

Annual International Interdisciplinary Conference
AIIC 2014 08-12 July, Azores, Portugal



2nd Annual International Interdisciplinary Conference AIIC 2014



Governo dos Açores



Annual International Interdisciplinary Conference AIIC 2014 08-12 July, Azores, Portugal



PROCEEDINGS

2nd Annual International Interdisciplinary Conference, AIIC 2014

8-12 July 2014, Azores Islands, Portugal

(Conference place: **University of the Azores, Ponta Delgada**)

PROCEEDINGS

2nd Annual International Interdisciplinary Conference, AIIC 2014

8-12 July 2014, Azores Islands, Portugal

(Conference place: **University of the Azores, Ponta Delgada**)

European Scientific Institute, ESI (publishing)

Impressum

Bibliographic information published by the National and University Library "St. Kliment Ohridski" in Skopje, Macedonia; detailed bibliographic data are available in the internet at <http://www.nubsk.edu.mk/>;

CIP - 37(100)(062)
33(100)(062)

COBISS. MK-ID 96954634

Any brand names and product names mentioned in this book are subject to trademark, brand or patent protection and trademarks or registered trademarks of their respective holders.

The use of brand names, product names, common names, trade names, product descriptions etc. even without a particular marking in this works is in no way to be construed to mean that such names may be regarded as unrestricted in respect of trademark and brand protection legislation and could thus be used by anyone.

PROCEEDINGS:

2nd Annual International Interdisciplinary Conference (2; 2014 ; Azores Islands) Proceedings.
/ 2nd Annual International Interdisciplinary Conference, AIIC 2014,
8-12 July, Azores Islands, Portugal

European Scientific Institute, ESI, 2014.. - (554, 576, 479 p.): ilustr. ; 28 cm

Kocani, Republic of Macedonia

Email: contact@eujournal.org

Printed in Republic of Macedonia

ISBN 978-608-4642-25-1

Copyright © 2014 by the authors, ESI and licensors
All rights reserved. 2014

PROCEEDINGS

2nd Annual International Interdisciplinary Conference, *AIIC 2014*

8-12 July 2014, Azores Islands, Portugal

(Conference place: **University of the Azores, Ponta Delgada**)

Table Of Contents:

FRAUD AND PRIVACY VIOLATION RISKS IN THE FINANCIAL AGGREGATION INDUSTRY: THE CASE OF REGULATION.....	1
<i>Anastassios Gentzoglanis</i>	
<i>Avner Levin</i>	
ETHICS IN LOCAL INFORMATION SERVICES BROADCASTED IN TRANS-REGIONAL RADIO STATIONS IN POLAND.....	12
<i>Tomasz Dawid Jedruchow</i>	
QUANTIFICATION OF THE AMOUNT OF UNJUST ENRICHMENT IN RELATION TO SALE OF A PLOT OF LAND BUILT UP WITH A STRUCTURE OF ANOTHER OWNER.....	19
<i>Jana Klišová</i>	
<i>Martina Studnařová</i>	
THE TORT LIABILITY IN PORTUGAL: THE FAULT REQUIREMENT – THE PARTICULAR CASE OF PUBLIC SCHOOLS.....	24
<i>Jorge Barros Mendes</i>	
MODELING AND SIMULATION OF THE ORTHOGONAL CUT BY USING THE LAW OF DAMAGE.....	27
<i>Lynda Himed</i>	
THE LIMITS FOR THE GLOBAL PROLIFERATION OF COMPETITION LAW: THE CASE OF MACAO SAR.....	31
<i>AlexandrSvetlicinii</i>	
LAW, RAPPING AND SOCIAL JUSTICE: RETHINKING TRUTH IN CONTEMPORANEITY.....	40
<i>Mari Cristina de Freitas Fagundes</i>	
<i>Ana Clara Correa Henning</i>	
<i>Gabriela M. Kyrillos</i>	
<i>Thais Luzia Colaço</i>	
LEGAL RESEARCH: AN OVERVIEW OF A RESEARCH PROPOSAL.....	50
<i>O. J. Jejelola.</i>	
CRAFTING MY OWN STORY: HOMELESS MOTHERS’ STANDPOINTS USING THEMATIC NARRATIVE ANALYSES.....	60
<i>Dr. Thérèse M. Craine Bertsch</i>	
O DIREITO DO USO DO NOME PRÓPRIO NA TOPONÍMIA PORTUGUESA.....	75
<i>Irene Portela</i>	

**THE DOCTRINE OF ‘NON – DISCLOSURE’ UNDER THE LAW OF INSURANCE:
A CRITICAL APPRAISAL.....81**

O. J. Jejelola

**IS THE PHYSICIAN A PERSON EQUIVALENT TO A PUBLIC SERVANT AND
THE SPECIAL ENTITY OF FAILURE TO PERFORM OFFICIAL DUTIES
ACCORDING TO THE CRIMINAL CODE OF THE REPUBLIC OF
LITHUANIA?.....89**

Ausrine Amsiejute

SYSTEM OF DIVISION OF REVENUE IN ETHIOPIA.....95

Alefe Abeje Belay

**ECONOMIC SANCTIONS AGAINST THE ISLAMIC REPUBLIC OF IRAN FROM
THE HUMAN RIGHTS PERSPECTIVE.....99**

Arash Izadi

**ELECTORAL PARTICIPATION,KNOWLEDGE, ATTITUDE AND PRACTICESA
CASE STUDY OF UTTAR PRADESH ASSEMBLY ELECTION 2012 (INDIA).....107**

Bupinder Zutshi

**THE USE OF ART AND CULTURE BY POLITICS IN A TOTALITARIAN STATE.
(ALBANIA).....120**

Anila Mullahi

**A NON-ZERO SUM GAME: HOW GAME THEORY CAN INFORM BETTER
TRANSBOUNDARY WATER RIGHTS TREATY DRAFTING.....126**

Michael J. Dema

**REACHING THE GRASSROOTS: CONTRIBUTION OF INDIA IN
AFGHANISTAN.....143**

Mondira Dutta

ETHNICITY AND ELECTORAL BEHAVIOUR IN NIGERIA159

Nwachukwu Sunny Nnabuihe

Austin Aghemalo

Nwosu Ezekwesiri Okebugwu

**LEGITIMIZING THE U.S. FOREIGN POLICY TOWARDS AUTHORITARIAN
REGIMES: A FRAMEWORK FOR ANALYSIS.....179**

Jaroslav Zukerstein

**AN ANALYSIS OF THE REPRESENTATION OF FEMALE MEMBERS OF THE
UNITED KINGDOM PARLIAMENT IN THE BRITISH PRESS.....182**

Michela Insenga

**THE CONTRIBUTION OF “CRITICAL GEOPOLITICS” IN THE
UNDERSTANDING OF THE LEBANESE SOCIO-POLITICAL LABYRINTH.....192**

Francisco Salvador Barroso Cortes,

“ZOMBIES AND COWYBOYS: HOW TO WIN THE APOCALYPSE”.....207
Mark Cronlund Anderson

**THE ROLE OF REGIONAL ECONOMIC COMMUNITIES IN FIGHTING
TERRORISM IN AFRICA: THE CASE OF INTER-GOVERNMENTAL
AUTHORITY ON DEVELOPMENT (IGAD).....216**
Memar Ayalew Demeke
Solomon Gebreyohans Gebru

**AN ACCOUNT OF HUMAN RIGHT VIOLATIONS IN NIGERIA (PRE-BRITISH,
BRITISH AND POST INDEPENDENCE).....230**
Sunny Nwachukwu
Austin Aghamelo
Nwaneri Stanley

**THE ISSUE OF TRUCK BRAKING, THEIR ACCIDENT RATE AND ECONOMIC
LOSSES INCURRED IN TRAFFIC ACCIDENTS IN THE CZECH REPUBLIC.....240**
Jiri Prnka
Lukas Zemanek
Michal Novotny

**TRAFFIC VOLUME AND ACCIDENT STUDIES ON NH-22 BETWEEN SOLAN
AND SHIMLA, INDIA.....248**
Rajiv Ganguly
Ashok Kumar Gupta
Mudit Mishra

**TEACHING DIGITAL FORENSICS AND CYBER INVESTIGATIONS ONLINE:
OUR EXPERIENCE.....255**
Elizabeth K. Hawthorne
Rose K. Shumba

**ENVIRONMENT ACCOUNTING: A CURRICULUM MODEL TO INDIAN
ACADEMIA.....262**
M. MuninarayanappaM.Com.
M.Phil
L. AugustinAmaladasM.Com

**TOWARDS A SHARED MEDITERRANEAN WATER INFORMATION
SYSTEM.....274**
Jauad EL KHARRAZ

**A STUDY ON THE FINANCIAL GROWTH OF COMPANIES DUE TO GREEN
PROJECTS - REFERRING TO BUILDERS: AN ENVIRONMENTAL
APPROACH.....279**
Maria Josephine Swathi
L. AugustinAmaladas

FACTORS OF DEBRISFLOW ORIGINATION IN THE SOUTH-WEST AREA OF LAKE BAIKAL LAPERDIN V.K.....292

Valerii Kirillovich Laperdin

ETYMOLOGY AND ECOLOGY. CAN ETYMOLOGY BE AN AID IN ECOLOGICAL EDUCATION? THE CASE OF THE SARDINIAN WORD MITSIA.....296

Marinella Lörinczi

WETLANDS CONSERVATION:AN INTEGRATIVEAPPROCH.....308

Waleska V. Manyari

Osmar A. Carvalho junior

ENVIRONMENTAL POLLUTION RISK ANALYSIS AND MANAGEMENT IN TEXTILE INDUSTRY.....323

Venkatesh Jaganathan

M.Phil

Priyesh Cherurveetil

Aarthy Chellasamy

M.S. Premapriya

“ENTREPRENEURSHIP & NEW VENTURE CREATION” KEY ELEMENTS OF THE ENTREPRENEURIAL ECOSYSTEM FACILITATING THE GROWTH OF ICT ENTREPRENEURS IN ITALY.....330

Fabio Corno

Richa Lal

Stefano Colombo

LONG-LEGGED BUZZARD (AVES: BUTEO) BREEDING POPULATION FROM MOLDOVA REGION.....346

Emanuel Ștefan Baltag

Lucian Eugen Bolboacă

Constantin Ion

FUTURE DEVELOPMENT OF COHORT LIFE EXPECTANCY IN SWEDEN.....352

Petr Mazouch

THE NATURAL HERITAGE OF LIBRAZHD’S DISTRICT, IN FUNCTION OF THE STABLE DEVELOPMENT QAMIL LIRËZA.....356

University "A.Xhuvani" Elbasan

FOREST COMPOSITION CHANGES WITH COMPETITION IN THE NORHERN PART OF TURKEY.....364

Ibrahim Atalay

DYEING POTENTIAL OF THE IRIS SIBIRICA L. FLOWERS.....372

Pavol Kaššák

Magdalena Kuli

PHILOSOPHICAL AND SOCIO-PHILOSOPHICAL BASE OF HISTORICAL GARDEN TYPES DEVELOPMENT – FROM CONTINENTAL FRENCH FORMAL GARDEN OF THE 17TH CENTURY TO INSULAR ENGLISH LANDSCAPE GARDEN OF THE 18TH CENTURY.....381

Marie Zgarbová

A BUILDING AS A GARDEN - A GARDEN AS A HOUSE.....390

Viktor Filipi

LANDSCAPE INFOGRAPHIC DESIGN.....397

Markéta Krejčí

Iva Hradilová

EVALUATION OF INTRAVARIETAL HOMOGENEITY WITHIN GRAPEVINE ROOTSTOCK CULTIVARS AS REVEALED BY SSR FINGERPRINTING.....402

Ing. Katerina Barankova

LANDSCAPE IN THE HOUSING ESTATES OF THE CZECH REPUBLIC IN 1960s-1980s.....409

Ing. Anna Magni

THE POTENTIAL OF RIVER IN URBAN SPACES.....414

Tereza Havránková

GARDEN ARCHITECTONIC CHARACTERISTICS OF THE CITY IDENTITY.....422

Lucie Poláčková

PROTOTYPE MODEL OF CARRYING CAPACITY IN TOURISM: THE IMPLEMENTATIONS FOR THE ISLAND OF RHODES.....434

D.G. Prokopiou

B.S Tselentis

G.Mavridoglou

D.Lagos

MODERN IT TOOLS SUPPORTING INDIVIDUAL TOURISTPROJECTS.....443

Cezary Bolek

Joanna Papińska-Kacperek

THIRD SECTOR AND LOCAL CITIZENSHIP: THE WAYS TO STOP THE GENERATING STRUCTURE OF UNDERDEVELOPMENT IN CAPE VERDE.....449

Nardi Sousa

ISSUES IN DEFINING REGIONAL DEVELOPMENT: EXPLORATION POTENTIAL FROM THE SEA OF AZORES.....461

Luz Paramio

Teresa Tiago

Flávio Tiago

Sandra Faria

ART IN THE SERVICE OF THE CHURCH IN YORUBALAND OF SOUTH-WESTERN NIGERIA: AN APPRAISAL.....466

Emi Rod Adoh

Babatunde Samuel Olufemi

THE CARPET PARADIGM AND THE BLUE TILE FROM THE WALL OF DAMASCUS, THE GRID AND THE ARABESQUE.....474

Cristina Cojanu

IMMIGRATION MOVIES IN TURKEY: HOW ECONOMIC CHANGES AFFECT TURKISH CINEMA IN 1960S.....491

Gökhan Uğur

BETWEEN HISTORY AND LEGEND: FOOD, CULTURE AND POLITICS AT THE ESTE COURT OF FERRARA - A PSEUDOSCIENTIFIC APPROACH TO REIGNING.....497

Andrea Guiati

ASPECTS OF PERSONALITY SELF-ACTUALIZATION IN THE CONTEXT OF LIFE QUALITY IN RELATION WITH SENSE OF HUMOR.....505

Irina Strazdiņa

CULTURAL AND CIVILIZATIONAL PROCESSES IN EGYPT IN THE XIX CENTURY.....516

Turekulova Zhuldyz

SEX IDENTIFICATION OF HUMAN REMAINS FROM AN IRISH MEDIEVAL POPULATION USING BIOMOLECULAR METHODS.....521

Sheila Tierney

Jeremy Bird

THE STORY OF TWO NORTHWARD MIGRATIONS- ORIGINS OF FINNO-PERMIC AND BALTO-SLAVIC LANGUAGES IN NORTHEAST EUROPE, BASED ON HUMAN Y-CHROMOSOME HAPLOGROUPS.....531

Csaba Barnabás Horváth

FORMS OF AFFLICTION AND IDENTITY IN GRAHAM SWIFT'S NOVELS.....539

Alexandra Roxana Mărginean

COVER PAGE THE SYMBOLISM OF KOLANUT IN IGBO COSMOLOGY: A RE-EXAMINATION.....547

Chidume, Chukwudi g.

INFORMALIDADE URBANA: REPRESENTAÇÕES SOCIAIS DA MÍDIA SOBRE A INFORMALIDADE HABITACIONAL URBANA NA CIDADE DA PRAIA.....553

Rutte Tavares Cardoso Andrade

TOURISM ON THE AZORES AND MADEIRA ISLANDS: ISSUES OF PERIPHERAL AND DEVELOPMENT REGIONS.....563

Sandra Dias Faria

Maria Teresa Borges Tiago

Flávio Gomes Borges Tiago

João Pedro Couto

ECOLOGICAL APPROACH TO INTIMATE PARTNER VIOLENCE ON INDIGENOUS MEXICAN WOMEN.....568

Gloria Margarita Gurrola Peña

Patricia Balcázar Nava

Alejandra Moysén Chimal

Julieta Garay López

Esteba Esquivel Santoveña

FRAUD AND PRIVACY VIOLATION RISKS IN THE FINANCIAL AGGREGATION INDUSTRY: THE CASE OF REGULATION

Anastassios Gentzoglakis, PhD

University of Sherbrooke, Canada

Dr. Avner Levin

Associate Professor and Director, Privacy and Cyber Crime Institute
Ryerson University

Abstract

The financial aggregation industry is on the rise again. After having experienced high growth rates during the pre-financial crisis of 2007-2008, the industry has undergone significant changes in terms of structure, behavior and performance. Plagued by lack of trust on behalf of the customers and under the pressure of changing technologies and in the absence of a regulatory framework, new entrants had difficulties in penetrating the market the way have originally anticipated. In the meantime, banks and other financial institutions refined their strategies and consolidated their positions in the new emerging industry. To survive, many early entrants developed new strategies and became suppliers of technology to the banks and other financial institutions. This study uses the SCP paradigm to analyze the emerging financial aggregation industry and the attitudes young customers have toward these services. The results show that customers are seriously concerned with the risks of violation of privacy and fraud associated with aggregation activity online and they are ready to pay a prime to get a more secure service. Nonetheless, regulating of the aggregation industry on the ground of these risks is premature. Yet, the existing regulatory agencies should increase awareness concerning the looming risks and provide incentives to financial aggregators to adopt technologies and operational strategies that minimize the potential for fraudulent behavior online.

Keywords: Financial Aggregation, Disruptive Technologies, Regulation, Fraud, Privacy, Competitive Strategies

Introduction

Financial aggregation is on the rise again. A growing number of new personal finance and non-finance sites combine many new technological features and ingenuity to provide account aggregation services and novel financial management tools to an ever-increasing number of individuals interested in completing their financial transactions and financial planning online.

Financial aggregators are financial service firms – either banks or non-banks, which collect data online, group them together and present them to customers within a single application interface. The financial aggregation industry originated in the US – Mint and Yodlee are the most well-known world-wide – but it has expanded rapidly and conquered foreign markets in Europe (UK, France), Asia (Japan and South Korea) and Canada (ASIC, 2001). The international divisions of financial aggregators are not fully-fledged yet, but they are expanding quickly as a result of increasing competition from traditional financial service firms and newcomers.

The approach to aggregating financial services is rather novel and so much so the issues emerging from this. On the one hand, this innovation is quite interesting and responds to ever-increasing needs of individuals who desire to group their financial and utility accounts. Dealing with all the accounts is not only tedious (remembering and frequently updating user names and passwords, responding to soliciting advertisement and surveys, etc.) but also time consuming. Individuals who monitor multiple accounts waste their time, i.e., they do it at the expense of leisure. Financial aggregation not only does reduce search costs (costs of monitoring and tracking specific accounts) but also frees time of busy individuals who could make better use of it and increase their wellbeing.

On the other hand, financial aggregation may cause some inconveniences and even create serious problems. Security risk and violation of privacy are some of them. For instance, while a user is online on a non-bank personal finance site, his or her personal information is used in order to get access to the service. Usually this information is encrypted and thus protected. But this simple method of authentication, the so-called single-factor authentication (the mere use of a username and password) is notoriously known for its vulnerability to phishing and fraud. *Malware and other intrusive programs are widely used by fraudsters to extract funds or perform other fraudulent activities under a user's name while the latter is using aggregation services online.* Contrary to the nonbank financial aggregators, banks and other heavily regulated financial institutions normally use a technology that requires the use of a multifactor authentication method and aggressive consumer education with respect to security and privacy (Albrechtslund, 2008).

The growth of the financial aggregation industry depends on the success of these and other innovative services offered to consumers. But the questions related to privacy and the issues of identity theft, fraud and misuse may hamper its growth potential. Nowadays, these problems are getting exacerbated by the ever-increasing use of *cloud computing and storage*. For instance, personal data may be stored in the cloud and used by fraudulent individuals around the globe increasing thereby the risks of fraud and violation of privacy. As the industry grows, these risks may increase and this is the reason why many regulatory authorities warn consumers about the potential problems. For instance, the Financial Consumer Agency of Canada (FCAC) has issued a warning as to the possible threats financial aggregation may present to Canadian consumers (FCAC, 2011).

This research explores the privacy, fraud and potential online financial risks and security issues arising from the increasing use of account aggregation services offered by a growing number of nonbank and bank aggregators. It uses a modified version of the so-called structure-conduct-performance (SCP) paradigm in order to identify the main issues to be investigated and analyze them in detail with the objective to understand thoroughly the structure of this industry, the conduct of financial aggregators and their respective performance. Conduct is crucial because it implies strategies and the latter have a definite impact on industry performance. To use strategies, firms need to understand customers' behavior, particularly those who use the financial aggregation services online.

Section II of the paper presents the analytical framework and justifies its importance to the current work. Section III examines the technologies used by the financial aggregators and the strategies used by them to collect data and understand the behavior of individuals using these services online. It also makes a literature review of the key finding on the subject. Section IV presents the results of the study and compares them to the literature. Lastly Section V concludes and offers policy recommendations.

Methodology

There are various frameworks that can be used to analyze the financial aggregation industry. The most important of them are presented in table 1 below. Porter's five forces

model, Ansoff's matrix, BCG (Boston Consulting Group) growth-share matrix and the SWOT model do recognize the importance of competition *within* and *for* the industry and the development of strategies which would give a competitive edge to incumbents. Each model explores the most appropriate strategies to be developed by incumbents to either penetrate new markets or make the current competitive environment less intense. Despite their similarities, they do have significant differences chiefly with respect to the key elements each model uses to establish relationships and appropriate strategies. For instance, Porter's five forces model emphasizes the importance of recognizing the relative competitive position of each firm in the industry and develop strategies that would maintain each firm's competitive advantage. Ansoff's matrix and the SWOT models are similar too in some respects since both of them are based on the development of corporate growth strategies after making a thorough evaluation of different alternatives in terms of existing and/or new products and markets.

Unfortunately, both models fail to take into account the dynamic interaction of different players within and outside a particular industry and develop strategies in terms of product and technology advancements. Further, key stakeholders who actively intervene in the process of strategy development are ignored such as the government, regulators and competitors from abroad. Bain's SCP paradigm is broader and encompasses all previous models. It also goes a step further by taking into account *potential competition* and the strategies that may be used by entrants and incumbents. Using a game theoretic approach, Bain's model is widely used to explain the dynamics of competition in existing and new or emerging industries. In its modified version, Bain's model takes also into account government policies and the influence regulation has on industry's structure and performance. Given that the financial aggregation industry is currently characterized by intense competition arising from the traditional banking industry and new aggregators, the SCP paradigm is used in this paper to analyze this industry and examine whether regulation is an appropriate policy option.

Table 1 Comparison of various analytical frameworks and the modified version of SCP paradigm

Models	Competition in- muro	Competition ex- muro	Static strategies	Dynamic strategies
Porter's model	X	X	X	
Asnoff's matrix	X	X	X	
BCG growth-share matrix	X			
SWOT model	X	X	X	
SCP paradigm	X	X	X	X

Source: Author's conception

The modified version of the SCP paradigm makes the role of each decision maker within the company (operations research, marketing, production and engineering, accounting, market and regulators, etc.) more explicit. It also takes into account the industry's broader business environment (elasticity of demand, unionization, technology, product and customer attributes, etc.) and shows the dynamic interplay among all stakeholders.

Also, the modified version is more appropriate than the traditional SCP paradigm. The latter, in its basic form, establishes a link between structure, conduct and performance. It is based on sound economic theory – the Cournot model – which shows that the more concentrated an industry is the higher the monopoly power of the incumbents and lesser the competition in the industry. Thus, structure (number and size of firms in the industry, economies of scale, etc.) affects the conduct of individual firms (pricing, R&D, M&A, collusion, etc.) and performance measured by profitability, allocative and dynamic efficiencies and price-cost margins. There may be feedback effects among the three basic elements and government policies are driven by performance.

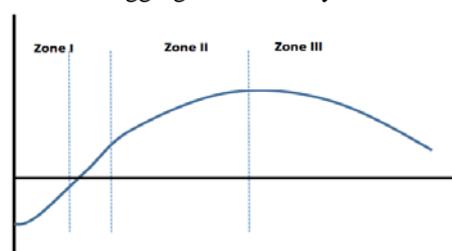
Thus in this study performance is measured by indices constructed using data generated through a questionnaire distributed in Canada. Questions were asked related to fraud, privacy violation, theft identity and the degree of security that prevails in this industry and its dynamics. The results are used to analyze the desirability of government intervention and regulation of this industry.

Technological Changes and Customer Behavior in Financial Aggregation Industry: A Review of the literature

Technological changes dramatically affect the structure of an industry, the behavior of existing firms and potential entrants and the whole performance of an industrial sector. These effects are even starker when technological changes are disruptive and not evolutionary. The latter allow firms to adjust themselves and provide them sufficient time to adopt strategies that would increase their competitiveness. The former are more sweeping and generally not very well understood by incumbents, at least at the initial stages of their appearance. They are normally introduced by start-ups and small-sized firms, capable of creating niche markets and even penetrating the well-established ones dominated by large-sized incumbents. As new entrants enter the industry competition intensifies by the introduction of entirely new and similar services to the ones of incumbent. Normally, new entrants are facing less regulation and other institutional constraints as government and regulatory organizations are slow to react, given their limited technological knowledge. This asymmetry in information and technological competence plays at the benefit of new entrants. The latter have the so-called “first-mover advantage” which may make new entrants major players in the industry.

However, incumbents are not powerless. They would first call for an even-leveled competitive field by asking for a tougher regulation and entry barriers. Unable to react rapidly, given their sheer size and their long-lived experience functioning in a rather stable and well-defined business, incumbents would even raise issues of security and increase users’ awareness concerning the dangers that exist in switching providers and in trusting their newly created businesses. This is precisely what happens in the financial aggregation industry. The current technologies used by new entrants to provide aggregation services are indeed disruptive and far-reaching. Incumbents, large banks and other financial institutions launch a far-cry to customers alerting them that they are no longer obligated to offer protection of their accounts should customers give their PINs and other sensitive information to third party providers. Such an attitude is legitimate and by all means justifiable but as long as incumbents do not offer the aggregation service and this is a need not satisfied by incumbents, customers would, nonetheless, use the service offered by new entrants (Edge and Sampaio, 2009). So at the early stages, when technology is mastered by new entrants only and the financial aggregation service is offered exclusively by them, customers with high reservation prices – the ones who value the service most – would be willing to use the service anyway. At the outset, there is an erosion of incumbents’ market shares but negligible. As entrants become firmly entrenched and expand the gamut of their services, incumbents’ market shares are threatened further and their strategies to thwart entry and expansion of newcomers are intensified. The competition process may continue as long as no new regulation is introduced to stop the growth of new entrants and determine the fair play. This life cycle of competition may be stylized and illustrated by the following familiar graph.

Figure 1 Life cycle of competition introduced by technological changes and innovation in the financial aggregation industry



The Canadian financial aggregation industry is neither mature in terms of competition nor fully competitive yet. It is situated in Zone I. From a technological point of view the Canadian industry is, at least with respect to innovation, at its early stages. For instance, mobile banking, the most rapidly developing market segment is still under development. For instance, according to *The Pollara online survey (August 2013)*, 70% of those who own a mobile device use mobile applications for completing their financial transactions. (<http://newsroom.bmo.com/press-releases/bmo-mobile-banking-survey-70-per-cent-of-canadian-tsx-bmo-201309170898511001>). CIBC is the first Canadian bank to adopt the electronic deposit while TD is about to introduce this application soon. This strategy would help the banking industry to diversify itself and diminish the intensity of competition that arises from the arrival of financial aggregators over the internet (Fujii et al., 2012).

Indeed, competition over the internet is now a reality. Financial and non-financial firms use various technologies to collect data and other sensitive information to study their customers' behavior and get a competitive edge over their rivals. Indeed, the Internet has created a paradigm shift in almost any type of businesses and is forcing traditional financial institutions to transform themselves at a rapid pace and at an unprecedented scale.

In Canada there are seven account aggregators, subsidiaries of foreign aggregators all of them established between 1999 and 2007. Canadian banks do not allow financial aggregators to have access to their customers' accounts and refuse to share their customers' financial information. In case of fraud, Canadian banks are not obliged to refund their customers since the customers are responsible for giving sensitive information to financial aggregators.

Competition is high between these seven account aggregators and well-established Canadian banks, although the services offered are not exactly the same. The Canadian banks offer personal finance, budgeting and banking savings services for the accounts a customer has in a specific bank. By contrast, financial aggregators, like Mint Canada, give customers a total visibility of what is happening in the customers' accounts irrespectively where these accounts reside – in TD, RBC, BMO, HSBC, etc. Customers can see what is happening with their accounts at any moment of the day online or with mobile applications (Mearian, 2001).

The security concerns are very important in this industry. Customers are mainly concerned because financial aggregators may use their personal information for purposes other than the ones for which this information has been initially provided. Further, there are risks for identity theft and malwares from unscrupulous individuals who search the internet to get information and commit frauds. Both types of risks are real and they cannot be eliminated. But the probability of their occurrence may be reduced if financial aggregators invest in advanced technologies and apply a vigorous privacy policy and develop monitoring and internal control mechanisms that safeguard safety.

It is notoriously known that financial aggregators use "cookies" – a text file that resides on a customer's computer while online – to provide financial information online. There are two types of cookies, persistent and per-session cookies. A persistent cookie is used by financial aggregators to provide usage information on specific functions residing in

provider's online banking application. Normally, there is no customer related information associated with this type of cookies. A per-session cookie is stored temporarily in customer's PC temporary memory (RAM) and assigns an ID per session whenever a customer logs on the site. This cookie is important to validate a customer's device (PC, tablet, or smart phone) and allow customers to complete their online transactions. As for the persistent cookies, the per-session cookies do not contain any customer-related information. Cookies are site specific and only a single aggregation provider can access, decode and make use of the information.

Online banking has become widespread and still growing. Pew Research Center, Federal Reserve (2014) defines "online banking or Internet banking or e-banking" "the use of a web site that allows" customers of a financial institution to conduct financial transactions on a secured website operated by the institution, which can be a retail bank, virtual bank, credit union or building society". Recent statistics by Pew Research Center, Federal Reserve (2014) indicates that 69 million of Americans transact online while 56% of them pay a bill online. Table 2 gives some key summary statistics about the attitudes Americans have towards mobile banking.

Table 2O nline banking statistics and customers' attitudes

Online / Mobile Banking Statistics		Data
Percent of those who managed household finances who banked online at least once in the past 12 months		81 %
Percent of people who used mobile phone banking within the past 12 months		19 %
Number of Americans who bank online		69 M
Online banking customer satisfaction		78 %
Percent of consumers who receive electronic checking account statements		42 %
Percent of consumers who paid a bill online through their bank in the past month		56 %
Statistics on Mobile Banking Users		Percent
<i>Using your mobile phone, have you done any of the following in the past 12 months?</i>		
Checked an account balance or recent transaction		90 %
Downloaded your bank's mobile banking application		48 %
Transferred money between two accounts		42 %
Received a text message alert from your bank		33 %
Made a bill payment using your bank's website or application		26 %
Located the closest in-network ATM for you bank		21 %
Deposited a check to your account using your phone's camera		11 %
Statistics on Non Mobile Banking Users		Percent
<i>What are the main reasons you have decided not to use mobile banking?</i>		
My banking needs are being met without mobile banking		57 %
I'm concerned about the security of mobile banking		48 %
I don't trust the technology to properly process my banking transactions		22 %
The cost of data access on my wireless plan is too high		18 %
It is too difficult to see on my mobile phone's screen		17 %
It's difficult and time consuming to set up mobile banking		10 %

Source: Pew Research Center, Federal Reserve (January 1, 2014) <http://www.statisticbrain.com/online-mobile-banking-statistics/>

Canadian account aggregators make use of cookies and advanced encryption technologies to provide their financial aggregation services. Less than half of financial aggregators offer services using a better technology than the 128-bit SSL technology. There are therefore risks for fraud and breach of security in the financial sector of Canada (Gross and Acquisti, 2005, Kirkpatrick, 2010, Korff, 2008). Canadian financial aggregators have to adopt stringent encryption technologies to offer their services securely and inspire more confidence to users. Unless such measures become more concrete and visible, customers would not use the financial aggregation services heartedly (Langlois et al. 2009).

Data and Main Findings of the Study

There is no publicly available data for the financial aggregation industry in Canada or elsewhere, particularly with respect to market shares, pricing policies, profit margins, technologies used to detect malwares, fraud, security threats and violation of privacy. Secondary data were obtained from the internet and the scant literature that exists on the subject (Ontario, 2010). Nonetheless, these data are not enough to examine the behavior and attitudes customers have while making their financial transactions online using financial aggregators like Mint, Savvy Money, PocketSmith, Mvelopes, Check.me, iBank, and Yodlee.

For this purpose we have developed a questionnaire which was distributed in both official languages (English and French) in two Canadian provinces, Ontario and Quebec. A number of questions were asked to elicit information with respect to the use and knowledge Canadians have of the financial aggregation industry and their concerns about privacy, fraud and security issues.

The questionnaire was divided into four parts. The first concerned questions related to the use of financial aggregation services and the awareness of users about the existence and the type of aggregation services offered in Canada. The second deals with questions related to how users perceive financial aggregator firms in Canada and what type of platforms or devices they use to access these services. The third part concerned questions related to privacy, identity theft, fraud, and issues of security. Questions concerning their willingness to pay to safeguard the offer of secure services were also included in this part of the questionnaire. Finally, the fourth part concerned questions with respect to their socio-economic and demographic characteristics. In total, we got 255 responses (110 from the province of Quebec and 145 from Ontario). Summary statistics concerning responders' gender, age group, annual income and highest degree are indicated in the table 3 below.

Table 3 Responders' Summary Statistics

Responders' gender		
	Quebec (%)	Ontario (%)
Male	63%	37%
Female	37%	63%
Responders' age group		
20-29 years old	80%	22%
30-39 years old	16	21
40-49 years old	3	25
Over 50	1%	32%
Responders' annual income		
<\$19,999	72	6
\$20,000-\$39,999	16	91
\$40,000-\$59,999	3	19
\$60,000-\$79,000	6	18
\$80,000-\$99,999	2	16
\$100,000>	0	19
I'd rather not say	0	14
Responders' highest degree		
High school diploma	1	4
College diploma	23	7
University diploma (Undergraduate - Bachelor's degree)	54	35
University diploma (Graduate - Master's degree)	18	37
University diploma (Postgraduate - Doctorate)	3	17

Source: Author's data

A first glance at the summary statistics indicates that there are important differences between responders residing in Quebec and Ontario. The Quebec sample is mostly composed by males while the opposite is true for the responders from Ontario. Quebec responders are mostly young professionals with a bachelor's degree while the Ontarians are mostly middle-aged with a majority of them holding a master's degree. As far as the income is concerned, Quebecers are in the lower income bracket while the responders from Ontario belong to the

next upper income bracket. The statistical analysis of these two samples is done in Gentzoglanis and Levin, 2014).

The answers to the questions related to responders' knowledge concerning the existence of the financial aggregation services in Canada show that the majority, more than 37%, had a very good knowledge and uses frequently these services, while more than 28% had some idea about their existence and use them occasionally.

As far as privacy policy and security issues are concerned, 21% of Quebecers answered that they do read the privacy policy of financial aggregators before making any transactions while this percentage is much higher for the responders from Ontario (37% of Ontarians). Thus, 1 out of 5 Quebecers and 2 out of 5 Ontarians do read the financial aggregators' privacy policy. These documents are many pages long and use a jurist language which makes them difficult to understand. The high percentage of users who read an aggregator's privacy policy shows that users of financial aggregation services are seriously concerned about privacy.

This finding is consistent with the answer users give to the questions concerning their level of concern about identity theft and fraud when they make financial transactions on different platforms or devices. The results show that 93 % of Quebecers are concerned and 86% of Ontarians are highly concerned. Given this overwhelming concern of users about privacy and risks of fraud, financial aggregation service companies should be very careful when they use marketing tools to promote their services. Their marketing strategy should emphasize the safety characteristics of their technologies to preserving privacy and thwarting fraud.

These high levels of concern are reflected as well in the answers they gave to the questions concerning their willingness to make transactions with well-established financial aggregators as opposed to the newcomers which in many instances are virtual. Thus 35% of Quebecers and 41% of Ontarians are willing to deal solely with aggregators having a physical presence in the market (as opposed to virtual ones) although both state that they prefer the firms having an explicit privacy policy in addition to having brick and mortar presence. Thus it is important for financial aggregators to have an explicit policy on privacy and a record of integrity should they want to attract new customers. By and large, established financial aggregators and banks with long history of presence in the market have a competitive advantage compared to newcomers less well-established financial aggregators.

As far as the results are concerned with respect of the use of encryption technologies and the level of trust customers have towards these technologies, Quebecers are more trustful than Ontarians (55% versus a meager 14%). It is obvious that financial aggregators must make considerable efforts to increase their reputation and confidence among actual and potential users. The industry's survival and growth depends on its capacity to use the most advanced encryption technologies that inspire confidence to users.

Trust in financial aggregators is an important element for growth in a nascent industry (Boyd and Hargittai, 2010). Quebecers (42% of responders) declare that they trust their financial aggregators because of good reputation (26%) and the absence of any problems associated with security issues, while this percentage is only 26% among Ontarian responders. Nonetheless, 43% of the latter say that they have never had problems with their financial aggregators as far as security, privacy and fraud issues are concerned. Reputation is thus important for Quebecers while the absence of problems is more important for Ontarians. It is possible to surmise that customers trust their financial aggregators using tangible criteria like absence of violation of privacy and security problems. Financial aggregators should build on these findings.

Knowing customers' online behavior, particularly the frequency with which they consult their accounts and make transactions, is important because financial aggregators may

target their customers according to the type of transactions, their duration and frequency. Their profitability depends, to a great extent, on knowing well their customers' online behavior (Steeves et al., 2010). Every financial aggregator uses cookies, persistent and non-persistent for marketing but also for safety purposes. This provides opportunities for increasing market shares and returns on investment. Most of the responders (52% in Quebec and 45% in Ontario) complete their transactions once every two weeks and 24% in Quebec and 34% in Ontario once per day.

Given the changing nature of technology and the fact that mobile banking is increasingly becoming the new standard in this industry, knowing the platforms or devices used by customers to complete their financial aggregation services is becoming important for aggregation providers. The latter must make investments in infrastructure to make their interfaces compatible with the platforms or devices customers use to access the services. It appears that Canadians in Quebec and Ontario use laptops, desktop computers, tablets and smart phones to access the aggregation service providers. Notwithstanding, 63% in Quebec and 39% in Ontario declare that the laptops are the most frequently used platform or device to make their financial transactions but Ontarians trust more their desktop computer (32% compared to 17% of Quebecers).

As far as the change in attitude is concerned in the use of a particular platform because of privacy or security issues, 72% of Quebecers report that they have not changed attitude at all while this percentage is only 56% for Ontarians. Furthermore, about equal percent of Quebecers and Ontarians (95% and 92% respectively) declare that they have never had to change bank, financial institution or financial aggregators because of their concern about the protection of personal data.

Patronage for financial aggregators with explicit privacy policy is praised by both groups of responders (79% of Ontarians and 49% of Quebecers) even if their services are less attractive than the ones offered by financial aggregators *without* explicit privacy policies. This illustrates that an explicit and well-articulated privacy policy is a requirement for patronage even if most of customers won't read it, as it was indicated above.

Fraud, theft of identity and online security are serious concerns for all customers (Warren and Brandeis, 1980). If the latter wanted to reduce the probabilities of occurrence, they may be willing to pay a fee to aggregation service providers to get the warranty that these risks would be reduced to the minimum. The answers to the question "How much each respondent is willing to pay to have the warranty that the service would be provided almost risk free" vary dramatically between the two groups. A large majority of Quebecers (63%) is willing to pay a "prime" up to \$10 per month to be assured that financial services are offered with high security. This percentage drops to only 37% for Ontarians. This difference in behavior may be explained by hypothesizing that Quebecers are either more risk-averse or Ontarians believe that their data are well protected and there is no need to pay an additional fee (insurance) for that.

Table 4 Summary of the main findings

	Believes and attitudes online	Groups distinguished by language	
		English	French
Trust in encryption technology	Strongly	77	55
	Fairly	6	7
Read privacy policy	Yes	54	18
	Never	40	78
Level of concern	Very	46	61
	Fairly	45	29
Change in attitudes	Yes	39	25
	No	57	72
Platform choice	Laptop/smart/tablet	36	69
	Desktop	41	17

Virtual vs bricks and mortar	Virtual with privacy	73	49
	Bricks and mortar without privacy	16	36
Willingness to pay	\$0	55	25

Source: Author's data

All in all, the financial aggregation industry is growing but there are some stumbling blocks to its growth. Data protection, privacy, security and fraud issues are some serious concerns users have which may inhibit or at least retard future growth (Gentzoglanis, 2010). Financial aggregation service providers should acknowledge customers' concerns and attitudes and adopt new technologies and strategies that would increase safety and establish a good reputation for the industry. This is particularly important at every stage of development of any industry but more important so for the financial aggregation industry which is at its infancy (Sans Institute, 2004). Given the newness of the industry and the low rate of incidences related to privacy violation and fraud, regulation may not be necessary. Regulation as a prevention mechanism would not contribute to making the industry safer and therefore no such mechanism is required at this time. Even if there are some real and potential problems related to privacy and security, nonetheless, the introducing of new regulations before the industry fully develops is premature. Table 3 summarizes the main findings.

Conclusion

In the early 2000s, account aggregation was fast becoming a basic expectation of banking customers, and companies were racing to install the technology that would allow them to reach millions of new customers. Only very few were able to hold their ground against the systems. Unfortunately, these predictions were wrong and in the aftermath of dot com bubble most of them went bankrupt. Once again, the survivors have been harshly hit chiefly because of the recent financial crisis. After these two major shocks, the financial aggregation industry is on the rise again. This time, the technologies are better known and the internet has become more widespread and better understood by service providers and customers alike. The account aggregation industry has started all over again but this time it is based on solid ground.

The analysis of data indicates that Canadians are seriously concerned by the problems of privacy violation and fraud while when they are using aggregation services online. Convenience of service outweighs the inconveniences caused by these threats but the risks remain high and customers are willing to pay a high prime to get a more secure aggregation service. As far as the issue of regulation is concerned, the study concludes that (1) the financial aggregation industry be allowed to exercise its potential free of new regulations and (2) regulators continue to monitor the industry and alert users with respect to the potential problems associated with privacy, theft identity and malware intrusions while completing their transactions online. It is argued that the existing regulatory framework is adequate to exercise some discipline in the market. The current anti-spam legislation (CASL Bill C-28 to be in effect from July 1st 2014) bans unsolicited electronic messages such as emails and texts, and although is meant to crack down on unwanted spam and to protect customers from harassment, identity theft, spyware and fraud, it would also contribute to limiting the use of persistent cookies by financial aggregators for marketing and related purposes not associated with the financial aggregation services – for instance, the use of personal information by other divisions of financial aggregators to sell products like insurance and/or financial products.

Acknowledgement:

This research received funding support through the Office of the Privacy Commissioner of Canada's Contributions Program. The opinions expressed in the paper are those of the author and do not necessarily reflect those of the Office of the Privacy Commissioner of Canada

References:

- ASIC, Australian Securities and Investment Commission (2001). Account aggregation in the financial services sector, Consultation Paper 20, May. <http://www.asic.gov.au/cp>
- Albrechtslund, A. (2008). Online Social Networking as Participatory Surveillance. *First Monday*, 13(3). Retrieved from <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2142/1949>
- Bigge, R. (2006). The cost of (anti-)social networks: Identity, agency and neo-luddites. *First Monday*, 11(12). Retrieved from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1421/1339>
- Boyd, D., and Hargittai, E. (2010). Facebook privacy settings: Who cares? *First Monday*, 15(8). Retrieved from <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3086/2589>
- Edge M. E and P. R. Sampaio (2009). A survey of signature based methods for financial fraud detection, *Computers & Security* 28(6):381-394 (2009).
- FCAC (The Financial Consumer Agency of Canada), “Financial Aggregation Services: Risk of disclosing online banking information” March 10, 2011). <http://www.fcac-acfc.gc.ca/eng/about/news/pages/ConsPress-ConsPresse-0.aspx?itemid=32>
- Fujii, H., T. Okano, S. Madnick and M. Siegel (2012). E-Aggregation: The Present and Future of Online Financial Services in Asia-Pacific, Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA 02139.
- Gentzoglanis, A. (2010). “Risk and Regulatory Reforms in the Securities Industry: A Need for a Paradigm Shift?”, in the *International Journal of Financial Markets and Derivatives (IJFMD)*, Vol. 1, NO 4.
- Gross, R., and Acquisti, A. (2005). *Information Revelation and Privacy in Online Social Networks (The Facebook case)*. Proceedings from ACM Workshop on Privacy and the Electronic Society (WPES), 2005, Alexandria, Virginia.
- Kirkpatrick, D. (2010). *The Facebook Effect: The Inside Story of the Company That Is Connecting the World*. New York: Simon & Schuster.
- Korff, D. (2008). The difficulties in Meeting the Challenges Posed by Global Social and Technical Developments, London Metropolitan University, European Commission Comparative Study, Working paper, NO. 2.
- Pew Research Center, Federal Reserve (January 1, 2014) <http://www.statisticbrain.com/online-mobile-banking-statistics/>
- Langlois, G., Elmer, G., McKelvey, F., and Devereaux, Z. (2009). Networked Publics: The Double Articulation of Code and Politics on Facebook. *Canadian Journal of Communication*, 34(3). Retrieved from <http://www.cjc-online.ca/index.php/journal/article/viewArticle/2114>
- Mearian, L. (2001), “Banks See Online Account Aggregation as Necessary Evil”, <http://www.telegraph.co.uk/finance/personalfinance/2732394/Citibank-My-Accounts.html>
- Ontario, Ministry of Economic Development and Trade, (2010). E-Commerce: Purchasing and Selling Online – What You Need to Consider, Ontario, Queen’s Printer for Ontario.
- Sans Institute (2004). Understanding IPS and IDS: Using IPS and IDS together for Defense in Depth. Retrieved from <https://www.sans.org/reading-room/whitepapers/detection/understanding-ips-ids-ips-ids-defense-in-depth-1381>
- Steeves, V., Milford, T., and Butts, A. (2010). Summary of Research on Youth Online Privacy. *The Office of the Privacy Commissioner of Canada*.
- Warren, S. D., and Brandeis, L. D. (1980). The Right to Privacy. *Harvard Law Review*, 4(5), 193–220. Retrieved from http://groups.csail.mit.edu/mac/classes/6.805/articles/privacy/Privacy_brand_warr2.html

ETHICS IN LOCAL INFORMATION SERVICES BROADCASTED IN TRANS-REGIONAL RADIO STATIONS IN POLAND

Tomasz Dawid Jedruchow, MA
Charles University in Prague, Czech Republic

Abstract

For many years, the rules of ethical behavior in the media is one of the most important scientific issues. The increasing specialization of the media makes it in many cases very difficult to maintain the objectivity of the information. It is especially difficult when you are dealing with trans-regional media, which can not only broadcast throughout the country but also locally. The specific structure of the program makes the keeping of the rules of journalistic ethics requires many efforts. Article informs us about the specifics of local news in the trans-regional radio stations. Due to their nature, it's very hard to keep the rules of journalistic ethics. Although it is not impossible.

The text presents not only the difficulties that journalists of trans-regional radio stations have to face but also possibilities of avoiding staying in conflict with the principles of journalistic ethics.

Method that was used in text is ethnographic case study. It was examined an example of trans-regional radio station operating on the basis of trans-regional concessions. Ethnographic case study method was possible to use due to the fact that the author of the publication was an employee the audited station, so that he could to learn the rules of its functioning from the inside.

Keywords: Media, journalism, ethics, information service, broadcasting

Introduction

Ethics in the media in recent times is a common theme in the way not only variety of scientific treatises, but also during the discussion about means of information stations. In modern times – especially in recent years – we have to face flood of information.

For a long time major news media – newspapers, radio and television – do not have a monopoly on information. Also, the Internet is no longer like a few years ago. Everywhere we are dealing with a specialization. Once in a television, newspaper, radio or website you can get information, find entertainment and learn. Now it's past.

All around the world media companies are creating theme TV stations, formatted radio stations, information portals. All of these initiatives are directed to the receiver set to a specific message. Most people know which TV station gives latest information. People listening to the radio know where is the music that they are looking for. Readers critically look at the titles Releases knowing who is considered the most reliable in the topic.

Therefore, there was a situation that the news on thematic TV and formatted radio stations have been marginalized to a minimum. The whole weight of the transmission of current news fell on the news stations. The other are limited only to give only basic information services that allow listeners and viewers to keep up when it comes to major events.

In this context, the publisher every day have a very difficult task - a fair and complete transmission of information.

These considerations will be limited only to information services presented on the air of trans-regional radio stations during the so called "local broadcasting". To introduce the characteristics of these elements of the program, I'll briefly describe the structure of information blocks in this type of stations. This analysis will help to understand how difficult it is to maintain the basic principles of ethics in the media of this type.

A few words about the ethics of journalism

By definition, ethics are rules of behavior based on ideas about what is morally good and bad, in a given era and its particular community or system. In other words, these are the assessment, standards, principles and ideals defining beliefs, behaviors and actions deemed appropriate. As a result, ethics helps to understand and appreciate what is good.

From experience we know that every area of human life is guided by ethics. In the case of journalism, the situation is similar. Therefore, the ethical standards for the profession of journalism are included in all kinds of codes.¹

Please note that ethical codes are valid only at the time when they are recognized by professional journalists. There are in fact no other rights that might take precedence sanctioning their validity and compliance. And while on the one hand they allow the journalist to the set of his action to the truth presented in a faithful and honest, on the other they have only the meaning of honor. Moreover, they apply only in conscience.

The media reports indisputably the most important is to preserve the truth. Truth is the adequacy of the content of the judgment with the real state of things. The truth can be known through continuous exploration, thanks to the cooperation and assistance of others. In the opinion of many authors, the truth is not limited to truthfulness. It is also the compatibility of communication with the inner truth of presented cases. This requires from a journalist effort that will allow him to know the subject in the fullest possible manner in the free way from any assumptions.

Passing the truth is not only the right approach to the described subject. This is also the correct ratio of transmission to recipients. Always, without any exception media must treat them in a subjective way. Do not forget that each of them is a free and rational, which implies both – the right to accept or reject the journalists arguments.

Prerequisite for good transfer of information is that it was a reliable and honest and based on some sources. Important is that at every step – from gathering, through development, to the use of it – the message has to be related to and consistent with the truth.

Collecting information should be done according to respect for single people and whole social classes. This solution should be used also during selection of information.²

Each stage of journalistic work should be maintained objectivity. It is a condition to communicate the truth of the recipient. Therefore, a journalist can not forget that the man is conditioned in different ways. Therefore, should first of all keep their distance from the case and stick to the facts. Another important element should be striving to remain impartial by rejecting prejudices and assumptions. He should also be factual and try at all costs not undergo any influence, which allows him to stay independent.

Objectivity of journalist, however, does not depend only on himself. This is due to the fact that during his work he acquires the messages from the subjective informers. That is why he is forced not only to collect material from many sources and to complete information, but also present different points of view.³

¹ Boyd A., *Dziennikarstwo radiowo – telewizyjne: techniki tworzenia programów informacyjnych*, Kraków 2006. str. 299.

² *Ibidem* pp. 66.

³ *Ibidem* pp. 279.

As you can see, ethics imposes on the work of the journalist many requirements and responsibilities. Keeping its rules often forced to significantly increase the effort and increase the expenditure incurred during the preparation of the publication. Adapting of the material to the generally accepted moral norms takes place at every stage of creation and requires repeated control of reliability, objectivity and accuracy. However, the final effect of all of this is undoubtedly a reliable and ethically correct work of the journalist, that successfully becomes a reliable and credible source of information for all of your readers.

Features of local news in trans-regional radio stations

Trans-regional radio stations broadcast their program through a network of local radio stations. At the beginning, the network was formed based on local branches.

In most cases trans-regional radio stations are formatted stations. It means that they are broadcasting program dedicated to specific group of listeners (teenagers, 40+) or with specified music format (jazz, classic, rock).

Broadcasting system in trans-regional radio stations is made to minimize costs without losing attractiveness for listeners. It would be easy if it was only transferring broadcasting from central studio to local branch and then forward it to listener. In time, media companies and holdings could afford to buy small local stations and transform them into their local branches. Over the years, companies have also begun to apply franchising that gives you the ability to "territorial expansion" practically without incurring the costs associated with organizing new editorials.

However, keep in mind the fact that having a local branch is not only a radio transmitter and possibly a small editorial. Such an investment is associated primarily with the acquisition of concession to broadcast on the airwaves in the region. Of course, such a concession assumes that the program will more or less have a local character. Unfortunately - the realization of this clause only by broadcasting from central editorial is infeasible.

Simply enter a the following example - trans-regional station with headquarters in Warsaw and ten regional offices. Typically, the license requires local stations to include in its program from 10% to 20% of a local program. This gives you more or less 2.5 and 5 hours scheme which treats only about local matters.

If the broadcaster wishes to implement the provisions of the concession at the same time broadcast the program only from central editorial, in the best case, the listener would have to deal with extremely inconsistent show, which every two hours moves into another area of the country. If the number of branches larger than 10 - broadcasters simply run out of time to complete the records of concession.

Towards of this situation trans-regional stations have decided to keep model of program with so-called "local broadcasting".

All day program is been broadcasted from the central newsroom, where from via satellite signal is transmitted to the local branches of the station. Just from there, using terrestrial transmitters, it's emitted on the air. Broadcasting the local stations takes place using a special computer program that allows you to receive and re-transmit the satellite signal from central newsroom.

To comply with records of the concession (and indirectly to the attach listeners to the station), at certain pores satellite broadcast from the central studio is interrupted. At that time, each of the local branches start with "local emission". Because each branch gives its own broadcast, and after its completion central studio starts its broadcasting, the local emission is also called the "local broadcasting".

It is widely accepted that within "local broadcasting", on-air radio features news and information programs. Most often you can hear them in two forms - local news (in addition to general information service) and local news magazine.

The magazine is usually a presenters band lasting two hours. The network schedule is placed late in the afternoon, what allows for a summary of the events of the day in an extensive and exhaustive way.

Local news is a short “local broadcasting”, which due to time constraints allow for the presentation of two pieces of information read form, or one with short sounds reportage.

Practice shows that local news are usually placed in the network schedule after the overall news transmitted from the central studio. For this reason, its length is limited to approximately one minute. At this time, in addition to the information must still fit jingles, which indicate the beginning and the end of the local news. Jingles lasts about 5 seconds each, which in turn limits the time that can be used for the presentation of information for 50 seconds.

Fifty seconds –this amount of time is available to local news publisher to present information in a fair, clear, accurate and comprehensive way. It should also be noted that more and more editorials focuses on the quality of information and work of their own editors. This is expressed in issuing information using reporter sounds. For this reason, the publisher has even less time for the presentation of information.

Keep in mind that a journalist – reporter, who works on the subjects is obliged to prepare it according to the rules of journalistic ethics. Therefore, he’s not only trying to delve into the topic, get to know it and understand it. He also makes every effort to deplete him. That’s why he strives to ensure that he reaches all parties and obtain statements and positions of the maximum number of persons involved in the issue.

In the case of radio journalism reporter based primarily on statements recorded by him during the conversation. However, many times the subject is much more extensive and requires explanations that reporter placed in the input or the end of the recorded statement.

Of course, it can be assumed that the reporter focuses only on reliable and complete presentation of the subject. However, the practice shows that the publisher does not only has the ability, but also has an obligation to suggest a reporter form in which the information should be prepared. In such a situation, the reporter makes a preliminary analysis and processing of the collected material, so that the publisher was not forced to complete reediting information.

However, if the reporter fails to develop the subject in line with expectations publisher, he is forced to work earnestly, that will allow him to "fit" the information in the allotted time (fifty seconds), while retaining the same meaning and significance of it.

Difficulties in maintaining the principles of journalistic ethics

The publisher may receive material from a reporter in four forms⁴:

1. Text information interspersed with sounds (recorded statements of adversaries);
2. Text information announcing a short reportage, that by using carefully selected questions, answers, speech and sound effects, is to give the recipient image of the subject of the information;
3. "Mouth" - a brief announcement to the sound, in which the reporter personally discuss the topic;
4. SPEC - a brief announcement to the sound, in which the reporter personally presents topic and illustrates the contributors adversaries.

Shortening of the first type of materials seems to be the easiest for the publisher. This is due to the fact that the publisher can correct practically every piece of information. If the publisher after hearing the prepared material sees that it does not have time to present it within the stipulated time, it must decide what and how to change to get the desired effect.

⁴ Ibidem pp. 324 – 342.

In this case, most often begins with an analysis of the text. After noting the all the information the publisher may try to find a sentences that can be removed. Editor should be very careful, because such activity can radically change the meaning of reporter material. Removing sentences or fragments may deprive the listener of relevant information. It may also make it difficult to understand the message and, in extreme cases, misrepresent reality. Therefore, in any case, you must not remove the formulations relevant to discuss the heart of the matter. Also, the inclusions must be removed very rarely, mostly because they allow the listener to properly understand the issues.

The second thing publisher can do with announced is the simplification of the text. It often happens that reporters try to explain topic using detailed descriptions. With good efficiency publishers often can replace many words with one. Then there are all sorts of useful collocations.

Unfortunately, in this case also may occur irregularities. Simplifying text brings the threat changes its meaning.

As for other forms of radio journalism, the publisher has a very limited field of action. This is due to the fact that the reporter supplies audio finished material, which forms a whole. Under the assumption that the reporter is preparing information in accordance with the guidelines of the publisher, the whole should be drafted so as to read the announcement and sound emission with the possible ending lasted no more than the allowed duration of a local news service. Otherwise, the publisher is faced with the need considerable interference in the form of information.

In this case, issue is so difficult that the design of this type of information implies a short announcement and cohesive sound material. Obviously the publisher may shorten or simplify the announcement and ending but it is usually so short that the effect does not meet up to expectations.

The second activity that publisher may take is interference in the audio material. In the case of the "picture" action is relatively simple, because he can shorten or delete the sound effects appear in a material. However, should be remembered that they are most often placed by a certain logic, and therefore cause – effect link, they often not allowed their complete removal. Similarly, consideration should be maximum when it comes to editing statements. Of course we must remember to keep their meaning and expression.

It is much harder shorten the "mouth of" that is spoken reporter's report. This is due to the fact that the sound material is made of one statement that simplification is not possible. Here, the publisher has very little maneuverability. The only intervention for which he can afford is the removal of these elements statements that do not directly relate to the topic. However, in the case of an experienced reporter, those are mostly the not there.⁵

The so-called. SPEC is the largest and also the most difficult task for the publisher. This is due not only to the fact that information is transmitted personally by a reporter, but also because it contains the different types of sounds and speech signals, which are connected together constitute a full-fledged material reporter. SPEC is a kind of "picture" with the narration. In addition, well-prepared SPEC is designed so that it provides a uniform product. Removal of any of its elements completely changes its meaning or even makes it incomprehensible. Here – as in "picture", the publisher must proceed very carefully with each of its parts. Nevertheless, in most cases, it turns out that the material is designed so that the publisher can not make any interference. Every since his operation leads to changes in the content and meaning of the material, which makes it incompatible with the facts and at the same time worthless from the standpoint of journalism.

⁵ Ibidem pp. 363.

Unfortunately, the majority of publishers in the local branches of trans-regional station does not have any other possibility of such rewrite the material in order to have enough time available for its emission. Therefore, they are often in the situation in which it is better to dispense emission at all. If the publisher is faced with a choice - publish all the material risking that there is not enough time for its emission; reword it by removing certain elements and to jeopardize its reliability as a journalist; and finally to give up its emissions - mostly opting for the latter solution.

It must be remembered that although the problem seems to be difficult and often impossible to solve, many experienced journalists (especially radio publishers) very well aware of the fact that the minute is a very long time. Many authors notes that the attention of the listener returns the first 5-7 seconds reportage. For the experienced publisher brief introduction to the reportage is enough to judge whether it intended for fill local service 60 seconds. At the same time efficient reporter knows which elements should be avoided in order to not unnecessarily increase the size of the reportage compiled by him.

So it's time to answer the question in the introduction: Is it possible to observe the rules of journalistic ethics in local news reports in trans-regional radio stations?

The author is convinced that, yes. Of course, this characterization of the work puts a lot of difficulties, but in most cases they are not impossible to solve.

To make sure that local news will always be made in accordance with the principles of journalistic ethics really is enough keep a few basic principles, that rely mainly on solid cooperation publisher with a reporter. Publisher clearly should inform the reporter what material is expected. The reporter must be aware that the topic should be depleted in a specific period of time. On the other hand, the reporter should inform the editor which the finished material elements are less important, or even can be removed without changing the meaning of the prepared information. The ideal would be if the publisher obliged to correct the resulting material, consult the changes made to a reporter before the issuance of the revised version. However, assuming full professionalism of employees in the newsroom, in fact, consultation is necessary.

Conclusion

Summarizing the above considerations it can be concluded, that regardless of the nature of the information service which is prepared for the needs of the radio station, and regardless of the type of reportage supplied publisher, maintain an appropriate level on the air can be guaranteed only through the involvement of all the people participating in creating the final production, which is a local information service.

It is impossible for a serious approach to the subject when the publisher cannot or do not want to clearly formulate their expectations according to delegated tasks. It is also difficult to interfere with the material when the publisher completely doesn't know anything about the situation reportage is about.

Thus, in the vast majority success of the task which is preserving all the rules of journalistic ethics depends not only on the professionalism and experience of practitioners, but also the relationship prevailing between the members of the editorial and cooperation skills and a clear articulation of their expectations, needs and concerns.

References:

Boyd A., Dziennikarstwo radiowo – telewizyjne: techniki tworzenia programów informacyjnych, Kraków 2006.

Adamczyk W., Media masowe w procesie budowania demokracji w Polsce (1989-1995), Poznań 1999.

Bender R., Łętowski M., Wojna o Media. Kulisy KRRiT, Warszawa 1994.

- Chorążki W., Polskie media lokalne i sublokalne 1989-1999, Warszawa 1999.
- Gluz R., Media w Polsce XX wieku, Poznań 1999.
- Goban-Klas T., Media i komunikowanie masowe. Teorie i analizy prasy, radia, telewizji i Internetu, Warszawa 2008.
- Habelski R., Polityczna historia mediów w Polsce XX wieku, Warszawa 2009.
- Jachimowski M., Polskie media 10 lat po likwidacji cenzury, Warszawa 2000.
- Jarowiecki J. [red.], Polskie media lokalne na przełomie XX i XXI w., Kraków 2007.
- Kopper G. [red.], Media i dziennikarstwo w Polsce 1989-1995, Kraków 1996.
- Sasińska-Klas T., Media w wyborach, kampanie wyborcze, media w polityce, Toruń 2007.
- Skodlarski J., Zarys historii gospodarczej Polski, Warszawa 2007.
- Stanisławek J., Etyka, Warszawa 1993.
- Ślipko T., Zarys Etyki Ogólnej, Kraków 2002.

QUANTIFICATION OF THE AMOUNT OF UNJUST ENRICHMENT IN RELATION TO SALE OF A PLOT OF LAND BUILT UP WITH A STRUCTURE OF ANOTHER OWNER

Jana Klišová, Mgr., Ing.

Martina Studnařová, Ing.

Brno University of Technology/Czech Republic

Abstract

The article is a short essay describing the previous and current situation in the legal regulation of the Czech Republic governing the two specific areas of evaluation referred to in the title:

- amount of unjust enrichment, and
- normal price of a plot of land built up with a structure of another owner.

The article's aim is to make the professional public familiar with and inform it about the legislation gaps existing in the Czech Republic, which are not only negatively reflected in the valuation practice, but also affect the general public. The topic of this article resulted from processing the issue of dissertations of the authors.

Keywords: Diversity of ownership, unjust enrichment, legislation in the Czech Republic

Introduction

The paper named Quantification of the Amount of Unjust Enrichment in Relation to Sale of a Plot of Land Built up with a Structure of Another Owner is included in the field forensic engineering due to the fact that this issue is very closely connected to the activities of experts and sworn experts in the area of economy, and according to the classification of the Ministry of Justice, it is included in the Directive of the Ministry of Justice of the Czech Socialistic Republic dated 15 February 1973, Ref. No. 10/73-contr. about organisation, control and inspection of activities of sworn experts and interpreters as follows: Economy – Prices and Estimates – Real Estate Valuation.

The paper was created in response to the new Civil Code 89/2012 Coll. and the Property Valuation Act No. 151/1997 Coll., as amended, when despite every effort exerted by the legislators to regulate the proprietary situation of the entities impoverished as a result of unjust enrichment and to increase their legal certainty, we can see missing methodological procedures both for determination of the unjust enrichment amount and for determination of the normal price of the land in the case of different owners of the land and the structures built on such land.

The paper has been elaborated within the doctor degree study programme of Forensic Engineering of Brno University of Technology in relation to dissertations of the authors as a summary of the already published articles.

Previous legal regulation of the Czech Republic governing the respective issue

The previous Civil Code (Act No. 40/1964 Coll.) was enacted in 1964 and was valid until the end of 2013. During the time, it was subject to many amendments. The Civil Code was based on the situation of the 1960s and then existing opinions concerning ownership rights, a fact which caused one of the most important shortcomings of the code – different ownership of lands and structures built on such lands, in particular in Part One, Section 120 (2), which provided that **structure is not a part of the land**. Due to the aforementioned, the entire problem of different ownership and the following legal settlement of proprietary disputes and different interests of the individual owners continued.

Cancellation of the previous legal regulation and its replacement by the new Civil Code followed up the legal regulation of separated ownership of lands and structures. Contrary to the previous legal interpretation, this was not expressly specified in the Civil Code. Separate ownership of lands and structures was derived from the term "real estate" specified in Section 119 (2) of the Civil Code:

"Real estates are lands and structures connected to the land by a solid foundation." [3]

As obvious from the definition above, in the case of real estate determination, there were two "separate things" with possibly different civil law relationships. Separated ownership of structures and lands without any limitations was not very usual in other countries. Neighbouring Germany may be stated as an example, where the legal term "land" is considered as a synonym to the term "real estate". The reason is the same owner of the land and of the structure situated on the land.

In regard to the right of construction, which was regulated both during the effectiveness of the general civil code and in the Civil Code, the so-called right of personal use of land was its equivalent until the end of 1991 (until the Civil Code was amended) provided certain conditions were fulfilled. Pursuant to Section 198 of the CC, the right of personal use of lands was applied to allow citizens to build a family house, recreational facility, garage or small garden on the land plots, to which such right was established. It was possible to establish such right also for lands, on which the structures or small gardens have already been built. The right of personal use was not limited by time and passed to heirs. For example a family house built by the user in this manner was a part of the user's personal property pursuant to Section 217 of the CC.

Legal regulation of so-called unlawful construction has undergone several changes after the CC came into effect: according to the original wording of Section 221 of the CC, the court decided on the title to the unlawful construction. The court could under certain circumstances order the title to the construction to be held by the builder or order the builder to remove the construction.

The entire Heading Three of the Civil Code was devoted to unjust enrichment. The merits of unjust enrichment were regulated in legislation by Section 451 (2) of the Civil Code.

"Unjust enrichment is a proprietary benefit acquired by performance without any legal reason, by performance for an invalid legal reason or by performance for a legal reason which ceased to exist, as well any proprietary benefit acquired from fraudulent resources." [7]

However it is necessary to emphasize that unjust enrichment was also regulated in other spheres of law, for example in the business law and in the labour law.

The presently applicable legal regulations governing the respective issue

The actual private law codification therefore occurred as late as in the new Civil Code – Act No. 89/2012 Coll. enacted in 2012 and effective from 1 January 2014. However not only this Act was published in the collection of laws, but also Act No. 90/2012 on Business Corporations and Act No. 91/2012 Coll. on International Private Law. The "new Civil Code" pays major attention to the issue of unjust enrichment, namely in the provisions of Sections 2991 to 3005, and the proprietary rights are regulated in the third part of absolute proprietary rights in Sections 1084 to 1086. In application of these provisions we must bear in mind that the new Civil Code follows the idea: Everything which is not forbidden is allowed.

In the sphere of proprietary rights, the principle has been restored that **the structures will again become parts of the land, and the land owner is also the owner of the structure built on the land.**

The first mention that a structure becomes a part of the land is provided in Section 1083 of the CC regulating use of someone else's thing by the builder for construction on their land, when the structure becomes a part of the land. The land owner is obliged to compensate the thing's owner the value of the thing.

The legal regulation in Section 1084 concretely defines identity of the proprietary rights to the land and structure in a sentence appearing in paragraph 1:

"A structure built on someone else's land is owned by the land owner." [1]

In such case the land owner is obliged to compensate the person who built a structure on someone else's land in good faith, for the purposefully spent costs. The court may decide on the basis of the land owner's motion that the person who built a structure on someone else's land having no right to do so must remove the structure at their own costs and restore the land to the original condition. The court will take into consideration whether the structure was built in good faith or not.

Anyone who built a structure on someone else's land is entitled to claim from the land owner, who knew about building the structure and did not prohibit it without undue delay, **to transfer the land to the builder at the normal price.** Also the land owner has the right to claim from the structure builder to **buy the land at the normal price.** In such case the court may assign the title to the land to the construction builder and decide on their obligation to pay the land owner the respective compensation. [1]

With regard to comparison of the old and the new Civil Code in regard to unjust enrichment we can observe that some provisions have only been reworded, some provisions have been principally changed and some provisions are completely new. In general we may say that the new legal regulation protects the more impoverished party, and that is why it only incorporated a demonstrative list of acts representing unjust enrichment amended with a list of examples. For this reason, there is a key change in assessing unjust enrichment. It is newly judged also from the point of justice, decency and normal practice, not pursuant to law (and a new compound lexeme resulted from the aforementioned: "Enrichment without a just reason, impoverished, enriched, good faith, bad faith, etc.") [1]

The new Civil Code also establishes an obligation to take into account the amount of unjust enrichment at the moment the return is claimed. Also the principles of criminal law, institute of which should only be applied in marginal cases, were taken into consideration.

Regulations governing the valuation

Civil Code

The provision concerning prices is specified in Section 492 of the Civil Code:

(1) The value of a thing, if quantifiable in money, is its price. The price of a thing will be quoted as a normal price, unless otherwise agreed or provided for by law.

(2) Extraordinary price of a thing shall be quoted if its value is to be replaced with regard to special situation or special popularity caused by accidental features of the thing.

Act No. 526/1990 Coll. on prices

The normal price is defined in Act No. 526/1990 Coll. on prices as amended, especially by Act No. 403/2009 Coll. The validity of its application to this case and definitions of the normal price are as follows:

Section 1 – Subject of the Regulation

(1) The act applies to application, regulation and control of prices of products, outputs, works and services (hereinafter the "goods") for the domestic market, including prices of imported goods and prices of goods intended for export.

(2) Price is a monetary amount

- a) agreed upon the purchase and sale of goods pursuant to Sections 2 to 13, or*
- b) established according to a special regulation⁶ for other purposes than for sale.*

(3) The procedure according to this act also applies to transfers of rights and furthermore also to transfers and passages of titles to real estates including enjoyment rights to real estates.

Section 2 – Negotiating the Price

(6) The normal price for the purpose of this Act is the price of identical or (in regard of use) comparable or mutually substitutable goods freely agreed between the sellers and the buyers, who are independent from one another in regard to economy, capital or personnel, in the respective market, which is not endangered by effects of restriction of economic competition. If the price normal in the market cannot be quantified, the price for evaluation, if a more favourable economic position is not misused, shall be determined by calculation of the economically justified costs and a reasonable profit.

In Section 1 (2), the price is defined as a monetary amount, which is agreed upon purchase and sale of goods or as a monetary amount determined according to a special regulation for other purposes than sale. Special regulation here means Act No. 151/1997 Coll. on property valuation. [5]

Conclusion

The aim of the paper was to illustrate and describe for the professional public the situation in the Czech Republic in the field of real estate valuation, concretely with the focus on the sphere of unjust enrichment and the problem of different ownership of a land and the structure built on the land.

As is obvious from the above-described basic legal regulations governing this area, we may state that there is a considerable variability of solutions applied to concrete cases in practice.

Though legislators tried to harmonise the two spheres according to the applied foreign codes, the result is that the non-incorporated methodological procedure in settlement of the problem of different ownership causing possible unjust enrichment still exists.

We support our statement by the fact that these seemingly remote spheres in the valuation practice have the same insufficient legal regulation, which then negatively reflects in the process of definition of the unjust enrichment amount.

⁶Act No 151/1997 Coll. on valuation of property and on amending certain acts (Property Valuation Act).

We would like to point out that a problem may possibly incur, which will require regulation in the Czech Republic by a judicial decision. It is the case when a land built up with a structure of another owner is sold. The owner of the structure has the right to claim from the land owner to transfer the land at the normal price. Also the land owner has the right to claim from the structure builder to buy the land at the normal price. Due to mutual pre-emption rights, the market of entities potentially interested in buying the real estate is considerably limited and the normal price principle cannot be therefore adhered to. If an invalid contract is then entered into, the sold will be impoverished by the agreed amount equalling the normal price. This means that an unjust enrichment incurs here and it will be up to the sworn expert to quantify its amount. A problem appears here where it is not possible to apply the normal price provisions from the aforementioned act on normal price, because the conditions of the merits of this term are not met. Therefore a problem arises that in quantification of the unjust enrichment amount we cannot apply the provisions on normal price, because we have no competition market here. The Supreme Court or the Regulation to apply the statute will then also have to govern this missing regulation.

References:

- Collection of Laws of the Czech Republic, Act No. 89/2012 Coll. The Civil Code (op. 19th 3rd 2013). Available from WWW: <http://www.sbirka.cz/POSL4TYD/NOVE/12-089.htm>
- BRADÁČ, Albert et al . Official property valuation in 2014, the Ministry of Finance as amended by Decree No. 441/ 2014. Brno: CERM Academic Publishing, Ltd. ISBN 978-80-7204-867-0
- Law No. 40/1964 Coll . , The Civil Code, as amended
- Law No. 526/1990 Coll . , Act on Prices, as amended
- Law No. 151/1997 Coll . , Property Evaluation Act, as amended

THE TORT LIABILITY IN PORTUGAL: THE FAULT REQUIREMENT – THE PARTICULAR CASE OF PUBLIC SCHOOLS

Jorge Barros Mendes

School of Technology and Management, Polytechnic Institute of Leiria, Portugal

Abstract

The Law 67/2007 of December 31st has changed the arrangements liability of the state bringing numerous innovations in the Portuguese legal system over the past diploma. We will analyze synthetically, one of the requirements for the Portuguese state will be sentenced - the concept of fault.

This concept appears now clearly enshrined in Portuguese administrative law, contrary to the previous regime which referred to the civil law and the concept of *bonus pater familiae*. We will try to understand it with the Law of The Tort Liability of the State and trying to understand if we have in Portugal the objectification or subjectivation of the fault.

We will conduct a review of certain decisions of the Portuguese courts on this matter, essentially trying to understand how the courts decided under the previous law and decide how to the present law.

Keywords: Tort liability, fault, public schools

Introduction

The Law 67/2007 of 31st December (RCEE), which repealed the DL 48051 of November 21st of 1967 has changed the rules on civil liability of the Portuguese state.

The Law had brought numerous innovations in our legal system over the past diploma. We will analyze synthetically, given the time constraints and the objective of these meetings, the concept of guilt under the new law and we are going to try to understand the practical applicability of the concept of jurisprudence established under the school accidents.

The fault at subjective responsibility

The concept of fault appears to us expressly enshrined in article 1^h RCEE. Indeed, as Margarida Cortez alert, the legislature limited to refer to Article 487 of the Civil Code, i.e., the fault was appreciated given the diligence of a *bonus pater familiae*. The author has considered inappropriate that reference, since the acts which form the basis of liability are functional and not personal acts, i.e., the agent acts as proprietor invested organ.

See, for example, that for civilists experts, "the fault can be defined as the judgment of censure to the agent for taking the conduct adopted, where according to the legal command would be forced to adopt different behavior. It should therefore be understood as the omission of care which would be payable in accordance with the standard of conduct that the law imposes agent. "

The problem lies in combining the provisions of article 10 RCEE with article 7 RCEE concerning the liability for unlawful acts.

The responsible for compensating is the public administration in situations of mild guilt, provided that the employee has acted in the exercise of its functions and because of them. And in this circumstances there's no right of return - this will only happen in situations

where the official has acted with gross negligence - in these circumstances the employee acted with gross negligence or willful misconduct.

Particularly, the presumptions of guilt for violation of due diligence

The portuguese jurisprudence that earlier accepted that the presumptions of guilt predicted to be applicable to administrative liability in article 493 of the Civil Code.

According to the rules of common experience damage from things come from lack of proper supervision. In addition there is the need to ensure the right to compensation for the injured party against the extreme difficulty of proving the negative facts that substantiate the violation of dutiful care and convenience to encourage compliance with the due diligence that belongs to the public administration.

The Central North Administrative Court - Ac. 31.05.2013 came to consider the organization of a study visit with 388 pupils aged between 10 and 15 years on average in the mines of Ramalhão area, in the hills of Marão in Amarante is a dangerous activity - due to natural means chosen, by age and number of students involved.

In this case it would be up to the state to rebut the presumption that he employed all measures required by the circumstances in order to prevent them.

However, in this case during this tour a student of 14 years old with his friend moved away from the rest of the group at lunch time and decided to take the "Mine Source Figueira / Stoned".

The student ended up falling into the same pit and had suffered head injuries traumatic injuries that will come to cause death four days later. It happens that during the absence of the two pupils nobody noticed that they were not with the group and they were absent from the group for over 40 minutes until the alert was given by the lowest deceased friend. In the specific case it was necessary that the school rebuts the presumption, which failed to do, not least because the school could not prove the number of teachers and staff affected to such activity; failed to demonstrate that it could not be avoided, and, any case, the output of the deceased from the place of lower concentration of students in a release. The decision has considered verified the assumptions of tor liability: i) relevant fact: the pursuit of a dangerous activity undertaken by the school; ii) unlawful translated in breach of due diligence and advise the ride 388 minors in that location with mines open air, resulting in a wrongful or negligent actions; iii) causation - if not for the unfortunate and reckless choice school, the accident would not have occurred.

In cases of drop beacons on school grounds, the Portuguese Supreme Administrative Court (STA), most recently, considered that the failure to comply with a dutiful care, diligence and vigilance is attributable. to the State is the thing to watch Live a detectable hazard and whose degree exceeds sociologically acceptable risks.

The STA considered that "(...) A soccer goal placed in a sports venue of a high school for use by students, can't be considered a dangerous equipment, because it is not fixed to the ground, if, by their characteristics of heavy structure iron, requires no such attachment to maintain balance and stability under conditions of normal use (...), so that (...) the absence of such a fixation of this goal to the ground did not match the violation of technical rules to be observed by the responsible school, which did not assume, therefore, a unlawful conduct by omission (...).

Conclusion

i) The article 10 RCEE has established the objectification of the fault in article 10 RCEE.

ii) the establishment of presumptions of light trespass, pursuant to article 10, n^o2 RCEE in cases of breach of the obligations of surveillance beyond

References:

ALMEIDA, MÁRIO AROSO DE. *Comentário ao Regime da Responsabilidade Civil Extracontratual do Estado e demais Entidades Públicas*. Universidade Católica Editora, 2013.

AMARAL, DIOGO FREITAS DO. *Direito Administrativo, volume III*. Lisboa 1989.

"A responsabilidade da Administração no Direito Português." *Separata da Revista da Faculdade de Direito da Universidade de Lisboa, vol. XXV*, 1973.

ANDRADE, JOSÉ CARLOS VIEIRA DE. "Panorama Geral do Direito da Responsabilidade Civil da Administração em Portugal." In *La responsabilidad patrimonial de los poderes públicos*. Madrid/Barcelona: Marcial Pons, 1999.

"A responsabilidade por danos deocorrentes do exercício da função administrativa na nova lei sobre responsabilidade civil extracontratual do Estado e demais entes públicos." *Revista de Legislação e Jurisprudência ano 137.º, nº 3951* (2008).

BARRA, TIAGO VIANA. "A responsabilidade civil administrativa do Estado." *Revista da Ordem dos Advogados* Jan. / Mar. 2011, no. I (2011 - Ano 71).

CADILHA, CARLOS ALBERTO FERNANDES. "O Novo Regime de Responsabilidade Civil do Estado e demais Entidades Públicas pelo Exercício da Função Administrativa." *Revista do CEJ* 1 semestre 2009 | número 11 (2009).

Regime da Responsabilidade civil extracontratual do estado e demais pessoas colectivas públicas - 2 edição. Coimbra: Coimbra Editora, 2011.

CORDEIRO, ANTÓNIO MENEZES. *Tratado de Direito Civil Português II - tomo III*. Coimbra: Almedina, 2010.

CORTEZ, MARGARIDA. *Contributo para uma reforma da lei da responsabilidade civil da Administração*. A responsabilidade civil do estado - trabalhos preparatórios da reforma. Coimbra: Coimbra Editora, 2002.

Responsabilidade civil da administração por actos administrativos ilegais e concurso de omissão culposa do lesado - Stvidia Ivridica 52. Coimbra: Coimbra Editora, 2000.

COSTA, MÁRIO JÚLIO DE ALMEIDA. *Direito das Obrigações*. Almedina. Coimbra: Almedina, GARCIA, MARIA DA GLÓRIA FERREIRA PINTO DIAS. "A responsabilidade civil do estado e das regiões autónomas pelo exercício da função político-legislativa e a responsabilidade civil do estado e demais entidades públicas pelo exercício da função administrativa." *Revista do CEJ*, no. 1º semestre 2010 | número 13 (2010).

GOMES, CARLA AMADO. *Contributo para o estudo das operações materiais da administração pública e do seu controlo jurisdicional*. Coimbra: Coimbra Editora, 1999.

"A reponsabilidade civil extracontratual da adminitração por facto ilícito: reflexões avulsas sobre o novo regime da Lei 67/2007, de 31 de Dezembro." In *Textos dispersos sobre direito da responsabilidade civil extracontratual das entidades públicas*, edited by AAFDL. Lisboa:

LEITÃO, LUIS MIGUEL TELES DE MENEZES DE. *Direito das Obrigações - volume I - Introdução. Da Constituição das Obrigações*. 9ª ed. Coimbra: Coimbra Editora, 2010.

MACHETE, PEDRO. "A responsabilidade da Administração por facto ilícito e as novas regras de repartição do ónus da prova." *Cadernos de Justiça Administrativa, n. 69, Maio/Junho* .

PORTOCARRERO, MARIA DA GLÓRIA FERREIRA PINTO DIAS GARCIA; MARTA. *Comentário ao Regime da Responsabilidade Civil Extracontratual do Estado e demais Entidades Públicas*. Lisboa: Universidade Católica Editora, 2013.

SOUSA, MARCELO REBELO DE E ANDRÉ SALGADO DE MATOS *Direito Administrativo Geral, Tomo III - 2ª edição*. Lisboa: Dom Quixote, 2009.

VARELA, JOÃO DE MATOS ANTUNES. *Das Obrigações em Geral, vol. I* Coimbra: Almedina, 2012.

WALINE, JEAN. *Droit Administratif*. Paris: Dalloz, 2010.

MODELING AND SIMULATION OF THE ORTHOGONAL CUT BY USING THE LAW OF DAMAGE

Lynda Himed, MA

University of Batna- Faculty of Science of Engineer, department of Mechanic, Algeria

Abstract

The principal objective of our work is to simulate the orthogonal cutting process a computer code by the finite element method which is ABAQUS by its explicit integration diagram and by quoting the method of the adaptive grid (ALE) and the law of Johnson- Cook behavior established in ABAQUS. This study is carried out for a steel of the 42CD4 type and a tool of which the angle of cut is 6° . The tool has a presumed rigid.

Keywords: Orthogonal cutting, Finite Element Method, Adaptatif Mesh, damage, Johnson-Cook law

Introduction

In working, the contact and friction between the parts and the tools play a big role. Indeed, the final geometry of the formed product depends on friction. The forces and the concerned couples increase with friction, [1]. Modeling by finite elements of working of the parts, having nonlinearities geometrically and numerically, requires a mending of meshes.

In this work, one presents the digital simulation of the formation of the chip out of orthogonal cut which is carried out on software ABAQUS 6.5 [2].

Law of behavior and damage of material machines

The law chosen to represent the physique of the process is that of Johnson-Cook [3], usually used in the literature to simulate this type of operation.

$$\sigma(\varepsilon_{eq}, \dot{\varepsilon}_{eq}, T) = \underbrace{(A + B(\varepsilon_{eq}^p)^n)}_{\text{Term of work hardening}} \underbrace{\left(1 + C \ln\left(\frac{\dot{\varepsilon}_{eq}^p}{\dot{\varepsilon}_0}\right)\right)}_{\text{Dynamic term: } f_d} \underbrace{\left(1 - \left(\frac{T - T_t}{T_f - T_t}\right)^m\right)}_{\text{Term of softening: } f_a} \quad (1)$$

This law of flow breaks up into three terms: a term of work hardening, a dynamic term and a term of softening.

The term relating to work hardening corresponds to the yield stress at speed of constant deformation ($\dot{\varepsilon}_{eq}^p = \dot{\varepsilon}_0$) and to the constant temperature ($T = T_t$).

A is the yield stress to null plastic deformation, B and n are respectively the linear and nonlinear parameters of work hardening.

The second term is a multiplicative factor noted f_d characterizing the dynamic hardening of material. This term thus depends on the speed of equivalent plastic deformation. C is the coefficient of sensitivity at the speed of deformation and $\dot{\varepsilon}_0$ is a speed of deformation of reference.

The third term of the law is a factor noted f_a corresponding to the thermal phenomenon of softening. In lower part of the temperature of T_t transition, the effect of the temperature on the law of flow is neglected. For temperatures ranging between T_t and the melting point T_f , the yield stress decreases with the temperature to become null for ($T = T_f$).

Beyond the melting point, the yield stress is practically null. T_t is the temperature of transition from which one has a thermal mechanism of softening, and m being the thermal exhibitor of softening. Table 1 respectively gives the material characteristics and the coefficients of the law of Johnson - Cook of the material 42CD4, [4]:

Table 1 Material characteristics and coefficients of the law of behavior of johnson-cook.

Material characteristics		Parameters of Johnson- Cook	
ρ (Kg/m ³)	7800	A(Mpa)	595
E (Mpa)	210000	B(Mpa)	580
ν	0.3	n	0.133
C_v (J/Kg.K)	379	C	0.023
k (W/(mK))	46	m	1.03
		$\dot{\epsilon}_0$ (s ⁻¹)	0.001
		T _{amb} (°K)	293
		T _{fus} (°K)	1793

Boundary conditions and loading

The part is modelled in plane deformations and it is fixed by an embedding at its base. Its length is of 31.4 mm (diameter Ø10 mm) and its width is of 15 mm, (fig. 1). The tool is modelled by a rigid body of angle of cut 6°.

The clearance angle is worth 5° and the ray of the nozzle is worth 0.1mm. It is animated of a translatory movement at a cutting speed $V_c=15$ m/s. The initial temperature of the part and the tool is of 20°C (293°K). Depth of cut $a_p=0,2$ mm. The contact between the tool and the machined part is considered with friction this last is estimated at $\mu=0.2$.

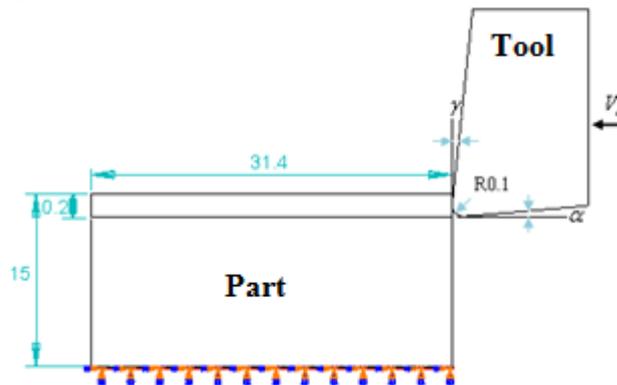


Fig.1. Machining out of orthogonal cut

Simulation of the orthogonal cut

One used for this simulation a rigid tool with the angle of cut 6°. On the fig. 2, one observes that the grid was refined dice the first contact between the tool and the part thanks to function ADAPTIVE MESH.

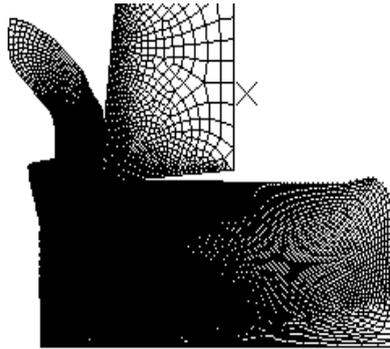


Fig.2. Morphology of the chip for the angle of cut $\gamma=6^\circ$.

The fact of taking a great angle (more cutting tool) generates a facility in the formation of the chips. It is noted finally that the chip formed by this method is a continuous chip.

Distributions of the equivalent constraint of Von Mises (fig. 3) and the field of temperature (fig. 4) are presented in our simulation.

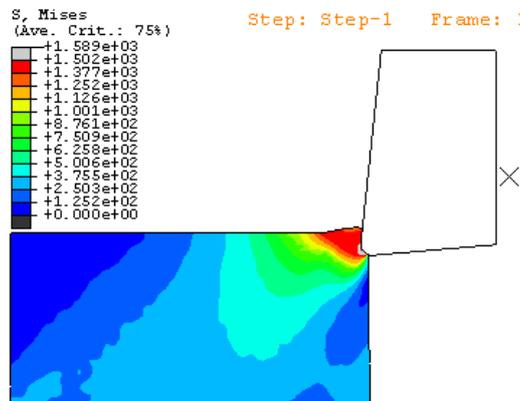


Fig.3. Equivalent constraint of Von Mises, $\gamma=6^\circ$.

One notices the appearance of the zone of separation of metal at a peak of the tool (in gray). In this area, the tool exerts a compressive force on the material which is driven back and separates in two parts: the chip and the machined part. One notices also the appearance of the primary education zone of shearing (red) and secondary (out of orange).

The temperature in the zone of separation tool part is of 151.7°C (fig. 4), then it passes from 393.7°C on the point of the tool (frame 8) to 462.7°C in frame 35 and in all the courses of the tool and finally the temperature releases itself through the chip.

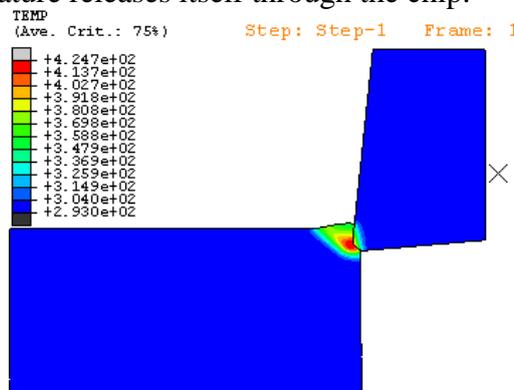


Fig.4. Distribution of the temperatures, $\gamma=6^\circ$.

The heat generated with the interface is due to plastic work in the part and which is diffused in the tool (fig.5).

One notices an increase in the plastic deformation equivalent to traverses tool in the primary zone of shearing, where the constraints are most important.

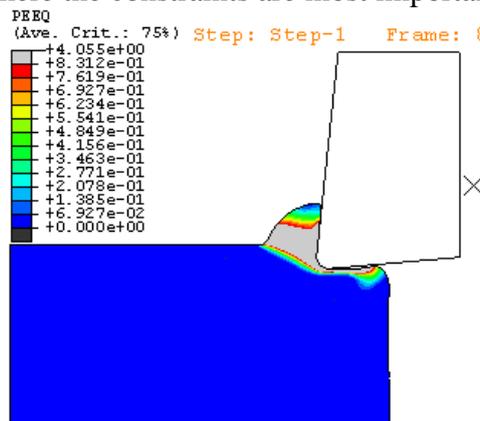


Fig.5. Equivalent plastic deformation, $\gamma=6^\circ$.

Conclusion

Our main aim was the study of the phenomenon of removal of the matter and more exactly in the case of the orthogonal cut, by using the finite element method.

- One studied the formation of the chips and their morphologies.
- The chips formed by the method of the adaptive grid are continuous chips.
- One identified the problem of distortion of the grid and its remedy is the adaptive grid.

References:

- Lestriez. P. (2003). Thesis of doctorate. University of technology of Troyes.
- Abaqus. (2003). Abaqus to user's manual, Abaqus Inc.
- Johnson, G.R. and Cook, W.H. (1983). 7th Int. Symposium on Ballistics, La Hague, pp. 541-547.
- Barge. M. (2005). Thesis of doctorate of the Central school of Lyon, July 2005.

THE LIMITS FOR THE GLOBAL PROLIFERATION OF COMPETITION LAW: THE CASE OF MACAO SAR

Alexandr Svetlicinii, PhD, MRes, LL.M

University of Macau, Faculty of Law, Macao SAR, China

Abstract

The adoption and enforcement of competition rules which replace or supplement state regulation of markets has become a global trend that led to almost universal proliferation of competition law regimes. Following the lead of the developed market economies an increasing number of developing countries and transition economies have introduced competition rules in their national legal systems. Macao SAR, as a small developed economy concentrated around booming gaming industry, stands among few jurisdictions that do not have comprehensive competition legislation. Present paper analyses current situation with regulation of market competition in Macao with special focus on the gaming industry. While general competition rules embedded in the Commercial Code are left to the private enforcement by interested parties, specific competition rules applied to the gaming activities have to be enforced by the sector regulator lacking the knowledge and experience in antitrust enforcement. As a result, the effective antitrust enforcement is largely non-existent. The international trade obligations of Macao SAR under the WTO framework or its bilateral trade relations with China and European Union have not prompted the adoption of competition law either. The study is an attempt to provide explanations as to the current state of affairs with competition rules and to anticipate further developments in this field.

Keywords: Competition law, economic regulation, gaming, Macao, unfair competition

Introduction

The current transnational landscape of competition law regimes can be best described by the terms “universal proliferation” and “global convergence”. Already ten years ago it was reported that 101 countries had a competition law.⁷As reported by the UNCTAD in 2007, a total of 113 countries and regional groupings have adopted or were in the process of adopting competition legislation.⁸By 2009 the number of national competition authorities (NCAs) joining the International Competition Network has reached 104 NCAs from 92 jurisdictions.⁹Even though it has been argued that competition law regime is active in roughly 60-70% of the countries with competition legislation,¹⁰ the universal proliferation of competition law regimes remains a largely uncontested trend. The global implementation of competition rules has become the norm with the end of the Cold War when numerous developing countries

⁷See F. Kronthaler and J. Stephan, Factors accounting for the enactment of a competition law – an empirical analysis (May 2005), p. 5, available at http://www.iwh-halle.de/projects/competition_policy/Factors_01.PDF.

⁸UNCTAD Guidebook on competition systems (Geneva, 2007), available at http://unctad.org/en/Docs/ditccpl20072_en.pdf.

⁹ICN Factsheet and key messages, p. 1, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc608.pdf>.

¹⁰See A. Mateus, Competition and Development: What Competition Law Regime? (October 26, 2010), available at <http://ssrn.com/abstract=1699643>.

have realized the benefits of competition rules for their national economies and consumers.¹¹ The developing countries have been initially rejecting the idea of adopting competition rules when the government's control over economy was strong but with the wave of economic reform including privatizations and other economic liberalization measures the governments have gradually replaced regulation with competition rules.¹²

Against this background, there are only few jurisdictions that have not made competition rules a part of their national legal system. In this regard the Macao Special Administrative Region of the People's Republic of China (Macao SAR or Macao) represents a rare example of a developed market economy without a competition law regime.¹³ The most recent WTO trade policy review for Macao concluded that there has not been overarching competition legislation in Macao as the authorities consider that current provisions, which are scattered around various laws and sector-specific regulations and rules, have provided adequate protection given that the territory is small and most business are small and medium enterprises.¹⁴ The present paper considers these and other legal, economic and institutional factors that would explain the absence of competition law regime in Macao SAR. Casino gaming remains at the core of the Macao's economy in terms of its share in the region's GDP, employment and revenue.¹⁵ In this sense the discussion on the government's policy towards competition in the gaming industry will contribute to the better understanding on why competition rules have not replaced sector regulation, which is currently the case in several other economic sectors such as energy, telecommunications, utilities, financial services, transport, etc. The paper also aims at evaluating the perspectives for adoption of a comprehensive competition law or the possibility that this region could become an 'isolated island' of law¹⁶ surrounded by the sea of jurisdictions with developing competition law regimes.

Macao legal system and general competition rules

Macao legal system belongs to Romano-Germanic legal family¹⁷ with common features being codification of legislation and emphasis on public enforcement of economic regulations. Under "one country, two systems" principle embedded in the China's

¹¹See UNCTAD, *Benchmarking Competition Systems: A Global Survey of Major Institutional Characteristics*, available at <http://unctad.org/en/Pages/DITC/CompetitionLaw/ResearchPartnership/BenchmarkingCompetition.aspx>.

¹²See D. Wei, "Analytical Comparison as a Challenge for International and Comparative Competition Law" in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013), p. 66.

¹³As reported by the Global Competition Forum on 13.05.2010 at <http://www.globalcompetitionforum.org/asia.htm#Macau>. With the population of 607,500 and an total surface of 31,3 km² Macao in 2013 has generated gross gaming revenue of 361,866 million MOP which brought per capita GDP to MOP 697,502 (approx. USD 87,306). Government of Macao Special Administrative Region, Statistics and Census Service, Macao in Figures 2014, <http://www.dsec.gov.mo/Statistic.aspx?NodeGuid=ba1a4eab-213a-48a3-8fbb-962d15dc6f87>.

¹⁴ See Trade Policy Review of Macao, China, WT/TPR/S/281, WTO Secretariat, 25 March 2013, p.8. See also V. Quintã, "Competition law needed: WTO", *Macau Business Daily* (17.05.2013), available at <http://macaubusinessdaily.com/Economy/Competition-law-needed-WTO>.

¹⁵In 2011 services accounted for about 90% of GDP and employment; the gaming sector accounted for 45% of GDP and 20% of employment. Direct tax from gaming accounted for about 80% of total government revenue. Trade Policy Review of Macao, China, WT/TPR/S/281, WTO Secretariat, 25 March 2013, p.6.

¹⁶The concept of 'isolated island' of law for Macao was used in Tong Io Cheng and Wu Yanni, "Legal Transplant and the On-Going Formation of Macao Legal Culture" in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013), p. 256.

¹⁷See generally P. NunesCorreia, "The Macanese Legal System: A Comparative Law Perspective" in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013), pp. 133-140.

Constitution¹⁸ and implemented in the Macao Basic Law,¹⁹ the Macao SAR enjoys a high degree of autonomy in the exercise of executive, legislative and judicial powers.²⁰ The preservation of the capitalist system in Macao has been guaranteed by the Macao Basic Law for fifty years following the hand-over of Macao by Portugal to China in 1999.²¹ The Macao Basic Law instructs the government to “pursue the policy of free trade and safeguard the free movement of goods, intangible assets and capital”.²² The SAR shall also “protect the free operation of industrial and commercial enterprises and make its own policies on the development of industry and commerce” and “improve the economic development and provide legal guarantees for promoting the development of industry and commerce and for encouraging investments, technological progress and development of new industries and new markets”.²³ Notably, the word “competition” is nowhere to be found in the Macao Basic Law, which effectively leaves the policy choice for achievement of the above mentioned objectives to the discretion of the Macao SAR. In the policy statements of the Macao SAR Government competition and competition rules appear neither as objectives nor as the tools to achieve other objectives. For example, in the 2014 policy for economy and finance the Government pledged to promote economic diversification, support SMEs, deepen regional economic cooperation and strengthen financial and monetary regulations.²⁴ According to the policy statement, the above objectives shall be achieved through various state assistance and regulatory measures.²⁵

In the sectors that are not directly regulated by the state, the businesses are free to formulate their own commercial policies subject to the general rules related to economic activity such as company law, contract law, taxation, etc. Competition between entrepreneurs is addressed by the Title X, Chapter I of the Macao Commercial Code (ComC).²⁶ The central provision is Article 153 ComC, which provides that competition between entrepreneurs shall take place in a manner that does not harm the interests of the economy of Macao.²⁷ The same provision prohibits all agreements or practices that have the object or effect of preventing, falsifying or restricting competition.²⁸ The following provisions regulate the validity of no-competition agreements between entrepreneurs. These shall respect the general prohibition of agreements harmful to the economy or those restricting competition and shall be in writing.²⁹

The no-competition agreements must be also limited to a certain zone or certain

¹⁸ The Constitution of the People’s Republic of China, adopted at the 5th Session of the 5th National People’s Congress and promulgated for implementation by the Announcement of the National People’s Congress on 4 December 1982, Article 31, http://www.npc.gov.cn/englishnpc/Constitution/node_2825.htm.

¹⁹ The Basic Law of the Macao Special Administrative Region of the People’s Republic of China, adopted by the 8th National People’s Congress at its 1st Session on 31 March 1993, unofficial English translation is available at http://bo.io.gov.mo/bo/i/1999/leibasica/index_uk.asp.

²⁰ Macao Basic Law, Article 2.

²¹ See Joint Declaration of the Government of the People’s Republic of China and the Government of the Republic of Portugal on the question of Macao, <http://bo.io.gov.mo/bo/i/88/23/dc/en/>. See also Macao Basic Law, Article 5.

²² Macao Basic Law, Article 111.

²³ Macao Basic Law, Article 114.

²⁴ See Macao SAR Government, Major Policies on Various Issues for the Fiscal Year of 2014, available at http://portal.gov.mo/web/guest/info_detail?infoid=281287.

²⁵ See Macao SAR Government, Policy Address for the Fiscal Year of 2014 of the Macao Special Administrative Region (MSAR) of the People’s Republic of China, available at http://portal.gov.mo/web/guest/info_detail?infoid=302415.

²⁶ Commercial Code, approved by Decree-Law no. 40/99/M, 3 August 1999, unofficial English translation is available at <http://bo.io.gov.mo/bo/i/99/31/codcomen/>. See also J. Godinho, The Macau Commercial Code: An English Unofficial Translation (September 12, 2013), available at: <http://ssrn.com/abstract=1545094>.

²⁷ Commercial Code, Article 153(1).

²⁸ Commercial Code, Article 153(2).

²⁹ Commercial Code, Article 154(1).

activity³⁰ and their validity shall not exceed five years.³¹ Summarily, the above mentioned provisions create private remedies for the parties willing to contest the validity of non-competition agreements. In line with the rules of civil procedure, the party alleging the invalidity of an anti-competitive agreement will bear the burden of proof in relation to the anti-competitive object or effect of such agreement.

Title X, Chapter II ComC identifies the acts of unfair competition, which are prohibited and can give rise to the private claims for damages. The general clause defines unfair competition as “any act of competition that objectively reveals itself to be in breach of the norms and honest usage of economic activity”.³² The general clause is followed by a list of specific acts prohibited as unfair competition. Two of them are noteworthy as they concern practices that are often banned under the classic antitrust rules. One of them is exploitation of dependence defined as “undue exploitation by an entrepreneur of a situation of dependence, with economic repercussions, in which entrepreneurs who are his clients or suppliers may find themselves, and who do not have an equivalent alternative for the exercise of their activity”.³³ The exploitation of dependence does not require the showing of a dominant position. At the same time the absence of “an equivalent alternative for the exercise of their activity” might imply that the undertaking concerned is in a possession of substantial market power. The ComC also qualifies the sale at a loss as an act of unfair competition: “sales effected below the cost or acquisition price are considered unfair, if they are part of a strategy directed at the elimination of a competitor or a group of competitors from the market.”³⁴ The respective provision of the ComC also does not require the showing of dominance, which might imply that even the undertakings without market power cannot engage in sales at a loss with the purpose of eliminating competitors.

The Macao’s approach to defining the acts of unfair competition is thus a mixed one: there is a general clause and the non-exhaustive list of specific situations which are considered unfair competition acts. It has been argued that this enables certain flexibility and allows catching various emerging acts and practices.³⁵ While the competition provisions of ComC are primarily intended for private enforcement by the interested parties, some external reports referred to these provisions as basic elements of competition policy adopted by the Macao Government for the proper functioning of markets.³⁶ The survey of the judicial practice of the Macao’s courts in enforcing competition provisions of the ComC remains scarce and mainly restricted to the acts of unfair competition such as imitation of trademarks.³⁷

Since there is no specialist competition law enforcement agency in Macao, the Macao Consumer Council³⁸ already in 2001 in its fair competition policy report suggested establishing a fair competition committee as a specialized agency to enforce competition rules in Macao, as well as an *ad hoc* competition arbitration tribunal to deal with claims based on competition rules.³⁹ While this proposal has not been implemented, the Consumer

³⁰ Commercial Code, Article 154(2).

³¹ Commercial Code, Article 154(3).

³² Commercial Code, Article 158.

³³ Commercial Code, Article 168.

³⁴ Commercial Code, Article 169.

³⁵ See A. Teixeira Garcia, “Unfair Commercial Practices and Cyber Consumer Protection” in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013), p. 197.

³⁶ See U.S. Department of State, Bureau of Economic and Business Affairs, 2013 Investment Climate Statement – Macao (April 2013), available at <http://www.state.gov/e/eb/rls/othr/ics/2013/204682.htm>.

³⁷ See e.g. Judgment of the Court of Second Instance No. 13/2004 dated 26.02.2004, Judgment of the Court of Second Instance No. 844/2011 dated 07.02.2013, available at <http://www.court.gov.mo/>.

³⁸ Macao SAR Government Consumer Council, <http://www.consumer.gov.mo/>.

³⁹ See Macao SAR Government Consumer Council, Macao fair competition policy report, paras 97-100, available at http://cc.informac.gov.mo/c/active/c_competition.htm.

Council has pursued other initiatives aimed at protection of consumer interests. One of such initiatives was the establishment in 2011 of the Supermarket Price Information Platform, an online database containing the retail prices of around three hundred products from over ten supermarkets.⁴⁰

Regulation of competition in the gaming industry

Since 1962 the Macao gaming industry was dominated by the monopoly concessionaire *Sociedade de Turismo e Diversões de Macau* (STDM). It was partially liberalized in 2002, when following the adoption of the Law No 16/2001⁴¹ by the Legislative Assembly,⁴² it was decided to issue three gaming concessions and introduce several new players to the gaming market. The tendering procedure organized pursuant to the Administrative Regulation No. 26/2001⁴³ resulted in the following winning bidders becoming new gaming concessionaires: (1) *Sociedade de Jogos de Macau* (SJM), a subsidiary of STDM, (2) *Galaxy Casino, S.A.* (Galaxy), and (3) *Wynn Resorts (Macao) S.A.* (Wynn). Later modifications of the concession contracts allowed the concessionaires to conclude sub-concessions agreements thus introducing three more players to the gaming market: *Venetian Macao S.A.* (Venetian), *MGM Grand Paradise, S.A.* (MGM) and *Melco PBL Jogos (Macao), S.A.* (Melco PBL). As a result of the above bidding distribution of the administrative concessions by Macao SAR, the gaming industry landscape was fixed until 2020 and 2022 respectively with currently six undertakings operating more than thirty casinos.⁴⁴

The Law No 16/2001 contains several competition-related provisions that stipulate the prohibition of the anti-competitive agreements and practices, certain forms of abuse of dominant position and control of shareholdings. Thus, the law prohibits agreements and concerted practices, among the concession holders or companies belonging to the respective groups, which may prevent, restrict or distort competition among the concession holders.⁴⁵ The abuse by one or more concession holders of their dominant position on the market or in a substantial part thereof, which may prevent, restrict or distort competition among sub/concessionaires is likewise prohibited.⁴⁶ It should be noted, however, that due to the limited scope of application of the Law No 16/2001,⁴⁷ even though the gaming concessionaires compete on a wide range of market including accommodation, catering, entertainment, etc., the above mentioned competition rules only apply to their gaming activities i.e. operation of games of chance. It was also noted that the above provisions do not contain any exemptions similar to Article 101(3) TFEU and also do not require showing of anti-competitive effects making the intention or object of such agreements or practices the key evidence of their illegality.⁴⁸

The Law No 16/2001 also aims at preventing the exchange of corporate shares and capital participations between concessionaires so that form a situation like corporation agreements: “casino gaming sub/concessionaires, and their main shareholders holding at least

⁴⁰ The database can be freely downloaded as a mobile phone application at <http://www.consumer.gov.mo/c/supermarket/en/mobile-app-en.asp>.

⁴¹ Lei n.º 16/2001 *Regime jurídico da exploração de jogos de fortuna ou azar em casino*.

⁴² *Assembleia Legislativa da Região Administrativa Especial de Macau*, <http://www.al.gov.mo/>.

⁴³ Regulamento Administrativo n.º 26/2001 *Regulamenta o concurso público para a atribuição de concessões para a exploração de jogos de fortuna ou azar em casino, o contrato de concessão e os requisitos de idoneidade e capacidade financeira das concorrentes e das concessionárias*.

⁴⁴ For the complete list of casinos see Gaming Inspection and Coordination Bureau, Information of Casino Addresses and Websites, available at http://www.dicj.gov.mo/web/en/information/contacts_casino/content.html.

⁴⁵ Law No. 16/2001, Article 21(3).

⁴⁶ Law No. 16/2001, Article 21(4).

⁴⁷ Law No. 16/2001, Article 1.

⁴⁸ See C. Wang, “Comentários sobre a Lei da Concorrência em Jogos de Macau”, *Administração* n.º 87, vol. XXIII, 2010-1, p. 158.

5% of the corporate capital, cannot, directly or indirectly, hold 5% or more of the capital of other sub/concessionaires.”⁴⁹The accumulation of positions in more than one sub/concessionaire is another form of corporate concentration prohibited by the law: “The holders of key corporate offices (namely, members of the board of directors) cannot accumulate positions in more than one sub/concessionaire or management company.”⁵⁰The violations of the specified prohibitions may result in the following types of liability: (1) the acts or decisions made by such persons in violation of the law can be revoked; (2) the responsible state authority can order the removal of the individuals concerned from their respective positions; (3) responsible persons will be liable for an administrative infraction.⁵¹

The Gaming Inspection and Coordination Bureau (DICJ),⁵² is an administrative authority that assists the Chief Executive of Macao SAR on the formulation and execution of the economic policies in the gaming industry. The responsibilities of the DICJ include supervision of the activities of the concessionaires, management of the issue of licenses for casinos and the gaming promoters, and inspection of casinos’ daily operation.⁵³The DICJ is authorized to investigate and penalize any administrative violations according to the applicable substantial and procedural rules. Gaming operators that violate competition rules embedded in the Law No. 16/2001 carry administrative legal liability and can be sanctioned by the DICJ. As a result, for the gaming industry, the DICJ is not only a policy supervising organization, but also a state authority with administrative powers to enforce the law and sanction the perpetrators in case of administrative infractions. However, since the Law No. 16/2001 is silent on the amount of penalties that can be imposed for violation of competition rules, it has been argued that the vagueness of the penalty provisions might inhibit the effective administrative enforcement of competition rules by DICJ.⁵⁴

While there is no evidence that the DICJ has ever sanctioned concessionaires for violation of the specified competition rules, the following cases could be illustrative in that regard. The first case concerns the price wars carried out by the casinos in relation to the commission rates paid to the gaming promoters. Casinos kept raising the commission rates in order to attract more VIP guests. It was reported that in 2008 six concessionaires have attempted to agree on the commission rates paid to the promoters or to enforce a price cap on these commissions, which could be regarded as price fixing, a form of anti-competitive behavior that violates competition provisions of the Law No.16/2001.⁵⁵ The legislative amendments passed in 2009 authorized the Secretary for Economy and Finance⁵⁶ to set the limits on the commission rates and regulate the mode of their payment. The Secretary has used these powers in October 2009 by setting the commission cap at 1,25% of the total amount of the bet.⁵⁷There were also some indications in 2009 that gaming operators intended

⁴⁹ Law No. 16/2001, Article 17(10).

⁵⁰ Law No. 16/2001, Article 18(1).

⁵¹ Law No. 16/2001, Article 18.

⁵² *Direcção de Inspeção e Coordenação de Jogos*, <http://www.dicj.gov.mo/>.

⁵³ Regulamento Administrativo n.º 34/2003 *Organização e Funcionamento da Direcção de Inspeção e Coordenação de Jogos*.

⁵⁴ See C. Wang, “Comentários sobre a Lei da Concorrência nos Jogos de Macau”, *Administração* n.º 87, vol. XXIII, 2010-1, p. 170.

⁵⁵ See C. Wang, “Dealing with Competition Issues in the Casino Gaming Industry: the Silence of Macao’s Gaming Law”, *Journal of Macao Polytechnic Institute*, Vol. 12, No.4, 2009, p.7.

⁵⁶ *Secretário para a Economia e Finanças*, http://portal.gov.mo/web/guest/info_detail?infoid=13608.

⁵⁷ Despacho do Secretário para a Economia e Finanças n.º 83/2009.

to freeze the salary increases, which could reduce the mobility of labour force and restrain competition for the skilled employees among the gaming operators.⁵⁸

The application of abuse of dominant position is currently disabled due to the fact that even with some market leadership in relation to the revenues and number of customers, there is no single company that would held a dominant position and could act independently of its competitors.⁵⁹ The question is also what to consider the relevant product market: the gaming services in general or particular games offered to the casino customers. It was suggested that at least various gaming services should be distinguished: common game floor, VIP game room and slot machines.⁶⁰ The dimension of the relevant geographic market could also become relevant, however, due to the highly regulated nature of the gaming industry in Macao and high entry barriers the geographic market should be restricted to Macao SAR.

The above review of the specific competition rules applicable to the gaming sector identifies the following problems: (1) the existing competition rules are not substantiated in secondary legislation (2) DICJ does not have prior experience with antitrust rules; (3) the administrative penalty provisions remain too vague to provide sufficient deterrence to the anti-competitive conduct. These factors can explain the current lack of enforcement of competition rules in the gaming sector and will constrain the development of competition practice in the future. The interest (or the lack thereof) of the government to promote competition among gaming sub/concessionaires should be also considered in the light of the current taxation regime. Taxation of gaming activities is currently based on a fixed tax imposed on the gross gaming revenue as well as two types of contributions: to the public foundation (up to 2%) and to the urban development, promotion of tourism and social security.⁶¹ At the same time the government has allowed a *de facto* discrepancy in the tax burden among the gaming concessionaires by equalizing the fixed percentage of gross revenue with certain in-kind contributions (such as the cost of river dredging) allowed to some operators. While the gross revenues of the casino operators have grown considerably more than the cost of in-kind contributions, this discrepancy can affect competitive position of various operators.⁶²

Conclusion

The brief review of the general competition rules embeded in the Commercial Code regulating behaviour of entrepreneurs and specialized competition rules contained in the Law No. 16/2001 setting the basic principles of the economic regulation of gaming industry highlights the current approach to market competition. In the highly regulated sectors such as gaming, energy, telecommunications, public utilities, transport, etc. monitoring and enforcement of market competition is entrusted to regulatory agencies, which tend to apply their classic regulatory tools rather than antitrust enforcement. In the liberalized markets, open to the foreign goods and services and characterized by the presence of SMEs, the enforcement of competition rules is left to the entrepreneurs, who in the absence of competition culture and with no experience with competition law tend to settle competition-related disputes out of court. Thus, the domestic legal, economic and institutional factors are currently not conducive to the adoption of the comprehensive competition legislation. The

⁵⁸See C. Wang, "Comentários sobre a Lei da Concorrência nos Jogos de Macau", *Administração* n.º 87, vol. XXIII, 2010-1, p. 160. See also M. Quental, "Employment Contracts in Macau Casinos" in Salvatore Mancuso (ed.) *Studies on Macau Gaming Law* (LexisNexis, 2012), 153-171.

⁵⁹*Ibid.*, p. 163.

⁶⁰*Ibid.*, p. 166.

⁶¹Law No. 16/2001, Article 22.

⁶²See L. Pessanha, "Taxation of Gaming in Macau" in Salvatore Mancuso (ed.) *Studies on Macau Gaming Law* (LexisNexis, 2012), pp. 250-251.

following passages address the role of the external factors such as foreign trade relations in prompting the adoption of competition law in Macao.

The EU-Macao relations have been evolving under the 1992 Agreement for Trade and Cooperation, which provided for cooperation in the field of trade and other areas such as industrial cooperation, investment, science and technology, information, communication, culture, environment, social development, tourism, etc.⁶³ In relation to investment cooperation, the parties agreed to “improve the climate for investment on both sides...on a basis of non-discrimination and reciprocity”.⁶⁴ Unlike more recent trade agreements of the EU, the EU-Macao Agreement does not provide for any obligations or cooperation concerning competition matters. In its 2013 Annual Report on Macao the EU Commission mentioned the EU’s proposal for dialogue on the regulatory framework for facilitating trade and investment, including competition, government procurement, regulatory procedures and intellectual property rights.⁶⁵ Nevertheless, there has been no further developments in the direction of reforming current competition rules scattered throughout various legislation.

The economic relations between Macao and Mainland China have been evolving under the framework of 2003 Closer Economic Partnership Arrangement (CEPA).⁶⁶ The CEPA is primarily aimed at liberalization of trade in goods, trade in services, promotion of trade and investment facilitation.⁶⁷ While the Mainland has already granted concessions on market access in 18 service sectors⁶⁸ to Macao service suppliers, Macao’s liberalization of trade in services for the Mainland are yet to be agreed.⁶⁹ The agreement specifically provides for cooperation in the field of banking, securities and insurance in order to “support Mainland financial institutions in establishing business in Macao” and to “support Mainland banks in developing network and business activities in Macao through acquisition”.⁷⁰ Although the effective penetration of the Macao’s services markets by the Mainland service suppliers is a matter of the future, the CEPA does not provide any obligations or commitments concerning competition. Thus, even though both Mainland China and Hong Kong have adopted comprehensive competition legislation, Macao SAR has not yet followed their example and with the current economic regulation policies in place one should not expect any substantial changes in the current approach towards competition.

⁶³ Agreement for trade and cooperation between the European Economic Community and Macao, OJ L404, 31.12.1992, p. 27.

⁶⁴ Agreement for trade and cooperation between the European Economic Community and Macao, Article 7.

⁶⁵ European Commission, Joint Report to the European Parliament and the Council Macao Special Administrative Region: Annual Report 2013, JOIN(2014)19, 16.05.2014.

⁶⁶ Mainland and Macao Closer Economic Partnership Arrangement, signed on 17.10.2003, entry into force 01.01.2004, available at http://www.economia.gov.mo/public/docs/CEPA_CEPA_I/index/en/efulltext.pdf. See also C-H Wu, “A New Landscape in the WTO: Economic Integration Among China, Taiwan, Hong Kong, and Macao” in C. Hermann and J.P. Terhechte (eds.) *European Yearbook of International Economic Law*(2012) 241-270.

⁶⁷ CEPA, Article 1.

⁶⁸ Legal, accounting, architectural, medical and dental, real estate, advertising, management consulting, convention and exhibition, value-added telecommunications, audio-visual, construction and related engineering, distribution, insurance, banking, securities, tourism, transport, logistics. See also A. Emch, *Services Regionalism in the WTO: China’s Trade Agreements with Hong Kong and Macao in the Light of Article V(6) GATS* (July 12, 2010), available at <http://ssrn.com/abstract=978843>.

⁶⁹ CEPA, Annex 4 Specific Commitments on Liberalization of Trade in Services, available at http://www.economia.gov.mo/public/docs/CEPA_CEPA_I/index/en/eannex4.pdf.

⁷⁰ CEPA, Article 13.

References:

- Emch, Adrian. Services Regionalism in the WTO: China's Trade Agreements with Hong Kong and Macao in the Light of Article V(6) GATS (July 12, 2010), available at <http://ssrn.com/abstract=978843>.
- Godinho, Jorge A.F. Macau Business Law and Legal System (LexisNexis, 2007).
- Kronthaler, Franz and Johannes Stephan. Factors accounting for the enactment of a competition law – an empirical analysis (May 2005), available at http://www.iwh-halle.de/projects/competition_policy/Factors_01.PDF.
- Mateus, Abel. Competition and Development: What Competition Law Regime? (October 26, 2010), available at <http://ssrn.com/abstract=1699643>.
- NunesCorreia, Paula. "The Macanese Legal System: A Comparative Law Perspective" in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013) 133-140.
- Pessanha, Luis. "Gaming Concessions in Macau" in Salvatore Mancuso (ed.) *Studies on Macau Gaming Law* (LexisNexis, 2012) 47-125.
- Pessanha, Luis. "Taxation of Gaming in Macau" in Salvatore Mancuso (ed.) *Studies on Macau Gaming Law* (LexisNexis, 2012) 223-263.
- Quental, Miguel. "Employment Contracts in Macau Casinos" in Salvatore Mancuso (ed.) *Studies on Macau Gaming Law* (LexisNexis, 2012), 153-171.
- Teixeira Garcia, Augusto. "Unfair Commercial Practices and Cyber Consumer Protection" in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013) 193-206.
- Tong, Io Cheng and WuYanni. "Legal Transplant and the On-Going Formation of Macau Legal Culture" in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013) 239-278.
- Wang, Changbin. "Comentários sobre a Lei da Concorrência nos Jogos de Macau", *Administração* n.º 87, vol. XXIII, 2010-1, 153-175.
- Wang, Changbin. "Dealing with Competition Issues in the Casino Gaming Industry: the Silence of Macao's Gaming Law", *Journal of Macao Polytechnic Institute*, Vol. 12, No.4, 2009.
- Wei, Dan. "Analytical Comparison as a Challenge for International and Comparative Competition Law" in Tong Io Cheng and Salvatore Mancuso (eds.) *New Frontiers of Comparative Law* (LexisNexis, 2013) 63-71.
- Wu, Chien-Huei. "A New Landscape in the WTO: Economic Integration Among China, Taiwan, Hong Kong, and Macao" in C. Hermann and J.P. Terhechte (eds.) *European Yearbook of International Economic Law*(2012) 241-270.

LAW, RAPPING AND SOCIAL JUSTICE: RETHINKING TRUTH IN CONTEMPORANEITY

Mari Cristina de Freitas Fagundes

Masters in Sociology/UFPEL, researcher at Research Group of Legal Anthropology/GPAJU-UFSC

Ana Clara Correa Henning

Master in Education/UFPEL, Master in Law/PUCRS and Doctoral in Law/UFSC, researcher at Research Group of Legal Anthropology/GPAJU-UFSC

Gabriela M. Kyrillos

Master in Social Policy/UCPEL and Doctoral in Law/UFSC, researcher at Research Group of Legal Anthropology/GPAJU-UFSC

Thais Luzia Colaço

Master in History/UFSC, Doctor of Laws/UFSC, Pos-Doctor of Laws/Universidad de Sevilla, Professor at Graduate Program *Stricto Sensu* in Law/UFSC, Coordinator at Research Group of Legal Anthropology/GPAJU-UFSC
Federal University of Santa Catarina/Brazil

Abstract

Our criminal justice system produces socially naturalized truths which authorize certain subjects' discourse, and silence others'. Rapping, as a counterculture, produces resistance from peripheral spaces in the complex power and knowledge net around us. Rap lyrics problematize a form of violence present even inside the state action, either as classifying subjects or in its so-called democratic discourse. Those questions are reasoned in this paper, in bibliographic contribution and compositions analysis in this genre.

Keywords: Truth Production , Criminal Justice System, Rapping, Resistances

Introduction:

This article is intended to characterize truth production in and by legal field, making a study of the disciplinary society to the standardization society. We acknowledge legal field, mainly the criminal justice system, through its discourses, is a strong truth producer that is accepted and reproduced as such, considering some statements naturalization and their agents legitimacy. However this scenario can be questioned because some of its assumptions are poorly applied in certain spaces, as further explained.

In order to understand and study some "silenced lores", we rely in studying rap lyrics made by composers from Pelotas, Rio Grande do Sul, Brazil and in its specialized literature. Our objective is to verify how these songs contribute to question the production of truths other than those assured by official law. In this sense, the reader is invited to discuss the social representation explained through the cultural expressions studied, in contrast to the knowledge and will power manufactured by the legal discourses, and therefore enabling us to question the current criminal justice system.

1. From the Disciplinary Society to the Standardization Society: Some Considerations on Truth Production in the Criminal Justice System

The neverending search for order, security and stability in a society is wrapped by fear (BAUMAN, 2008), it becomes particularly important to question the criminal justice system, its fundamentals and criteria used in order to assign some behaviors as illegitimate. Understanding, through legal mechanisms, the assignment of creating rules that should be obeyed, inflicting punishment to those who disobey the precepts of law, is a way to discuss truths produced in the criminal justice system. On this issue we can say that:

What is called a true knowledge is made by the game rules, by discourses that constrain these knowledges. The truth is a product of the power-knowledge, of the strategies articulation power and of the discourses taken as true. (COLAÇO; DAMÁZIO, 2012, p. 16, own translation).

The current system of law was wrought by a way of thinking conventionally called as modernity (SANTOS, 2010). The modern epistemological project is to represent the State as a center of power: “The State is understood as the sphere where all interests in society may come to a synthesis, this is, as the *locus* able to make collective goals, valid to everyone” (CASTRO-GÓMEZ, 2005, p. 171, own translation). The close relation between State, law and episteme result, among other consequences, in proposing strict rules on what is acceptable as scientific or legal, making unlawful anything beyond them.

In a perspective that doesn't see power as “The Power”, but rather as nets, knots, webs and practices, in this paper we oppose to a homogenic legal ruling that aims to understand behaviors so only by the provisions of the law, as if it were the characteristic center of power. In this line, to dive in some historical aspects of the “legal truths” made up in given times allows the foundations of this study, putting the subjects formation through disciplinary rules (FOUCAULT, 2009) and normalization (FOUCAULT, 2005).

Throughout the centuries, legal practices were articulated and new subjects were created and then shaped to fulfill different rules, as law, because it is, as already said, a main producer of truths raised in different societies (FOUCAULT, 1996).

Leaving absolute power behind - that one when a king sought to ban his enemies, he had centered the legal perspective in his own hands, being lawful to “kill and let live” (FOUCAULT, 2005) -, the disciplinary power was born. It was intended to comprehend bodies individually, limiting positions, actions, inhibiting diffusion of practices; introducing predictions, clearing rules and, therefore, making it possible to keep constant surveillance among individuals, ordering space in general. In this sense:

What was then being formed was a policy of coercions that act upon the body, a calculated manipulation of its elements, its gestures, its behaviour. The human body was entering a machinery of power that explores it, breaks it down and rearranges it. A ‘political anatomy’, which was also a ‘mechanics of power’, was being born; it defined how one may have a hold over others’ bodies, not only so that they may do what one wishes, with the techniques, the speed and the efficiency that one determines. Thus discipline produces subjected and practised bodies, ‘docile’ bodies. (FOUCAULT, 1995, p. 138).

This disciplinary society allows the framing of different legal practices, trained to the formation of subjects and subjectivities. The relationship between surveillance, control and correction (FOUCAULT, 1996), are characteristics of the criminal justice system even in contemporary times, making it possible to verify power of the disciplinary society built between the 17th and 18th centuries (FOUCAULT, 1997).

It's worth noting, to the author, this body docilization cannot be understood only negatively, because this discipline enables body positivity and use, it creates subjects "fit" to live in society and to work. The legal system relies in this disciplinary mechanism to settle the power structures, and to be possible, through law, point the social hierarchies using universal rules it stated:

[...] Whereas the juridical systems define juridical subjects according to universal norms, the disciplines characterize, classify, specialize; they distribute along a scale, around a norm, hierarchize individuals in relation to one another and, if necessary, disqualify and invalidate (FOUCAULT, 1995, p. 223).

It's clear, therefore, the criminal justice system selectivity, as its own rules marks social hierarchy. It rules not only to punish, but also to label individuals, making up among them a sever detachment, an abyssal line (SANTOS, 2010), in a alleged order by means of legal provision. Its mechanisms produce truths taken as given, as they are part of legitimate knowledge, "forgetting" other knowledges, made silent by the criminological knowledge, because:

[...] only one truth appears before our eyes: wealth, fertility and sweet strength in all its insidious universality. In contrast, we are unaware of the prodigious machinery of the will to truth, with its vocation of exclusion. All those who, at one moment or another in our history, have attempted to remould this will to truth and to turn it against truth at that very point where truth undertakes to justify the taboo, and to define madness [...] (FOUCAULT, 1972, p. 220).

A discourse is taken as true precisely by the tactics and strategies developed to allow certain discourses to stay and by silencing others, showing constant power articulation. There is, however, opposition to the criminal justice system homogeneity, yet to become speakable. This visibility allows us to discuss what is settled in legal texts, once:

[...] There is no binary division to be made between what one says and what one does not say; we must try to determine the different ways of not saying such things, how those who can and those who cannot speak of them are distributed, which type of discourse is authorized, or which form of discretion is required in either case. There is not one but many silences, and they are an integral part of the strategies that underlie and permeate discourses (FOUCAULT, 1998, p. 27)

In the face of the need of a power that did not aim only the individual body, but the massification of bodies in a range of individuals - a population - rises, circa the 18th century, another form of power, according to Foucault, which does not deny disciplinary power, but otherwise, uses it, unites to it in some circumstances, past individual bounds, permeating the social body.

This new power is called biopolitics, that is, a government reason, the art to govern through certain mechanisms, focusing in the "body-species". And through biopower this practice is exercised: "The old death potency that was symbol of the sovereign power now is, carefully, covered by the management of bodies and by the life calculative management" (FOUCAULT, 1997, p. 131, own translation). This way, the power that chose between kill or let live is reversed, becoming, then, the power to make live and let die.

Social regularity is demanded with biopower. A need for confession emerges in order to be possible to know, delimit and understand through acts and speech what the people do and plan to do beyond the discipline already set in the social body. In other words, truths are formulated based on subjects' confessions (either if made to a psychologist, to the Judiciary or to the Government in a census, for instance), because the art of talking about a

particular subject to certain subjects, allows the possibility of prediction of these speeches. To know the birth or death rates, life or crime expectancies (FOUCAULT, 1997) is a technique for saving power to the rulers; the possibility to beget a “biopolitic” that doesn’t aim just the individual body - indeed, also - but the people, the bodies mass.

One could note that a confession is made to a skilled subject that will be able to build a normative truth to rule the population. According to the analysed scope, Brazilian judiciary system predicts by law⁷¹ confession⁷² in the jurisdictional courts and it provides to the one who confesses reduction on the sentence, for instance, among other mitigating factors accordingly to charges.

However confession for itself is useless if not made in the face of those subjects owning “legit” power, in the legal field. Furthermore: the confider must show where the crime took place, the people who were present at the time and diverse other circumstances of that demeanor.

Beyond the naivety of thinking those procedures are only to ensure “fair” punishment of whoever made the alleged offense, one can realize this procedure allows to verify the territory where the crime took place, recurrence of some offenses, characterization of certain people - formerly as subjects and neighborhoods labeling and correlation between crimes and specific locations, through the act of confessing.

Ensues from it, the “virtuality”⁷³ of those facts, this is, being able to predict demeanors that may be committed before the labeling of either subjects, locations or “characteristic” crimes. In this sense it is worth noting that confession:

[...] it is also a ritual that unfolds within a power relationship⁴, for one does not confess without the presence (or virtual presence) of a partner who is not simply the interlocutor but the authority who requires the confession, prescribes and appreciates it, and intervenes in order to judge, punish, forgive, console, and reconcile; a ritual in which the truth is corroborated by the obstacles and resistances it has had to surmount in order to be formulated; and finally, a ritual in which the expression alone, independently of its external consequences, produces intrinsic modifications in the person who articulates it: it exonerates, redeems, and purifies him; it unburdens him of his wrongs, liberates him, and promises him salvation (FOUCAULT, 1998, p. 61).

It must be emphasized that legal rules didn’t emerge in order to bring safety to society, or ensure order, the beauty of legal regulation (CARVALHO, 2011), but because of a complex political game, the interconnection of different statements that makes the discourse of legal truth, knowledge, power.

As it has been asserted, alongside these statements there are many others silenced, this is, “subjected” (FOUCAULT, 2005, p. 12), but nevertheless absent. Practices that articulate other ways of living and being, that resist to the legal regulation. It insists in making invisible

⁷¹ Article 197 of the Code of Criminal Procedure (BRASIL, 2014a).

⁷² Here understood as a means of producing evidence in criminal procedure, which has lost its absolute value (it is no longer considered the “queen of evidences”) so it must “[...] be analyzed in its context, not in an isolated manner, but in a set composed by the collected evidence, in such a way that it wouldn’t, alone, justify sentencing, but, when located in the same line of the evidence, in conformity and harmony, it can be considered by the judge (LOPES Jr., 2012, p. 646, own translation)”.

⁷³ This is what is meant by Foucault (1996, p. 85, own translation) with “All sentences in the 19th century became a means of controlling, not precisely if what has been done by individuals is in conformity with the law, but what they can do, what they are capable of doing, what they are subjected to do and what they are about to do”

or silent the actions and/or positioning that disagree with the “legit” discourse in the eyes of some people.

According to this perspective the reader is invited to dive specifically in crime control practices in contemporaneity and in “counterdiscourses” that emerge contradicting the regularity advocated by the criminal justice system and externalizing other ways of living and being inside culture, as, for instance, through hip-hop movement, more precisely, through rapping.

2. Between Discourses and Counterdiscourses: Law, Rapping and Social Justice

In a society surrounded by liquid fear culture, that is, “[...] a diffused, dispersed, indistinct fear [...]” (BAUMAN, 2008, p. 08, own translation) the development of a “culture of control” (GARLAND, 2008) presents as an immediate answer to assure the possibility of order in the social; to allow safety discourse; promote previous labelling of “other” and “self”, strenghtening, therefore, the walls of legal science. So, the criminal justice system, through its agents⁷⁴ (KANT DE LIMA, 2013, p. 544), presents itself as mechanism to label subjects that aren’t fully in accordance with the precepts of law: we expect possible crimes, “virtualities” to the commission of criminal practices. In this sense, we can typify:

[...] Police officers act in institutional environments characterized by weak inspection mechanisms, by generalization of organizational equity model and by the absence of articulation between formal structures and practical activities. It results that research and repression tasks are guided by a “logic-in-use” in the police medium which comprehend a knowledge inventory based in stereotypical categorizations of the criminals, where they live and how they act, and that, in its turn, stimulates the criminalization of the behavior of people who are less prepared to have their civil rights secured against the arbitrariness of police organizations [...] (BARREIRA, ADORNO, 2010, p. 306, own translation).

We can notice that this “knowledge inventory” refers to what is understood as police act legitimacy. In the logic of legal knowledge, because the police “Institution” allows conception of truth discourse, those agents are supported by legal provisions that allow their use, for instance, of “moderate strength”. Moreover, they can justify their arguments in “suspicious attitudes” of those who they approach or arrest, and rarely are questioned about it or are delegitimized in their speeches in the face of those ones who are apart of their social environment.

“[...] Confronted by a power that is law, the subject who is constituted as subject - who is 'subjected' - is he who obeys” (FOUCAULT, 1998, p. 85). Ergo, to question this obedience, this normalization, presents as incendiary in legal environment, because normality and abnormality can have different cultural acceptances, either because in some social settings reality goes counter to the supposed by law, or because this law reaches these settings in a distorted way.

As legal practices produce knowledge, we can also think as discourses produce and make legit certain knowledges upon subjects - upon women and men - and within a space - the legal one - that establishes a normal point of view of the world. On this aspect, legal discourses can make some behaviors more accepted than others, it can insert them in either a normality or abnormality frame, it continuously

⁷⁴ When we refer to the term “agents” it is worth explaining, we report the diversity of actors in the legal field such as, for instance, magistrates, prosecutors, police officers, prison guards, etc

reconstructs multiple senses in the scope of social relations, mainly between men and women (FACHINETTO, 2011, p. 35, own translation).

The insertion in this “frame” happens exactly by the belief in a power taken as legit, in different intensities, in the labeling of subjects as deviant, abnormal or, otherwise, as law-abiding, normal. The abyssal thinking, a power considered “more legit”, normalizes, therefore, relations between subjects, taking ones as “citizens” e other ones as “noncitizens”, hazardous (SANTOS, 2010), ignoring power is exercised, not owned by ones and deprived to other.

We can note, therefore, a constant struggle between knowledges, this is, a struggle for legal discourse validity as a qualified mechanism to dictate truths and to place subjects to their discourses: on one hand, statal agents legitimated by this system spreading these truths and, in the other hand, sighs, or rather, cries spreading the criminal justice system dissonance in certain locations, researches that go through this path, and, better than that, art producing peripheral knowledge in many ways, small fragments, small mobilizations, counterdiscourses.

In this context, rap is a powerful mechanism through the voices of their composers and their listeners to point out other discourses than those spread by the criminal justice system, it can also be a mechanism to resist to legal truths. The constitutional principle is opposed by numerous songs showing dissonance between this principle and daily life of a portion of society in the face of our current legal system.

We don't intend to say the discourses in rap lyrics are “truer” or more legit than those propagated by the criminal justice system. We wish to propose new questions through our lyrics analysis, asking “how” these discourses against the precepts of law are configured and why they are configured, pointing to another kind of violence: the violence⁷⁵ perpetrated by the State itself.

Also, one can understand music as a two-way road, society creates it and it is created by it; there is, thus, a manufacturing of subjects in and by culture. In this sense we can add:

Where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of exteriority in relation to power. [...] Their [correlations of power] existence depends on a multiplicity of points of resistance: these play the role of adversary, target, support, or handle in power relations. These points of resistance are present everywhere in the power network. Hence there is no single locus of great Refusal, no soul of revolt, source of all rebellion, or pure law of the revolutionary. Instead there is a plurality of resistances, each of them a special case: necessary, improbable; others that are spontaneous, savage, solitary, concerted, rampant, or violent; still others that are quick to compromise, interested, or sacrificial; by definition, they can only exist in the strategic field of power relations (FOUCAULT, 1998, p. 95).

Hip-hop, as resistance bearer movement, is in its amplitude characterized by black youth, which seeks to emphasize their heritage through its four elements: graffiti (drawing), DJ (rhythms mixing), break (dance) and rapping (music) (SANTOS, 2002; ANDRADE, 1999). They have their “tactics” and “strategies” (FOUCAULT, 1997) to diffuse certain discourses from minority groups in more privileged classes; to stress “subjects knowledges” in contemporary. It is citing worthy (2005, s/p, own translation):

Media discourse, therefore, ranges from demonizations to some glamorization of excluded people, media gives them “visibility” and

⁷⁵ Be that violence either in the arbitrary act of some of its agents, or by the omission in this acting.

allow them, somehow, report their “outcast” status and claim citizenship, bringing up the discussion of “poor people place”, or rather, the right to discourse, leisure and “access” to the city, bringing “democratization” process contradictions and their social tensions to the agenda. Peripheral culture has achieved, almost regularly, not only to produce a counterdiscourse, but, as well, to draw new socio cultural (and spatial) borders that fluctuate from exclusion and integration: a) to promote new social nets, revitalizing old social movements and community ties; b) to occupy, not always peacefully, city spaces, including prime areas; c) to denounce and expose in their songs the city “reverse postcard”; d) to enable through its events the meeting of different social segments; e) to amplify or conquer social visibility through articulation with institutionalized culture and market.

Transcending the peripheral vicinities, reaching the ears of those who deny the discourses made in “outskirts”, rapping started to create subjects. Through music these people stopped being just discourses, and became discourse producer subjects; claim producers:

Hip-hop subjectivity shows itself as a proposal to rethink concepts, very important to young people in peripheries and favelas. While little time ago they didn’t have any other choice rather than abide to be objects of police and legal discourses, by the time hip-hop developed they became discourse producers subjects and made room to fulfill of concepts the slums everyday, formerly reduced to the lack of conceptualization of social marginalization [...] The black stain spreads through brazilian subjective cartography. Surprisingly, middle and high classes discover there was an empty space in urban maps, something that doesn’t shoot bullets and steal tape players, but, rather, wants to produce culture, to point these elites perversity and claim for change - that is, something much more hazardous than it seems (GEREMIAS, 2006, p. 132 e 127, own translation).

The perspective is to bring up peripheral knowledge to widely accepted legal norms, highlighting the abyssal division between them (SANTOS, 2010), noticeable in the following lyrics. Pok Sombra, the composer, questions the “normality” granted to ones and the “abnormality” imposed to others.

I don’t think about being remembered as great Mandela/ But I think about making my own part for the favela kids/ Those who watch on screen, hop, drugs and prostitution/ Alienation on MTV and “Plim-Plim” [...] (POK SOMBRA, 2011, own translation).

We can note in the lyrics the will to produce reports about the place they live in, bringing their neighborhoods to context, addressing difficulties in their daily tasks, violence in the outskirts and complaints on not being heard in spite of their cry. According to Jair Brow:

[...] Total violence, general decay, brother killing brother, .50s, .38, at the end, suburbs are bad, son sitting on the edge of the canal, he looks at the others, listens the pop, talks to his bro, he knows there’s no return [...] Ease your mind, be intelligent, be a smart bro, here it’s always present [...] No one cares here, shouts I didn’t hear, many towns are likes this, I give you the bad, dark times, Vila Castilho, Bairro Dunas, Bom Jesus. The lights go out for many [...] schools, what for? Cruel everyday life, many go to Heaven [...] Panic: in the suburbs, our day-to-day lives make us hurry/ There are few

improvements, observe!/ So get a grip! There are many ways to change [...]/ Don't feed your mind with false illusions/ Look for a better way, better options (JAIR BROW, 2012, own translation).

In the following composition, it is pointed the perception of the songwriter against the criminal justice system through dictums used in the rhymes. It is stressed that Guido – the songwriter – puts the different stages of criminal process, be it the entrance to the “new world”, the creation of a new subject and their representation of those who judge them:

Today it's so hard to see sunshine/ If things seem bad, brother, it's natural/ Even saying time stopped/ But know this, everything goes back to normal, everything goes back to normal/ The sight darkens, darkness has taken place of light/ Welcome to the new world/ a.k.a. prison/ Where your friends will be gone, stars won't shine/ Where you can only be sure the doors were closed/ Knees bend, hands get tied/ Mouths got shut and eyes that cried/ Things that were thought, years that passed/ Memories that are gone and never came back/ Ideas were imagined, characters were created/ Fake world I created and one day they abandoned me/ Men who judged me in the end condemned me/ Today I am who I feared the most, the monster they created/ They don't heal me, they only humiliate me/ They killed the good things that existed around me/ My world went downhill, my lungs can't bear it/ I'm curious about knowing my new being, be prepared [...]
(GUIDO CNR, 2012, own translation)

It is interesting, also, to highlight a stanza of a rap song produced by Gagui IDV. The complaint made in the lyrics is clear in the sense of relating the social disparity, moreover fantasies which are created to cover the apartheid still experienced in contemporary society:

Leave it to me that the manumission will be rewritten/ Without Princess Isabel, no probation/ No dreaming that discrimination is made up/ No hypocrisy of the covered apartheid[...]/ Hail the rap redemption in every corner of the ghetto (GAGUI IDV, 2011, own translation).

These rap lyrics demonstrate the complex power and knowing net that pervades contemporaneity. Among various approaches, it is noticed the production of discourses made by those who are generally considered illegitimate to build truths. The resistances through music denounce and face disparities in the criminal justice system against the constitutional principle of equality. This is pointed through the dictum put on songs, not of previous or future interpretations or projections, but what it is, actually, described on them.

In the same way, it is inferred that the projection of subjects' speeches and practices, allowed in and by the criminal justice system built in modern times, with the objective of forming behavioral regularities is defied. The individuals who transit through the referred lyrics above are not – or are not just – those who “shoot bullets and steal tape players”, but those who discuss other ways of being and living in this world through culture. Pushing to the limit, the very violent actions of the State that can create the “monster”, who is not “healed”. This exposes the contradiction between a democratic discourse and social spaces which sometimes are silenced by some practices, but remain wrapped in the plot of power and because of that, resisting.

The need of dialogue with other ways of reality contextualization becomes necessary in the search of approaches of legal discourses and discourses produced in and by rapping. Not to create a more legitimate, more truthful knowledge, but so that other ways of being and living in this society come to light and be liable for discussion, putting “silenced lores” on the

level of considered legitimate knowledge, allowing different ways to understand the local culture.

Conclusion

As shown in this paper, the criminal justice system suffered many crossings in order to become the rules-and-discipline system established nowadays. The disciplinary and normalization forms created, emphatically, in modern society, allowed creation of truths and their naturalization as foundations in legal planning.

Following the deconstruction of this homogeneous way of thinking, other ways of living and being in this society started to be questioned, checking the creation of “counterdiscourses” as a way of resistance to this lawful precision, overcoming the idea that power is concentrated in the hands of some and taken of others, although it is presented in relational character.

In this sense, it was brought to discussion some Rap lyrics produced in the city of Pelotas, Rio Grande do Sul, Brasil, addressing different ways of living and being in contemporary culture, denouncing social disparities, reporting the existing abyss between the truth discourses produced in the legal field and what is experienced by individuals from outskirts of society. It is not intended to consider a discourse more legitimate than another, but to reassure the spread of different discourses and crossing of different truths.

It is shown, through what has been here exposed, the importance of music in contemporary society and the relevance which this cultural expression holds as a mechanism capable of enabling other ways of thinking and making different views of a portion of society on the criminal justice system. And so it is possible to create fissures and cracks on the solid legal thought, questioning its produced truths, pointing other ways to understand the social, not more or less legitimate, but open for discussion and analysis of social complexity of current time.

References:

- Andrade, Eliane Nunes de. Hip-Hop: Movimento Negro Juvenil. *In*: Andrade, Eliane Nunes (Org). RAP e educação, RAP é educação. São Paulo, 1999. p. 83-92.
- Barreira, César e Adorno, Sérgio. A Violência na Sociedade Brasileira. *In*: Martins, Carlos Benedito (coord.). Horizontes das Ciências Sociais no Brasil: Sociologia. São Paulo: ANPOCS, 2010. p. 303-374.
- Bauman, Zygmunt. Medo Líquido. Tradução de Carlos Roberto Medeiros. Rio de Janeiro: Zahar, 2008.
- Brasil. Código Penal. Disponível em: http://www.planalto.gov.br/ccivil_03/decreto-lei/del2848.htm. Acessado em: 20 de maio de 2014.
- Carvalho, Salo de. Anti Manual de Criminologia. 4 ed. Rio de Janeiro: Lumen Juris, 2011.
- Castro-Gómez, Santiago. Ciências Sociais, Violência Epistêmica e o Problema da “Invenção do Outro”. *In*: Lander, Edgardo (org.). A Colonialidade do Saber, Eurocentrismo e Ciências Sociais: Perspectivas Latino-Americanas. Buenos Aires: Consejo Latinoamericano de Ciencias Sociales – CLACSO, 2005. p. 169-186.
- Colaço, Thais Luzia e Damázio, Eloise da Silveira Petter (org). Novas Perspectivas para a Antropologia Jurídica na América Latina: o Direito e o Pensamento Decolonial. Florianópolis: FUNJAB, 2012.
- Fachinetto, Rochele Fellini. A produção dos discursos de gênero nos julgamentos pelo Tribunal do Júri em Porto Alegre/Rio Grande do Sul/Brasil. E-cadernos CES [online], 14, 2011. Disponível em: <http://eces.revues.org/884> Acessado em: 20 de outubro de 2013. p. 33-60.

- Foucault, Michel. *A Verdade e as Formas Jurídicas*. Traduzido por Roberto Cabral de Melo Machado e Eduardo Jardim. Rio de Janeiro: NAU, 1996.
- _____. *História da Sexualidade I: a vontade de saber*. Tradução de Maria Thereza da Costa Albuquerque e J.A. Guilhon Albuquerque. Rio de Janeiro: Graal, 1997.
- _____. *Em Defesa da Sociedade: curso no Collège de France (1975-1976)*. Tradução de Maria Ermantina de Almeida Prado Galvão. São Paulo: WMF Martins Fontes, 2005;
- _____. *Vigiar e Punir: história da violência nas prisões*. Tradução de Raquel Ramallete. Rio de Janeiro: Vozes, 2009;
- _____. *A Ordem do Discurso: aula inaugural no Collège de France, pronunciada em 2 de dezembro de 1970*. Tradução de Laura Fraga de Almeida Sampaio. São Paulo: Edições Loyola, 2012;
- Gagui IDV. *A Inveja Mata*. Canção disponibilizada no ano de 2011. Disponível em: <https://www.youtube.com/watch?v=g4qaeJdZ8UE>. Acessado em: 20 de dezembro de 2013;
- Garland, David. *A Cultura do Controle: crime e ordem social na sociedade contemporânea*. Rio de Janeiro: Revan, 2008;
- Geremias, Luis. *A Fúria Negra Ressuscita: as raízes subjetivas do hip-hop brasileiro*. 2006. Disponível em: www.bocc.ubi.pt/pag/geremias-luiz-furia-negra-ressuscita.pdf. Acessado em: 15 de janeiro de 2014.
- Guido CNR. *Prisão*. Canção disponibilizada no ano de 2012. Disponível em: <http://www.vagalume.com.br/guido-cnr/prisao.html#ixzz31ad48AO6>. Acessado em: 15 de janeiro de 2014;
- Herschmann, Micael. *Espetacularização e Alta Visibilidade: a politização da cultura hip-hop no Brasil contemporâneo*. In: Freire, João e Herschmann, Micael (org). *Comunicação, Cultura e Consumo*. Rio de Janeiro: E-Papers, 2005. p. 153-168.
- Jair Brow. *Cotidiano Violento*. Canção disponibilizada no ano de 2012. Disponível em: <https://www.youtube.com/watch?v=eGs0sxn95-w>. Acessado em: 20 de janeiro de 2014;
- Lopes Jr., Aury. *Direito Penal e Processual Penal*. São Paulo: Saraiva, 2012.
- Kant De Lima, Roberto. *Entre as leis e as normas: éticas corporativas e práticas profissionais na segurança pública e na Justiça Criminal*. *DILEMAS: Revista de Estudos de Conflito e Controle Social*. Vol. 6, n. 3, out/nov/dez, 2013. p. 549-580. Disponível em: <http://revistadil.dominiotemporario.com/doc/DILEMAS-6-4-Art1.pdf>. Acessado em: 10 de outubro de 2013;
- Pok Sombra. *Sinta-se Bem*. Canção disponibilizada no ano de 2011. Disponível em: <https://www.youtube.com/watch?v=ahDPkg86ogk>. Acessado em: 05 de março de 2014;
- Santos, Boaventura de Sousa. *Para Além do Pensamento Abissal: das linhas globais a uma ecologia de saberes*. In: Santos, Boaventura de Sousa e Meneses, Maria Paula (org). *Epistemologias do Sul*. São Paulo: Cortez, 2010. p. 31-83.
- Santos, Rosana Aparecida Martins. *O Estilo Que Ninguém Segura: “Mano é Mano e Boy é Boy! Boy é Mano? Mano é Mano? Reflexão Crítica sobre os Processos de Sociabilidade entre o Público Juvenil na Cidade de São Paulo na Identificação com a Musicalidade do Rap Nacional*. Dissertação de Mestrado apresentada à Escola de Comunicação e Artes da Universidade de São Paulo, USP. São Paulo, 2002. Disponível em: www.teses.usp.br/teses/disponiveis/27/.../tde.../mestrado_dissertacao.pdf. Acessado em: 20 de janeiro de 2014.

LEGAL RESEARCH: AN OVERVIEW OF A RESEARCH PROPOSAL

Mr. O. J. Jejelola

Department of Commercial Law, Adekunle Ajasin University Akoko

Abstract

The writer looked at the problems involved in writing a legal research proposal by identifying some of the basic challenges such as the choice of topic, resource materials, methodology and the theoretical framework to be adopted for the research. The aim is to take a holistic overview of a legal research methodology.

The primary and secondary sources of material selection were used through the use of the law libraries and the internet as well as journals and periodicals to gather information for this study.

The study shows that legal research works are still much being conducted under the doctrinal method which is not empirical in view of the fact that analysis of statistical data or qualitative methodology is often viewed as the concern of the pure scientist rather than in the humanities.

In conclusion, it was observed and recommended that the need to embark on empirical legal research methodology cannot be over emphasized as it is the only panacea by which the sociological effect of the law could be attained in the 21st century.

Keywords: Research proposal, legal research

Introduction

The development of the law will to a great extent be subjected to obsolete and archaic postulation and outdated rules that may be out of tune with those the laws supposed to govern if there is no consistent research that is being conducted from time to time to evaluate its operation within a particular geographical legal system. Therefore, this underscore the essence of a legal research not only in law but virtually in all other subjects in order to better the lot of the people the world over. For example, a research could have the aims of probing into the causes of plane crashes and the like globally with a view to stemming the tide. The concomitant effect of this may at the end of the day be geared towards the total eradication of plane crashes globally or at least to bring it under a bearable condition. Aside, it may be conducted on the causes of the recent religion 'sect' called 'Boko Haram' in Nigeria that had been taking it tolls on the lives of the citizenry in the country with a view to finding a lasting solution to it by way of offering some necessary recommendations to the government of the day. These hiccups are problems which pose great challenges to human existence and therefore, they are meant to be solved in order to ensure safety of every individual and to guarantee the Fundamental Human Rights of all Nigerians as enshrined under chapter IV of the 1999 Constitution⁷⁶ of the Federal Republic of Nigeria.

Before going into the 'nitty gritty' of this topic, it is imperative that one need to define what a research is in order to fully comprehend the scope of this paper.

⁷⁶ Cap. 23, Law of the Federation of Nigeria, 2004.

What is a research?

A research is the process of identification of a researchable problems and what can be used to solve the problems identified. It concerns with the collecting of materials and informations for the purpose of ascertaining the veracity or otherwise of some informations or identification of some determinable hypothesis.

Etymologically “research” is derived from the French word *recherché*, meaning to “search closely” or “to look for closely”. From this, it means that research is a vital tool for discovering and knowing. And it is a means of acquiring knowledge and faith.

In Rajkumari Agrawala’s words⁷⁷:

“Research is a continuum”. He further remarked that:

Research is the gathering of evidence or information for ascertaining an assumption or verifying some hypothesis. It is an inquiry for the verification of a fresh theory or for supplementing prevailing theories by new knowledge.

No research can be purely new as even original discoveries are an extension of the research already undertaken, being showed generally as expressing agreement or reputation or plain addition.

A researcher is burdened with the heritage of information already collected in his area of work. Communicated information, i.e., knowledge is the universal property of mankind and its sharing is not encumbered by any inherent limits in terms of time or number, though man-made barriers and devises which obstruct the free flow and sharing of information do exist in society. Knowledge cannot be suppressed though its flow may be delayed with some efforts. Like streams, human knowledge does not flow backwards. It is not open to any individual or generation to proclaim self disinheritance from already acquired knowledge.

The theoretical frame work of a legal researcher is concerned with the role of a problem –solver in any area of the law of his best interest. Therefore a research is “a process of systematic enquiry”⁷⁸. And it is a means of probing into the roots of unknown problems with the interest not only to discover their genesis but also with the aim of solving the identified problems in ways casually related to the expansion of human knowledge⁷⁹.

Presentation and analysis of a research work

To me, what I feel a researcher is expected to do here is nothing more than to showcase his research plan/proposal which normally provides the outlay of what he wants to do, what to achieve, what and how s/he wants to go about doing it. And to put it in a simple way – The writing of a research proposal. This is the masterpiece of the whole research work which encompasses all its features and its integral components which are hereunder listed as follows: -

- (a) Topic of the research.
- (b) Background and Introduction to the study/Literature review.
- (c) The statement of the problem.
- (d) Objectives of the study.
- (e) Justification of the study.
- (f) Definition of major concepts/terms.
- (g) Conceptual theoretical framework.
- (h) Major assumptions/hypotheses.
- (i) Methodology: -

⁷⁷ Indian Legal Research: An evolutionary and perspective analysis (1982)24 JILI at 470 – 78.

⁷⁸ Reasons and Rowan, 1981 : 19.

⁷⁹ Akindele and Olaopa, 2009 : 28.

- (i.) Sources of data collection.
- (ii.) Collection techniques.
- (iii.) Data analysis techniques.
- (j) Scope of the study.
- (k) Limitation to the study.
- (l) Chapters Sequences/Chapters Organization.
- (m) References, Footnotes and Bibliographies.
- (n) Abstract.

According to Professor Yusuf Aboki⁸⁰:

A research proposal is a brief statement of what a researcher wants to do on the topic he has chosen. It is a statement of how a perceived idea is likely to be undertaken for the purpose of concretizing it. On many occasions, during the actual research and writing, a lot of what is contained in the proposal may be changed slightly or substantially. Therefore, a research proposal is not a fixed and rigid document. It may undergo some changes in the light of findings, some of them unexpected, during the course of the research.

Let us now treat each of the aforementioned features one after the other.

Topic of a research proposal

It can be rightly asserted that the first task before a researcher is choosing of a research topic. This may at times create some challenges for the student in such a way that searching for a robust research topic could take months if not a whole semester in some cases. The title of the topic should be as short and concise as possible. It should be clear, precise and depict the threshold of the project. The topic should not be more than 21 – 23 words as the popular adage in research methodology is that the narrower the topic, the likely the in-depth study of the topic or subject matter. While the wider the title, the shallower the discussion will be.

However, to make the task of choosing a research topic easy, it has been suggested that the underlisted guidelines may be of assistance to students: -

- (i.) Students should initially read widely through titles of books and journal articles from which examples can be seen.
- (ii.) The topic must be of interest to the student.
- (iii.) The topic must be novel and original in such a way that it does not involve a duplication of another person's copyright.
- (iv.) The topic must be purely a researchable one.
- (v.) The topic must be very important and significance in such a way that it must be capable of adding new ideas or information to the present state of knowledge on the subject matter.

Introduction and background to the study/literature review

Here, the researcher is faced with the vivid account of what led to the formulation of the research topic chosen by him/her. Really, the introductory aspect will highlight what encouraged and motivated the writing of the proposal which may include the historical background, the antecedence and the current state of operations of the law with regard to the particular research topic which has made the research necessary. For instance, it could be in the quest of the law to act as an instrument of social engineering in the society. Informations about the topical issues being investigated are supposed to be provided and the background should be as concise as possible but captures very important information required.

⁸⁰ Introduction to Legal Research Methodology 2nd Edtn. 57

While the literature review of a research work is absolutely necessary in order to acquaint the researcher about what other people have said or written earlier about the area of the research topic. The importance of this in any legal research proposal has been underscored by PROFESSOR ABOKI⁸¹ thus:

Literature review is expected in proposals, although we sometimes see some without it. It is the opinion of this writer that it is an essential requirement in legal research and must be included in all proposals. Literature review determines whether a research topic is a novel one or not. It determines whether a research will contribute to the literature in that area or not.

In the same vein, PROFESSOR GASIOKWU⁸² said in his explanation of the term literature review:

This is one of the various steps involved in empirical research for testing hypothesis and collection of primary data. It is an extensive search for the relevant literature on the subject. It is during this period that suggestive ideas regarding hypothesis present themselves and the researcher takes stock of matters known and unknown relating to his topic. He should however avoid duplication of those areas of research, which have already received attention of competent scholars. In reviewing literature it is necessary to avoid entertaining preconceived notions on the basis of published literature. One bane on legal literature is that writers write articles not on the basis of actual state of law but as it ought to be.

The main aim of consulting literature is to gain sufficient theoretical and factual background, which would enable a legal scholar to formulate hypothesis for testing, construct questionnaire and avoid duplication of effect.

The above two quotations from the books of erudite Professors have thoroughly captured what a literature review means.

Statement of the problem

The purpose of the research should be stated here. In short, the researcher should state why the research is to be embarked upon. This borders on the problematic concern of the study. He must be specific so much so that even a layman may be able to understand the idea of the nature of the problems which are embedded in the rationale for the research. It can be done in form of questions or by examining issues and concerns by stating them in a problem form. At times, a statement of problem may contain many problems which should all be stated and a researcher must cover all of them or s/he takes only the problem that can best be handled as this must be clearly stated in the scope of the work.

Objectives of the study

This is quite different from the justification of the study. The objective shows outrightly the intentions of the researcher and what he/she intends to achieved by the research. It also helps to highlight the important aspect of the research in such a way that the readers will appreciate the nature and scope of the work. Epithet such as evaluate, examine, assess and investigate are often the acceptable words used in constructing research objectives.

Justification of the study

Justification means why the research is necessary. As we all know that research involves expenses, time and energy and therefore the need to find out why time, money and

⁸¹ op.cit P. 60 paras. 6.7

⁸² legal Research And Methodology: The A – Z of writing Theses and Dissertations in a Nutshell P. 91 paras. 5.1.5

energy should be committed to the research cannot be overemphasized. Therefore expenses committed on research can only be justified if the research has a good reason to be undertaken as for instance, if it is viable, useful, beneficial to the people or add value to the end user. It is worthwhile under this sub-head to even enumerate the people or group of people that will benefit from the research.

For example, a research work on “The operations of the 1999 Constitution of the Federal Republic of Nigeria between the Executives, Legislative and the Judiciary” will no doubt benefit the legal practitioners, judges, legislators, law students, law lecturers, police, prison officers e.t.c.

The researcher should be able to identify his contributions to knowledge through the research. The irony is that a research which will not serve a purpose or which is not useful has no justification to be embarked upon abinitio.

Definition of major concepts/terms

MAYER⁸³ regards concepts as the building-blocks of theory. This implies the idea of assigning meanings to the key concepts of the research. As a result, the operational definition of terms is an essential part of defining or stating the problem. If this is not precisely done in a research, it may create the problem of readers not to fully comprehend the content of the work particularly in a legal research that may contain so many legal maxim or jargons. A particular term may mean different things or interpretations to different people. In view of this, every major concept or legal maxim to be used in the study must be explained in the correct language of the field of study in order to avoid several interpretations by different readers of the work.

In defining the concepts, authoritative sources in the field are consulted and references made. Blacks law dictionary interpretations may also be used and some popular abbreviations used are clearly defined and explained such as Loc.cit; op.cit; id. or Ibid, ejusdem generis, ex post facto; nemo dat quod non habet e.t.c.

Conceptual/theoretical framework

This provides the foundation upon which the research structure is laid and act as a guide to the researcher in knowing the hypothesis to be generated and the type of information or data to be collected. It has often been said that there are so many theories from which a researcher can adopt one or a combination of two or more in explaining the research.

In a legal research, the recent findings shows that some of the theoretical framework that can be utilized are: -

- (a) Historical research.
- (b) Comparative research.
- (c) Analytical research.
- (d) Statistical research.
- (e) Ethnographic research.
- (f) Teleological research.

Theoretical frameworks help to situate the research within a particular approach in explaining the problem thereby giving the researcher a clear focus.

Major assumptions/hypotheses

As it has often been said, the clarion call is now a shift from doctrinal to non-doctrinal research or empirical research. By so doing, informations and data now can be collected or gathered in a scientific way, analyzed and studied in legal clinic or chambers from which

⁸³ (1973 : 41)

conclusion can be arrived at and suggestions are made with a view to enhancing or improving the jurisprudence of the legal system.

Empirical researches involve the formulation of hypothesis which has been defined as a statement of generalization, which is probable or possibly but needs to be tested through field studies or survey. AKINDELE AND OLAOPA⁸⁴ argued that:

Research problem in itself, cannot be scientifically solved until it has been reduced into hypothesis that shows a casual relationship or relationships between dependent and independent variables.

In effect therefore, a hypothesis is a hunch, a testable proposition the validity of which remains to be determined. A hypothesis is usually anchored on a relationship between variables. Variables are factors or qualities the researcher wants to study and draw conclusions about. And the two variables whose relationship is the subject matter of study are the independent and dependent variables. The independent variable is the cause of the dependent variable – the effect. For example in a case involving examination malpractice by students of the tertiary institutions, the independent variable may be indiscipline while the dependent variable can be attitude of the invigilators during examinations. It has been suggested that before a hypothesis is adopted for testing, the underlisted questions should be asked⁸⁵: -

1. Are the terms empirically specific, so that the concepts or variables can be distinguished in concrete situations?
2. Is the posited relationship between variables such that it could be verified or nullified by means of empirical operation?
3. Is there any prior evidence as to the truth or falseness of the posited relationship?
4. Can an appropriate study design be devised?
5. Are the variables “context-bound” or could they be equally well applied to other inaction situation?
6. Are the generalizations “culture-bound” or can they be also applied realistically to other cultures?
7. Is the empirical system that is constructed sufficiently precise and articulate to permit predictions in concrete situation?

Methodology

In the words of MARTIN BULNER⁸⁶:

-----methodology denotes the systematic and logical study of the general principles ----- concerned in the broadest sense with the question of how ---- - knowledge is established, and how others can be convinced that the knowledge is correct.

The researcher should map out a strategy for the research operations and also decide what research techniques to employ. But a good research may be a combination of two or more methodologies, for example, empirical and doctrinal.

ADAM PODGORECKI⁸⁷, defines techniques as the tool or know how most adequate to a given research task. A research technique should be differentiated from a research strategy which refers to the way in which one particular study is designed and carried out. A research technique and strategy in a doctrinal research may be different from that of non-doctrinal research although, methodology concerns three major items of the research:

⁸⁴ (1997 : 29)

⁸⁵ suggested by Robert Bales, quoted in Pauline V. Yound, *Scientific social surveys and Research* (3rd Edtn 1962).

⁸⁶ *Sociological Research Methods: An introduction* London: Macmillian Press Ltd 1977, P. 4.

⁸⁷ *Law and Society*, London: Routledge and Kegan, 1974 P. 48.

- (i.) Sources of data collection: The researcher must state and specify the various sources of his data collection. These sources can be either primary and secondary or any other materials used in the study.
- (ii.) Collection Techniques: Here the researcher should specify the strategies for collecting data from the identified sources of data collection. Techniques may include for example libraries, journals, newspapers gazettes or through the use of questionnaires, interviews and participants observations. And it could as well be an oral interview in a predominantly illiterate environment.
- (iii.) Data Analysis Technique: Under this, the approaches to be used in summarizing and explaining the facts collected which could be in form of statistical tables, measures of central tendency, graphical representation as it may be relevant to the study.

Scope of the study

Basically, this indicates the time frame of the study within which the research is covering. Care must be taken in formulating a topic for research proposal so that the topic is as narrow as possible. The general belief is that “the wider the scope of a research, the shallower the discussion is likely to be. The narrower a research topic, the more in-depth, the discussion may be”.

Limitation to the study

Hardly can there be any research without some challenges which a researcher may encounter during the course of the research. For example a major barrier which a comparative researcher of two different countries’ Constitution may face will be a linguistic problems aside from the issue of how to select the countries of its study. It is expected that the researcher must state how to overcome any envisaged limitation to the study in his layout.

Chapters sequence/organization layout

Also expected of the researcher is the outline of what he or she intends to discuss under each chapter. This may be a summary of what each chapter will contain as the aim is to give a reader a brief idea of what the research is all about. So therefore, in a logical and sequential form, each chapter states what it contains as a sub-unit of the systemic work for example, as a general rule, chapter one is the introduction, chapter two is the literature review, chapter three and four deals with the core issues connected with or the theoretical framework of the research or study. The second to the last chapter is normally devoted to data presentation analysis, interpretations and major findings. While the last chapter of the study presents the summary of major findings, conclusion and recommendation. It may also contains some solutions to the identified problems in the research.

References, footnotes and bibliographies

According to Professor Kunle Ajayi⁸⁸:

References concern all authorities or texts, journals, magazines, newspapers and other documents consulted in collecting data for the study. Such sources must be duly acknowledged or credited with the appropriate pages in order to avoid plagiarism. Footnotes take care of other comments that are pertinent to the research. Both references and footnotes may come up immediately at the end of each chapter or at the end of all the chapters but before bibliography. Bibliography lists out all the relevant texts, journals, magazines, newspapers

⁸⁸ Research proposal writing & Literature Review Being a paper presented at the Faculty of Social Sciences Postgraduate Workshop on Proposal and Thesis Writing (29th March, 2011). University of Ado – Ekiti, EkitiState.

and other materials consulted during the course of the data collection, either data are utilized from them or not. The bibliographies are normally arranged into categories such as texts, journals, magazines and newspapers e.t.c. It is very pertinent that authors must be arranged alphabetically all through.

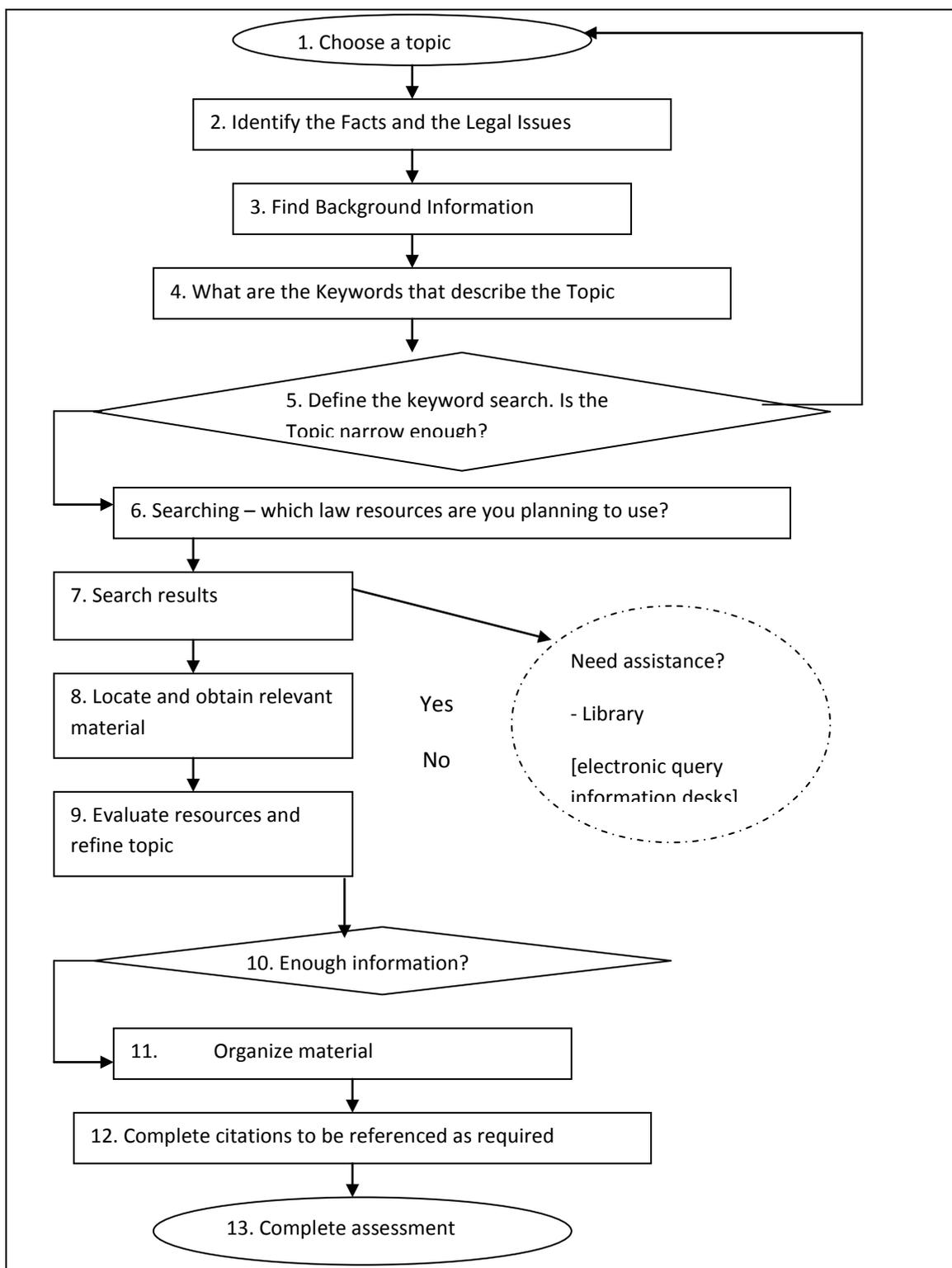
The above quotation aptly describes this sub-head except to add that in a legal research, the footnotes can be at the foot of each page and not necessarily at the end of each chapter or at the end of all the chapters.

Abstract

This may be bound with the thesis or submitted separately depending on the extant laws on same. It is usually done after the completion of the entire research work as it should contain the main issues and the conclusions of the researcher. It is often at times referred to as the summary of the substance of the research work or project. It may have a maximum length of 300 to 500 words but it is always short.

All the above presentations and analyses have been succinctly encapsulated in a flowchart which provides a step-by-step guide on legal research by the Rmit University College of Business⁸⁹ in the diagram below:

⁸⁹ www.Rmit.edu.au/



Conclusion

In conclusion, it remains to add that a research thesis shall also contain:

- (a) acknowledgements;
- (b) a table of contents showing appropriate pages where chapters, sub-headings, tables, figures, appendices e.t.c appear or start and;
- (c) the author's name in full and with surname last depending on the specifications given.

The methodologies of two different researchers may differ depending on the type of research employed. The doctrinal approach is often favoured in legal research but the current rationale is in favour of empirical research. This will make the law to be more functional and developmental in order to take cognizance of the technological developments the world over in the 21st century.

CRAFTING MY OWN STORY: HOMELESS MOTHERS' STANDPOINTS USING THEMATIC NARRATIVE ANALYSES

Dr. Thérèse M. Craine Bertsch, LCSW, DSW

Abstract

Single mothers in the U S, especially women of color, face the greatest risk for homelessness in the current housing crisis. Eleven homeless single mothers produced their own findings on their experiences with recurrent episodes of homelessness. Feminist standpoint theory guided this qualitative study using a U. S. third world cultural lens. Thematic narrative analysis structured the women's steps to analyze and create their own narratives. Political and ideological splits suggested homelessness for young single mothers resulted from either their lack of motivation and poor choices, or the lack of affordable housing, poverty, and social capital. Researchers called for process research to identify the risks and protective factors for both individual and structural factors driving unstable housing. These findings suggest rental enhancement although necessary was not sufficient to obtain and maintain stable housing. Poor quality housing, rental hikes, sale of homes, abuse and people entering or leaving rentals were precursors of recurrent episodes of homelessness. Bourgeois social structures excluding poor women need to address the need for affordable housing and public services, and less restrictive shelter and surveillance regulations as barriers to stable housing and jobs. Given their experiences of poverty and trauma, it was a revelation that *dedication to family* (feeling ennobled by motherhood), and the *desire to work* — typical concerns of working mothers — were the predominant themes I uncovered as the social work researcher in my cross case analysis of the women's narratives. These findings challenge stigmatizing beliefs about neglectful mothering, and their lack of motivation for employment.

Keywords: Homelessness, single mothers, jobs, feminist narrative theory, social work

Introduction

Single mothers in the U S, especially women of color, face the greatest risk for homelessness in the current unprecedented housing crisis. Single mothers represent 84% of homeless families (National Center on Family Homelessness, NCFH, 2010, Families experiencing section, para. 1) and 31.6% of the poor, more than double the number of single men and more than five times that of married couples. (National Poverty Center (NPC), 2011: How does poverty differ section, para. 1–2). Between 1980-1992 birthrates outside of marriage jumped by 54% nationally. Of these 94% were White and only 9% were Black. By 1993 the number of Black single mothers jumped to 57% of the national total of 27% of all children under 19 years of age living with a single mother (Wilson, 1996, p. 87).

As a social work co-researcher, I collaborated with 11 homeless single mothers who created their own narratives. Feminist standpoint theory, FST, (Harding, 2004, 1995, 1991, D. Smith, 2004, 1987), suggests that beginning research with women's everyday lives challenges the hegemony of the ruling class, and a more accurate account of women's experiences can be achieved. As co-researchers, the women themselves sought a more personal approach to analyze their own stories. Thematic narrative analysis, TNA, (Riessman, 2008, Polkinghorne,

1988), provided them with a method for their self-analysis and the creation of their narratives. Concepts from the Methodology of the Oppressed (Sandoval, 2000, 2004)—articulating U. S. third world feminist theory, which takes into account both the gender and race stratification of women, i.e. a third space (Sandoval, 2000), provided a cultural lens for my cross case analysis of the women’s narratives to identify commonalities in their experiences.

The United Nations Human Right’s Council (National Law Center on Homelessness & Poverty, NLCHP, 2011), cited U. S. homelessness as a human rights violation. Despite this, political and ideological splits argue that homelessness for young single mothers results from either their lack of motivation and poor choices, or from the lack of affordable housing, poverty, and social capital. Previous homeless research often focused either on individual characteristics of the homeless, or the outcomes of transitions from shelters to permanent housing. Researchers (Bassuk & Geller, 2006) called for process research to identify the risks and protective factors for both individual and structural factors driving unstable housing. Historical data is revealing.

The federal government spent \$30 billion per year in the 1980s on subsidizing low-cost housing, dropping in 1988 to 7 billion non inflation-adjusted dollars, “so the impact is worse” (Sclar, 1990, p. 1039). Housing searchers by the poor resembled the childhood game of “musical chairs” (Sclar, 1990). Low-income housing units went from a surplus of 300,000 to a loss of 4.4 million between 1970–1995 (Blau, 2007, p. 353). The loss of subsidized housing was compounded by President Nixon’s refusal to reinforce the Fair Housing Act of 1968 (Lamb, 2005), thereby reinforcing segregated housing. Racist housing practices impacted the swelling numbers of the poor homeless population who are disproportionately Black [NCFH, 2011], (Craine-Bertsch, 2013, pp. 1-2).

Annually, more than 3.5 million people experience homelessness in the United States, where it takes two and a half full-time jobs at minimum wage to rent a two-bedroom apartment at fair market rent (National Low Income Housing Coalition (NLIHC), 2010, p. 137). It is estimated that an additional 700,000 persons were made homeless in the aftermath of Hurricane Katrina (NLCHP, 2010, Hurricane Katrina), and does not include the thousands, in New York alone, who were made homeless in the wake of Hurricane Sandy. Extremely low-income renter households, numbering 10 million, are the only income group in the country with an absolute shortage of affordable housing, leaving more than a third of them with no hope for paying rent within their means (NLIHC, 2011, para. 3). Housing restrictions related to ethno-racial bias, the “massive industrial restructuring and loss of blue collar jobs” (Wilson, 1996, p. 34), the disproportionate incarceration rate of Black men in the mushrooming of the prison industry, and shifts in the market economy destabilized unions and urban communities. These factors have impacted the growing unemployment rate, particularly among Black men in poor urban and suburban communities—the hardest hit workers in our current socioeconomic crisis—and contributed to the rise in homelessness among Black single mothers (Allegretto, 2011; EPI, 2011; Blau & Abramovitz, 2007; DeNavas-Walt, C., Proctor, B.D., & Smith, J.C. (2011). ; El-Bassel, 1998; Shinn, 2007; Wagmiller, 2000; and Wilson, 1996).

Empirical Knowledge

Social and structural factors and homelessness.

Prominent structural factors have been identified in a review of the empirical literature. Young single mothers are now the poorest and have the largest incidence of family homelessness (NCFH, 2011). They have to navigate between the demands of childcare while searching for housing and jobs. Low educational levels, inadequate public transportation, and possible migration histories add to their burdens (Blank, 2007; NCH, 2009, Causes section, para. 2; Rocha, 1997). The structural and social barriers single mothers face when trying to

achieve higher levels of education compounds the problems they encounter to achieve self-sufficiency (V.D. Johnson, 2010; A.K. Johnson, 1999). In addition, the marriage rate of poor women reveals that the existing gap between college graduates and those with high school diplomas who no longer marry is widening from 4% in 1960 to 16% in 2008 (Pew, 2010, The class based decline in marriage, section, para. 2).

One of the root causes of homelessness may simply be the lack of affordable housing, even for those who are mentally ill (Berlin, 2007; Blau, 2007; Bassuk & Geller, 2006; Bogard, McConnell, A. K. Johnson & Richards, 1995). Subsidized housing is identified a protective factor against recurrent homeless episodes in many statewide and regional research projects and is largely attributable to the lack of affordable housing, particularly for low-income renters (Culhane, D. P., Metraux S, Byrne, T. (2011); NLIHC, 2011, p. 4). Quick reintegration into permanent housing contributes to maintaining housing stability (Bogard, McConnell, Gerstel, & Schwartz, 1999) even when compared to housing linked to mandatory substance abuse and mental health treatment (Padgett, Gulcur, & Tsembneris, 2006). Recent initiatives include rapid rehousing programs, which Culhane et al. (2011) noted needs to be further studied. While a clear prevention model does not exist “there is some evidence from the research literature, as well as some policy experiments...to guide this new initiative” (Culhane et al., 2011, p. 296). Section VIII and rent vouchers (Roman, 2007), direct pay to landlords (Baumhol & Shinn, 1998), and assisting tenants in annual housing recertification tasks or income reviews may also help mothers to avoid either losing eligibility or being evicted (N. Smith et al., 2005). While race and ethnicity predict both slower rates of exits and faster rates of readmits to shelters, even when the effects of other variables are taken into account (Wong, Y. I., Culhane, D. P., & Kuhn, R. (1997), one study reports that longer shelter stays were positive experiences for some women, providing them with the time, support, and security needed to get on their feet, or to qualify for housing (Wong et al., 1997; Zlotnick, Bradley, Tam, 2007).

Outcome studies for case management services for improving the retention of housing, for homeless families, is inconclusive as to the efficacy of such services. Studies do suggest a very high retention rate of “90% and more” (Culhane et al., 2010, p. 8) when families are provided with housing subsidies. This was confirmed by Bassuk and Geller’s (2006) analysis of research on homeless families, in which access to housing vouchers increased retention of housing and “decreased the likelihood of shelter readmission” (p. 795). Stable housing does appear to be supported by case management when housing *retention* is targeted (Bassuk & Geller, 2006, p. 795). Hartnett and Postmus (2010) study— found administrative philosophies direct the type of shelter services offered. Many case management services are geared toward individual and behavioral needs, such as counseling and parent classes rather than “socio-structural forces”, which address destabilizing “societal barriers” in housing (Hartnett & Postmus, 2010).

Rapid re-housing may be more valuable than services-enriched housing in reducing homelessness and unstable housing. According to Bassuk & Geller (2006), more studies and “rigorous research” (p. 796) is needed to determine how housing subsidies function together and apart from services, and how they may strengthen stable family housing. In addition, they call for studies to examine which populations of homeless single mothers would benefit from services-enriched housing programs and in what ways. Rocha (1997) noted that homeless mothers are also faced with the inability of their poor partners to pay child support, which is less of a problem for middle-income mothers.

Doubling up has been described as a phase preceding both recurrent and initial episodes of homelessness (Reed Wasson & Hill, 1998; Shinn & Gillespie, 1994; Stojanovic et al., 1999). Homeless families frequently live with family members, doubling-up (Hoback & Anderson, 2006). While doubling up can forestall homelessness, doubling up is often the step

before becoming homeless (DeNavas-Walt, Proctor, & J. C. Smith, 2011, pp. 21–22; Institute for children, poverty, and homelessness, Institute for Children, Poverty, & Homelessness, ICPH, (2011). The U.S. Census reported that the number of doubled-up households from the spring of 2007 to the spring of 2011 increased from 19.7 million to 21.8 million (DeNavas-Walt, Proctor et al., 2011, p. 21). Recent studies suggest “Eighty-nine percent of the homeless moved in with family or friends in the two years prior to becoming homeless. Among low-income housed families, 55% spent more than 30% of their income on housing and 49% had doubled-up with family or friends in the prior two years” (NCFH, n.d., p. 2).

Individual characteristics associated with single homeless mothers

Culhane, Metraux, Park, Schretzman, and Valente (2007), reported that “Pregnant women and women leaving abusive situations tend to exit shelters more quickly, but are also more likely to return. Other predictors for return to a shelter include exiting without a housing subsidy and lower educational attainment or work history” (pp. 3–4). These findings are associated with poverty and the lack of affordable housing, which puts single mothers at risk for homelessness. One study (N. Smith et al., 2005) identified similar risks for re-entry patterns into shelters. The risks for repeat episodes of homelessness included being a pregnant female member of a household, or a young head of household, or large numbers of children in a family, and poorer families headed by a single fathers, who only represented a small fraction of the sample. In addition to sexual and physical abuse, poor health, posttraumatic stress disorder, trauma exposure and chronic trauma, racism and foster care, and substance abuse are often associated with individual characteristics of homeless single mothers. Studies also identify that the experience of oppression and abuse that women receiving social welfare benefits have experienced is often reproduced in the policy and bureaucratic practices, carried out by workers towards them in their daily life. While research has identified pregnancy and domestic violence as risks for homelessness, little was known about the discrete risks for recurrent episodes of homelessness for single mothers related to these personal characteristics. The disproportionate numbers of homeless single mothers who are Black demonstrates the interlocking nature of class, gender, and race oppression in their daily lives as women. The literature is not so clear on how these differences may account for, and contribute to recurrent episodes of homelessness

Conceptual/Theoretical Framework

Feminist standpoint theory (FST)

FST grew out of the women’s movement emphasizing consciousness and a Marxian social analysis of the stratification and alienation of the worker and class conflict. Dorothy Smith (2004), a FST pioneer suggested that women experienced gendered alienation, as a by-product of “conceptual imperialism” (p. 24), as women were confined to think their world through the male dominant structures, knowledge, and language, which often conflicted with women’s everyday experiences. FST challenges the presumed value-neutral objectivity claimed by empirical studies, and favors inclusion and transparency of assumptions and values in research constructs to enhance trustworthiness (Harding, 2004). Rather than rendering invisible the researcher’s value-laden and socio-historical political influences in a presumed objectivity as, “the god trick of seeing everything from nowhere” (Haraway, in Harding, 2004, p. 86), FST transparently includes political ideals, by grounding knowledge construction and public representations in the everyday lives of women. At the same time FST is acknowledged as historically located and contingent and not the best choice for every research project.

Harding (1991) points out, “The socially induced need for women always to consider ‘what’ men (or ‘others’) will think’ leads to a larger gap between their observable behavior

and speech and their thoughts and judgments” (p. 125). The standpoints of women are developed by engaging in daily life with the knowledge of their experiences intersecting with the social systems that structure and regulate their lives which are constructed and maintained from the vantage points of dominant patriarchal ideological forces. This produces a “double consciousness”—a concept initially referring to race stratification (Du Bois, 1903)—suggesting that women simultaneously acknowledge both women’s public faces and their inner realities.

As a research approach, FST can potentially uncover a fuller view of women’s knowledge and enhance an even stronger objectivity by linking “together strong forms of three terms: *reflexivity*, *objectivity*, and *method*. They all develop together; one is not a preamble for the others” (Harding, 1995, p. 17). Women are encouraged to participate in all phases of research and may “redefine the location of the research question” (Swigonski, 1993, p. 177), recommending how the results might be used to benefit other women.

FST asserts that starting off research construction from women’s lives fosters a stronger objectivity with a less partial view of women and their lives by proceeding to construct, explore, and analyze what emerges from that starting place rather than utilizing methods of analysis that are removed from the women’s experiences. This process can potentially demystify the dynamic ways in which knowledge production has privileged “the dominant Western, bourgeois, white-supremacist, androcentric, heteronormative culture”(Harding, 2004, p. 5), which is presumed to be value-neutral. FST, similar to social work’s emphasis on the person-in-the-environment attempts to overcome the de-contextualizing often associated with positivist studies. The ways in which women’s lives are regulated by their social conditions can be observed when the social contexts of daily life are preserved in their day-to-day lives. Feminist empiricists—while attending to equal rights—“leave intact much of scientists’ and philosophers conventional understanding of the principles of adequate scientific research. It appears to challenge mainly the incomplete practice of the scientific method, not the norms of science themselves” (Harding, 1991, p. 113).

Harding (1995) suggests that reflexivity is not simply describing or confessing how the subjective voice and history of the researcher can, even unknowingly, influence the project. The researcher’s reflexivity, their social location, is a resource that strengthens the method when the researcher looks critically at their assumptions, turning the “critical lens” on these assumptions in order to analyze them (p. 19) In acknowledging the existence of hierarchal power arrangements in social life, that often privilege the researcher, the social location of the researcher can become a “local resource that we can use in scientifically and politically progressive ways”(Harding, 1995, p. 19). Early feminist scholars emphasized different and distinct feminist oppositional models, strategies, and analytic methods to combat gender oppression

Thematic narrative analysis

Padget (2008) described qualitative inquiry as being “steeped in choices and decisions—a qualitative study can be seen as a series of critical junctures in which the decision trail is rarely if ever, foreordained” (p. 41). In searching for a method that the women could use for self analysis and construction of their narratives, given their preference for underlining their interviews, I selected *thematic narrative analysis*, TNA. Riessman (2008) distinguished TNA from a wide array of narrative typologies as “the most widely used... interrogates ‘what’ is spoken (or written), rather than ‘how’ (p. 19). It is not so much how the story unfolded or the language used or the interviewer’s role in the process that is relevant in TNA. The interviewer and data that is considered extraneous as well as the influence of the audience on the narration and storyline is often erased according to Riessman (2008):

“Consequently in the written report, it appears that a biographical account emerges ‘full blown’ from the self of the narrator rather than a conversation between a teller and a particular listener/questioner” (p. 58).

The selection of the model depends on the purpose of the study. “The purpose of descriptive research is to present the narrative schemes the storyteller has intended” (Polkinghorne, 1988, p. 169). TNA supported the women’s work and provided a natural method to help the mothers construct their narratives and to explicate the meanings of their experiences. Moreover, Creswell (2002), noted the affinity that narrative studies have with feminist studies as a secondary theoretical lens in crafting the narratives as feminist studies are designed “to examine power and control issues”(p. 524) .

This process and the resulting narratives revealed the unique ways in which mothers experienced life. Immersion in the women’s stories led to a growing awareness that these predominately Black, resource poor young single mothers were describing an almost total lack of personal safety and societal support throughout their young lives. Working with the women in this study to create their narratives illuminated how in their social space — their day-to-day experiences— the choices open to them and their sense of agency produced different questions, solutions, and goals. FST acknowledges that multiple experiences and the varied social locations in which women are further stratified provide different levels of privilege and oppression. Harding (1995) also reminds us that women are always “reporting individual participation in the collective experiences. The same thing is true about consciousness raising in women’s groups” (p. 42). Postmodernists are also “starting off from different lives—not individual lives, but cultural locations—in order to think about what’s right and what’s wrong about Enlightenment histories” (Harding, 1995, p. 24).

Methodology

The interview

This study was composed of three sessions with each of the 11 women participating as co-researchers. Eight of the women in the study were Black, one was Latina, and two were White. While I am also a single mother who raised five children, the women’s stories aroused my own questions about why the women responded to situations as they did and what influenced their choices. The literature revealed the negative public perceptions of single mothers who receive social welfare entitlements (Abramovitz, 1995, 2006, 2009) and those who are homeless emanating from those who are often unaware of their unearned privileges as members of dominant White society. I was mindful that beginning research in the everyday lives of the marginalized can reveal how their lives are structured and regulated by social factors, which, as Swigonski posits (1993), enable the researcher to ask new questions more relevant to the research participant, for example “What choices do the members of this group make, and why do they believe those are good things to do?” (p. 176). Moreover, Sandoval (2004) suggests rather than viewing problems through one feminist construct or lens, any or all of the constructs can be applied as an analytic lens to identify, understand, and challenge gender marginalization.

The first session. I described and explained the goals and ethics of the study to each woman. Sharing my status as a single mother and the fact that I was a senior student strengthened my relationships with the mothers. However, I also recognized that the women’s stories were their stories and my questions were not their questions. I conducted an “informal conversational interview” with four questions that related to the focus of inquiry: 1) Tell me about your life; 2) Were there any turning points in your life? 3. Tell me about the experience of being homeless what you know about this; 4) Is there anything that we haven’t talked about that is important to your story? At the end of the session I reviewed a one-page guide for them to analyze their interview, which I left with the women and I answered their

questions. As the women were co-researchers, I also left a copy of the homeless literature review that I used in preparation for this project.

Posing a non-directive question to Agnes who was not at ease in speaking about how she would explain her pregnancy to the reader, given she did not have a permanent partner and was homeless with another child, yielded very rich data. Asking Agnes how she would explain her choice to the reader was validating for Agnes who included this data in her narrative. One limitation of this study, however, was in not asking a specific question related to race. I attribute this to inexperience more than to uncomfortability of either myself, or the mothers. I did not want to impose meaning or raise questions that they themselves had not raised. I am fairly certain that asking a specific non-directive question about race would have produced interesting findings, similar to the response of Agnes who was given a choice to answer for herself. Despite this omission, given the segregation on Long Island, New York, and in other parts of the nation and the disproportionate poverty of Black single mothers, the negative impact of race is assumed.

The second session. I reviewed the instruction for analysis and answered any of the women's questions. The first two women that I interviewed stated they understood the instructions but preferred to begin their analysis by underlining what they considered to be significant in their interviews, which I had transcribed, as this felt more natural. It was clear that they took to heart their role as co-researchers. In consultation with my doctoral adviser, I followed their lead and encouraged the next nine women to underline their texts as well. I searched the literature to provide the women with a method for self-analysis and the construction of their narratives, and decided upon TNA.

The third session, constructing the narratives. As the mothers were not trained in computer analyses we used *traditional hand analysis*, which Creswell (2002) described as "cutting and pasting text sentences onto cards" (p.261), to construct their narratives. Prior to this third session I cut and pasted the text they underlined onto cards. The mothers first sorted cards with similar themes into stacks, then arranged each stack chronologically. They created a theme for each stack. Finally they organized the stacks sequentially to form a structure. This method was well suited for the mothers to work fairly independently by sorting and organizing the cards in a process conforming to thematic narrative analysis. We then constructed their narratives on the laptop computer I brought to this session.

My task was to help the women to summarize and avoid duplication of the information on their cards. I restricted my comments, asking them to paraphrase when there were duplications in their accounts. The women were very self-directed from the outset and enjoyed this work. FST found a home in social work ethics which emphasizes beginning where the client is and client self determination (Swigonski, 1993, 1994). Riddled throughout their narratives are admonitions, questions, and suggestions for what homeless single mothers need in order to manage their daily lives. When the stories were completed, the women were proud of their work and hoped that their stories could help other homeless single mothers.

Cross-case analysis. Several concepts adapted from the method of group analysis (Krueger & Casey, 2009) guided my analysis of each of the narratives of the women in the group as I compared them. I noted the frequency of themes and I identified that dedication to their families (62) and their desire to work (60) predominated. Not only frequency but also extensiveness – i.e. the themes were present in each women's story – and the passion and emotion with which they described their experiences illuminated the predominant themes that emerged in the analysis. The women analyzed and interpreted their own narratives. I examined their housing moves and the antecedents to these moves. I also noted several subthemes seemed to predominate: childhood and parents (including grief); relationships; violence/bullying; housing history; work history; future goals and resolutions.

U. S. third world theory, a cultural lens. To avoid misinterpreting or even worse missing entirely the meaning the women wished to convey I sought a cultural compass to ground my own inquiry. U.S. third world feminists challenged me, as a White researcher, to *illuminate not reinterpret their work* (feminists (hooks, 1989, 2004; Sandoval, 2000, 2004, Smith, Linda, 1999). Sandoval (2000, 2004) posits that this “third space” provides an advantage in unmasking the hidden power dynamics such as those embedded in predominant racialized ideology and describes how ideology becomes the basis for creating, maintaining, and evaluating social structures. Sandoval (2000) was influenced by Barthes’s theories of deconstructing oppressive ideology, and his description of the “punctum” (pp. 141–143) as a powerful, blissful, destabilizing experience like falling in love. This, in turn, enables a person to deconstruct and transcend the continued acceptance of the natural state of things presented under the governing ideology of the social norms and mores and — often expressed as binary constructions— mediating social life. This subject position haunts “all we think we know” (p. 140) and exposes how language, symbols, and structures are loaded with intentions that serve to maintain power and dominant ideology.

The first three technologies of the Methodology of the Oppressed, MTO, (Sandoval, 2000), provided a compass or sensitizing supra-concepts (van den Hoonaard, 1997) grounding my interpretation and illumination of the women’s narratives and enabled me to perceive how the women’s standpoints and actions related to their problems and needs in their everyday lives as they articulated the process and their own growing consciousness. I hoped this would ground me in listening and analyzing their narratives and would enable me to tune in to the mother’s realities and their voices rather than superimposing meaning or reinterpreting their experiences. The MTO described experiences which paralleled the gender, race, and class marginalization of the women in this study who were engaged in daily praxis in their day-to-day lives to: 1) recognize that social knowledge and structures do not reflect their realities, which led to; 2) questioning social structures emanating from dominant ideology, and asking questions about who is benefiting from the systems that are created, resulting in; 3) challenging or opposing social structures that don’t serve the women’s everyday reality. This cultural lens helped me to recognize that the women were describing how they had reframed false negative accounts of their experiences and had developed their own standpoint as well as their oppositional consciousness. They depicted themselves in their stories as resisting, questioning, challenging, attempting to gain self-autonomy and meaning, and describing their differences of opinion as human rights issues. These exchanges were frequently interpreted as being noncompliant or problematic.

A feminist perspective is not always adequate when working to interpret the mother’s accounts. Zinn (as cited in Sandoval, 2004) suggests the inadequacy of feminist models to fully account for and represent U.S. third world women’s experiences within the expanding context of feminism as “such work is often tacked on, its significance for feminist knowledge still unrecognized and unregarded” (p. 47). MTO suggests that without interrogating dominant essentialist ideology, you risk seeing through imperial eyes (L. Smith, 1999), and the voice of oppressed women and the meaning they attach to their everyday encounters may or may not be visible or given voice. The themes and the insights of the women in this study resonated with the accounts of *U.S. third world feminists*. The women developed “informal political skills” and resembled “urban guerillas” (Hurtado in Sandoval, 2004, p. 203), as they use tactics for survival each day, while occupying a “third space”.

Conclusion

Recurring episodes of homelessness were often the result of the lack of affordable safe housing, rent hikes, or sales. At times partner abuse, pregnancies or overcrowding caused the loss of housing. Seven of the women’s mothers abused substances, resulting in the placement

of four of the women in foster care. The mothers of the five Black women were caught up in the crack epidemic that swept over urban and suburban communities in the 80s and 90s. Most of the women in the study avoided the use of alcohol and drugs. Their lack of understanding about substance abuse confounded their choices in their partners. *Dedication to family* and the *desire to work* was the overarching plot of their narratives in my cross-case analysis. It was a revelation that the central concerns of the women were typical of many working mothers, given the immense trauma many of these women experienced as children and as young adults revealed in their candid accounts of the burdens they faced as poor homeless women in their everyday lives (Craine Bertsch, 2012, p. 6). The social structures available to working mothers utterly fail poor homeless mothers seeking employment. At times housing workers did help women to obtain permanent housing and services. Shelter workers could also be provocative as they were often unaware of how past abuse and trauma impacted the women's hyper vigilance in defense of their children, and how for these new young mothers working could be therapeutic, even when they were pregnant.

Dedication to family. The women loved their children and were proud to be responsible mothers. The women experienced motherhood as ennobling. The women's description of motherhood paralleled and served as a proxy for Barthes' "falling in love", the "punctum". fostering their ability to analyze and deconstruct the constraints imposed upon them in their social locations when they became mothers. Behaviors that could appear to demonstrate ingratitude or irresponsibility, when conceptualized as strategies for survival (Sandoval, 2000, 2004) illuminated the actions of the women as deconstructing public beliefs and perceptions. The women explained how they interrogated the policy, practices, and stereotypes they encountered and found the courage to leave the irresponsible partners of their children.

Agnes states, "I don't quit because I have two children who need me. That's a mother, willing to go to any length or task to get back on their feet and provide for their family". Ashley described putting her life on hold. "For now it's just my kids and me until I have stability". I love kids. It brings joy to me every day, waking up to their face every morning. Instead of me waking up crying because I'm in this predicament, I look at them and they bring me joy". Kimberly's comment "My son made me who I am today" also resonates in Patience's comment. "I feel like I was homeless my whole life. Where does my sense of place and my strength come from; when I had children, in becoming a mother".

While marriage was desirable it was out of reach but not a reason to put off having a family. Their narratives illuminated how the stereotyping of single mothers as unmotivated and lazy "Welfare Queens" (V. D. Johnson, 2010), related more to capitalist ideology and meritocracy. This stigmatized identity did not reflect the reality of their daily lives, and their personal morals or how social structures deprive them of needed resources. The women disclosed the unrealistic expectations for homeless single mothers to succeed in a social environment not designed with their needs in mind, but rather for those with bourgeois values of the middle class. The women's daily lives revealed how structural impoverishment and unwarranted stigma weighed them down as middle class values are superimposed on them. Single mothers who have had children by multiple partners but are economically self-sufficient do not face the stigmatizing identities of women receiving social welfare. The ideology exposes the stigma relates to capitalism rather than morality.

Desire to work. The women's "desire to work" deepened the significance of the women's efforts, motivation, and courage to seek and keep their jobs, and to work for independence. A feminist Marxian social analysis of the sexual division of labor is particularly helpful in uncovering how these single mothers who desired to work, were prevented from working, but ironically blamed for not working. The macro level power arrangements have greatly contributed to their gendered social stratification (Hartsock, 1998,

2004). Despite the seemingly losing battle — the women reveal an unrelenting motivation to work to enable them to provide better opportunities for their children and to escape the surveillance, which holds them and their children hostage. The loss of one service needed by all working parents, particularly permanent housing presented numerous barriers against jobs. How do you interview for a job or make plans without permanent housing, affordable public transportation, and childcare.

In shelters, childcare was unavailable through elder teens or relatives, as teens needed to be supervised by parents, and visitors in shelter apartments were prohibited. Crystal didn't give up despite losing two jobs because of lack of transportation and childcare. "My goal now is to get permanent housing and a job as a home health aide. I enjoy my job and I don't like not working". Kimberly lost her permanent housing, childcare, and her job after being disqualified from services because a \$60 a month performance raise caused her to lose thousands of dollars of rental and childcare support. Kimberly plans "to study for medical billing. I also took the Post Office examination". Despite many years of abuse, and trauma, and a strong work history Michele discussed her recent diagnoses of multiple sclerosis and the difficulty she had in standing for long periods in her last job, adding, "I'm a hard worker.... I always did my best to work because not going to work that was not really an option because I felt that was what was keeping me on top. I feel good about my life". These women wanted to work!

The women negotiated broken public service systems, inadequate public transportation and childcare, and the lack of safe and affordable permanent housing. Despite intimidation, at times, by social welfare and housing workers they pushed back. Women surrendered children to the care of family members, fought back when accused of child neglect, refused to adhere to shelter policy forbidding them to work, attempted to find local jobs—even off the books—rode bikes and paid exorbitant fees to private taxi companies to get to their jobs. Some women felt that shelters offered them safety, others left in response to shelter policies or workers that attempted to regulate their desire to work, which is not evident in the literature. The women also pushed back against these regulatory practices and those who enforced them and over-extended their authority. Their stories reveal how "social locations are fundamentally structured by power relations" (Hartsock, 2004, p. 243) which are often not responsive to their needs.

Without safe and affordable housing, access to adequate public transportation and childcare, and without the opportunity for education in an increasingly complex and technological economy, homeless women cannot be expected to gain independence. The women interrogated the false premises upon which social welfare policy is based. Public institutions can play a vital role in collaborating with policy makers to present a more realistic perception of poor homeless single mothers — to transform public perceptions of the women and respond to their needs for permanent housing. Empowerment models (Lee, 2001) can shape shelter workers and cultures, shifting the emphasis from negative individual and stereotypical characteristics of homeless single mothers as either the cause of their problems, or as a perpetual victims. Homeless single mothers can engage in a process of restoring their emotional well-being while simultaneously challenging the social structural barriers they identified. These include lack of affordable housing, adequate transportation, fair wage jobs, and constant surveillance, and the faulty stigmatizing identities that are influencing policy makers and those with authority over them, standing in the way of their gaining independence and human rights. The women stepped up by exposing themselves, through their narrative accounts, to advocate for themselves and on the behalf of other homeless mothers. The process of homelessness uncovered in the narratives revealed the women's resilience despite histories of abuse, and the surveillance and regulations in shelters and welfare bureaucracies reproducing past experiences of oppression. They acknowledged they were victimized but

they were not victims, their eyes were on the future. These findings can be compared to the women's narratives (Craine-Bertsch, 2013). The narratives also illuminated how the care, support, and instructions of the professionals they encountered such as housing workers, substance abuse counselors, HIV test workers, the principal of a school, and a parole officer and specialized housing programs combining employment training and placement, with coordinated child care and transportation changed the trajectory of their lives. The women learned they could accept support from them without losing their dignity. The women's satisfaction with their narratives give evidence of the trustworthiness of the findings. The reader can compare the cross case analysis with the women's narratives" "to judge the accuracy and credibility of the account" (Creswell, 1998, pp. 202–203).

References:

- Abramovitz, M. (1995). From tenement class to dangerous class. In N. Van Den Bergh (Ed.), *Feminist Practice in the 21st Century* (2nd ed., pp. 211–231). Washington, DC: NASW Press.
- Abramovitz, M. (2006). Welfare reform in the United States: Gender, race and class matter. *Critical Social Policy*, 26(2), 336–364. doi:10.1177/0261018306062589
- Abramovitz, M. (2009). Wall street takes welfare it begrudges to women. *Affilia: Journal of Women and Social Work*, 24(2), 105–107. doi:10.1177/0886109909331870
- Allegretto, S. (2011). Through volatility and turmoil, the gap widens. *The State of Working America*. Economic Policy Institute, 1–34. Retrieved from http://epi.3cdn.net/002c5fc0fda0ae9cce_aem6idhp5.pdf
- Bassuk, E., & Geller, S. (2006). The role of housing and services in ending family homelessness. *National Center on Family Homelessness: Housing Policy Debate*, 17(4), 781–806. Retrieved from <http://content.knowledgeplex.org/kp2/cache/documents/2693/269321.pdf>
- Berlin, G. (2007). *MDRC: Congressional Testimony by Gordon Berlin on Solutions to Poverty*. Retrieved from <http://www.mdrc.org/publications/450/testimony.html>
- Blank, R. (2007). Improving the safety net for single mothers who face serious barriers to work. *Future Child*, 17(2), 183–197. Retrieved from http://futureofchildren.org/futureofchildren/publications/docs/17_02_09.pdf
- Blau, J. & Abramovitz, M. (2007). *The Dynamics of Social Welfare Policy* (2nd ed.). New York, NY: Oxford University Press.
- Bogard, C., McConnell, J., Gerstel, N., & Schwartz, M. (1999). Homeless mothers and depression: Misdirected policy. *Journal of Health and Social Behavior*, 40(1), 46–62.
- Craine-Bertsch, T. (2012) *The standpoint of homeless single mothers on recurrent episodes of homelessness*. (Doctoral Dissertation, Adelphi University: NY. Available from ProQuest Dissertation and Theses database. (UMI No. 3536603).
- Creswell, J. W. (2002). *Educational Research: Planning, Conducting, Evaluating Quantitative and Qualitative Research*. New York, NY: Merrill Prentice Hall.
- Culhane D. P. & Byrne, T. (2010). Ending Chronic Homelessness: Cost-Effective Opportunities for Interagency Collaboration. *Penn School of Social Policy and Practice Working Paper* Retrieved from http://works.bepress.com/dennis_culhane/94
- Culhane, D. P., Metraux S, Byrne, T. (2011). A prevention-centered approach to homelessness assistance: a paradigm shift? *Housing Policy Debate*, 21(2), 295–315. Retrieved from http://works.bepress.com/dennis_culhane/103/
- Culhane, D. P., Metraux, S., Park, J. M., Schretzman, M., & Valente, J. (2007). Testing a Typology of Family Homelessness Based on Patterns of Public Shelter Utilization in Four U.S. Jurisdictions: Implications for Policy and Program Planning" *Departmental Papers*

- (SPP). Retrieved from http://works.bepress.com/dennis_culhane/1
- DeNavas-Walt, C., Proctor, B.D., & Smith, J.C. (2011). Income poverty and health insurance in the United States: 2010. Current population reports: Consumer Income. *U. S. Census Bureau*, 1–187. Retrieved from <http://www.census.gov/prod/2011pubs/p60-239.pdf>
- Du Bois, W. (1903). *The Souls of Black Folks. Of Our Spiritual Strivings*. Retrieved from <http://www.bartleby.com/114/1.html>
- Economic Policy Institute. (2011). *Reducing poverty and increasing marriage rates among Latinos and African Americans* (Issue Brief No. 313). Washington: DC : Austin, A. <http://www.epi.org/files/2011/IssueBrief313.pdf>
- El-Bassel, N. (1998). Crack in America: Demon drugs and social justice, March 18, 1998. [Review of the book *Crack in America: Demon Drugs and Social Justice*]. *Journal of the American Medical Association*, 279(11), 885—886.
- Haraway, D. (2004). Situated knowledges: The science question in feminism and the privilege of partial perspective. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies* (1st ed., pp. 81–101). New York, NY & London: Routledge.
- Harding, S. (1991). *Whose science? Whose knowledge? Thinking from Women's Lives*. (1st ed.). Ithaca, NY: Cornell University Press.
- Harding, S. (1995). Starting from marginalized lives: A conversation with Sandra Harding. In G. Olson, & E. Hirsh (Eds.), *Women writing culture* (1st ed., pp. 3–42). New York, NY: State University of NY Press.
- Harding, S. (2004). Introduction: Standpoint theory as a site of political, philosophic, and scientific debate. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies* (1st ed., pp. 1–15). New York, NY: Routledge.
- Harding, S. (2004). Rethinking standpoint epistemology: What is “strong objectivity?” In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies*.
- Hartnett, H., & Postmus, J. L. (2010). The function of shelters for women: Assistance or social control? *Journal of Human Behavior in the Social Environment*, 20/2. 289-302.
- Hartsock, N. C. (2004). The feminist standpoint: Developing the ground for a specifically feminist historical materialism. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies*. (1st ed.) 35–53. New York, NY: Routledge.
- hooks, b. (1989). *Talking Back*. Boston, MA: South End Press.
- hooks, b. (2004). Choosing the margin as a space of radical openness. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies* (1st ed., pp. 21–33). New York, NY & London: Routledge.
- Hurtado, A. (1985). *Reflections on White Feminism: A Perspective from a Woman of Color*, 25, from an unpublished manuscript. In C. Sandoval (2004). U.S. third world feminism: The theory and method of differential oppositional consciousness. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies* (pp.195–209). New York, NY: Routledge.
- Institute for Children, Poverty & Homelessness. (2011). Profiles of Risk. *Family Structure* (Research Brief No. 3). 1–4. Retrieved from http://www.icphusa.org/PDF/reports/ICPH_ProfilesOfRisk_No.3.pdf
- Johnson, A. K. (1999). Working and nonworking women: Onset of homelessness within the context of their lives. *AFFILIA*, 14(42), 42–77.

- Johnson, V. D. (2010). Impact of race and welfare reform on African American single mothers' access to higher education. *Journal of Black Studies*40(6), 1041–1051. Kincheloe, J., McLaren, P., and Steinberg, S. (1997). Series Editors' foreword. In Giroux, H. A. *Pedagogy and the Politics of Hope: Theory, Culture, and Schooling, A Critical Reader* (pp. ix–xiv). Boulder, CO: Westview Press.
- Krueger, R. A., & Casey, J. A. (2009). *Focus groups: A practical guide for applied research* (4th ed.). Los Angeles, CA; London; New Delhi; Singapore; & Washington, DC: SAGE.
- Lamb, C. M. (2005). *Housing Segregation in Suburban America Since 1960: Presidential and Judicial Politics*. New York, NY: Cambridge University Press.
- Lee, J. A .B. (2001). *The Empowerment Approach to Social Work Practice: Building the Beloved Community*. New York, NY: Columbia University Press.
- National Center on Family Homelessness. (n.d.). Research on homeless and low-income housed families. *Family Homelessness: Research*, 1–4. Retrieved from http://www.councilofcollaboratives.org/files/fact_research.pdf
- National Center on Family Homelessness. (2010). Families experiencing homelessness. *Families*. Retrieved from <http://familyhomelessness.org/families.php?p=ts>
- National Law Center on Homelessness & Poverty. (2010). *Program: Hurricane Katrina*. Retrieved from <http://www.nlchp.org/prog=6>
- National Center on Family Homelessness. (2010). Families experiencing homelessness. *Families*. Retrieved from <http://familyhomelessness.org/families.php?p=ts>
- National Center on Family Homelessness. (2011). The characteristics and needs of families experiencing homelessness. *Why are Families Homeless?*, 1–9. Retrieved from <http://www.familyhomelessness.org/media/278.pdf>
- National Law Center on Homelessness & Poverty. (2010). Indicators of increasing homelessness due to the foreclosure and economic crisis. *Fact sheet*. Retrieved from www.nlchp.org/content/pubs/Foreclosure_effects_on_homelessness.pdf
- National Law Center on Homelessness & Poverty (2011) “Simply Unacceptable”: Homelessness and the Human Right to Housing in the United States 2011. A report of the National Law Center on Homelessness & Poverty. Retrieved from http://www.nlchp.org/Simply_Unacceptable
- National Low Income Housing Coalition. (2010). Minimum Wage. *2010 Advocates Guide to Housing and Community Development Policy*, (p. 137). Retrieved from <http://www.nlihc.org/doc/2010-ADVOCATES-GUIDE.pdf>
- National Poverty Center. (2011). How does poverty differ across subgroups? *Poverty in the United States: Frequently Asked Questions*. University of Michigan: Gerald R. Ford School of Public Policy. Retrieved from <http://npc.umich.edu/poverty>.
- Padgett, D. K. (2008). *Qualitative Methods in Social Work Research* (2nd ed.). London, England; Los Angeles, CA: SAGE.
- Polkinghorne, D. (1988). *Narrative Knowing and The Human Sciences*. New York, NY: State University of New York Press.
- Pew Research Center (2010). The decline of marriage and rise of new families. *A Social & Demographic Trends Report*. Retrieved from <http://www.pewsocialtrends.org/files/2010/11/pew-social-trends-2010-families.pdf>
- Reed Wasson, R., & Paul Hill, R. (1998). The process of becoming homeless: An investigation of female-headed families living in poverty. *The Journal of Consumer Affairs*, 32(2), 320–342.

- Riessman, C. K. (2008). *Narrative Methods for the Human Services*. Los Angeles, CA: SAGE.
- Rocha, C. J. (1997). Factors that contribute to economic well-being in female-headed households. *Journal of Social Service Research*, 23(1), 1–17.
- Sandoval, C. (2000). *Methodology of the Oppressed. Theory Out of Bounds: Volume 18*. Minneapolis, MN: University of Minnesota Press.
- Sandoval, C. (2004). U.S. third world feminism: The theory and method of differential oppositional consciousness. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies* (pp.195–209). New York, NY: Routledge.
- Sclar, E. D. (1990). Editorials: Homelessness and housing policy: A game of musical chairs. *American Journal of Public Health* (pp. 1039-1040). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1404844/pdf>
- Shinn, M. (2007). International homelessness policy, socio-cultural, and individual perspectives. *Journal of Social Issues*, 63(1), 657–677.
- Shinn, M., & Gillespie, C. (1994). The roles of housing and poverty in the origins of homelessness. *American Behavioral Scientist*, 37(4), 505–521.
- Smith, D. E. (1987). *The Everyday World as Problematic: A Feminist Sociology*. Boston, MA: Northeastern University Press.
- Smith, D. E. (2004). Women's perspective as a radical critique of sociology. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies* (1st ed., pp. 21–33). New York, NY & London: Routledge.
- Smith, L. (1999). *Decolonizing Methodologies. Research and Indigenous Peoples*. NY & London: Zed Books Ltd.
- Smith, N., Flores, Z., Linn, J., & Markovic, J. (2005). Understanding family homelessness in New York City: An in-depth study of families' experiences before and after shelter. *Vera Institute of Justice*, 1–179. Retrieved from <http://nyc.gov/html/dhs/downloads/pdf/VERA%20Study.pdf>
- Stojanovic, D., Weitzman, B., Shinn, M., Labay, L., & Williams, N. (1999). Tracing the path out of homelessness: The housing patterns of families after exiting shelter. *Journal of Community Psychology*, 27, 199–208.
- Swigonski, M. E. (1993). Feminist standpoint theory and the questions of social work research. *AFFILIA*, 8(2), 171–183.
- Swigonski, M. E. (1994). The logic of feminist standpoint theory for social work research. *Social Work*, 39(4), 387–393.
- van den Hoonaard (1997). *Working With Sensitizing Concepts: Analytical Field Research*. Qualitative Research Methods Series, No 41. SAGE, Thousand Oaks.
- Wagmiller, R. (2000). The changing geography of male joblessness in urban America: 1970 to 2000. *Housing Policy Debate*. 19(1), 93–136. ISSN: 1051-1482.
- Wilson, W. J. (1996). *When Work Disappears. The World of the New Urban Poor*. Vintage Books, New York, NY: Random House, Inc.
- Wong, Y. I., Culhane, D. P., & Kuhn, R. (1997). Predictors of exit and reentry among family shelter users in New York City. Departmental Papers (SPP). *Social Services Review*, September 1997, 441–462. Retrieved from http://works.bepress.com/dennis_culhane/5
- Zinn, M., Weber Cannon, L., Higinbotham, E. and Thornton Dill, B. The Costs of Exclusionary Practices in Women's Studies. *Signs, Journal of Women in Culture and Society* 11 (2). Winter 1986. In Sandoval, C. (2004). U.S. third world feminism: The theory and

method of differential oppositional consciousness. In S. Harding (Ed.), *The Feminist Standpoint Theory Reader: Intellectual & Political Controversies* (pp.195–209). New York, NY: Routledge.

Zlotnick, C., Bradley, K., & Tam, T. (2007). Impact of adulthood trauma on homeless mothers. *Community Mental Health Journal*. 43(1), 1–32. doi:10.1007/S10597-006-9070-7

O DIREITO DO USO DO NOME PRÓPRIO NA TOPONÍMIA PORTUGUESA

Irene Portela, PhD

Instituto Politécnico do Cávado e do Ave, Portugal

Abstract

The misuse of the name and in consequence the violation of the right to use the name raises serious legal order and the protection and guarantee of legal certainty. This issue is particularly serious if it is the right to use the name on road signs and signage used to designate geographical locations. The misuse of the English language can not excuse himself from behind the agreement spelling 1990.

Keywords: Acordo ortografico; toponimos; Direito; linguagem; sinalética

Introdução

O âmbito do uso do nome é variável de acordo com o seu significado mas o Direito do uso do nome é invariável enquanto Direito fundamental, inalienável, intemporal, permanente, ilimitável, omnipresente.

Na perspetiva do Direito ao uso do nome individual: nome, nome de família ou pronome, alcunha, o individuo pode – em caso de lesão comprovada invocar o seu Direito para responsabilizar civilmente ou penalmente o infrator ou o criminoso. Fazer mau uso ou abusar do nome de alguém é crime – neste sentido o código civil reconhece o Direito ao nome como um Direito subjetivo – um Direito de exigir ou pretender o seu respeito por parte de outrem. Penalmente, o código prevê um conjunto de tipos legais de crimes ligados às ofensas ao bom nome, à imagem, à honra, quer de forma direta quer de forma indireta, o que demonstra a preocupação do legislador em proteger este Direito da personalidade- da pessoa como esfera de Direitos e deveres .

No sentido comercial ou empresarial do mesmo – com a carga de interesses materiais que os atos do comercio e da industria prestam aos nomes, às denominações, às marcas, as patentes e todos os produtos ou coisas protegidas no âmbito dos negócios, a economia tem capitalizado este valor, o que despertou no legislador a necessidade de aprofundar as derivações destes Direitos industriais, de propriedade intelectual transformando realidades subjetivas – ideias – em criações, patentes, produtos e marcas.

Numa perspetiva coletiva – o uso do nome é entendido como um valor cultural representativo do imaginário e da ideia de um lugar, um edifício, um caminho, um bem coletivo ou coisa publica que merece a proteção do Direito.

Na sua obra, *An Essay Concerning Human Understanding*, John Locke apresenta o conceito de semiótica. Este autor discorre sobre a verdade, o conhecimento e a justiça. Ora sendo este autor o pai do principio da divisão de poderes e do estado de Direito deve procurar-se na leitura desta obra o sentido das coisas.

Locke divide as ciências humanas em três e considera que a terceira é a semiótica ou doutrina dos sinais, sendo a ciência que se destina à investigação dos signos com que se compreendem as coisas e com que o homem as comunica (Locke, 1979, Book IV, Chap. XXI, par. 4). Segundo ele, o homem, ao raciocinar, não lida com coisas, mas com ideias (representação mental das coisas) e com palavras (representação verbal das ideias); por isso, a

semiótica confunde-se com a lógica, que também organiza a aquisição e a comunicação do conhecimento. Assim, a verdade, para Locke, não passa da união ou da separação de sinais, conforme as coisas que representam concordem ou discordem entre si (Locke, 1979, Book IV, Chap. V, par. 2). Quer dizer, a verdade decorre da junção ou disjunção de palavras ou das ideias. Portanto, a verdade será o resultado das ideias ou das palavras e enquanto pertence ao âmbito das proposições, resulta das ideias ou das palavras que são símbolos que representam as coisas.

Ora partindo desta noção de semiótica e da noção de que a linguagem do direito é performativa, coloca-se a questão de saber que consequências advêm para o Direito a alteração dos símbolos, a impossibilidade de interpretar os símbolos e qual é o valor dos mesmos para a ordem jurídica.

A linguagem do direito apresenta três características: é locucionária, uma vez que visa comunicar, e é ilocucionária, porque é um ato de prescrição. Assim, as palavras jurídicas não procuram apenas informar, mas são em si mesmas um ato de autoridade, prescrevem um determinado número de normas. Enfim, a linguagem das leis é performativa, uma vez que procura influenciar o comportamento dos cidadãos pelas normas de conduta (medidas de conduta) que se impõem (direito civil em sentido lato) ou com sanção que se impõe (direito penal, ou em sentido lato, o direito repressivo) (cf. Loger-Riopel. Viaud, 2013).

A linguagem das leis, contrariamente à linguagem científica, não procura constatar ou descrever uma realidade pré-existente ou por hipóteses em relação a esta. Não trata de uma realidade que existiria fora dele, ele é a sua própria realidade: ele é o seu referencial, ou seja, é ao mesmo tempo o seu significado e o seu referente (cf. Teixeira de Sousa, 1986). Não tem outra existência senão na língua que o estabelece. A linguagem do jornalista não é performativa e a sua força ilocucionária é diferente, por exemplo, porque é simplesmente constativa.

Na linguagem corrente fala-se de leis jurídicas e de leis científicas. Não se deve confundir estas “leis”. As leis científicas constatarem uma relação que elas não estabelecem, não prescrevem, não criam, não são performativas: “aquece-se um metal e ele dilata”. Esta lei constata a regularidade da natureza, nada tem de normativo ou de performativo. Inversamente, a lei dos juristas é normativa, ela cria um facto novo: a norma.

Na linguagem jurídica pode distinguir-se, primeiro, a linguagem das normas, que estabelece, comunica que torna obrigatórias as normas de conduta abstratas e compostas de uma hipótese (conceito de identificação) e de um dispositivo (conceito de predicação). Em seguida, a linguagem da decisão que é a concretização da linguagem das normas e que comporta uma qualificação, ou seja, a relação de um caso a uma hipótese legal e uma predicação: a aplicação de um dispositivo legal a um caso concreto pela via da consequência. Por fim, pode-se também distinguir na linguagem jurídica a linguagem dos doutores que, excepto em casos excepcionais não é uma linguagem performativa, mas um simples comentário da linguagem normativa (uma metalinguagem). Uma linguagem apenas é performativa se reunir determinadas condições de validade: ela tem qualidade performativa apenas se for pronunciada por quem tem o poder de o fazer e de acordo com um ritual fixo.

Concluindo, podemos dizer que a regra jurídica pertence à linguagem performativa, a lei científica à linguagem constativa ou hipotética. A primeira tem uma existência, tem uma realidade que se pode constatar. É assim que se pode falar de “lei falsa”, de uma lei que não emanaria da autoridade, de uma lei não autêntica. Mas a lei jurídica é uma realidade, não é em si, uma constatação de uma realidade para além da minha. Uma vez estabelecido o seu carácter autêntico, não se pode dizer que seja verdadeira ou falsa, boa ou má, conforme ou não às regras do bom senso. Ora as predicções de qualidade caracterizam os valores. Pode dizer-se então que a linguagem da lei como tal pertence ao domínio dos valores.

Desta pertença da lei dos juristas ao mundo dos valores, podemos tirar, a nível hermenêutico consequências muito importantes, e nomeadamente que os símbolos têm ou podem ter o valor de “valor”, senão vejamos:

Em julho de 1996, em Barcelona, foi elaborada a Declaração Universal dos Direitos Linguísticos (Anexo 5), pela Assembleia de Participantes da Conferência Mundial dos Direitos Linguísticos. E o artigo 3.º nº 1 diz expressamente que esta Declaração considera como direitos individuais inalienáveis e que devem ser exercidos em todas as situações os seguintes:

“o direito a ser reconhecido como membro de uma comunidade linguística; o direito ao uso da língua em privado e em publico;

o direito ao uso do próprio nome;

o direito a relacionar-se e associar-se com outros membros da comunidade linguística de origem

o direito a manter e desenvolver a própria cultura;”

(...) e todos os outros direitos de carácter linguístico reconhecidos no Pacto Internacional de Direitos Civis e Políticos de 16 de Dezembro de 1966 e no Pacto Internacional de Direitos Económicos, Sociais e Culturais da mesma data.

Os direitos das pessoas e dos grupos linguísticos mencionados anteriormente não devem representar qualquer obstáculo à sua interrelação e à integração na comunidade linguística de acolhimento, nem qualquer limitação dos direitos desta comunidade ou dos seus membros ao pleno uso público da própria língua na totalidade do seu espaço territorial.

o Direito ao uso do próprio nome enunciado nos termos do artigo 3º encontra reforço ainda na própria declaração dos Direitos linguísticos nos termos do Artigo 23º, Ponto 3 e 4 (“O ensino deve estar sempre ao serviço da diversidade linguística e cultural, e das relações harmoniosas entre as diferentes comunidades linguísticas do mundo inteiro; No quadro dos princípios anteriores, todos têm direito a aprender qualquer língua. “), e no artigo 28º (“Todas as comunidades linguísticas têm direito a um ensino que permita aos seus membros adquirirem um conhecimento profundo do seu património cultural (história e geografia, literatura e outras manifestações da própria cultura), assim como o melhor conhecimento possível de qualquer outra cultura que desejem conhecer) e, por fim, o Artigo 29º, Ponto 1 e 2 (“Todos têm direito ao ensino na língua própria do território onde residem; Este direito não exclui o direito de acesso ao conhecimento oral e escrito de qualquer língua que lhes sirva de instrumento de comunicação com outras comunidades linguísticas”) (Anexo 5).

Neste contexto, surge a questão do (mau) uso da sinalética (dos símbolos que representam uma coisa ou uma ideia) – como conjunto de placas e de sinais de trânsito para identificar uma localidade, um serviço publico, um edifício, uma rua, que pode representar não só uma violação do Direito do uso ao nome como também a violação dos valores coletivos. Referimo-nos por exemplo a casos correntes que parecem inofensivos, mas, quando é usada uma letra minúscula no início do nome – tribunal, câmara, travessa das cortes, cortes de baixo, ou de cima, ou quando as abreviações de localidades, V. do Castelo (para identificar Viana do Castelo), M. Grande (referindo-se a Marinha Grande), acontecem com total desprezo pelos princípios básicos da escrita e da ciência ortográfica e gramatical portuguesa, numa completa iliteracia dos nossos valores culturais e da semiótica coletiva.

A segurança jurídica e o valor da confiança associados à sinalética rodoviária deveriam ser uma garantia fundamental de qualquer cidadão. A questão surge em Portugal com mais acuidade por causa do acordo ortográfico. Ao abrigo do chapéu do Acordo Ortográfico (AO90) surgiram as mais diversas variáveis na escrita e no uso da língua portuguesa. Deve ser da ordem do acordo ortográfico escrever qualquer coisa nos sinais ou nas placas: - sem acentos, sem maiúsculas, sem hífen, de forma abreviada e indiscriminadamente os nomes das localidades.

A nova ortografia, acordada pelo Acordo Ortográfico de 1990 (AO90), foi promulgada pela Resolução da Assembleia da República (AR) n.º 26/91, de 23 de Agosto (com pequenas atualizações posteriores), e pormenorizada pela Resolução do Conselho de Ministros (CM) n.º 8/2011.

A ortografia ainda em vigor, acordada pelo Acordo Ortográfico de 1945 (AO45), foi promulgada pelo Decreto n.º 35.228 de 8 de Dezembro de 1945, e ratificada em 1973, com pequenas alterações, pelo Decreto-Lei n.º 32/73 de 6 de Fevereiro.

O Código do Direito de Autor e Direitos Conexos foi promulgado pelo Decreto-Lei n.º 63/85, de 14 de Março (com pequenas actualizações posteriores).

Nos termos do artigo 112 da Constituição da República portuguesa, na hierarquia das normas, um Decreto-Lei prevalece sobre uma Resolução da AR ou do Conselho de Ministros, e um Decreto-Lei é vinculativo, ao passo que uma Resolução é uma mera recomendação.

Por conseguinte, uma Resolução não tem força legal para revogar um Decreto-Lei, e por isso deve-se considerar de Direito que o AO45 continua em vigor.

O que levanta juridicamente a questão de que havendo um conflito entre a nova ortografia e o Direito do Autor, o que prevalece é o Decreto-Lei do Direito de Autor. Embora o Artigo 93.º do Código do Direito de Autor preveja a possibilidade de atualizações ortográficas, não consideradas “modificações”. Por outro lado o Autor, pode escrever como entender, por uma “opção ortográfica de carácter estético”, conforme consta do n.º 1 do Art. 56.º do Código do Direito de Autor e dos Direitos Conexos, onde se diz “que o autor goza durante toda a vida do direito de assegurar a genuinidade e integridade da sua obra, opondo-se à sua destruição, a toda e qualquer mutilação, deformação ou outra modificação da mesma, e, de um modo geral, a todo e qualquer acto que a desvirtue”.

Numa leitura contra o acordo ortográfico, nenhum editor é obrigado a editar os seus livros ou as suas publicações segundo a nova ortografia, nem nenhum Autor é obrigado a escrever os seus textos segundo o AO90.

Mas, e é isto que nos prende: numa leitura perante o acordo ortográfico como lidar com estas divergências na sinalética, que pode lesar a segurança jurídica e que representa um mau uso ou um uso abusivo do Direito ao uso do nome: *tout court!* ?

Por outro lado ainda, se em 2015 o novo AO90 adquirir vinculatividade jurídica sob a forma de Decreto-Lei?

Isto resolverá a questão da sinalética? Da disparidade de grafia, do abuso de minúsculas iniciais?, das abreviaturas indecifráveis? Não nos parece, até porque substituir a sinalética de um país deve ter um custo exorbitante que os presentes cortes orçamentais não contemplam.

Daqui concluímos que a própria associação feita ao acordo ortográfico é também ela abusiva ...abusiva porque é contrária à leitura do próprio acordo ortográfico: - na Base XIX do mesmo constam de forma explícita as regras para o uso Das minúsculas e maiúsculas.

Fulano, beltrano e sicrano – uso de minúscula porque se refere a indicação vaga de alguém, e o uso obrigatório de maiúsculas existe relativamente a nome próprios de indivíduos – a letra maiúscula é usada para os antropónimos reais ou fictícios dos indivíduos – antropónimo é o nome dado a um individuo seja ele um nome, sobrenome ou alcunha.

Quanto ao nome próprio de lugares – o acordo manda que a letra maiúscula seja usada nos toponimos sejam reais ou fictícios – nomos + topos (lugar)

Quando o nome do mês integrar o nome de rua, seguindo a regra dos toponimos deve ser escrito com letra maiúscula, por exemplo, 15 de Novembro (a regra era de que o nome do mês passasse a ser escrito com letra minúscula..., mas não no caso de integrar um toponimo.

Os nomes que designam instituições sejam elas órgãos públicos ou estabelecimentos particulares devem ser escritos com uma maiúscula inicial

Quanto às categorizações dos toponimos, quando usadas antes de formas toponimas ou seja antes dos nomes dos respetivos locais, podem usar-se indiferentemente as maiúsculas ou minúsculas, por exemplo, moro na Rua ou na rua da Liberdade.

Ou seja, a leitura do acordo ortográfico é clara e de uso prático, e em nada legitima o mau uso da língua portuguesa e em especial o mau do uso do nome configurando a violação sem qualquer sanção deste Direito.

O que acontece é que a sinalética atualmente não tem de obedecer a uma norma jurídica – vinculativa e sancionatória – única que determine todos os aspetos que uma placa, um sinal deve ter (conter) como requisito de validade e de expressão da cultura coletiva portuguesa.

Os direitos linguísticos são parte integrante dos direitos humanos e nesse sentido o Conselho da Europa defende que “todas as línguas existentes no espaço europeu devem ser igualmente valorizadas, promovidas e ensinadas quer se trate das línguas oficiais de estados-membros, das línguas regionais ou das línguas minoritárias migrantes” (ILTEC, 2008: 20).

Previo ao Direito à voz – consideremos o Direito ao uso do nome!

Creio que, sem dependência da vinculatividade da resolução da Assembleia da república, ou seja, independentemente da lei na qual se baseie esta iniciativa, tomando como referente jurídico a garantia constitucional à segurança jurídica e à segurança rodoviária, deve promover-se para a jurisdição e vinculatividade da semiótica rodoviária, codificando, regulamentando esta matéria através do uso de normas jurídicas únicas, universais, uniformes.

Conclusão

A criação de linguagens técnicas tornou-se necessária pela falta de precisão e ambiguidade da linguagem corrente. As conotações ou valores estilísticos são associações extra semânticas, mais ou menos latas, que, sem alterar o sentido da palavra o podem colorir. Por fim, a imprecisão da linguagem corrente deriva também da instabilidade semântica. Todas as línguas variam no tempo e têm necessidade em se adaptar às necessidades sempre em movimento da comunidade linguística (Arrivé, 2007, 80-100).

As linguagens técnicas tendem a purificar o seu léxico, a sua sintaxe a sua semântica de modo a realizar os enunciados desprovidos de qualquer equívoco. Tal procura é feita pela substituição das palavras intuitivas e coloridas da linguagem corrente por termos abstratos, conceitos rigorosamente definidos que excluem qualquer ambiguidade. A linguagem técnica mais perfeita é a das matemáticas que permite a transmissão exata do pensamento evitando a confusão das significações.

A linguagem técnica do direito não atingiu ainda tal grau de abstração e de formalização comparável à da linguagem matemática (Parquet, 2007, 35-37). Conserva laços estreitos com a linguagem corrente e participa em larga medida da ambiguidade daquela. Por outro lado, o carácter normativo do direito adapta-se mal à lógica formal e ao cálculo lógico, concebidos primordialmente para os julgamentos de existência e não tanto para as normas, que, em si mesma, não são verdadeira nem falsa (Wagner e Haag, 12-17). O papel importante da linguagem corrente nos enunciados jurídicos é um dado com consequências pois o jurista procura extrair do fundo comum expressões para dar sentido profundo e científico aos preceitos do direito. Daí deriva, como em todo a atividade própria, uma língua técnica. Apoiando-se na linguagem comum. Mas clarificando os termos e as formas de modo a obter um idioma particularmente adaptado ao objetivo procurado, e que finalmente assinala um lugar distinto no meio das confusões, das obscuridades e dos equívocos da linguagem comum.

Creio que numa década em que a modernização administrativa passa pela desformalização, desmaterialização e transparência dos procedimentos, há questões que não

podem ser ignoradas principalmente se estão na base do ordenamento da comunidade, da coisa pública nas suas várias vertentes, desde logo no principio essencial de que devemos chamar as coisas pelo nome.

References:

- Akam Akam, André, “La loi et la conscience dans l’office du juge” in *Revue de l’Ersuma, Revue de l’ERSUMA :: Droit des affaires - Pratique Professionnelle*, N° 1 - Juin 2012, *Pratique professionnelle*. Online: <http://revue.ersuma.org/no-1-juin-2012/pratique-professionnelle/article/la-loi-et-la-conscience-dans-l>
- Arrivé, Michel, *A la recherche de Ferdinand Saussure*, Paris, Puf, 2007.
- Butler, Judith (1997). *Le Pouvoir des mots. Politique du performatif*, prefacio e tradução de Charlotte Nordmann e de Jérôme Vidale, Ed. Amsterdam, Paris, 2004.
- Duarte, Susana Azevedo (2013) , “O ónus da prova do sujeito passivo que evidencia manifestações de fortuna” in *Ab Instantia*, 2013, 65-80.
- Canotilho, J.J. Gomes (1991), «Os impulsos modernos para uma teoria da legislação»,», *Legislação. Cadernos de Ciênciade Legislação*, nº 1, Abril - Junho 1991, pp. 7- 13
- Cornu, Gerard (1990), *Linguistique juridique*, Paris, Monchrestien, 1990.
- Garric, Nathalie (2007) , *Introduction à la linguistique*, Paris, Hachete, 2007.
- Gadamer, Hans Gerod (1986), *Verdade e método*, Pétropolis, Vozes, 1986.
- Gazel, Lorenzo (2005) , “ Effets essentiels de l’acte social et normes juridiques: type eidologique et type eidonomique dans la philosophie de l’acte” online boa.unimib.it/bitstream/.../Reinach%20Paris%201.
- Justo, A. Santos (2009), *Introdução ao Estudo do direito*, Coimbra, Coimbra editora, 4.^a ed., 2009.
- Normier, Bernard (2007), *L’apport des technologies linguistiques au traitement et à la valorisation de l’information textuelle*, éditions ADBS.
- Laugier, Sandra, *Performativité, normativité et droit*, *Archives de Philosophie*, 2004, tomo 67, Locke. John An Essay Concerning Humane Understanding In Four Books. (1690) EEBO Editions, ProQuest, Postcolonial Literary Studies Edição/reimpressão 2011, 607-627.
- Martinho Soares (2012) , «L’hermeneutique du discours historique chez Ricoeur », in *International studies in hermeneutics et phenomenology*, vol. 3 Lit Verlag, Berlin, 2012, 343-340
- Miaille, Michel, (2005), *Introdução Crítica ao Direito*. 3. Ed. Lisboa, Estampa, 2005.
- Machado, João Baptista (2010), *Introdução ao Direito e ao discurso legitimador*, Coimbra, Almedina, 2010.
- Montané Alejandra e Aida Sánchez, “Os professores do ensino superior: entre a performatividade da lei e as narrativas autobiográficas” in *Revista Lusófona de Educação*, 2010,15, 55-69.
- Morais, Carlos Blanco (2007), *Manual de Legística. Critérios Científicos e Técnicos para Legislar Melhor*, S.l., Verbo, 2007
- Oiveira Ascensão, *O Direito. Introdução e Teoria Geral*, 13^a ed., Almedina, Coimbra, 2005.
- Parquet, Mauriel (2007), *Introduction générale au droit*, Paris, Breal, 2007.
- Teixeira de Sousa, Miguel (1986), “Sobre a linguagem performativa da Teoria Pura do Direito”, in *Revista da Ordem dos Advogados (= ROA)* 46 (1986), 433-447.
- Troper, M., V. Champeil-Desplats y C. Grzegorzcyk (dirs.) (2005), *Théorie des contraentes juridiques*, Paris, L.G.D.J., 2005.
- Vanberg, V (2009), *Racionalidad y reglas*, Barcelona, Gedisa, 1999.
- Lerger-Riopel Nicholas e Viaudi, Agnès (2013), “La structure conceptuelle des controverses juridiques: Petite anatomie des cas diis difficiles” in *Lex Electronica*, vol. 18.2 (Automne/Fall 2013).

THE DOCTRINE OF 'NON – DISCLOSURE' UNDER THE LAW OF INSURANCE: A CRITICAL APPRAISAL

Mr. O. J. Jejelola

Department of Commercial Law Adekunle Ajasin Univeristy Akoko.

Abstract

The subject of insurance law has been a very tricky and clumsy one to anybody who desires to know about it or conduct any research with regard to same. The general notion of the public against insurance companies is very negative when it comes to the aspect of payment of indemnity by the insurers. Perhaps based on a simple or very trivial excuse, the insurer may repudiate liability either on the basis of non – disclosure or non – possession of insurable interest e.t.c. In most cases, insurers have denied or repudiated indemnities on ground of non – disclosure which in all of the policies are made to be a “warranty” or “conditions” which goes to the root of the contract itself. The common law rule on this is very strict and therefore operates against the claim of the assured whenever the defence is raised by the insurer.

However, the Nigerian Insurance Act, appears to have remedied this common law position by making the concept of non – disclosure equitable to both parties to an insurance policy. It is hereby suggested that other jurisdiction should follow suit for the development of insurance law.

Keywords: Law of insurance, doctrine of ‘non – disclosure’

The doctrine of ‘non – disclosure’ under the law of insurance: a critical appraisal

Intoduction

A contract of insurance can be defined as a contract whereby a person called the insurer agrees in consideration of money paid to him, called the premium, by another person, called the assured, to indemnify the latter against loss resulting to him on the happening of certain events.

In the widest sense of the term, a contract of insurance can also be defined as a contract whereby one person, called the “Insurer” undertakes, in return for the agreed consideration, called the “premium” to pay to another person, called the “Assured” a sum of money, or its equivalent on the happening of a specified event⁹⁰.

It must be borne in mind from the outset that a contract of insurance is a contract *uberrimae fidei*⁹¹ i. e., contract of utmost good faith. The utmost good faith is required from both the assured and the insurer although, the heavier duty usually falls on the assured⁹².

⁹⁰Prudential Insurance Co. v. Inland Revenue Commissioner (1904) 2 K. B. 658 at p. 663. per CHANNELL J. “Where you insure a ship or a house, you cannot insure that the ship shall not be lost or the house burned, but what you do insure is that a sum of money shall be paid on the happening of a certain event. That I think is the first requirement in a contract of insurance. It must be a contract whereby, for some consideration, usually, but not necessarily, for periodical payment called premiums, you secure to yourself some benefit usually but not necessarily the payment of a sum of money upon the happening of some event”.

⁹¹ See Volume 25, Halsbury’s Law of England.

⁹²London Assurance Co. v. Mansel (1879)11 Ch. D. 363.

It is a requisite of this principle that there should be no shady dealings, but transparent honesty. This principle of utmost good faith has become clearly established in the Law of insurance and thus, Lord Mansfield in 1766 said in Carter v. Boehn⁹³ as follows: -

“The assured is under duty to disclose all material facts and make no misrepresentation The governing principle is applicable to all contracts and all dealing Good faith forbids either party by concealing what he privately knows to draw the other into a bargain from his ignorance of that fact, and his believing the contrary”

The rule of caveat emptor is not in consonance with the doctrine of uberrimae fidei in the law of insurance and the reason is to prevent fraud and encourage good faith.

The rationale for the rule include, the everyday requirement for honesty, the peculiarly aleatory⁹⁴ nature of a contract of insurance, which calls for perfect comprehension of the risk undertaken, and commercial usage as developed in this area over the ages. Thus, it may be said that in the contract of insurance the greatest premium is placed on the basis that one must love his neighbour as himself.

In America, the attitude has been to distinguish between the Marine and non-Marine Insurance contracts and to apply the rule of utmost good faith less stringently in the latter⁹⁵.

On the other hands, in many African Counties the Courts have to follow the common law⁹⁶.

In view of the fact that the harshness of the rule is sometimes recognized, nonetheless, not much has been done to alleviate the burdens of the assured especially where illiterates have been involved⁹⁷. Thus, the law does not consider the parties interest in the subject-matter of the contract for its validity.

However, in contract of insurance, this requirement must have to be complied with since the assured's interest in the subject-matter of insurance is important for the validity of the contract. Per PHILLIMORE J. stated as follows:

“Anybody who sues on a policy can only sue in respect of his own interest unless by special provisions, the law allowing it, the policy is made for the sake of another, or unless some statute says the policy shall enure for the benefit of somebody else”⁹⁸.

Elements of a valid contract of insurance

It is pertinent to mention briefly that there are some essential elements of a valid contract of insurance.

In the first instance, there must be an agreement between parties through offer and acceptance. Thus, per LORD ESHER, M. R. stated that:

“At the beginning I was much taken with ordinary proposition that a proposal and an acceptance of that proposal make a contract. Whether that is so or not, depends on whether the one was meant to be a proposal and the other an acceptance by way of contract”⁹⁹.

An element of consideration must be present in all types of policies of insurance.

⁹³ (1766) 3 Bur at 1905, (1558 -1774) All E.R. Rep. 183.

⁹⁴Blakbun v. Vigors Brothers Ltd. (1886) 17 Q.B.D. 561.

⁹⁵ Vance: Insurance Law 3rd ed. Chap. 7.

⁹⁶ See Akpata v. African Alliance Insurance Co. Ltd., (1966) 2 A.N.L.R. p. 317; *Zambian v. New India Assurance Co. Ltd.*, (1964) 1 A.L.R. (Comm.) p. 4.

⁹⁷Northern Assurance Co. Ltd., v. Idugbee (1966) 1 A.L.R. (Comm.) p. 155.

⁹⁸Cosford Union v. Poor Law and Local Government Officers' Mutual Guarantee Association Ltd., (1910) 103 L.T. 463 at 465.

⁹⁹Canning v. Farquhar (1886) 16 Q.B.D. 727.

The premium is the consideration which the insurers receive from the assured in exchange for their undertaking to pay the sum insured in the event insured against¹⁰⁰.

Furthermore, capacity to enter into an insurance policy generally is the same as in other types of contract which is governed by the general law of contract. Thus, a minor may enter into a contract of insurance if it is for his benefit¹⁰¹ otherwise, the contract of insurance will not be binding upon him¹⁰². At the same time, a contract of insurance made by a person of unsound mind or drunken person is in certain circumstances, voidable¹⁰³.

Lastly, the subject-matter of the insurance contract must be present. For example, if a proposed assured is insuring a motor car or motor vehicle, the law requires him i.e. (the assured) to possess a motor car or motor vehicle which must have to be specifically, described in the insurance policy.

In a nutshell, the decision in Esewe v. Asiemo¹⁰⁴ has summarized all the essentials of a valid contract of insurance as follows:

“The essentials of a contract of insurance are its objects namely, the vehicle insured, the amount for which it was assured, its purchase price and risk against which vehicle is insured”.

The case held further that the intention to create the contract being established the essentials of the contract having been offered and premium having been paid there was a valid contract of insurance.

This article takes a critical look at the concept of non - disclosure as a basic principle of a contract of insurance at the time of making the contract.

Consequently, the substantial part to this paper will be devoted to the meaning of non - disclosure, the rationale behind the requirement of the concept in contracts of insurance, instances where it is applicable, within the common law perspective and the statutory provisions.

The nature and scope of the duty to disclose material facts

In Lindenau v. Desborough¹⁰⁵ Barley J. said:

“I think that in all cases of insurance, whether on ships, houses, or lives, the underwriter should be informed of every material fact within the knowledge of the assured But if it must be disclosed it will be the interest of the assured to make a full and fair disclosure of all the information within their reach”

Littledale J.¹⁰⁶ in the same case said:

“It is the duty of the assured in all cases to disclose all material facts within their knowledge”.

Also in Rozanes v. Bowen, Sankey L. J.¹⁰⁷ while concurring with Scutton L. J. said¹⁰⁸:

“The next point is that, apart from any question of the answers in the policy, persons who desire in England, and I have no doubt in other countries too, to insure are bound to disclose material facts”.

Earlier on, in the case, Scutton L. J. has asserted that¹⁰⁹:

¹⁰⁰Sun Insurance Office v. Clark (1912) A.C. 443.

¹⁰¹Clements v. London & North Western railway o. (1894) 2 Q.B. 482.

¹⁰²Imperial Life Insurance Co. v. Charlebois (1902) 22 C.L.R. 417.

¹⁰³Imperial Life Assurance of Canada V. Audett (1912) 20 W.L.R. 372.

¹⁰⁴(1974) 4 U.I.L.R. p. 355.

¹⁰⁵(1828) 8 B & C 596 E.R. 1160

¹⁰⁶Ibid at P. 1162

¹⁰⁷(1928) 3211 L. R. 98

¹⁰⁸Ibid at P. 103

¹⁰⁹Ibid at P. 102

“It has been for centuries in England the law in connection with insurance of all sorts the duty of the assured to make a full disclosure to the underwriters without being asked of all material circumstances”¹¹⁰.

Limitation in the duty of disclosure

Knowledge

The duty to disclose is limited by one’s knowledge¹¹¹. “It does not extend to what one does not know or what one cannot reasonably be expected to know¹¹².”

In Joel v. Law Union and Crown Insurance Company Limited, Fletcher Moulton L. J. said:

“But in my opinion there is a point here which often is not sufficiently kept in mind. The duty is a duty to disclose, and you cannot disclose what you do not know. The obligation to disclose therefore, necessarily depends on the knowledge you possess”¹¹³.

Also, Lord Campbell in Wheelton v. Hardisty¹¹⁴, said that the assured is always bound;

“To disclose any fact exclusively within his knowledge which is material for the assurer to know”.

In Messers Century Insurance Company Limited v. Atuanya¹¹⁵. A man insured his car with the plaintiff. The car was destroyed by fire. When he claimed, the company denied liability on the ground that the plaintiff did not disclose a refusal of his insurance by another company. It was found, as a matter of fact that the plaintiff was ignorant of this fact when he was proposing the insurance. The court, therefore, held that the defence failed, as he could not be expected to disclose what he did not know.

Also in Akpata v. African Alliance Insurance Company Ltd¹¹⁶. Taylor C. J. held that the important point for consideration was not the period when the deceased, (who had insured his life) can be said to have had the first signs of carcinoma of the stomach or the ailments contained in question, rather:

“It is when deceased first had knowledge that he was so suffering or if it took place before he had personal knowledge, when was he first told by his physician that he was so suffering”.

In that case, it was shown by evidence, that the deceased did not know of his disease or ailment until after the policy was issued.

Opinion and intention

Fletcher-Moulton, L. J. hastened to explain that the knowledge is quite different from opinion or intention. “I must not be misunderstood”, he warned, “Your opinion of the materiality is of no moment”¹¹⁷. But the question always is what was the knowledge you possessed such that you ought to have disclosed it”?

He proceeded to elucidate the real nature of the duty to disclose in the following statements:

¹¹⁰ See also Hartford Protection Insurance Co. v. Harmer 91853) 2 Ohio St. 452 at 472 (per Ranney J.)

¹¹¹ See Carter v. Boehm (1776) 3 Burr 1905; 97 E. R. 1166.

¹¹² Messers Centuy Assurance Co. v. Atuanya (1967) 2 A.; N.L.R. 317.

¹¹³ (1908) L. K. B. 863.

¹¹⁴ (1857) 8 e.&b. 232, at 269 – 270.

¹¹⁵ (Per Ikpeazu, J.) (Supra) The Court showed a cleavage between Marine Insurance and Non-Marine Insurance in his case.

¹¹⁶ (1967) A. L. R. (Comm.) 4.

¹¹⁷ Joel’s Case (supra) P. 879 et. Sep.

“This duty is analogous to a duty to do an act which you undertake with reasonable care and skill, a failure to do which amounts to negligence, which is not atoned for by any amount of honesty or good intention. The disclosure must be of all you ought to have realized to be material, not of that only which you did in fact realize to be so.”¹¹⁸

The above statements of the law represent the English position, that the assured cannot insist on what he thinks or believes to be material as the prudent insurer is the test. In Horne v. Poland Lush J. said:

“It is immaterial that the plaintiff would not take the view that his countrymen are not as careful and trustworthy as Englishmen”¹¹⁹.

Also in Bates v. Hewitt¹²⁰ Cockburn C. J. declared:

“I think that we should be sanctioning an encroachment on a most important principle, and one that is vital in keeping up the full and perfect faith which there ought to be contracts of Maine Insurance, if we were to hold that a party who is under an obligation to communicate the material conditions and facts which he invites another to enter may speculate as to what may or may not be brought to his mind by the particulars disclosed to him by the assured, if those particulars fall short of the fact which the assured is bound to communicate. If we were to sanction such a course ... we should be lending ourselves to innovations of a dangerous and monstrous character”.

Duration of the duty of disclosure

Generally the duty of disclosure starts from the period when the assured proposes to the insurer and continues throughout the negotiations until at least the contract has been completed by acceptance or the negotiation ceased. As such, any material fact which at any stage of the negotiation comes to the knowledge of the proposed assured must be communicated to the insurers. Also, statements which were accurate at one stage of the negotiation but has become inaccurate thereafter must be disclosed before all contract is concluded. On the other hand, the duty of disclosure ceases when the contract is concluded¹²¹. In Re Yager and Guardian Assurance Company¹²², Channel J. said:

“The time up to which it must be disclosed is the time when the contract is concluded. Any material fact that comes to his knowledge before the contract he must disclose”.

Similarly, in Canning v. Farguhar¹²³, Lord Esher M. R. said:

“In insurance law the material time is the moment when the insurance is made and the representations ought to be true then”.

In Whitwell v. Autocar Fire and Accident Insurance Co. Ltd¹²⁴, the proposer was asked whether any company had declined to insure him. He answered in the negative. The answer was in fact true. At that time, quite unknown to the proposer, however, two days before the proposal was accepted, another insurance company had declined to insure him. The court held that there was no duty to disclose this fact afterwards because the contract was concluded before the refusal was known to the assured.

¹¹⁸ Ibid (underlining mine)

¹¹⁹ (1922) 2 K. B. 364

¹²⁰ (1867) L. R. 2 Q. B. 595.

¹²¹ Lishman v. Noethern Maritime Ins. Co. (1875) L. R. 10 C. P.

¹²² (1912) 108 L. T. 8.

¹²³ (1886) 16 O.B.D. 727.

¹²⁴ (1927) 27 Ll. L.R. 418.

The parties are however free to extend the duration of disclosure or modify it as they wish by the terms of the contract. This is commonly done in life policies where a clause is inserted, to the effect that the risk commences only after the receipt of the first premium by the insurer. In such a case, the proposer will be obliged to disclose any material fact which comes to his knowledge before the first premium is received.

Thus, in Looker v. Law Union and Roack Insurance Co. Ltd¹²⁵, there was question as follows: -

“Are you now free from disease or effects?” The proposer answered, Yes, five days later the insurance company sent a conditional acceptance of the risk stating that, “if the health of the life proposed remains meanwhile unaffected, the policy will be issued on payment of the first premium”.

Five days after the receipt of this letter, the assured became ill and died within four days from pneumonia. No notice of his illness was given to the company but the assured sent a cheque for the first premium to the company. The cheque was however dishonoured on presentation.

The court held that the company was not bound to issue a policy. According to Acton J.: “There was a failure to discharge a duty incumbent upon all proposers of contracts of insurance namely, a duty to inform the insurers of any material change in the nature of the risk to be undertaken by them.....”.

In Re Yager and Guardian Assurance Co. Ltd¹²⁶. A fire policy contained a condition that “No insurance is in force until the premium is paid”.

On 27th September, 1910, the claimant became aware that L. C. Company had refused to continue his policy beyond 1910, but he did not communicate this to the Guardian Assurance Co. Ltd on 28th September, the Guardian executed a policy in his favour from 1910 – 1911. A fire occurred and this claim was brought. The claim was resisted by the Guardian for a failure to disclose a material fact.

The court held that the fact that L. Company had refused to continue the policy was a material fact, that when this fact became known to the claimant on the 27th September there was no concluded contract and that it was still the duty of the claimant to disclose such fact to the Guardian.

Lord Alverstone said:

“In my opinion it cannot be said that this document of the 21st September was a contract. There was in the first place, on the face of the document to be no contract until the premium was paid”.

Similarly, in Harrington v. Pearl Life Assurance Co. Ltd¹²⁷, a man applied for a life insurance in May 1912 and his proposal was accepted. The insurer’s doctor declared him medically fit on examination. This policy was not effected since no premium was paid.

In October, 1912, he made the proposal again stating that there was no material change in his health. He became ill on 6th November and died when the premium was received on 8th November. It was held that there was a duty on the assured to disclose the change in his health before he paid the premium.

The parties may even further provide that the risk will not commence until the policy is issued and delivered to the assured. Thus, in Allis Chalmers v. Maryland Fidelity and Deposit Company¹²⁸, it was provided that the insurance came into effect from the issuance of the policy. The policy, was executed by the insurer on 8th March, but was delivered on 18th April, on 13th April, the insured employee left the office and the employer suspected that he

¹²⁵ (1928) L. K. B. 554.

¹²⁶ (1912) 108 L. T. 38.

¹²⁷ (1927) 43 T. L. R. 331.

¹²⁸ (1916) 114 L. T. 433.

had absconded. On 18th April, the insured's manager was informed whereby he paid the premium on that day and obtained a policy.

When the employer claimed, it was held that the non-disclosure of the employee's abscondment vitiated the claim since there was no binding contract when the employee absconded.

Earl Loreburn concluded as follows:¹²⁹

"I therefore come to the conclusion that there was no completed agreement At any rate before April 18th and that prior to April 18th either party could have refused to proceed with this business of the insurance. When the policy was delivered and the premium was paid on April 18th, there was knowledge of a state of facts upon the part of the assured which admittedly ought to have been communicated to them and it is agreed that it is impossible to recover under the policy"

When the policy is retrospective, there is a duty to disclose such facts which were material at the date from which the policy take effect and also all facts becoming material down to the actual date on which the contract is made. However, where the assured subsequently seeks to procure an alteration in terms of the contract for his own benefits, his duty to make disclosure will re-arise to the extent to which any material fact he then knows in relation to the alteration. Similarly, where the insurance is renewable or made periodically, the assured must disclosed all material facts which have come to his knowledge since the first contract¹³⁰.

Consequences of non disclosure

A failure to disclose any material fact, would render the contract voidable¹³¹. The aggrieved party may notify the other party that he wishes to avoid the contract upon discovering the non-disclosure¹³². Thereupon that party would be discharged from his obligations under the contract. The contract is however valid until thus avoided¹³³.

Since the duty to disclose is not an implied term in the contract there is no cause of action for damages upon a breach of this duty¹³⁴. The court may however award costs where appropriate, especially in cases of fraudulent non-disclosure¹³⁵.

Generally, the premiums which the assured has paid are hardly recoverable, in some rare circumstances however, premiums may be recovered. Such circumstances exist where there is no fraud on the part of the assured.

In American International Insurance Co. Ltd v. Dike¹³⁶, the assured was allowed to recover his premium since he was not fraudulent. The court held that where there no fraud and an insurer elects to avoid or repudiate a policy, such avoidance will have a retrospective effect of nullifying the contract abinitio. In that circumstance, therefore, the parties should be put back as far as possible into their original position as if the contract of insurance was never made.

It is however open to the aggrieved party to waive his right and affirm the policy all the same¹³⁷. To amount to waiver there must be a clear action on the part of such a party

¹²⁹ Ibid at P. 434.

¹³⁰ Boag v. Standard Marine Ins. Co. (1937) 2 K. B. 113 (that increase in value must be disclosed).

¹³¹ See. Lambert v. Cooperative Insurance Society Limited, (1975) 2 Ll. L. R. 485.

¹³² March Cabaret Club abd Casino Ltd v. London Assurance (Supra).

¹³³ Armstrong v. Turquand (1885) 91 I. C. L. 32.

¹³⁴ See. Wickens, Life Assurance law in Australia, 4th ed.

¹³⁵ Guardian Assurance v. Osei (1966) 2 A. L. R. (Comm.) 441.

¹³⁶ (1967) C. C. H. C. J.....

¹³⁷ see also per Udo Udoma, C. J. in Jubilee Insurance Co. Ltd v. Sematengo (1965) A. L. R. (Comm.) 88.

showing that he would not repudiate the contract. When there is a waiver the contract would bind both parties.

Criticisms

It is interesting to say that the general application of the concept of non – disclosure known to the common law and its strict technical interpretation may in some cases operate unfairly to the interest of the assured in an insurance policy, but it appears that the provision of section 59 (1) (2) (3) (4) and (5) of the Insurance Act, Cap. 117 Law of the Federation of Nigeria 2004, has provided a sufficient remedy to checkmate the flagrant abuse of this principle by the insurers to repudiate liabilities. The relevant provision state thus:

“(1) In a contract of insurance, a breach of a term, whether called a warranty or a condition, shall not give rise to any right by or afford a defence to the insurer against the insured unless the term is material and relevant to the risk or loss insured against.

(2) Notwithstanding any provision in any written law or enactment to the contrary, where there is a breach of a term of contract of insurance, the insurer shall not be entitled to repudiate the whole or any part of the contract or a claim brought on the grounds of the breach unless: -

(a) the breach amounts to a fraud; or

(b) it is a breach of a fundamental term (whether or not it is called a warranty) of the contract.

(3) Where there is a breach of a material term of a contract of insurance and the insured makes a claim against the insurer and the insurer is not entitled to repudiate the whole or any part of the contract, the insurer shall be liable to indemnify the insured only to the extent of the loss which would have been suffered if there was no breach of the term.

(4) Nothing in this section shall prevent the insurer from repudiating a contract of insurance on the ground of a breach of a material term before the occurrence of the risk or loss insured against.

(5) In subsection (2)(b) of this section, “fundamental term” means a warranty, condition or other term of an insurance contract which a prudent insurer will regard as material and relevant in accepting to underwrite a risk and in fixing the amount of premium”.

Conclusion

The rationale of this doctrine is borne out of the fact that the nature of insurance contract warrants some degree of good faith and honesty in order to enable the insurers have the full grasp of the subject of insurance, its attendant risk and the assessments of the appropriate premiums. However, the strictness of the common law rules in this area of the insurance law has left much to be desired as it may be used as an engine of fraud by the insurer. This is why the Nigerian Insurance Act differs from the common law position which is a welcome development by legislating on this concept with a view to doing what is just and equitable to both parties in an insurance policy.

- ◆ O. J. Jejelola Lecturer in Law, Department of Commercial Law, Adekunle Ajasin University Akungba Akoko

IS THE PHYSICIAN A PERSON EQUIVALENT TO A PUBLIC SERVANT AND THE SPECIAL ENTITY OF FAILURE TO PERFORM OFFICIAL DUTIES ACCORDING TO THE CRIMINAL CODE OF THE REPUBLIC OF LITHUANIA?

Ausrine Amsiejute, Doctoral candidate

Mykolas Romeris University, Lithuania, Hospital of Lithuanian University of Health Sciences Kauno klinikos, Lithuania

Abstract

The author analyzes in the article the concept of a person equivalent to a public servant defined in paragraph 3 Article 230 of the Criminal Code of the Republic of Lithuania, in order to determine if a physician who has improperly provided individual health care services through negligence is considered to be a person equivalent to a public servant for the purpose of Article 230 of the Criminal Code of the Republic of Lithuania, i.e. if he can be the entity of failure to perform official duties (Article 229 of the Criminal Code of the Republic of Lithuania).

Keywords: Person equated to public servant, professional practice, public services

Introduction:

The patient and the physician are linked by the obligation, the content of which includes the physician's duty to ensure that this obligation is carried out by adding the maximum effort, i.e. ensuring maximum degree of attention, diligence, prudence and proficiency. The physician who has breached that duty shall, *inter alia*, compensate for damages. In addition, the physician may be subject to disciplinary liability and/or to criminal liability as *ultima ratio* measure in the event of particularly grave violation of the duties causing serious consequences. Thus, although the physician's professional liability (compensation for damages caused) issue should be, first of all, resolved using civil law instruments, and only when it is found that results can not be achieved with other instruments (administrative, disciplinary, civil penalties and public exposure means) unrelated to application of criminal penalties, criminal liability should be applied. However, the cases where application of criminal liability to the physician as *prima-* or even *solo ratio* is sought regardless of the scale of the physician's failure to perform his duty and dangerousness of the act are becoming increasingly common in practice. Application of criminal liability as *prima-* or even *solo ratio* is extremely facilitated by Article 229 "Failure to Perform Official Duties"¹³⁸ of the Criminal Code of the Republic of Lithuania (further referred to as the Criminal Code), which through its abstract wording and the lack of doctrinal and systematic interpretation of its composition enables application of criminal liability to physicians as *prima-* or even *solo ratio*. (Im)possibility of application of this Article to physicians providing individual health

¹³⁸ Article 229. Failure to Perform Official Duties. A public servant or a person equivalent thereto who fails to perform his duties through negligence or performs them inappropriately, where this incurs major damage to the State, a legal or natural person, shall be punished by a fine or by arrest, or by imprisonment for a term of up to two years.

care services to patients will be analyzed in the article using systematic and teleological interpretation.

I.:

Article 229 of the Criminal Code “Failure to Perform Official Duties” criminalizes (1) omission, i.e. failure to perform the duties that fall within one’s competence and are necessary to ensure interests of the service, or (2) inappropriate performing of official duties, i.e. negligent, poor, careless, insufficiently effective performing of one’s duties thus not ensuring interests of the service, committed by a public servant or a person equivalent to a public servant¹³⁹. Thus, as apparent from the wording of the Article, criminal liability under Article 229 of the Criminal Code may arise only to a special entity – a public servant or a person equivalent to a public servant. The concept of a person equivalent to a public servant is provided in paragraph 3 Article 230 of the Criminal Code stating that a person who works at any state, non-state or private body, undertaking or organisation or engages in professional activities and holds appropriate administrative powers or has the right to act on behalf of this body, undertaking or organisation or provides public services shall also be held equivalent to a public servant. Summarizing this complex and difficult structure of the special entity’s attributes chosen by the legislator it shall be stated that in order for a person to be considered a person equivalent to a public servant, the person must have at least 2 mandatory attributes: 1) to work at any state, non-state or private body, undertaking or organisation or engages in professional activities; and 2) to hold appropriate powers (administrative powers, the right to act on behalf of this body, undertaking or organisation or provide public services).

The Supreme Court of Lithuania (criminal case No. 2K–P–89/2014) noted that making a decision on whether a person is to be considered a person equivalent to a public servant for the purpose of Article 230 of the Criminal Code, i.e. if he can be the entity failing to perform his official duties (Article 229 of the Criminal Code), it is necessary to assess the fact that the said criminal act under the Criminal Code is attributed to crimes and misdemeanours against public service and public interest (Chapter XXXIII of the Criminal Code). Thus, the subject of this criminal act is normal operation of state institutions, their authority and authority of state service in general, public interest¹⁴⁰, and the danger is that such acts may cause damage to normal functioning of the public service, operation of state authorities, their prestige and public interest. The mere formal compliance with the attributes of paragraph 3 Article 230 of the Criminal Code can not be considered sufficient for arising of criminal liability under Article 229 of the Criminal Code – it has to be stated that such activities of a person are associated with ensuring of public interest, and failure to perform or improper performance of such activities would mean violation of public interest. “Otherwise, if any person who formally corresponds to the attributes laid down in paragraph 3 Article 230 is treated as a person equivalent to a public servant without assessing significance of his activities in ensuring public interest or public service, it would distort the essence of crimes and misdemeanours against public service and public interest, the purpose of norms established in Chapter XXXIII of the Criminal Code” (The Supreme Court of Lithuania, criminal case No. 2K–P–89/2014).

Analyzing the cases heard at courts¹⁴¹, in which physicians were indicted under Article 229, it shall be stated that physicians are found guilty completely without providing any reasons of their compliance with mandatory attributes of a special entity (a person equivalent

¹³⁹ Klaipėda Regional Court, criminal case No. 1A-12-557/2008.

¹⁴⁰ Public interest as the value protected by law, and can be understood as the interest of public that persons authorized to deal with various matters of public interest, would do so in an impartial, fair manner, in accordance with the procedure laid down by laws (The Supreme Court of Lithuania, criminal case No. 2K–P–89/2014).

¹⁴¹ E. g. Criminal cases No. 2K-62/2011, No. 2K-299/2008, 2K-444/2008.

to a public servant) – usually it is only state in court judgements that X has been convicted because being a person equivalent to a public servant, working as a physician in hospital Y, he chose wrong tactics of treatment in contradiction to the provisions of the item N of the job description. It should be based on the assumption that the court considered the physician providing individual health care services to patients as a person equivalent to a public servant, as according to the court assessment, the physician working under a contract of employment or pursuing professional activities was providing public service. Further in the article reasonableness of considering the physician a person equivalent to a public servant for the purpose of Article 229 of the Criminal Code will be analyzed.

As already mentioned, the state legislator associates the status of a person equivalent to a public servant with two mandatory attributes, one of which is the legal basis on which the person has acquired the duties (powers). Compliance with this attribute is associated with labour relations on the basis of an employment contract at any state, non-state or private body, undertaking or organisation or engagement in professional activities. Possession of powers on the basis of an employment contract does not cause much uncertainty, which can not be said about the concept “professional activities”.

Gruodytė (2006) considers holding of the licence to engage in specific activities and autonomy of professional activities (the person acts on its own behalf and risk) to be the distinctive attributes of professional activities. The Supreme Court of Lithuania¹⁴² describes engagement in professional activities using the same attributes, stating in its ruling that engagement in professional activities under paragraph 3 Article 230 of the Criminal Code most often activities performed by persons not under employment contracts, which require professional qualification (e.g. special education, knowledge, skills, experience); normally such activities are related to passing qualifying examination and/or holding some licence.

Meanwhile, the Constitutional Court of the Republic of Lithuania¹⁴³, while formulating the constitutional concept of state service, stated that public service is professional activities of persons related to ensuring the public interest. Thus, the Constitutional Court of the Republic of Lithuania interprets the concept of professional activities in a considerably wider way, and equates activities carried out by the person (both on the basis of an employment contract and on other grounds) to engagement in professional activities; it only matters that the person would be acting as a professional.

Such different interpretation of “professional activities” complicates application of this attribute. For example, physicians usually provide individual health care services under the employment contract with a health care institution, therefore it seems to be possible to conclude that the physician meets the first attribute, i.e. works under the employment contract at any state, non-state or private body, undertaking or organisation. However, according to the definition of “professional activities” provided by the Supreme Court of Lithuania, the physician’s activities in providing individual health care services should be seen as engagement in professional activities (with special professional education and the licence necessary for engagement in activities).

Given the fact that the construction of this attribute formed by the legislator (performing the duties on the basis of employment contracts or performing the duties on other than employment contracts basis), and such intention to cover also the persons operating not on the basis of employment contracts corresponds to the concept of “self-employment” used in the public law, which means independent activities performed by natural persons, by which the person seeks to generate income or other benefits for a continuous period of time, it is considered to be appropriate to replace the concept “professional activities” with the concept

¹⁴² The Supreme Court of Lithuania, criminal case No. 2K-P-89/2014.

¹⁴³ Ruling of Constitutional Court of the Republic of Lithuania in 13 December 2004 // Valstybės žinios. 2004. Nr. 181-6708.

“self-employment”. This replacement with “self-employment” would enable avoiding situations where “professional activities” and work under employment contracts overlap, and would allow to clearly distinguish between the powers derived from an employment contract and the powers acquired through self-employment.

In any case, according to paragraph 3 Article 230 of the Criminal Code, the fact of professional activities or existence of the employment contract is not sufficient that a person engaged in professional activities or working under the employment contract would be recognised a person equivalent to a public servant. In order a person engaged in professional activities or working under the employment contract, could be considered a person equivalent to a public servant, he must have an appropriate authority. One of such powers specified in paragraph 3 Article 230 of the Criminal Code is provision of public services. Unfortunately, the content of the “public services” concept and/or its main elements is not presented in the Criminal Code.

The courts interpreting the concept of “public service” refer to the definition presented in paragraph 18 Article 2 of the Law on Public Administration: “Public service shall mean activities of legal persons controlled by the State or municipalities when providing social services for persons, as well as services in the spheres of education, science, culture, sports and other services provided for by laws. Other persons may also provide public services in the cases and in the manner provided for by laws”. As can be seen, the concept provided in the law is not clear enough – it only gives an exemplary list of services that can be considered public services for the purpose of this law. Interpretation of this concept in accordance with the definition presented in the Law on Public Administration was also supported by the Supreme Court of Lithuania, which in its previous¹⁴⁴ practice considered the nature of the service and regulation of such a service by law to be the essential criteria for the recognition of the service as public. However, such taking over of the concept from the other law and its application regardless of the crime subject, caused insurance, property security services recognition as public services, which resulted arising of criminal liability to relevant persons¹⁴⁵ according to Article 229 of the Criminal Code.

The Constitutional Court of the Republic of Lithuania¹⁴⁶, interpreting the substantive attributes of the concept of provision of public services, indicated that the public service shall be seen as a service provided to the public and shall satisfy the public interest. Thus, according to the court interpretation, in order to recognize the service as a public service, it shall be of a public nature, i.e. it shall satisfy the public interest, and in order the person could be considered a public service provider, he shall be actually authorised to perform the obligations of general economic benefit, and these obligations must be clearly defined

Čaikovskij (2007) identified 4 mandatory attributes of a public service: “1) only a service regulated by the law could be deemed a public service; 2) a service must be provided by legal persons controlled by the state or the municipality; any other persons may be providers only in the cases provided by the laws; 3) direct or at least indirect clients (i.e. recipients of that service) should be dwellers; and in some cases the society as such is the client, taking into account the character and significance of that service; 4) a service must be supervised, controlled and otherwise administrated by entities of public administration who inter alia

¹⁴⁴ E. g. criminal cases No. 2K-326/2006, No. 2K-304/2008. The assumption about previous practice shall be made from the clarifications provided in the criminal case No. 2K-P-89/2014 that the position of the Supreme Court of Lithuania regarding the concept of “public service” has changed.

¹⁴⁵ To a legal counsellor (criminal case No. 2K-326/2006) and security officer (criminal case No. 2K-304/2008).

¹⁴⁶ Ruling of Constitutional Court of the Republic of Lithuania in 21 December 2006 // Valstybės žinios. 2006. Nr. 141-5430.

issue permits for the provision of public services to private persons”¹⁴⁷. Given the fact that the person providing public services that correspond to these attributes will be recognized the entity failing to perform his official duties (Article 229 of the Criminal Code), and the attributes provided do not reflect at all that improper performance of such a public service would cause a potential violation of or hazard to the public interest, the conclusion should be drawn that these attributes should be supplemented with characteristics related to ensuring of direct links between activities and the public interest. Such extremely general definition of a public service distorts the essence of criminal acts public service and public interest, the purpose of the norms established in Chapter XXXIII.

Namely, because of such extremely general concept of public services, Čaikovskij (2007) made the conclusion that provision of individual health care services shall be recognised the public service, as paragraph 6 Article 2 of the Law on Health System provides the definition of individual health care – “the activities of natural and legal persons licensed by the state, the purpose whereof is to timely diagnose and prevent the individual’s health disorders, also to help recover and strengthen health”. “It shall be noted that enterprises and institutions shall acquire the right to engage in health care activities only upon receiving the licences according to the procedure prescribed by the Government or the institution authorised by it (paragraph 2 Article 16), and the right to engage in a certain type of health care practice shall be recognised to natural persons who have been issued, in the manner prescribed by law, a licence and a certificate (paragraph 1 Article 16)”¹⁴⁸. Therefore, in the opinion of Čaikovskij (2007), the physician engaged in individual health care, shall be considered the entity of Article 229 of the Criminal Code.

As can be seen from the concept of individual health care provided in the law, provision of such service can not be considered a public service for the purpose of Paragraph 3 Article 230 of the Criminal Code, and the physician who has provided it improperly or failed to provide it can not be considered the entity of the crime specified in Article 229 of the Criminal Code, as although the quality of health care services is important, the State has other instruments to ensure it rather than applying criminal liability for the crime, whose object is normal operation of state authorities, authority of a public service and public interest, and dangerousness of the act is expressed in causing damage to normal functioning of public service, operation of state authorities, their prestige and violation of public interest. The mere formal compliance of the provision of individual health care services with the attributes of paragraph 3 Article 230 of the Criminal Code can not be considered sufficient for arising of criminal liability to the physician under Article 229 of the Criminal Code, as such physician’s activities are not related to ensuring public interest and failure to perform or improper performing of such activities does not mean violation of a public interest.

In order to avoid situations in the future, where recognition of actually any person who formally complies with the attributes of paragraph 3 Article 230 of the Criminal Code as a person equivalent to a public servant can be sought without assessing significance of his activities to public interest or public service, it is suggested to replace the word the word “provides” the word “administers”, in such manner preventing the excess application of this norm, without considering the value of the law (the subject matter) to be retained.

Conclusion:

Criminal liability under Article 229 of the Criminal Code may arise only to a special entity – a public servant or a person equivalent to a public servant; a person equivalent to a

¹⁴⁷ Čaikovskij A. Valstybės tarnautojui prilygintas asmuo: funkcijos ir įgaliojimai // Jurisprudencija. 2007. Nr. 6(96), p. 96.

¹⁴⁸ Čaikovskij A. Valstybės tarnautojui prilygintas asmuo: funkcijos ir įgaliojimai // Jurisprudencija. 2007. Nr. 6(96), p. 95.

public servant must have 2 mandatory attributes: 1) to work at any state, non-state or private body, undertaking or organisation or engages in professional activities; and 2) to hold appropriate powers (administrative powers, the right to act on behalf of this body, undertaking or organisation or provide public services).

By making a decision on whether a person is to be considered a person equivalent to a public servant for the purpose of Article 230 of the Criminal Code, i.e. if he can be the entity failing to perform his official duties (Article 229 of the Criminal Code), it is necessary to assess the fact that the said criminal act under the Criminal Code is attributed to crimes and misdemeanours against public service and public interest (Chapter XXXIII of the Criminal Code). The mere formal compliance of the provision of individual health care services with the attributes of paragraph 3 Article 230 of the Criminal Code can not be considered sufficient for arising of criminal liability to the physician under Article 229 of the Criminal Code, as such physician's activities are not related to ensuring public interest and failure to perform or improper performing of such activities does not mean violation of a public interest.

Provision of individual health care service can not be considered a public service for the purpose of Paragraph 3 Article 230 of the Criminal Code, and the physician who has provided it improperly or failed to provide it can not be considered the entity of the crime specified in Article 229 of the Criminal Code.

References:

- Čaikovskij A. Valstybės tarnautojui prilygintas asmuo: funkcijos ir įgaliojimai // *Jurisprudencija*. 2007. Nr. 6(96).
- Gruodytė E. Valstybės tarnautojo samprata nusikaltimų valstybės tarnybai ir viešiesiems interesams skyriuje // *Jurisprudencija*. 2006. Nr. 7(85).
- Lietuvos Aukščiausiojo Teismo nutartis baudžiamojoje byloje nr. 2K-326/2006.
- Lietuvos Aukščiausiojo Teismo nutartis baudžiamojoje byloje Nr. 2K-299/2008.
- Lietuvos Aukščiausiojo Teismo nutartis baudžiamojoje byloje nr. 2K-304/2008.
- Lietuvos Aukščiausiojo Teismo nutartis baudžiamojoje byloje Nr. 2K-444/2008.
- Lietuvos Aukščiausiojo Teismo nutartis baudžiamojoje byloje Nr. 2K-62/2011.
- Lietuvos Aukščiausiojo Teismo nutartis baudžiamojoje byloje Nr. 2K-P-89/2014.
- Lietuvos Respublikos Konstitucinio Teismo 2004 m. gruodžio 13 d. nutarimas // *Valstybės žinios*. 2004. Nr. 181-6708.
- Lietuvos Respublikos Konstitucinio teismo 2006 m. gruodžio 21 d. nutarimas // *Valstybės žinios*. 2006. Nr. 141-5430.
- Lietuvos Respublikos Konstitucinio teismo 2007 m. kovo 20 d. nutarimas // *Valstybės žinios*. 2007. Nr. Nr.34-1244.
- Klaipėdos apygardos teismo nutartis baudžiamojoje byloje Nr. 1A-12-557/2008.
- Lietuvos Respublikos baudžiamasis kodeksas // *Valstybės žinios*. 2000. Nr. 89-2741.
- Lietuvos Respublikos sveikatos sistemos įstatymas // *Valstybės žinios*. 1998. Nr.112-3099.
- Lietuvos Respublikos viešojo administravimo įstatymas // *Valstybės žinios*. 1999. Nr. 60-1945; 2006. Nr. 77-2975.

SYSTEM OF DIVISION OF REVENUE IN ETHIOPIA

Alefe Abeje Belay

Lecturer, Bahir Dar University, Ethiopia

Abstract

In addressing the issue of the allocation of revenue raising powers, the main question is the taxation power distributed between the tiers of government in a federal system. It is an issue of vital significance that federations usually specify in their constitutions the revenue raising powers of the two orders of government. This is quite clear due to the very rational for creating and maintaining federal system. Scholars are undivided in arguing that fiscal federalism may aggravate imbalances if mistakes are committed in tax assignments of major tax bases. However, there is no one best model for all societies, except for those broad guidelines such as local governments should be assigned taxes whose burdens are local. Note also that assignment of tax bases may have to consider the importance of other tax objectives other than raising revenue, such as income distribution and economic stabilization. Besides, informational and technical requirements as well as potential gains and losses (economies and diseconomies of scale) have to be evaluated in assigning of tax bases.

Keywords: Revenue, system of division

Introduction

The Ethiopian federal system follows the conventional model of separate provision for the division of revenue sources between the federal government and regional governments (Assefa, 2007: 353-359). The federal constitution has three lists in this regard: federal, concurrent and regional.

In Ethiopia, the federal constitution declares that the federal government shall levy taxes and collect duties on sources reserved to it, and the states likewise exercise the same power with respect to sources that fall under their jurisdiction. Thus, the two tiers of government exercise their legislative and administrative powers within their respective taxation competences. As a result, the revenue generated from respective sources belongs exclusively to each level of government. The FDRE Constitution does not explicitly limit the powers of the states to alter the taxes or influence the tax bases. However, it provides general 'directives on taxation' which they must consider exercising their taxation powers. Both levels of government have the obligation to ensure that any tax is related to the source of revenue taxed, and tax imposed by them should not adversely affect their relationship. If any tax imposed by a state affects interstate commerce, the central government intervenes. However, in practice tax legislation is uniform throughout the country.

Federal Taxation Power of Federal Government

The federal constitution provides exclusive revenue sources under the title 'federal power of taxation' and 'state power of taxation'. As in most federal countries, in Ethiopia central governments have, relatively speaking, bigger sources of revenue. Taxation powers of the federal government include: employment from the employees of the federal government and its public enterprises and international organizations, federal stamp duties, monopoly tax, value added tax, national lottery, fees from licenses issued and services provided by organs of the federal government. This is on top of the federal government's share on royalty and taxes

on natural resources (mainly gold and natural gas). At federal level it is the federal parliament which is responsible for levying taxes assigned to the federal government (Art. 51).

Regional State Taxation Powers

Taxation power of the regional states within their jurisdiction include: taxation of employment income from employees of the state government; agricultural tax from farmers, tax on individual traders, houses and other property owned by private persons or regional government; employment, and sales tax from public enterprises owned by the state government; forest products, royalties and land lease fees from small mining undertakings. At state level, state councils (the legislative branches of state governments) are empowered to levy taxes on those tax bases (Art. 52(2)).

Concurrent powers of taxation

The Federal constitution provides that the federal government and states all collect taxes and shall share revenue taking the federal government in to account (Art.95). Article 98 lists concurrent powers of taxation as follows: profit, sales, exercise, and personal taxes on enterprises they jointly establish; taxes on the profits of companies and individuals to shareholders; taxes on the incomes of derived from large-scale mining and all petroleum and gas operations, and royalties on such operations (Art. 98). The federal government levy and collects taxes on those listed under concurrent powers of taxation, and the incomes are shared with the states, based on the decisions of the House of Federations, the upper chamber of the federal legislature. Regarding residual taxes they federal houses jointly decide by 2/3rds majority (Art.62).

In general, the division of revenue raising power in Ethiopia is mainly structured according to the categories of taxpayers or particular things as a source of revenue. The exclusive domain of each government is not the tax base but the tax source. Thus, it does not result in taxing the same income, transaction or thing by both levels of government. As a result, there is no limit to levy taxes for the federal government with the intention that subnational governments can raise enough money.

For those taxes which are not explicitly stated in the provisions of the constitutions of the constitution, it is to be determined by a 2/3rd majority vote of the joint session of two houses of the federal parliament.

We can classify the taxes in Ethiopia in to four:

- 1) Import and export taxes and dues: In line with the federal tradition, import and export taxes and other dues are exclusively levied and collected by the federal government. Tax on foreign trade is a major source of tax in Ethiopia. As a developing country, the nature and type of export items are few in number and originate from specific regions.
- 2) Income Tax: Experiences show some federations allocated personal income taxes to the central government while others have done so to the regions (Solomon, 2006: 126).

The Ethiopian constitution does not exclusively assign income tax to the federal government or to the states. The power to levy and collect taxes from income is assigned to both tier of government. Each of them is conferred power over specific sources. Federal government is given income of employees of federal government, of public enterprises owned by the federal government and international organisations. Incomes from employees of states and other private organisations are reserved to the states (ibid, 127).

- 3) Sales and excise taxes: The federal government assigns exclusive powers to the federal government to levy and collect sales and excise taxes from sale, production or services of public enterprises owned by the federal government. The same pattern is followed as the power of the states: they can levy these taxes against public

enterprises owned by them. In addition, the states can also levy and collect sales and excise taxes from individual traders within their jurisdiction (ibid, 130: Kibre, 1994: 26)

- 4) **Property Taxes:** The constitution gives the states a power to levy property taxes upon houses which are privately owned, land which is used by the *usufructuaries* and royalists from the use of forests. They can also levy and collect tax and royalties on small-scale mining activities (ibid, 132).
- 5) **Fees and other charges:** Both federal and states have power to collect fees and other charges. Each level has exclusive powers to collect fees and charges if the service lies under their exclusive jurisdiction (ibid, 134).

Imbalances: the Ethiopia federation is characterised by a high level of both vertical and horizontal fiscal imbalances. The vertical one is mostly due the limited economic space of the national economy which limited the tax base, and also because that the most lucrative tax bases are assigned to the federal government. When it comes to the horizontal one, the problems are much more complex. As regions are created based on ethnicity, we have huge asymmetries. Besides, some of the regions suffer from the historical legacy of marginalization from the centre, and thus more weak institutional capacity to collect tax (Kibre, 1994: Solomon, 2006: 213).

Regional borrowing: the major issues concerning borrowing are the adoption of appropriate criteria for acquiring loans, setting the upper limit to be borrowed, interstate obligations, the repayment period and debt servicing capacity. Unlike the centre, subnational borrowing is restricted to domestic borrowing and they may even be subject to direct control by the central government. The main reason for participation and federal control by the centre is that monetary and fiscal policies are centralised. In Ethiopia federal government determine the conditions and terms under which states can borrow from domestic sources. Accordingly, regional governments have to submit all necessary information to determine the amounts to be borrowed, together with revenue collection forecast, and with economic indicators. Understandably, fiscal discipline is a concern of all federal governments including developed countries federations. Bailout of over-spending regional states could cause inflation. However in Ethiopian context, regions are criticized for not effectively spending the budget allocated to them. Hence problem of debt and bailout requests will not be serious problems for some time to come.

The constitution says that the federal government and the states ‘shall respectively bear all financial expenditures necessary to carry out all responsibilities and functions assigned to them by law’. The crucial factor that determines the financial expenditure of the respective governments is the financial capacity which is primarily influenced by constitutional allocation of revenue sources and the method of redistribution. Therefore, there is limit the subnational government budget autonomy.

Conclusion

In sharing of revenue, taxes are grouped in to there: Federal, regional and joint. Fiscal federalism in Ethiopia has been adopted within a unique political landscape of ethnic federalism. This creates a gap between constitutional provision and practice. There is a huge imbalance and political centralism in practice.

Another issue is the link between the link between revenue and state creation and revenue and secession. In a multi-ethnic developing federation where ethnic politics is designed to govern every aspect of political aspect, several groups contend for governmental power as a means of access to the control of national resources. As a result, different groups at different layers strive towards state formation, regardless of the viability of those structures. This has raised issues relating to its fiscal implications. In Ethiopia the practice so

far is that states with larger population and territorial size obtain smaller per capita revenue compared to states with smaller states. This encourages smaller ethnic groups to claim statehood, so that they can become direct participant in the federal law-making process and to get more resources.

Even the more serious potential problem is the link between revenue and secession: Every ethnic group has the unconditional right of secession. This could lead to constant fiscal conflict between the regions. It could affect fiscal equalisation from richer to poorer regions. The richer regions may want to use their resources independently, rather than sharing it with poorer regions.

References:

Assefa fisseha, *Federalism and the Accommodation of ethnic diversity in Ethiopia: Comparative Study* (Utrecht: Wolf Legal Publishers, 2007).

Eshetu Chole (ed.), *Fiscal Decentralisation in Ethiopia* (Addis Ababa: Addis Ababa University Press, 1994)

Solomon Nigussie, *Fiscal Federalism In Ethiopia's Ethnic-Based Federal System* (Utrecht: Wolf Legal Publishers, 2006)

Kibre Moges, 'The system of correction Imbalances' in Eshetu Chole (ed.), *Fiscal Decentralisation in Ethiopia* (Addis Ababa: Addis Ababa University Press, 1994)The Constitution of the Federal Democratic Republic of Ethiopia, 1994

ECONOMIC SANCTIONS AGAINST THE ISLAMIC REPUBLIC OF IRAN FROM THE HUMAN RIGHTS PERSPECTIVE

Arash Izadi, Attorney at Law, PhD
Candidate School of Law –Xiamen University China

Abstract

Since the Islamic Revolution in 1979, Islamic Republic of Iran has always exposed to various international sanctions due to different reasons and excuses. They put Iran under different sanctions directly or indirectly through international organizations, under the pretext of creating an international order. As matter of fact, they pursue their own foreign policy goals and use sanctions as a means to achieve those goals. Economic sanctions is one of the sanctions type that have been imposed on Iran since the beginning of the revolution, And some of them involve deprivations and restrictions of Iranians which are against the basic and essential principles of human rights; although they are inapplicable based on International human rights documents and treaties, and their implementation is a crime and acts contrary to human rights. Governments cannot violate fundamental human rights and arrangements to humanitarian law with excuses of avoiding violation of international law and international order.

Keywords: Economic sanctions, human rights, treaty, Iran, the international law

Introduction

It is about 35 years that Iran is tolerant of economic and non- economic sanctions, with somehow serious effects and impacts on people's life. Based on the sanctions type and according to their nature, severity, they affect society and peoples. In this article, we will try to discuss the impact of these sanctions on primary and fundamental human rights of Iranian population. Now, the question is, whether the countries imposing sanctions against Iran are human rights violators and surpass human right regulations through these sanctions?

It's the question that this paper try to provide an answer for, and since the sanction on a general definition is a reciprocal action against illegal and unlawful acts aimed at stopping the unlawful acts of the country whom subject to sanctions, is it proper to use these excuses and ignore human rights laws and regulations, and to just overlook it??

Usually sanctions affects those who are living in the penalize nation and have no impact on outsiders; even in some cases increase their economic interests [for example, the actual price of boycotted goods multiplied due to sanction on the black market]. But the sanctions ban put pressure on people and cause some restrictions and constrained. Even if boycotting country suffer some financial burden due to imposing sanctions on other country, the sanctions expenditure is low in comparison with the cost of armed conflict,

So, they avoid high cost military actions with Sanctions [1]. It's worth mention that the number of peoples who have lost their lives as a result of economic sanctions after the Cold War is greater than the number of those who died in the history of the use of weapons of mass destruction [2].

We try to figure out the inconsistency of sanctions imposed on Islamic Republic of Iran with the international standards of human rights and it will be discussed in more detail in

the next sections. We will continue with goals and aims of sanction and their definition, and then investigate sanctions that imposed on Iran. We will discuss laws and regulations that violated due to implementation of these sanctions.

In the international relationships arena, states as the main actors in this field, using different and various tools to achieve their goals. Governments do not always state their goals clearly and explicitly, and by the failure of diplomacy they move towards sanctions to achieve their set foreign policy objectives. Among which may be mentioned the war and diplomacy, in this cases in which countries diplomacy have failed, sanctions are their next step. One of the types of sanctions is economic sanctions, which some Scholars have interpreted it as an economic weapon. In this context, it should be noted however, that Sanctions are not always impact only sanctioned country, but in many cases, the sanctioning country or countries experience some economic burden due to these sanctions.

International criminal prosecution which is the latest sanctions and in 1993, the UN Security Council in a courageous act defined this type of sanction in the shadow of establishing the International Criminal Court for individuals responsible for war crimes (serious crimes in violation of international humanitarian Law)[3] in the former Yugoslavia[4];

Severing of Communications, which disrupt and prevent the freedom of communication and communication by telephone, telegraph, mail, Internet, and sea, air and land delivery; Economic sanctions (trade embargo), which is the most common sanction that applied frequently and in this paper We will Describe it; **Military Sanction (Arms embargo)**, usually applies in response to military threats and breaches of international peace and security.

Islamic Republic of Iran and the international economic sanctions

Sanctions against the Islamic Republic of Iran can be divided into three broad categories; United Nation sanctions, European Union comprehensive multilateral sanctions and United States Unilateral Sanctions. It should be noted here that the first sanctions were imposed on November 14, 1979 by the United States of America against Iran after capture of spy's house. This trend continued against Iran after that event, and took more dimensions, and some sanctions imposed by Europe and the UN Security Council. This discussion is continued by evaluation of economic sanctions applied in pursuant to Security Council resolutions, and end by the sanctions imposed by the United States of America and the Union of Europe; the sanctions imposed by other countries against Iran will be discussed at the end of this section.

A – UN Security Council resolutions

All resolutions issued by the UN Security Council which has been issued against Iran according to Article 41 of Chapter VII of the UN Charter, and its focus on Iran's peaceful nuclear and missile tests, which is considered dangerous for international peace and security.

B - Europe Union sanctions

On 27 July 2010, the European Union attempted to impose strike coordination economic sanctions against Iran, The sanctions include a ban on foreign trade, financial services, energy and technology sectors, including a ban on insurance and reinsurance companies owned by the Iranian government and Iranian who Approved by European insurance companies[5]. And again the Europe Union foreign ministers on January 23, 2012 decided to sanctions the new contracts to import crude oil and petroleum products from Iran as well as current contracts from 1 July 2012.

SWIFT Sanctions

On March 17, 2012, in the wake of two days before the agreement took place between the 27 EU member states, and unjustified decision of the Council of Europe, Swift banking

network (SWIFT), the global center Of financial electronic communication, discontinued all Iranian banks with international financial networks due to Europe Union decision that they had violated the current sanctions and Iran failure to comply with its international obligations and Full cooperation with the International Atomic Energy Agency in relation to its nuclear program and its continual. In this regard and in accordance with the Council conclusions of 1 December 2011, the Council agreed resonance stringent measures in the energy sector, including a phased embargo of Iranian crude oil imports to Europe, in the financial sector, including the Central Bank of Iran, in the transportation sector, as well as additional restrictions on exports and notably on gold and sensitive goods and technologies with dual-use, additionally more designated persons and entities specified in (a role) including those controlled by the Iranian Revolutionary Guards.

Europe Union countries decided to order the Swift Financial Network based in Brussels to 25 Iranian banks in their blacklist are excluded from this service, and also including Iran's central bank cut off from the network and the services.

Europe Union sanctions focused on reduction of public and government revenues of Iran by prohibiting the sale of Iranian oil. This is considering that oil has a stake in the countries per capital income; affect the country's development, livelihoods, health and well-being of individuals and the other.

C - Sanctions of United States of America

United States of America is known throughout the world as the leader and pioneer in the application of economic sanctions for foreign policy consideration. During the Cold War, Communism came to an excuse for the sanctions and the subsequent human rights issues; from the 80s onwards issues such as the threat of terrorism, drugs and the spread of weapons of mass destruction form the fields of sanctions.

As mentioned above, the Islamic Republic of Iran is among the countries which have been affected by economic sanctions of US and it was first imposed in 1979 against Iran.

Three generations of human rights

First generation: civil and political rights and freedoms

The subject matter of the rules of civil and political rights and obligations erga omnes, the so-called first generation human rights, in the sense that such rights cannot be limited under any circumstances, the rules governing these rights are imperative nature of jus cogens and obligations that arise from these rules are egra omnes obligations.

These rights are fundamental human rights that include rights to life, the right to non-discrimination, the right to physical integrity, the right to liberty, right to the outrageous behavior of torture, inhuman or offensive behavior and so on.

The second generation: economic and social rights

Economic and social rights are classified as human rights belonging to the second generation. Rights such as the right to education, the right to benefit from affordable housing, health care, labor rights, and the right to benefit from the minimum livelihood are examples of this generation human rights.

The third generation: right to environment, the right to peace, right to development^[6]

These rights are aggregated in nature and include rights like the right to a healthy environment, the right to peace and the right to development.

The rights belongs to the third generation are the people's rights and not the individual rights.

A - Right to Life and Living

The most important human right is the right to life as guaranteed by law and is supported by the present law. Right to life is a fundamental right of all human rights arises.

Right to Life is in a higher status than all other rights. This right have been highlighted and confirmed in international treaties and documents as below:

Article 3 of the Universal Declaration of Human Rights states: Everyone has the right to life, liberty and personal security.

Paragraph 1 of Article 6 of the International Covenant on Civil and Political Rights states: Every human being has the inherent right to life. This right shall be protected by law. No one may be arbitrarily deprived of the right to life and self.

* In the A and C paragraph of the Article 6 , Almighty God is the source of life and keeping life is mentioned both as a right and as a duty. In addition to the life of a man is right, it is a duty.

It's an inheriting right, it means that others have no right to remonstrate against it; can't took it from a person unless there is a legal and canonical justification.

That is the duty of both the individual and others, they required to preserve and protect it.

According to Article 4 of the Covenant, this general reservation is against the object and purpose of the Covenant. Article 4 banned the violation of Article 6, even at a time of public emergency which threatens the life of a nation and its status has been officially announced.

Non- violating rights

Now the question is remain, when a suspension of fundamental rights (e.g. the right to life) is forbidden, even for a temporary period (Article 4, paragraph 2, of the Covenant), how can we make limitation on these rights with the imposition of sanctions?

Right to life cannot be a departure from the common law in the International Covenant on Civil and Political Rights, the European Convention and the American Convention on Human Rights.

This evidence represents the fact that right to life is basic human rights, and it's violated by the United States of America by sanctions against Iran Aircraft Industries.

U.S. Department of Commerce passed on the anti- terrorism surveillance program on March 30, 1984 against Iran and as a result, exports of aircraft, helicopters and its parts were banned.

This unilateral sanction against Iranian Airlines cause different technical defects and airliners crashed inIran, we will give a brief description of them:

According to reports from Iranian news agencies, there are 17 air accidents over the past 25 years in Iran and about 1,500 people have been killed. Reports added that the prices of raw materials and components, increased wear and insecure flights are the impacts of sanctions against Iran.

The witness to this claim is Report A36-WP/275 which was reported in the 36th meeting of the international civil Aviation organization (ICAO). The body and conclusions of this report [7] emphasize that the UnitedStates sanctions on Iran have been posed a great risk to the safety of passenger flights. Because Iran's access to parts and necessary servicesfor a safe flight is prohibited,The report also declares that flight safety is Very important for human life and human rights, and it is beyond any political differences or conflicts[8].The report citing a technical problem that has been identified by the technical experts of the organization [9].

B - Right to Development

UN General Assembly in 1979, with emphasis on the “right to development is a human right” and emphasize that “equal opportunities in development is priority for the United Nations and its constituent

States”, has taken great strides in this way. In 1986, another resolution[10] , the General Assembly as a natural consequence of the first chapter, emphasis on developing tasks for governments: the duty to work together to ensure the development and promotion of international development policy.

State sanctions could also be considered as a violation of the right to development. Right to development was recognized as a universal right and integral part of fundamental human rights in the Vienna Declaration and Programmed of Action on June 25, 1993. Paragraph 4 of Resolution Human Rights Commission as “human rights and unilateral sabotage acts”, explicitly stated that any restrictions, blockades, bans on trade and assets are listed as sabotage act which is a human right violation crime (Resolution of March 4, 1994)

In most of the economic sanctions listed, all prohibitions and restrictions are directly or indirectly affects in order to prevent or even reduce the country's development and when the country's international trade and economic exchange and knowledge services is prohibited, it will lead to problems in the development of the country.

C- The right to own

The right of ownership is a right that has been violated repeatedly by the economic sanctions against Iran. In many of the aforementioned sanctions, Iranian citizens have been deprived of this known right. These rights are included in the documentation of human rights, and Article 17 of the Universal Declaration of Human Rights was one important case of them, which stated:

Article 17 of the Universal Declaration of Human Rights:

- A. Every person has the right to own property individually or socially and otherwise.
- B - No one shall be arbitrarily deprived of property right.

Two points rose in this article, the human being has the right to own property, and certainly none of the human being can be fully deprived of his property; which both of them were violated in economic sanctions against Iran. The Iranian people themselves have been observance of denied ownership of many items and their property has been seized and confiscated and it has deprived them of the right to own.

D - Right to work and livelihood

Right to work and right to livelihood is well known in our times and guarantee the survival of any community. Unfortunately however, this right was violated in the shadow of frequent economic sanctions, which is as important point in the mankind literature and has been emphasized in many international treaties.Paragraph 2 of Article 1 of the International Covenant on Civil and Political Rights regarded right to work and livelihood and in paragraph A of Article 23 of the Universal Declaration of Human Rights on the right to work.

As you can see, right to work and livelihood have been accepted in most of the international literatures without any condition and clause, but again, unfortunately in the sanctions imposed against Iran, it is generally not considered and prohibitions business with Iranian nationals and avoid providing any services, transportation and Banking and financial aids to Iran and Iranian nationals are examples of violation of the these rights, directly and indirectly.

E. Right to Welfare and Health

Economic sanctions have deteriorating effects on peoples' health, due to its impact on public and private health care costs, the cost of these services, shifts in actual revenues, decreased access to primary health care; So, it is endanger your health. The relationship between health and the economy of a country is well studied and the two are necessarily interdependent. Sanctions on the government's ability to import essential commodities will

affect the purchasing abilities of households. In term of acceptance in the international documents, paragraph 25 of the Declaration on the Human Rights stress about this right.

UN Committee on Economic, Social and Cultural Interpretive Theory No. 8 entitled “The relationship between economic sanctions and respect for economic, social and cultural rights” requires:

“While the majority of sanctions vary from case to case, the Committee is aware that these sanctions are almost always have significant effect on the recognized rights in the Covenant. Hence, for example, often cause major disruption in the distribution of food, medical and hygiene items, and food quality and access to clean drinking water and endangers the functioning of health systems and education, and would undermine the right to work” [11].

E - Equal rights and non-discrimination

In some cases, human rights are accepted and recognized, but this law does not apply to all people equally and the same, and issues such as citizenship, nationality, race, color, religion, social and so on is Ideal excuse lead to some people cannot benefit from their recognized human rights. Therefore, in the sanctions imposed against Iran, Iranian nationals regardless of their Iranian citizenship are excluded from benefit and enjoyment of many recognized human rights; the instances of discrimination and lack of equality. International instruments which cover issue of discrimination and inequality are as follow, however, only the most important and effective documents are listed here, there is not enough opportunity to mention all such documents. For instance Article 1 and 2 of the Universal Declaration of Human Rights.

Furthermore, no distinction shall be on the basis of the political, jurisdictional or international country or territory to which a person belongs, whether it be independent, protectorate, or non-self-governing or under any authority limitation.

Paragraph 1 of article 2 of Covenant on Civil and Political Rights and Article II, Section 1 the International Covenant on Economic, Social and Cultural hereof equally have used same text and say about non-discrimination. Covenant on Civil and Political Rights, Article 26 on non-discrimination law say the same.

International Convention on the Prevention and Punishment of the Crime of Apartheid stated about that too.

F- Self determination

Humans and communities have the right to self - determination in political, social, cultural, economic aspects and assume their own fate, no longer any excuse accepted for fade or disturbing images, Here, economic sanctions with ban on the trade and dealing with people of a particular society, makes the economic, social and objectives relevant to the demands of foreign powers imposed sanctions which is contrary to the principle of self-determination of peoples and nations, some of the root causes of this ban can be found in the documentation of these rights:

The first paragraph of the first Covenant on Economic, Social and Cultural Rights, the right to be respected and noted that their citizens have a right to economic and political issues of his own rule.

The principle of “sovereignty over natural resources” has been approved repeatedly in General Assembly of the United Nations and other international documents, and even the 1974 Declaration on the rights and responsibilities of the state, economy based on the principle of freedom and self-determination of nations and the international community and each of your opponent’s choice of open international trade [12] And further, all people can reach their goals of wealth and use their own natural resources for this Purpose, provided

that there is not any prejudice to the obligations arising out of international economic cooperation and in accordance with international law, common interests and free trade. For the purposes of the UN which is the international peace and security, all members not only cannot use force or threat in their international relations, but also committing any acts that would undermine international cooperation should be avoided.

G- right on feed and food

The right to food and nutrition is essential and fundamental human rights, it is not possible for him to survive and live without this right, so such rights is undeniable. We can't deprive any human kind from these justified rights, unless the target is destruction and suffering and torture of human. The right to food and nutrition are highlighted in numerous international conventions and documents, including the UN Human Rights Commission resolution.

The United Nations Commission on Human Rights, in a resolution dated 17 April 2000 concerning the rights of social, economic, cultural and embodied in the Universal Declaration of Human Rights and the International Covenant on economic, Social and Cultural rights, and study of special problems facing developing countries in their efforts to achieve these human rights accepted. In this resolution, the Commission emphasized that hunger is harrow and infringement of human greatness.

Conclusion

The point that is quite clear, is that sanctions against the Islamic Republic of Iran is inconsistent with certain principles of human rights, the principles of human rights accepted by all countries of the world, and even designer and imposer of sanctions. The economic sanctions against Iranian citizens and ban and restriction on trade and business facilities are contradictory with the human rights which examined in this paper. We can freely express our voice that human rights law can be applied only in cases of domestic law, not international law; and Security Council would not be the subject to decisions here. If we think so, we must consider these reservations incompatible with the object and subject of obligations, without a doubt the best of the human rights conventions.

Many UN declarations and resolutions have stressed the fact that "the realization of economic, social and cultural rights" is an integral part of human dignity. Also, many states have used the concept of human dignity in their reports to the Committee on Economic, Social and Cultural Rights, including committee in Relation to socioeconomic rights, as well as in the Committee's concluding Observations[13]. For example, a ban on exports of commodities can be a serious impediment to the exploitation of human rights that takes place through depriving the public of the benefits and advantages that are essential for the import of goods.

A review of international human rights norms and standards enshrined in the UN Charter, Universal Declaration of Human Rights, Convention on the Rights of the Child and other relevant documents that are indicative of internationally accepted principles, It can be argued that if economic sanctions would lead to human suffering, these sanctions are not justified from the perspective of international law, and it is notable Even in the case of economic sanctions by the United Nations Charter with international agreements[14].

A number of scholars and experts believe that the United Nations is not a party to human rights treaties. Basically, they are defined and developed after the adoption of the rights specified in the Bill of Rights Charter. As can be noted in the Council's commitment to respect human rights under general international law, and human rights, especially those who come from one of jus cogens, and ensure that implied general Obligations (erga omnes)[15]. This kind of performance and behavior of the Security Council tarnished the image offers for

the international community; protection of human rights on the one hand, and on the other it ignores by imposing economic sanctions[16].

General regulations concerning human rights, inspired by Article 30 of the Universal Declaration of Human Rights, stressed that no government or individual or population cannot be referring to the rights and freedoms enshrined in the Treaties, shall affect the rights and freedoms of others. It is worth noting here that the government is not only prohibited from violating human rights, but also individuals and populations have been barred from committing such acts[17].

One of the very important provisions in Article 50 of the international responsibility of the plan adopted by the International Law Commission, prepared in compliance with international law is *jus cogens*. The government cannot give anything *jus cogens* in international law to prevent violations of international law. Under this provision, the government cannot prevent violations of international law by violation of basic human rights and humanitarian law arrangements. This two restrictions are inspired by Article 60 of the Vienna Convention (1969) on the Law of Treaties, Where it is said that there is no way to make such arrangements that conventions could be terminated one-sided or unilaterally.

References:

- Gary Clydes, Huf Bauer and others, Economic Sanctions reconsidered: history and policy.
 John Muller, Karl Muller, Economic Sanctions: a mass destruction weapon, Translated by Azarnia, TarjomanEghtesad, second year, 1378, p: 43.
 Security Council Resolution 827 of May 25, 1993.
 SeyedFatemi, Seyedmohamadghari, The analysis of Key concepts of the contemporary human rights, commitment, freedom, equality and justice, Journal of Legal Studies 33, 34.
 Council Regulation 423/2007 that was published on 27 July 2010
 Dr. SeyedFatemi, Seyedmohamadghari, The analysis of Key concepts of the contemporary human rights, commitment, freedom, equality and justice, Journal of Legal Studies 33, 34.
 4. CONCLUSION 4.3 the imposed trade sanctions by the United States of America against the Islamic Republic of Iran, which, according to the findings of the ICAO mission, is detrimental to the safety of civil aviation and does originate safety deficiencies
 The Safety Deficiencies Arising Out of the United States Sanctions Against The Civil Aviation of The Islamic Republic of Iran-Economic Commission-Assembly (36th Session-International Civil Aviation Organization, Working Paper, A36-Wp/275-Ec/34-20/9/07.
 The Report on Safety” by TC 4/3.33-13 17 July 2005.
 A/RES/41/128 - 4December 1986-97th plenary meeting
 Dr. HaibatolaNajhandiManesh, Economic sanctions and International human rights, Eatamad Meli, Sat, 30, ord. 1385.
 Article 1, Paragraph 2, international Convent on economic, social and cultural rights.
 Dr. HaibatolaNajhandiManesh, Economic sanctions and International human rights, Eatamad Meli, Sat, 30, ord. 138.
 Dr. Homayoon Mafi, Contemplation of American’s sanctions against Iran from international law perspective, law and political science research journal, summer 1385, no 1, pp: 59-84.
 Dr. Jamshid Momtaz, Compliance with UN Security Council sanctions for human rights and international humanitarian law, Law Quarterly, Volume 38, Number 4, winter 1387.
 Farida Shayegan, Dr Jamshid Momtaz, Compliance with UN Security Council sanctions for human rights and international humanitarian law, Law Quarterly, Volume 38, Number 4, Winter 138.
 KoochNeghad, Abbas, Human rights restrictions on international documents, fundamental rights publications, second year, third issue, 1383.

ELECTORAL PARTICIPATION, KNOWLEDGE, ATTITUDE AND PRACTICES : A CASE STUDY OF UTTAR PRADESH ASSEMBLY ELECTION 2012 (INDIA)

BupinderZutshi, PhD

Jawaharlal Nehru University, New Delhi, India

Abstract

The study of voter turnout rates, its composition, characteristics, Knowledge, Attitude, Behavior, Beliefs and Practices (KABBP) is an integral part of election management by the Election Commissions throughout the World. The Office of the Chief Electoral Officer-Uttar Pradesh has taken up a Systematic Voters' Education and Electoral Participation (SVEEP) interventions and programme before the Uttar Pradesh Assembly elections in 2012, to promote participation of the voter in the electoral process. The present study examines the voter turnout rates across gender groups, age groups, income groups, occupational groups and education levels in Uttar Pradesh state of India. It also attempts to assess knowledge, attitude, practices and satisfaction level of voters about various services and facilities of electoral process/election management and its consequences on voter turnout rates.

The study indicates voter turnout rate of 59.48% in 2012, as compared to 46.07% in 2007 and 47.79% in General Election of 2009. The mean and median voter turnout rates recorded during 1951-2009 has been 50.1%, and 50.5% respectively, with Standard Deviation of 9.4 for the same period. However significant variations in the voter turnout rates were recorded among micro regions within same administrative constituency due to demographic, cultural, socio-economic and institutional management measures. The results point out significant impact in voter turnout rates after interventions under SVEEP were initiated by the Election Commission in 2010. The study also depicts that there is lot of gap between what the voters 'should know' and what they 'actually know' in important areas like registration of voter list, making of Elector Photo Identity Cards (EPIC), Polling Station location, use of Electronic Voting Machines (EVMs), do's & don'ts with regard to model code of conduct. The results point out that persistent voter education with the kind of seriousness and depth, it deserves by the Election Management bodies should be given due and strong emphasis.

Keywords: Electoral participation, Voter Turnout Rate, Voter Knowledge, Education, and Communication, Election management

Context and Objectives

The study of voter turnout rates, its composition, characteristics, Knowledge, Attitude, Behavior, Beliefs and Practices (KABBP) is an integral part of election management by the Election Commissions throughout the World. Thus voter's participation and turnout rates are widely studied phenomenon in the comparative politics literature. Scholars have studied voter turnout rates and have pronounced that "Political equality and political participation are both basic democratic ideals" (Lijphart, 1997: 1) in flourishing democracies worldwide. Several studies have also indicated that changes in voter turnout rates can affect electoral outcomes and support for a particular party (Radcliff, 1994, 1995; Erikson, 1995a, 1995b). While voter turnout has generally been declining in most Western democracies, it has actually increased

in India since its first elections in 1951. This upward trend has been highlighted by scholars as an important factor in the sustenance of Indian democracy, where citizen's participation has improved in increasing numbers to choose their governments, election after election (Yadav, 2000).

In case of India, voter turnouts have been high in comparison to several Western democracies, despite the presence of a large illiterate and economically backward population. Scholars have pointed out that "The deprived seem to have greater faith in India's elections than the advantaged" (Varshney, 2000:20). Since electoral outcomes have important policy implications, it is vital to understand the degree and reasons for variation in the voter turnout rates among different spatial geographical regions as well as among different composition and social and economic characteristics groups of voters, so that focused target is given to encourage them to strengthen democratic value by exercising their duty of franchise.

Factors Affecting Voters Turnout

High voter turnout is often considered to be desirable (Franklin, Mark, 1999, 2001, 2002). Several models have been developed by scholars for voter turnout differentials across regions, political governance systems, community composition and characteristics and existing institutional frameworks. "Rational Voter Model" (Downs 1957), has been a dominant theory of voter participation in the literature for a long time, and has been extended theoretically and tested empirically by many scholars (Buchanan & Tullock, 1962; Riker & Ordeshook, 1968; Tullock, 1971; Cox & Munger, 1989; Aldrich, 1993; Feddersen, 2004). The rational choice model focuses on the cost-benefit analysis of the voting decision. According to Riker and Ordeshook (1968), since a single vote has virtually no effect on the election outcome, a voter cannot be expected to vote for gaining just material benefits. Instead, the only rational reason to vote is to gain benefits such as expressing an opinion or fulfilling a duty and participate in the governance system. Thus governance trust in voter is an essential requirement for higher voter turnout. Some scholars explain the voting decision based on a habit, which in turn depends on factors such as their social status and education, income, ethnicity, rural/urban character and ease of voting. Verba and Nie (1972) put forward a model of electoral participation based on education and profession, and studies such as Wolfinger and Rosenstone (1980), and Parry et al. (1992) use this resource model in their studies of voter turnout. The mobilization model complements the resource model and focuses on how the various parties, interest groups and candidates mobilize people to vote (Rosenstone & Hansen, 1993). Low turnout elections have often been referred to as low mobilization elections, and mobilization is a mechanism that works by way of both rationality and socialization (Franklin, 2004). An important variable in the turnout literature focuses on the competitiveness of the elections. According to Blais (2000: 60), "the verdict is crystal clear with respect to closeness: closeness has been found to increase turnout ... There are strong reasons to believe that, as predicted by rational choice theory, more people vote when election is close".

Studies have indicated that in each country, some parts of society are more likely to vote than others. In high-turnout countries, these differences tend to be limited, but in low turnout nations the differences between voters and non-voters can be quite marked. These differences appear to persist over time; in fact, the strongest predictor of individual turnout is whether or not one voted in the previous election. (Fowler, James H. 2006). Much of the impetus to vote comes from a sense of civic duty, which takes time and certain social conditions to develop that, can take decades to develop. Scholars have found ethnicity, caste, income, education levels, rural/urban character of electorates have affected voter turnouts. But these factors do not have straight forward linkages. As education levels are found to be closely linked with voter turnout in developed societies, while they are in reverse linked in

South Asian Countries especially in India. The dominant view in the existing studies points toward the primacy of institutional variables in affecting the variation in turnout across nations, although some authors also include sociological variables as well as economic variables in their analyses. However the factors affecting voter turnout can be classified as follows:

Multiple factor affects voter turnout rates. These factors are institutional management, cultural, social, economic, laws and governance. Making easier rules and laws for registration of eligible voter has helped in increasing registration of high numbers of eligible voters in voter lists, which naturally result in higher turnouts. Rolling registration (Registering eligible voters as closer to the date of polling) has helped in increasing eligible voter lists, as updating is regular, without creating barriers of cutoff dates. Online registration of eligible voter in the voter list has also improved voter turnouts. Creating awareness by Election Commission through mass media, advertisements and other intervention have increased eligible voters registration in voter lists. Simply making it easier for candidates to stand through easier nomination rules is believed to increase voting. Conversely, adding barriers, such as a separate registration process, can suppress turnout. Other factors include ease of voting is a factor in voter turnout. Increasing the number of possible voting locations, lowering the average time voters have to spend waiting in line, or declaring holidays on voting day for workers has helped in increased voter turnouts. Many countries have looked into internet voting as a possible solution for low voter turnout. Similarly Voter fatigue can lower turnout. If there are many elections in close succession, voter turnout will decrease as the public tires of participating. Holding multiple elections at the same time can increase turnout. Voter suppression affects voter turnout because citizens are prevented from voting. Prevention could be for legal, racial, or political reasons. Often the aim of suppression is that the people in power remain in power. In other cases, supporters of candidates who cannot get elected through fair means or have their nominated candidature listed on the ballot paper often self-suppress in protest. Voter also perceives security threat which suppresses their voting rights. Not all voters who arrive at the polls necessarily cast ballots. Some may be turned away because they are ineligible as they do not find their names in the voter list or do not possess accepted identification cards, some may be turned away improperly by opposing candidates due to lack of security personnel.

Lack of Trust in Governance

Early studies (Gosnell, 1927) assume that turnout depends on the character of the election itself, rather than on the voters. Thus, for example, lower turnout is expected where parties do not clearly communicate their policies to the voters, and a high turnout is expected when policies are well presented, or where electoral competition is expected to be close. Political parties on increase in turnout focus less on the characteristics of the elections, and more on the motivation of the individual voter and on parties' efforts to mobilize support for its policies through unfair means. However generally trust in government, interest in politics, beliefs in efficacy of voting, political parties' efforts to motivate electorates, suitability of candidate have been other factors affecting voter turnouts.

Literature focusing on determinants of turnout in India is limited, and consists mainly of the works by Yadav (2000), McMillan (2005), Ahuja, A and Pradeep Chibber (2012), Diwakar, R (2008). Yadav (2000) disaggregates turnout statistics in India in terms of regions and prominent social groups to understand the changing nature of political participation in India in the 1990s. Yadav's key thesis is that although overall turnout figures have not increased dramatically in India, yet the composition of those who vote has undergone a major change. He found socially underprivileged- the Scheduled Castes and Scheduled Tribes have increased voter turnouts but the same has not been true of other

disadvantaged groups like minorities and women. He points out that India is perhaps the country where voter turnout rates for underprivileged community is higher than most privileged groups. He also finds that voters in rural areas are more likely to vote than those in urban areas. Scholars have also analyzed that young voters and women have higher voter turnout rates especially during last decade.

A lot of attention has been paid to the decline in voter turnout rates in the World democracies, and scholars have debated the reasons and the effects of this decline. Declining voter turnout tends have been associated with citizens' lack of interest in the democratic process which dilutes the legitimacy of the governance. Scholars have also related the decline in voter turnout to disenfranchisement of socially and economically backward groups, and questioned whether democracy in such a scenario is truly representative. In such situations it is imperative on the Election Commission and political parties to encourage electorates to participate in the election processes by inculcating KABBP among the voters.

Objectives of the Present Study

- To evaluate the voter turnout rates during Uttar Pradesh Assembly Election 2012 and analyse the outcomes of voter turnout across gender groups, age groups, income groups, occupational groups and education level.
- To assess knowledge and satisfaction level of voters about various facts of electoral process/election management.
- To suggest for strategic communication with the voter in order to improve registration and voter turnout.

Research Methodology

The present study is based on both secondary and primary sources of data. Secondary data was collected from Election Commission of India (ECI) record like voter turnout during Assembly Election 2012 for Uttar Pradesh state of India.. Primary survey was conducted during July to December 2013 in Uttar Pradesh. A total of 20,154 households from rural areas (10,585 households from High turnout polling booth areas and 9,569 households from Low turnout polling booth areas) and 5,207 households from urban areas (2193 households from High turnout polling booth areas and 3014 households from Low turnout polling booth areas) were stratified and randomly selected for the detailed survey from the 380 Assembly segments. These stratified randomly selected household recorded 86,720 eligible voters (aged 18 year and above). Thus the survey covered 86,720 eligible voters representing 0.068 percent of total electorate of the state for the survey. Eligible voters aged 18 years and above recorded per household were 3.57 for rural areas and 2.83 for urban areas. 43,171 eligible voters were recorded from High turnout polling booth areas and 43,549 eligible voters were recorded from Low turnout polling booth areas. However only 62,735 eligible voters responded for the survey (30,973 voters from High turnout polling booth areas and 31,762 voters from Low turnout polling booth areas) and others were reluctant to provide detailed information required for the survey. (Refer Table No.1)

Table No. 1 Sample Coverage -KABBP Survey -2013, Uttar Pradesh

	Total Households Covered for Sample Survey		Total Eligible Voters found/ Covered for Survey				Total Eligible Voters Responded during Survey			
	Rural	Urban	Rural		Urban		Rural		Urban	
			M	F	M	F	M	F	M	F
High turnout Polling Booth Areas	10585	2193	17962	19088	2901	3220	13058	13703	1985	2227
Low Turnout Polling Booth	9569	3014	16586	18341	4175	4447	12125	13133	3061	3443

Areas										
Both Combined	20154	5207	34548	37429	7076	7667	25183	26836	5046	5670

Source: Sample Survey Conducted 2013

Interventions by Election Commission of India (ECI)

Election Commission of India (ECI) realized the importance of infusing greater vigor for high voter turnout rates for healthy democratic processes. The theme chosen for the Diamond Jubilee Year of the ECI in 2010 was “Greater Participation for a Stronger Democracy”. ECI realized that it needed to reach out to complete electoral rolls, urban apathy, women’s participation deficit and youth indifference to the electoral. It felt that educating voters and effective management of election machinery holds the key to motivate voters for greater participation. (Election Commission of India- ECI -2013, Compendium of Rules) The Commission thus decided to bring Voter education to the center table of election management and allocated it necessary attention and resources. Several measures were directed by ECI to meet this objective. Some of the measures taken were

- Improve participation of all sections of the electorate, awareness levels needed to be enhanced, especially amongst the newly eligible youth, the uneducated, residents of inaccessible and remote areas, socially and economically weaker/ deprived sections of society.
- ECI envisaged systematic, strategic and scientific processes in understanding the voter participation and engagement dynamics so as to facilitate the processes of increased and informed participation.
- Effective partnerships with educational institutions like Universities, Colleges, Senior Secondary Schools, and Vocational Institutes etc. were built, in order to educate the students on subjects related to democratic electoral practices and participation.
- Large segments/ sections of the electorate who were not covered by the formal educational system or those who had developed an apathetic attitude or those who are physically cut-off from the mainstream due to various reasons were brought under the ambit of focused voter education. Such segments/ sections were reached through civil society organizations, special agencies of volunteers, govt. departments working for the welfare of deprived and vulnerable sections or marginalized groups etc.

Uttar Pradesh Elections 2012, Voter Turnout Rates

The Uttar Pradesh Assembly Election 2012 recorded voter turnout of 59.48% as compared to 46.07% in Assembly Election 2007 and 47.79% in General Election of 2009. The mean voter turnout for Uttar Pradesh Elections (both assembly as well as General elections) from 1951- 2009 has been 50.1%, while median turnout rates for the same period was 50.5% with Standard Deviation of 9.4 for the same period. Thus significant increase has been recorded in the voter turnout in Uttar Pradesh during last five decades. The results point out significant impact in voter turnout rates after interventions under SVEEP were initiated by the Election Commission of Uttar Pradesh in 2010.

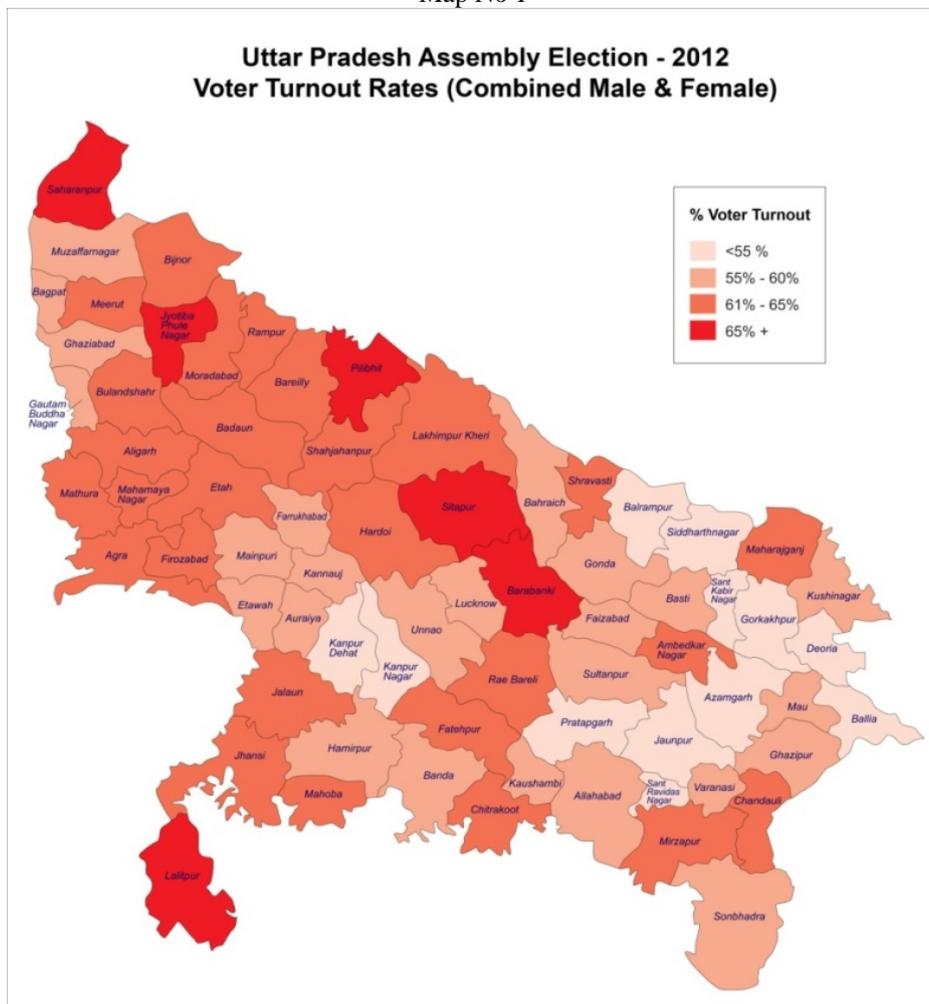
However significant variations in the turnout rates for Assembly Election 2012 were observed geographically (Map No. 1). The map indicates Eastern Uttar Pradesh recorded lower voter turnout rates as compared to Central and North-Western Districts of Uttar Pradesh. The districts of Kanpur, Pratapgarh, Jaunpur, Azamgarh, Ballia, Deoria, Gorakhpur, SantKabir Nagar, SantRavidas Nagar, Siddharthnagar and Balrampur recorded least turnout rates, while Districts of Saharanpur, JyotiPhule Nagar, Philibhit, Sultanpur and Barabanki recorded higher turnout rates.

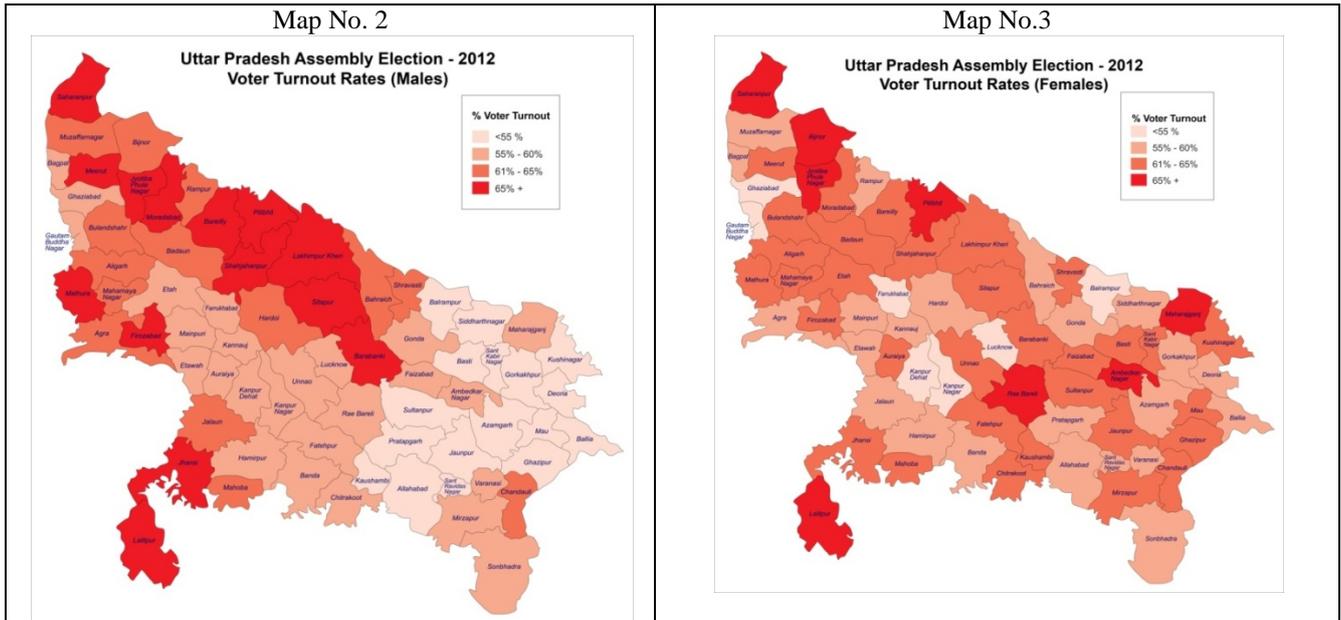
Gender wise voter turnout rate for Assembly Elections 2012 was 58.82% for male voters and 60.29% for women voters. District variations for gender voter turnout rates were

also recoded. Male voter turnouts depict very low rates in majority of Districts in Eastern Uttar Pradesh and high turnout rates in Central, North-West and South Districts. (Refer Map No. 2). Female voter turnout rates were higher in North-West Districts and some pockets of South and Eastern Districts (Refer Map No. 3). Thus voter turnout indicates strong regional influences of political parties and economic developmental issues.

Regional variation at micro level within the Districts were also observed in the voter turnout rates indicating multiple factors play important role in determining voter turnout rates. District wise Voter turnout, separately for District as well as for High Polling Booth and Low Polling Booth within the District, depict variations in voter turnout rates. The table indicates that voter turnout for polling booths within the same districts has been as high as 75% and as low as 45%. The multiple factors within the same District determine voter turnout rates. These multiple factors could be institutional (ease of registering voters in voter list, location of polling booths, security arrangements at the polling booth, services at polling booth like time taken to cast vote), demographic and social and economic characteristics of voters, motivational encouragement by Election Commission, political parties and candidates and suitability perception of candidate by voter.

Map No 1

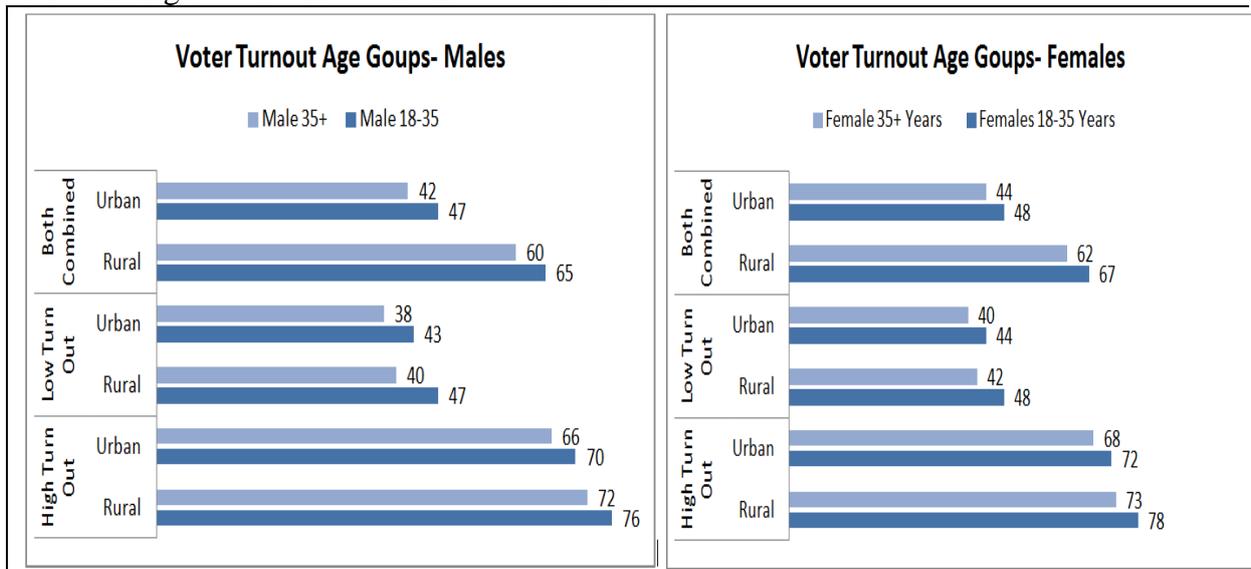




Thus the results clearly indicate that although significant improvement has been recorded in voter turnout rates in Uttar Pradesh during last one decade but regional variation still exists at micro, meso and macro level with the state. A combination of interventions by Election Commission has shown positive results which require to be expanded or even strengthened through participatory methods.

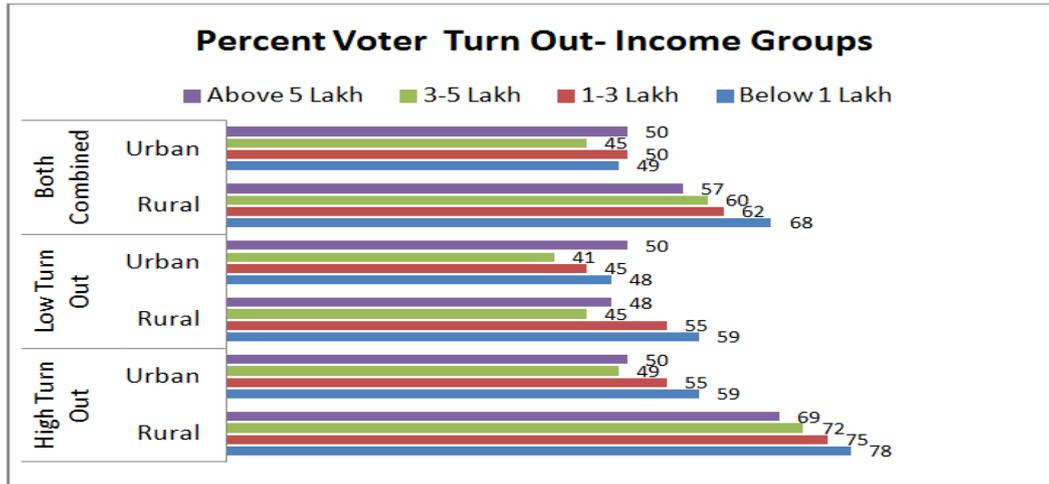
Voter Turnout (Age Groups)

The sample survey results for Uttar Pradesh Assembly Elections 2012 also confirm that voter turnout rates were higher among younger voters aged 18-35 years as compared to voters aged 35 + years. These results even hold true for both gender groups for both rural and urban areas. In case of rural areas the gaps in the voter turnout among the two age groups was 5 percent point both for men and women respectively, while the gap between the two age groups was 4 percent point for women and 5 percent point for men respectively in case of urban areas. The variation in the voter turnout among the two age groups was also recorded for both High voter turnout and Low voter turnout areas.



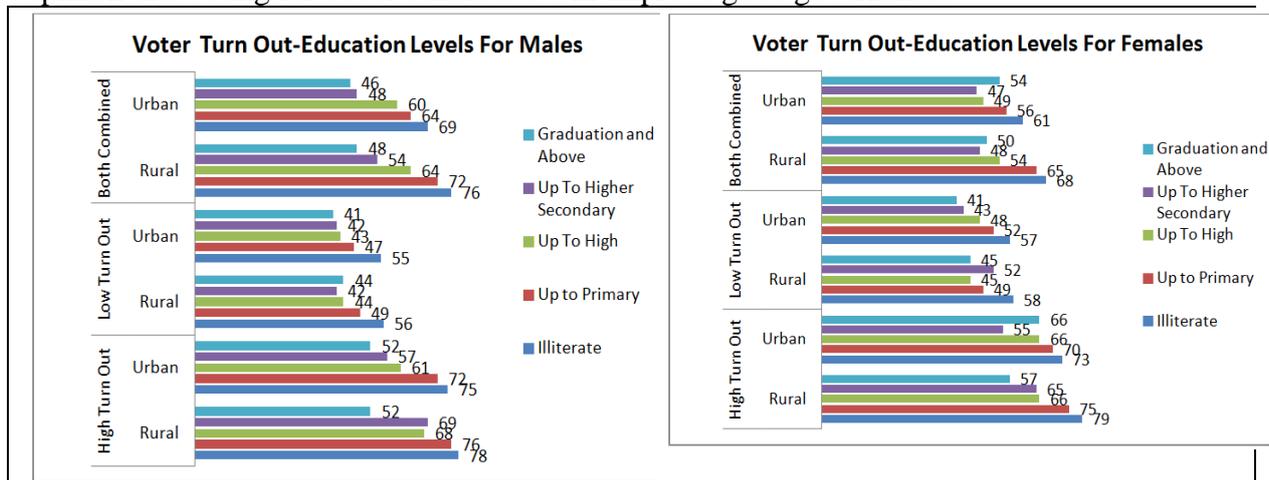
Voter Turnout Rates – Income Groups

The survey indicates that economically disadvantaged groups also tend to have higher voter turnout rates, as respondents in lower income groups recorded high voter turnout rates across both gender groups in both rural and urban areas¹⁴⁹. Lower income group voters feel that a support to particular candidate/ party candidate might turn their fortunes as such candidates/ parties also give allurements and promise freebies in the election campaigning period.



Voter Turnout Rates – Education Levels

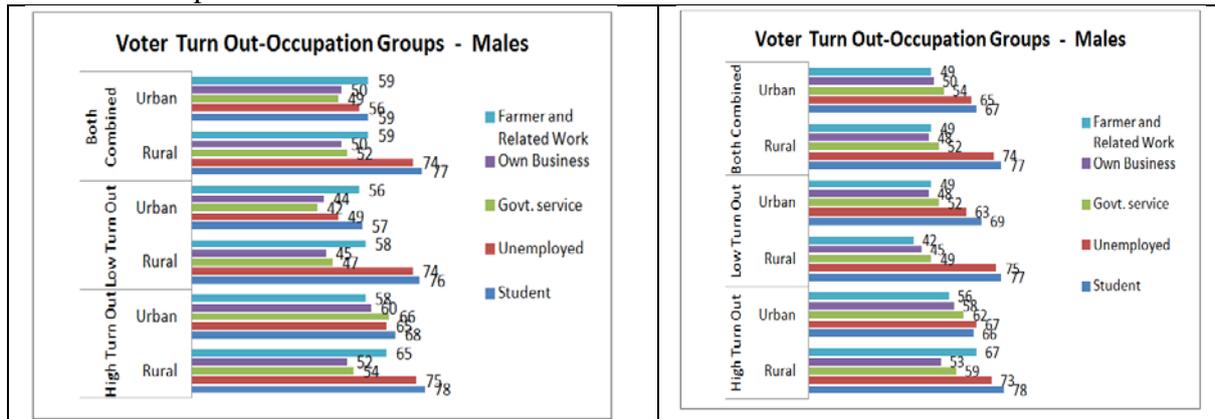
Education levels of voters also seem to be correlated with voter turnout rates. Contrary to the Western democracies model, where more educated turnout in large numbers for voting, the situation was different in case of Uttar Pradesh. Voter turnout rates for illiterate men and women were higher than the educated men and women both in case of rural and urban areas. However with SVEEP interventions by Election Commission, the trend has improved as with more awareness and better services even educated voters now are of the opinion that voting for better candidates will improve good governance.



¹⁴⁹ The income groups considered was those having annual income of Indian Rupees (1 lakh Indian Rupees is equal to Indian Rupees 100,000 (US\$ 1750)

Voter Turnout Rates – Occupation Groups

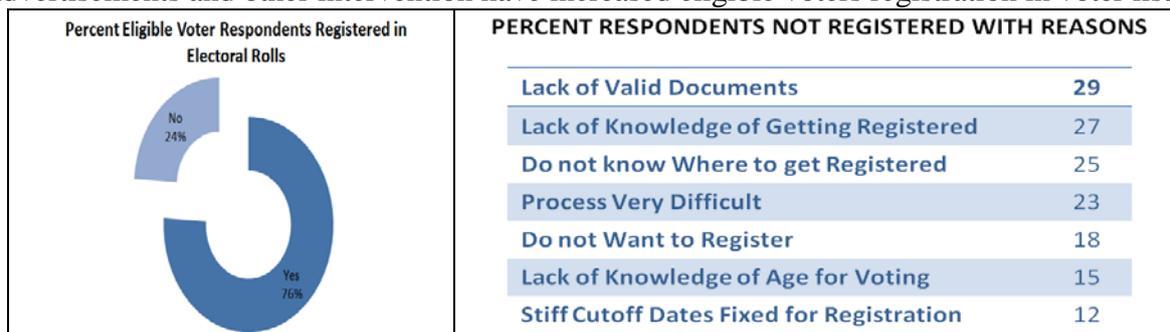
The results of voter turnout among students and other occupational groups indicate mixed results as students tend to have higher voter turnout rates followed by unemployed youths, farmers and low class labourers. The voter turnout rates were lower for government employees and voters engaged in their own business activities. On the whole the proportion of voter turnout rates across all occupational groups was lower in case of urban areas as compared to the rural areas. Women farmers in rural areas recorded lower voter turnout rates compared to their men farmer counterparts in rural areas. Unemployed men and women also recorded higher voter turnout rates, depicting that they have hope as candidates/ party manifestoes encourage them to vote and give them hopes for better greener pastures if they are voted into power.



Registered Voters in Electoral Rolls

The survey results indicate that in spite of several positive interventions initiated by Election Commission, only 76% eligible voter have registered in the voter lists in rural areas and only 77% eligible voter were registered as voters in urban areas with marginal variations in registration among males and females. Upon quizzed about the reasons for not getting registered in electoral rolls, a significant number of respondents who were not registered (both men/ women residing in rural and urban areas in high/low voter turnout areas) reasons such as, lack of knowledge of electoral rolls/ voter list, lack of knowledge of age for registering as voter in voter list, lack of valid identification documents, lack of knowledge of places where to get registered, stiff dates fixed for registration period, perception of difficult registration process and shortage of time.

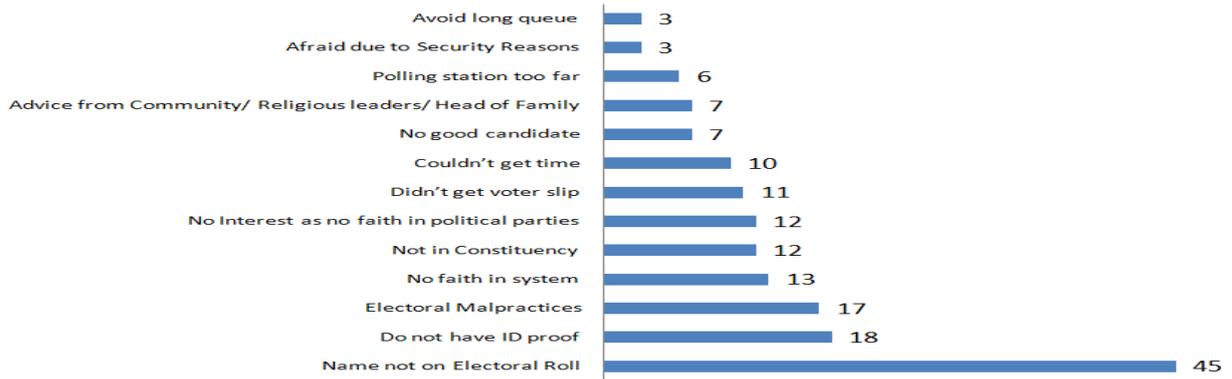
Making easier rules and laws for registration of eligible voter will help in increasing registration numbers of eligible voters in voter lists, which naturally will result in higher turnout rates. Rolling registration (Registering eligible voters as closer to the date of polling) has helped in increasing eligible voter lists in many countries, as updating is regular, without creating barriers of cutoff dates. Online registration of eligible voter in the voter list has also improved voter turnouts. Creating awareness by Election Commission through mass media, advertisements and other intervention have increased eligible voters registration in voter lists.



Demotivating Factors for Voter Turnout Rates

The single most factor for demotivating voter turnout rates was name not on the electoral rolls and lack of documents like appropriate ID cards and voter slips for voting. Other demotivating factors include electoral malpractices, lack of faith in the political system and in political parties. Significantly 7% respondents also cited inappropriate candidates in the fray as demotivating factor. Some of the institutional management issues were also stated as demotivating factors like polling station not appropriately located, long queue taking too much of time and security measures at the polling stations.

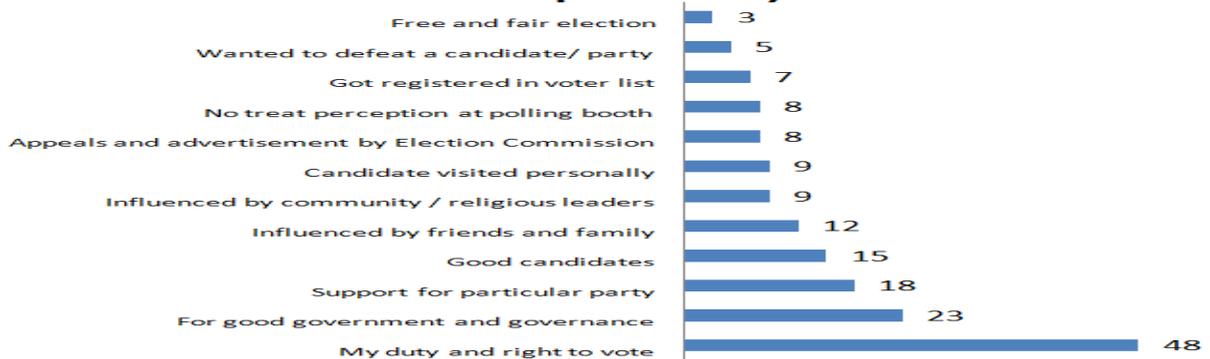
Factors Demotivating Voters to Vote (Percent Respondents)



Motivating Factors for Higher Voter Turnout Rates

A majority of electorate who participated in the voting say that they are motivated to vote as they see it as their duty/ right in democratic processes. Other motivating factors narrated by respondents were support for particular candidate/ candidates of particular party, influence by family and community member. In the wake of several interventions under SVEEP program made by ECI it was expected that respondents would be motivated to vote in large number, which has actually happened but only 8% respondents indicated role of ECI for their motivation to vote. Hence more efforts need to be taken by ECI to create awareness for higher turnout rates. It is interesting that in spite of media projection of threat and coercion to vote only 8% reported threat as demotivating factor.

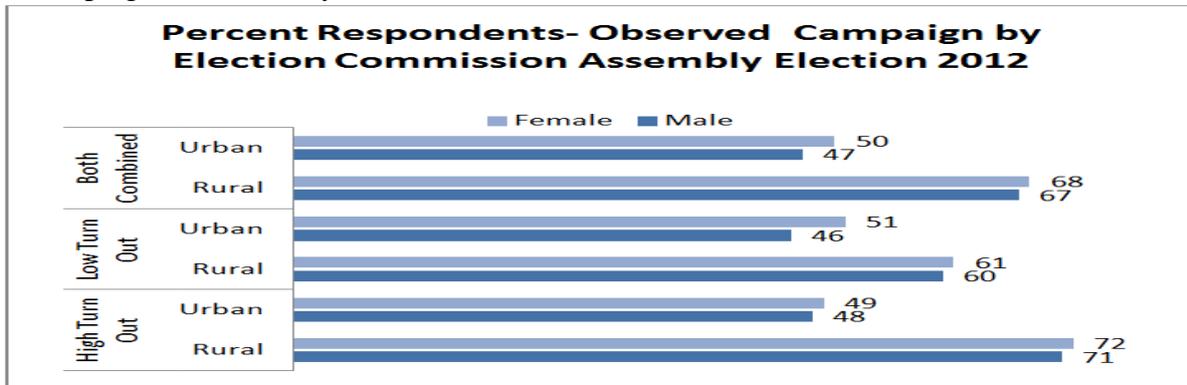
Factors Motivating Voters to Vote (Percent Respondents)



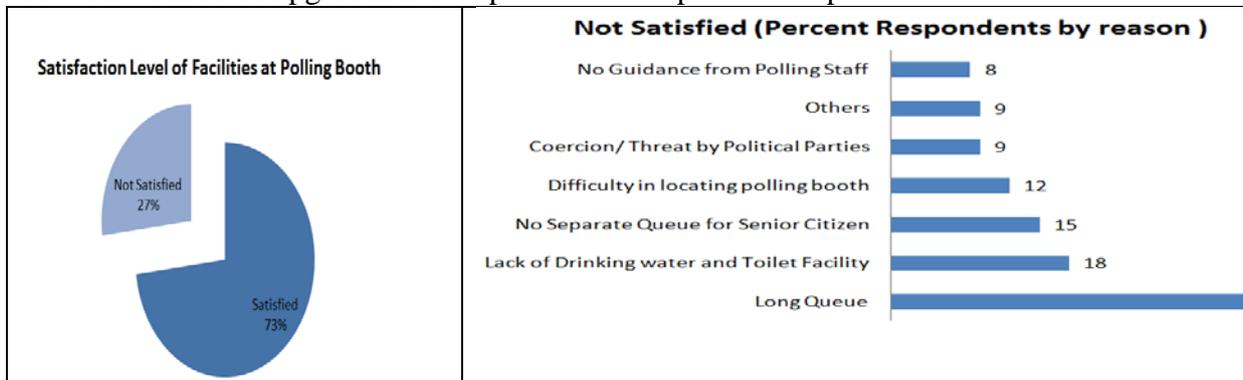
Recall about Election Commission SVEEP Campaign

About 65% respondents recalled that they have observed and witnessed a campaign launched by the Election Commission with regards to electoral process knowledge, and activities associated to increasing voter turnout rates. The recall rate was higher in rural areas as compared to urban areas. There was huge gap in the recall rate point percentage between

rural areas (67%) and urban areas (48%). Marginal variations were observed in the recall of campaign between men and women. The proportion of recall rate among high voter turnout areas was much higher than in case of low voter turnout rates. It thereby signifying the importance of campaign conducted by Election Commission under SVEEP initiative.



In the wake of several interventions under SVEEP program made by ECI it was expected that respondents would be motivated to vote in large number, which has actually happened but only 8% respondents indicated role of ECI for their motivation to vote. Hence more efforts need to be taken by ECI to create awareness for higher turnout rates. It is interesting that in spite of media projection of threat and coercion to vote only 8% reported threat as demotivating factor. The satisfaction level at the polling booth center in terms of services, functions and facilities were appreciated by voters. 73% respondents were satisfied with the services provided at the polling booths. Marginal variations were observed by respondents for both high and low voter turnout areas in terms of satisfaction level of services at polling booths. However high proportion of respondents from urban areas expressed that services need to be upgraded and improved as compared to respondents from rural areas.



There is lot of gap between what the voters ‘should know’ and what they ‘actually know’ in important areas like registration, making of Elector Photo Identity Cards (EPIC/ and the acceptance of other identity proofs for voting, Polling Station location, use of EVMs, timings of the poll, do’s & don’ts with regard to Model Code of Conduct. ECI requires making available this knowledge pool with a sense of urgency. Experience showed that even greater awareness does not necessarily get converted into greater participation, thus along with generating awareness necessary steps should be taken on the voting day to ensure implementation of the knowledge imparted to voters. Persistent voter education with the kind of seriousness and depth it deserves by the election management bodies should be given due and strong emphasis.

Conclusion

The study points there is high degree of voter turnout and high degree of satisfaction especially after the SVEEP programme. However the study also found, lack of information about process amongst unregistered voters, low levels of awareness about ECI campaigns, a significant proportion of non-registered eligible voter in the electoral rolls and exclusion of specific communities, socio-economic groups from voter turnout. Major threats are perception of cumbersome documentation and lack of knowledge for registration in voter lists, lack of interest due to mal-practices, poor candidates and trust deficit with political parties/ candidates and governance, Frequent polling. The opportunities from ECI campaign shows, voters perceive voting as their right/duty, the perception that facilities and services at polling booths are satisfactory and there is scope of betterment of facilities at polling stations. There is Increase in voter turnout percentage among poor, disadvantaged and marginalized communities and section especially women, scheduled caste/ scheduled tribes population. However the study points out that there is a need to strengthen electorate knowled, education and communication and Election Commission must revise constantly electoral rolls and efforts should be made for inclusion of on-line registration.

References:

- Ahuja, A and Pradeep Chibber (2012). Why the Poor Vote in India: "If I Don't Vote, I Am Dead to the State" *Studies in Comparative International Development* © Springer.
- Blais, Andre (2000). *To Vote or Not To Vote? The Merits and Limits of Rational Choice* (Pittsburgh, University of Pittsburgh Press).
- Buchanan, John & Tullock, George (1962). *The Calculus of Consent: Logical Foundations of Constitutional Democracy* (Ann Arbor, MI: University of Michigan Press).
- Cox, Gary W. & Munger, M. C. (1989). "Closeness, expenditures and turnout in the 1982 US house elections", *American Political Science Review*, 83(1), pp. 217–230.
- Downs, Anthony (1957). *An Economic Theory of Democracy* (New York: Harper & Row).
- Diwakar, R (2008). "Voter Turnout in the Indian States: An Empirical Analysis" *Journal of Elections, Public Opinion and Parties*, Vol. 18, No. 1, 75–100
- Election Commission of India- ECI (2013). *Systematic Voters' Education and Electoral Participation (SVEEP), Compendium of Instructions*.
- Erikson, R. (1995a). "State turnout and presidential voting: a closer look", *American Politics Quarterly*, 23, pp. 387–396.
- Erikson, R. (1995b). "Pooling and statistical control: a rejoinder to Radcliff", *American Politics Quarterly*, 23, pp. 404–408.
- Feddersen, Timothy J. (2004). "Rational choice theory and the paradox of not voting", *Journal of Economic Perspectives*, 18(1), pp. 99–112.
- Fowler, James H. (2006). "Habitual Voting and Behavioral Turnout," *Journal of Politics* 68 (2): 335–344.
- Franklin, Mark. N. (1999). "Electoral Engineering and Cross National Turnout Differences." *British Journal of Political Science*, 29, pp 205-216
- Franklin, Mark N. (2001) "The dynamics of electoral participation, in: Laurence Leduc, Richard Niemi & Pippa Norris (eds) *Comparing Democracies: Elections and Voting in Global Perspective* (Thousand Oaks, CA: Sage).
- Franklin, Mark (2002). "The voter turnout puzzles", *Analise Socia*, 38, pp. 321–338.
- Translation into Portugese of a 2002 conference paper presented at the Fulbright Brainstorm Conference on Voter Turnout, held in Lisbon, Portugal, February 2002.
- Gosnell, Harold F. (1927). *Getting Out the Vote: An Experiment in the Stimulation of Voting* (Chicago, IL: University of Chicago Press).

- Gupta, D. (2004). *An analysis of Indian elections*, Appendix D. Australia South Asia Research Centre, Australian National University. Retrieved 2008-11-20.
- Lijphart, Arend (1997). "Unequal Participation: Democracy's Unresolved Dilemma." *American Political Science Review*. vol. 91 (March 1997): 1–14. p. 12
- McMillan, Alistair (2005). *Standing at the Margins: Representation and Electoral Reservation in India* (Oxford: Oxford University Press).
- Parry, G., Moyser, G. & Day, N. (1992). *Political Participation and Democracy in Britain* (New York: Cambridge University Press).
- Radcliff, Benjamin (1992). "The welfare state, turnout and the economy: a comparative analysis", *American Political Science Review*, 86(2), pp. 444–454.
- Radcliff, Benjamin (1994). "Turnout and the democratic vote", *American Politics Quarterly*, 22, pp. 259–276.
- Radcliff, Benjamin (1995) "Turnout and the vote revisited: a reply to Erikson", *American Politics Quarterly*, 23, pp. 397–403.
- Riker, William H. & Ordeshook, Peter C. (1968). "A theory of the calculus of voting", *American Political Science Review*, 62, pp. 25–42.
- Rosenstone, Steven J. & Hansen, John Mark (1993). *Mobilisation, Participation and Democracy in America* (New York: Macmillan).
- Tullock, Gordon (1971). "Adam Smith and the prisoners' dilemma", *The Quarterly Journal of Economics*, 100 (Supplement), pp. 1073–1081
- Varshney, Ashutosh (2000). "Is India becoming more democratic"?, *The Journal of Asian Studies*, 59(1), pp. 3–25.
- Verba, Sidney & Nie, Norman H. (1972). "Participation in America": *Political Democracy and Social Inequality* (New York: Harper & Row).
- Wolfinger, Raymond E. & Rosenstone, Steven J. (1980). *Who Votes?* (New Haven, CT: Yale University Press).
- Yadav, Yogendra (2000). "Understanding the second democratic upsurge", in: Francine Frankel et al. (eds) *Transforming India: Social and Political Dynamics of Democracy* (Oxford: Oxford University Press), pp. 120–145.

THE USE OF ART AND CULTURE BY POLITICS IN A TOTALITARIAN STATE. (ALBANIA)

Anila Mullahi, PhD, Doc

Department of Literature in the Faculty of History and Philology,
Tirana University, Albania.

Abstract

From ancient times up to contemporary the subjective and affective aspect of literature has been considered to be subtle aspects, but at the same time the most important mean to achieve and retain the power. The political power that came into force in Albania, after 1944, as any other authoritarian power, used the aesthetics as a mean to control the masses. The relation of aesthetics to politics, in these times can be seen through a twofold point of view: On one hand there is the politicizing of art and on the other hand the struggle to aestheticize the politics.

The writer and the artist in general was not any more an individual with a specific education, or with a notable culture or talent. The artist was anyone who was sufficiently indoctrinated and was to some extents talented, and who could put on the ideology an artistic veil.

By employing as a base the deformation of the aesthetical and philosophical ideas of Hegel, which mystify and instrumentalize art as a didactic and moral mean, art was actually used as an effective mean of propaganda.

The publishing of literary periodicals, opening exhibitions, giving prizes etc., were all activities which aimed to create the idea that art had a quantitative and qualitative improvement and that it even was in the borders of geniality. In reality the art of this epoch, was mainly an artistic mediocrity, but a very effective propaganda. Many artists, who were appraised for their art, actually were praised for the effective propaganda in their works.

Keywords: Art, aesthetic, conformism, ideologies, substitution, obligation, entropy

Introduction

Literature has often been seen as one of the most efficient ways to synthesize ideas, indefinite values or specific ideologies, becoming an issue of debate for its specific nature and the reports it builds with the historical and life time. All the literary works were created by people who belong to a certain cultural and political ethnicity and to a certain time period, and at the same time these people have a certain position in the hierarchy of the society. More than an uninterested activity, the literary work is the product of an act which holds specific values, which are closely related even to other dominating, outsider forces.

From ancient times up to contemporary the subjective and affective aspect of literature has been considered to be subtle aspects, but at the same time the most important mean to achieve and retain the power. Foucault again and again emphasized that: *power is not a substance that can be accumulated and owned by the State or by a leader, nor a purely repressive device, but a continuous productive process, tightly connected to subjectivity throughout the whole social body.* (Foucault 1980)

The political power that came into force in Albania, after 1944, as any other authoritarian power, used the aesthetics as a mean to control the masses. The relation of

aesthetics to politics, in these times can be seen through a twofold point of view: On one hand there is the politicizing of art and on the other hand the struggle to aestheticize the politics.

Under the gown of a high appreciation for the art, it was required to attach a great importance to different creative fields and to artists, offering them suitable financial conditions to complete the artistic works. Art because of its specific nature needs financial support, and sometimes the artist makes custom-made artworks or artworks whose topics are predetermined. Such a phenomenon has been known since the Greek and Roman Antiquity, but also during the Middle Ages or the Renaissance, when the clerics used to finance the artists. Even the contemporary art is related to both the market demand and to the criteria set by the critique the art world.

Notwithstanding, *"the protectorate"* of the communist state to the art, was of a different kind. Art during this period was under the control of small groups of people who belonged to the partial system, and who did not have any artistic skill, nor a rich cultural background.

The writer and the artist in general was not any more an individual with a specific education, or with a notable culture or talent. The artist was anyone who was sufficiently indoctrinated and was to some extents talented, and who could put on the ideology an artistic veil.

Prohibiting writers of the tradition, with who they did not share the same political ideas or who were against homogeneity, even to the stylistic homogeneity, made art remain in the hands of people who little knew about art and its specificity.

In general, religion is considered to be an efficient mean to be used by the politics. Nevertheless, the communist country very soon prohibited the religion, considering it as unacceptable. This mean was cleverly substituted by the art, giving it the role that religion had to play in legitimizing the power.

Most of the objects of worships were destroyed, or were converted to the so-called 'cultural houses', to accentuate this substitute even more. The substitute was obvious even in discourse or terminology; for The Association of Writers was said that it was the Temple of art, for the specificity of the word in art it was said that it was the Holy Word.

Religion had often used the anesthetization in its rituals and communicative models with people, and such a thing had always resulted effective. Learning from the utilization of the aesthetic aspect to lure masses by religion, it was decided that religion would be substituted by art and art would be used by politics as the best mean to lure the masses. It seems like manipulating art was easier than manipulating religion.

Soon the painting started having as a central theme the substitution of the church saints with hero-saints of social realism. If the paintings of religion presented saints who sacrificed for the sake of their religious belief, the paintings of social realism presented the new saints who would die for the sake of the party and the political ideal. Saints were substituted by the trinity image of the worker, the soldier and the hick. The paintings in which the Jesus Christ was talking to people were substituted with the image of the leader who talks to the members of the party or to common people, persuading them about the holy word of the party. For example as in the compositional painting: *"Knee to knee with the people. As in the biblical paintings, the most cultivated genre was the Figural Composition, which has in its bases a specific, set subject, and which does not need the viewer to recompose the painting it his mind, and especially which is able to fulfill massive evocations"* (Mema 2002: 120, my translation).

In particular the caption which accompanied the work was an obvious propaganda. For example: *The voice of the mass, The party was established, We break the siege, Handing out the land patents* etc.

In Albania the substitution of religion by art, was accompanied by the substitution of art by propaganda. At the same time there was an assault on all the people who could be inculcated as collaborators and part of the church, and also on the art proponents, the so-called bourgeois or '*degenerate artists*'. This accusation is identical to the one that the Nazi party did in 1937, against the works of all artists who did not uphold it. (Stollman 1978: 43)

The totalitarian powers, let them be left-winged or right-winged, in the tendency to attack real art and in the struggle to use it, are more similar than different to one-another.

By employing as a base the deformation of the aesthetical and philosophical ideas of Hegel, which mystify and instrumentalize art as a didactic and moral mean, art was actually used as an effective mean of propaganda.

The publishing of literary periodicals, opening exhibitions, giving prizes etc., were all activities which aimed to create the idea that art had a quantitative and qualitative improvement and that it even was in the borders of geniality. In reality the art of this epoch, was mainly an artistic mediocrity, but a very effective propaganda. Many artists, who were appraised for their art, actually were praised for the effective propaganda in their works.

The art is characterized by specific codes and conventions which remain as such, in relation to the artistic tradition. Departing from it means losing continuity. Massivism and conformism specifically makes especially an artist lose the ability to create different, individual experiences. This phenomenon is what Nietzsche considers as *the dissolve of the individual in the plain generality, which stands for the mob, the raddle which approaches the vulgarism* (Ferri 2002: 172, my translation).

In literature, the writers created works which had a form that induced the emotions of the public, with a murky pathos and powerful energy. The subjects and narrations were merely simple, not complicated and built the myths of the new ideals which were repetitive and were presented as eternal. Some of these ideals were collectivism, the glorious past, and the sacrifices during war, the omnipower of the leader etc.

The art, noticeable for its specificity, which offers subjective and unique perception of the reality, was transmuted into an activity which offered to the mind of a person congealed models and ideas, which were not at all belonging to life. The works were similar to one another both for their thematic and for the way of constructing figures.

Figures such as the partisan who gives his life for the homeland, the labourer and the farmer that go to work and their only aim is to build the socialism are permanent and given as per the artistic models by using the narrative fantasy, designed in certain unusual realities and with the presence of simulation devised theatrical rituals.

Just like the obligatory homogeneity in politics, it happens even in art. You can feel the opposition to pluralism, the need and the assessment of different innovations, individuality, and sensuality, free and creative imagination. It is against the difference in style, as in every field of life.

The required homogeneity, the obligation to go in one direction lead to obligated entropy. By pressing men against Each Other, total terror destroys the space between say. (Arendt, 1973: 356).

Recognizing the value and absolute weight of art, by transforming the art into propaganda it was aimed the mass indoctrination. A series of links controlled the theatre, the literature, the painting, radio-TV, so through the attraction that the art had and the artistic veil to induce and topopagandize the only ideology. Art was used to hide what really happened.

Crowds gathered to the sound of songs devoted to the party or the leader but since it the sound was beautiful, the tune remained in your mind. They staged theatre's plays that often were interrupted by 'shootings' of the characters that would articulate slogans and later the mass driven from the character's words would pass on cheering. The combination of art

and propaganda in the theatre was the most visible and effective due to the specificity of the theatre that has direct contact with masses of individuals simultaneously.

The Autocratic governs support the propaganda, to indoctrinate the mass. After the '44 the ones that took power built an entire system of effective propaganda for the masses. Art with the special attraction that has is the most appropriate and influential to transmit the propaganda behind it, and people became disoriented and get engaged by organizations that involve them in their in their structures indoctrinating them and thus they became part of the mechanism.

Art has the ability to expose and through it to implement his intense influence on people. Exactly "the value exposure" was used by the propaganda to be successful. In many cases we do not talk about politicized art, but for propaganda build mimicking the aesthetic models.

Art becomes perception in distraction, getting away by his specifics he takes on the hardest and most important task where it can mobilize the masses "(Benjamin 1998 [1923]: 158).

Benjamin writes: Self human alienation has reached such a degree to taste the aesthetic pleasure in first order, the extermination of his own, this is how it is with the esthetical that the fascism practice, the communism responds to it by politicizing the art. Aesthetization of the self-destruction to the human being is noticeable in the way that the struggle class becomes a repeated theme of literary subjects.

The architecture is also one of the areas that have an aesthetic nature, but it was also put on political function. Since the earliest times, constructions such as pyramids, temples, palaces, mausoleums, cathedrals, are objects where are combined the aesthetics and the aim to reflect the power.

What characterizes the entire architecture of authoritarian systems is Monumentalism, which symbolizes the illusion of solidarity, strength and sustainability. Monumentalism, on the other hand, although it requires an Enormous Amount of Collective Labour, is basically a personal project. (Mandoki, 2003: 65).

Figures such as the partisan who gives his life for the homeland, the labourer and the farmer that go to work and their only aim is to build the socialism are permanent and given as per the artistic models by using the narrative fantasy, designed in certain unusual realities and with the presence of simulation devised theatrical rituals.

Just like the obligatory homogeneity in politics, it happens even in art. You can feel the opposition to pluralism, the need and the assessment of different innovations, individuality, and sensuality, free and creative imagination. It is against the difference in style, as in every field of life.

The required homogeneity, the obligation to go in one direction lead to obligated entropy. By pressing men against Each Other, total terror destroys the space between say. (Arendt, 1973: 322-56).

Recognizing the value and absolute weight of art, by transforming the art into propaganda it was aimed the mass indoctrination. A series of links controlled the theatre, the literature, the painting, radio-TV, so through the attraction that the art had and the artistic veil to induce and to propagandize the only ideology. Art was used to hide what really happened.

Crowds gathered to the sound of songs devoted to the party or the leader but since it the sound was beautiful, the tune remained in your mind. They staged theatre's plays that often were interrupted by shootings' of the characters that would articulate slogans and later the mass driven from the character's words would pass on cheering. The combination of art and propaganda in the theater was the most visible and effective due to the specificity of the theater that has direct contact with masses of individuals simultaneously.

The Autocratic governs support propaganda to indoctrinate the mass. After the '44 the ones that took power built an entire system of effective propaganda for the masses. Art with the special attraction that has is the most appropriate and influential to transmit the propaganda behind it, and people became disoriented and get engaged by organizations that involve them in their in their structures indoctrinating them and thus they became part of the mechanism.

Art has the ability to expose and through it to implement his intense influence on people. Exactly "the value exposure" was used by the propaganda to be successful. In many cases we do not talk about politicized art, but for propaganda build mimicking the aesthetic models.

Art becomes perception in distraction, getting away by his specifics he takes on the hardest and most important task where it can mobilize the masses "(Benjamin 1998 [1923]: 158).

Benjamin writes: Self human alienation has reached such a degree to taste the aesthetic pleasure in first order, the extermination of his own, this is how it is with the esthetical that the fascism practice, the communism responds to it by politicizing the art. Aesthetization the self-destruction of the human being and this is noticeable in the way the struggle class becomes a repeated theme of literary subjects.

The architecture is also one of the areas that have an aesthetic nature, but it was also put on political function. Since the earliest times, constructions such as pyramids, temples, palaces, mausoleums, cathedrals, are objects where are combined the esthetism and the aim to reflect the power. What characterizes the entire architecture of authoritarian systems is Monumentalism, which symbolizes the illusion of solidarity, strength and sustainability. Monumentalism, on the other hand, although it requires an Enormous Amount of Collective Labour, is basically a personal project. (Mandoki, 2003: 65).

In Albania were built several buildings of granite and marble, often destroying significant buildings of the past culture. These buildings have an obvious symmetry, cold and lifeless, but very large in size and compact as are the Pyramid, the Palace of Culture, and the Palace of Congresses, which had no connection with the tradition until that moment, but intended to show the power – govern strength, and to touch upon the individual pride. Monumentalism was manifested even on the size of the paintings and sculptures dedicated to the figure of the leader, thus, further emphasizing the pettiness or the smallness of the individual and the emotions of fear. Monumentalism was used to hide instability and the irrationality of what was happening.

Conclusion- Aesthetization of politic

The more effective strategy of imposition is the way which through teasing the personal emotions leads to certain political decisions of the individual.

The political sphere is not completely based on rational arguments, not even in the authority of the leader. It calls the need of pathos which produces hegemony in the nation and ruling class consensus. The rhetoric was the typical weapon in all authoritarian regimes and democracy it is combined with aesthetics through formal elements such as rhythm, repetition of the same word or phrase, image, etc. Through these the level of Pathos gets increased, which channels the emotions towards the appointed political decisions.

The speeches of communist leaders, in many cases were characterized by the veil of figurative expression, but it had nothing to do with aesthesis, but their trying to manipulate not only the masses, but even the elite by presenting their ideology as the only one and inevitable, and as result of the evolution and as the much sought answer.

Aesthetization of politics and making it visible through stressing the Pathos has been necessary and is evident in every society, but in the authoritarian governments is of another

kind. Benjamin for this relation would say: All Efforts to render Aesthetic politics culminate in one thing, war. (Benjamin 1996 [1923]: 158)

Large parts of the works of art, paintings, literature, Sculpture, architecture, theatre, are the central themes of liberation struggle. War appears aestheticized making readers believe that "it was beautiful" as was called for the first time by Marinetti in the manifesto of the colonial war in Ethiopia, while death was the grandest, not highlighting the too terrible consequences that it has for all people.

It is aesthetized the past war, but it is aesthetized even the preparations for what may come. It happens what is called by Stollman: aesthetization of military. It is aesthetized the military march, the marching of the army in front of people does not appear as a threat, but beautiful to see. The army marched in front of people in military parades as a monumental massiveness, structured as a strict geometry, mimicking the aesthetic effects. It was theatrically realized, mimicking the war; battle tanks, hand on hands battle, dancing gymnastics, marches with horses and dogs: all were attempts to aestheticize the war.

Size of monumentalism in architecture also appeared in festive ceremonies, the parades for 1st May, the parades on the day of liberty, where the strength of collective identity is confronted the individuality. You can see the aesthesis at membership meetings or communist leaders meeting with people, care for lighting, reverberation voice, uniforms, the presence of children with traditional costume giving flowers, pronounced presence of festive colours, mostly red. Melting and simultaneous use of certain elements of architecture, the presence of sculptures, music, poetry, theatrical elements, was used to create whole that would influence the effectiveness of the "rituals" of power.

This kind of aesthetic which has been used since the earliest times in pagan rituals, then in the important religious ceremonies and the presentation ceremonies of any kind of power in time, it resulted to have the effectiveness in that period. In this case we cannot talk about politicized art, but attempt of aesthetic politics.

The politicized art and the aesthetic politic had created what could be called a beautiful illusion but a complete lie. Art was made part of the politics, but not in the sense to smooth it, but in the sense to be used as a tool.

References:

- Arendt, Hannah, *"The Origins of Totalitarianism"*, Harvest Book, 1973.
 Benjamin Walter, *"Illuminations"*, Korbi, Tirana, 1998
 Stollman, Reuner, *"Fascists politic as a total Work of Art, New German Critique"*, 1978.
 Mandoki, Katia, *"Terror and Aesthetics: Nazi Strategies for Mass Organization, Critical Concept in Political Science"*, University of Nottingham, Routledge, 2003
 Lulzim Mema, *"Studime për artin"*, Qendra e studimeve të artit, nr. 7, Tirana 2002.
 Ferri, Luk, *"Homo Aestheticus"*, Shtëpia e Librit dhe e Komunikimit, Tirana 2002.
 Foucault, Michel, *"Power/Knowledge: Selected Interviews and Other Writings, 1972-1977"*, Colin Gordon, 1980.

A NON-ZERO SUM GAME: HOW GAME THEORY CAN INFORM BETTER TRANSBOUNDARY WATER RIGHTS TREATY DRAFTING

Michael J. Dema, J.D., A.M.

Assistant City Attorney, City of St. Petersburg, Florida, USA

Abstract

Despite its fundamental role as to the very existence of humans and their economies, the provision of clean water to their citizens remains a challenge to governments across the globe. This challenge presents itself as a classic interdisciplinary opportunity to blend science, law, and economics into an adaptive management solution ensuring the availability of this critical resource to all of the earth's inhabitants, regardless of location or socioeconomic status. This paper will explore how countries manage transboundary water resources, and how cooperative strategies may emerge that benefit each country that shares an international river or lake. In particular, this research explores how game theory and international treaties integrate the natural geospatial and temporal variability of hydrologic cycles into malleable instruments that ensure water supply and quality even in times of drought. Drawing on the long-term feedback available from the United States' and Mexico's International Boundary and Water Commission treaty for the Rio Grande River (and several smaller transboundary rivers), this paper asserts that even narrowly self-interested states can reach agreements in managing scarce water resources that lead to non-zero sum outcomes and the availability of clean water at all times for their citizenry.

Keywords: Water rights, treaty, game theory

Introduction

The potential for conflict over shared, scarce water resources should not surprise even the greatest of optimists. A finite (albeit naturally cyclic) resource like water is subject to significant impacts as global human population continues to rise. With increases in population come growing threats from climate change, pollution, and general overexploitation of the earth's freshwater. Novel approaches to allocation of international water resources will require the creativity to meet an ever-increasing demand, in a manner that is sustainable to the planet's environment and to future generations. With estimates ranging from 215 to 268 international watersheds, covering nearly half of the world's surface, opportunities abound for both cooperation and conflict alike.¹⁵⁰ In seeking cooperative outcomes, a wide variety of international agreements, such as treaties, commissions, and conferences, have been pursued throughout recent world history. The present research draws from one such of these major instruments: the United States' (U.S.) and Mexico's International Boundary and Water Commission (IBWC).

A brief overview of the unique challenges that exist with respect to international water rights is first necessary. At its core, the allocation of water, before it is ever in dispute among

¹⁵⁰ Clare Shine and Cyrille de Klemm, *Wetlands, Water and the Law: Using law to advance wetland conservation and wise use*(1999), at 271; Stephen E. Draper, *Model Water Sharing Agreements for the Twenty-First Century* (2002), at iv.

humans, is first subject to the laws of nature. Some regions are naturally water-rich, while others are bone-dry. Hydroclimatological conditions are more of a burden for some countries than others, with the poorest countries left most vulnerable.¹⁵¹ Additionally, the hydrologic cycle is prone to inter-annual variation, resulting in prolonged droughts in many regions of the world, conditions that are expected to be exacerbated by climate change in the coming years. This inherent natural variability, both geospatially and temporally, ultimately dictates the ground rules for water resource allocation. Predictive tools, such as surface water and groundwater models that integrate water supply variability, are the lynchpin of an emerging interdisciplinary body of science, international law, and economics that is the focus of this study. The IBWC is one attempt to merge these bodies of thought into a malleable and adaptive management tool.

The IBWC, comprised of the U.S. and Mexico, “relate[s] to the utilization of the waters of the Colorado and Tijuana Rivers, and of the Rio Grande,” which are a series of large, transboundary rivers (Figure 1).¹⁵² The Rio Grande in particular is one of the most water-stressed watersheds in the world.¹⁵³ The IBWC is best described as a *series* of treaties that govern the allocation of water resources shared between the two nations. Originating in 1884 and evolving since, the agreement between the two nations has consistently served as a starting point for conflict resolution and cooperation regarding freshwater supply. Although many of the substantive allocation issues were drafted in the IBWC’s primary 1944 treaty, it remains a dynamic document reflecting changes in the hydrologic and diplomatic environment shared by the U.S. and Mexico.¹⁵⁴ Among the oldest of such agreements in the world, the IBWC provides the opportunity for long-term assessment of the instrument’s efficacy, and it has been previously identified as a model for international water dispute resolution.¹⁵⁵ While leaving some things to be desired, including equal bargaining power between the parties, the IBWC is a binding international treaty that can function as a model for cooperative water allocation in other water-scarce, transboundary regions.



Figure 1. The U.S. - Mexico Border (including transnational waterways in red).¹⁵⁶

¹⁵¹See generally, Leif Ohlsson, *Hydropolitics*(1995).

¹⁵²*Treaty Between the United States of America and Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande* (1944).

¹⁵³Rebecca LTeasley and Daene C. McKinney, *Water Resources Management in the Rio Grande/Bravo River Basin Using Cooperative Game Theory* (2011).

¹⁵⁴*Id.*

¹⁵⁵See Heather L. Beach, Jesse Hammer, J. Joseph Hewitt, Edy Kaufman, Anja Kurki, Joe A. Oppenheimer, and Aaron T. Wolf, *Transboundary Freshwater Dispute Resolution* (2000), at 119.

¹⁵⁶Adapted from: http://www.ibwc.gov/Files/US-Mx_Boundary_Map.pdf

Operating under the assumption that water is a public economic good, and that water treaties are essentially contracts for the allocation of this commodity, the goal of this research is to assess, *post facto*, the successes and lessons learned from the IBWC and attempt to use this knowledge to aid the drafting of future water rights treaties. The method to be used for this analysis is a body of economics known as game theory. Game theory provides a useful framework for analyzing the strategic decision-making of riparian states, but is still in its nascent stages as a *pre-drafting* tool.¹⁵⁷ Ultimately, this assessment seeks to turn hindsight into foresight in the creation of equitable and sustainable instruments of international water resource development rights, evidenced by the recommendations made in Section IV, *infra*.

Background

Primer in International Water Law

Generally, international rivers are those fluvial waters which flow within drainage basins that span at least two countries.¹⁵⁸ This definition has expanded over the years to include international catchments, as international water law has embraced the watershed approach to water resource management.¹⁵⁹ Central to the study of international water law is the notion of a *riparian state*, which refers to a country where an international river is located.¹⁶⁰ Of further importance are the distinctions between upstream riparian states and downstream ones and the changing roles states play as water tumbles toward the sea.¹⁶¹ A major theme of the present analysis will thus focus on the equitable and sustainable distribution of the waters from international rivers among multiple riparian states. This theme, of course, raises new questions: What is equitable and what is sustainable?

Equitability is a concept that has manifest itself as the principle of *equitable utilization* over the past forty-plus years of water law development.¹⁶² In 1970, Finland recommended to the United Nations (U.N.) that non-navigability use agreements for international watercourses should strive for “an equitable apportionment of shared water resources.”¹⁶³ Somewhat unsurprisingly, this call for new rules was met with belligerence by many of the world’s upstream riparian states.¹⁶⁴ Not until 1997 did accord occur, when the U.N. adopted the seminal “Convention on the Law of Non-Navigable Uses of International Watercourses” (Convention) and notions of equitability, sustainability, cooperation, and conflict resolution were forever etched into the stone of far-reaching international agreements.¹⁶⁵

The Convention calls on riparian states to use and develop international watercourses with consideration of other riparian states’ interests and an eye towards protection of the waterbody.¹⁶⁶ These rights and duties are framed at a rote level in terms of morality, that “people should be guaranteed this vital water as part of their human rights.”¹⁶⁷ The Convention also sets the stage for cooperative arrangements in the allocation of international water resources. While recognizing the right to utilize a watercourse, the Convention also

¹⁵⁷See, e.g., Teasley and McKinney (2011) and K. Madani, *Game Theory and Water Resources*, 381 J. Hydrology 225-238 (2010).

¹⁵⁸Ariel Dinar, Shlomi Dinar, Stephen McCaffrey, and Daene McKinney, *Bridges over Water: Understanding Transboundary Water Conflict, Negotiation and Cooperation* (2007), at 54.

¹⁵⁹*Id.*

¹⁶⁰*Id.*, at 55.

¹⁶¹*Id.*, at 179.

¹⁶²Ashok Swain, *Managing Water Conflict: Asia, Africa, and the Middle East* (2004), at 164.

¹⁶³*Id.*

¹⁶⁴*Id.*

¹⁶⁵*Convention on the Law of Non-Navigable Uses of International Watercourses* (1997).

¹⁶⁶*Convention on the Law of Non-Navigable Uses of International Watercourses* (1997), Art. 5, §1.

¹⁶⁷Leif Ohlsson, *Hydropolitics* (1995), at 181.

creates a duty to cooperate among riparian states.¹⁶⁸ This duty to cooperate theoretically necessitates negotiating fair distribution of the limited and shared waters among riparian states.¹⁶⁹

If equitability refers to the present fairness in resource allocation, then sustainability encompasses notions of futurity as well. To wit, *sustainable development* is, without hyperbole, the grand unified theory of the international environmental movement. Hailed as a cure-all to the seeming mutual exclusivity of economic growth and environmental protection, sustainable development now thematically links every major international meeting and accord, since the famous 1987 Brundtland Commission report, *Our Common Future*.¹⁷⁰ Nothing short of ground-breaking, *Our Common Future* simultaneously espoused the merits of sustainable development and multilateralism among states in pursuing shared (i.e., global) environmental goals.¹⁷¹ The progeny of the Brundtland Commission report include 1992's U.N. Earth Summit and Agenda 21 in Rio de Janeiro, which placed environmental issues, including water allocation, at the forefront of the global consciousness.¹⁷² The afterglow of this revolution was short-lived, however, as the prickly issues of who gets what (and when do they get it) persisted.¹⁷³

The problem is that equitability and sustainability are not designed to prioritize economic efficiency, yet states still seek to maximize the latter. The aspirational tone of the Convention, Brundtland, and Rio is noble in theory but difficult to apply in practice. Nonetheless, water rights law presents a serious and unique obstacle in its own right. The commoditization of water, a substance implicit in the very survival of a human being, has added an economic component to a fundamental right. The nightmarish scenario of already-impoverished (in terms of both wealth *and* water resources) nations not being able to afford to provide their citizens with adequate drinking water supplies is already occurring.¹⁷⁴ Despite the rather unholy alliance of fundamental rights and economics, the nature of the issue requires creative solutions that rise above the aspirations of documents like the Convention, and embrace the dismal science. With an uneasy acknowledgement of the intertwined destinies of water rights and economics, an introduction to the governing principles of game theory ensues.

A. Game Theory and Resource Allocation Strategies

Because so much of international law is customary and not binding, *per se*, additional methods should be incorporated when implementing a transnational instrument governing water allocation.¹⁷⁵ One such method is derived from economics, known as game theory, and can potentially be leveraged as a way to make water treaties more efficient in their design. The idea is based on the notion that having an understanding of the potential outcomes of a treaty, both desired and not desired, is advantageous in drafting an instrument that gears its signatories towards the optimum outcome for all states.¹⁷⁶

¹⁶⁸ *Convention on the Law of Non-Navigable Uses of International Watercourses* (1997), Art. 5, §2.

¹⁶⁹ Leif Ohlsson, *Hydropolitics* (1995), at 182.

¹⁷⁰ Ken Conca, *Environmental Governance after Johannesburg: From Stalled Legalization to Environmental Human Rights?* (Winter, 2004/Spring, 2005), at 124.

¹⁷¹ *Id.*

¹⁷² *Id.*, at 125.

¹⁷³ *Id.*

¹⁷⁴ See, e.g., Leif Ohlsson, *Hydropolitics* (1995) and Dik Roth, Rutger Boelens, and Margreet Zwarteveen, Eds., *Liquid Relations: Contested Water Rights and Legal Complexity* (2005) for in-depth explorations of the riparian states struggling to provide for their population's basic water demand, including states as diverse as Israel, India, Chile, Ecuador, and South Africa.

¹⁷⁵ Ariel Dinar, Shlomi Dinar, Stephen McCaffrey, and Daene McKinney, *Bridges over Water: Understanding Transboundary Water Conflict, Negotiation and Cooperation* (2007), at 55.

¹⁷⁶ *Id.*, at 81.

Game theory is the use of mathematical models to predict the behavior of two or more “players” in resource allocation scenarios where multiple outcomes are possible.¹⁷⁷ Generally, game theory refers to an analytical framework for assessing the likelihood of a particular social outcome.¹⁷⁸ It comes with its own unique jargon, which will be introduced here. The *players* (e.g., individuals, corporations, or, pertinent to the present research, riparian states) are the rational decision makers taking action.¹⁷⁹ *Strategies* refer to the alternatives each player has to choose from.¹⁸⁰ *Information*, either private (not known to all players) or public (known to all players), is the data upon which decisions are made.¹⁸¹ The players, strategies, and information are governed by the *rules of the game*, which include laws, regulations, treaties, and natural processes (e.g., hydrologic periodicity).¹⁸² Finally, there are *social outcomes* and *payoffs*. Social outcomes refer to the end result of a particular scenario playing out, whereas payoffs relate to the individual player’s valuation (i.e., gain or loss) of a given outcome.¹⁸³

The strategies in the “universe” of possible game theory approaches can be explained by use of a continuum (Figure 2). On one extreme is the “narrow self-interest” strategy where a player simply wants to maximize their own benefits, with zero consideration of the other players.¹⁸⁴ Any benefits accruing to the other players are solely the result of happenstance. At the other extreme is “pure altruism,” a strategy that is far less likely to be found in any real-world scenario.¹⁸⁵ The altruistic player puts the benefit of the other players ahead of their own, even if it is to their detriment. Neither of these strategies leads to a player’s long-term success; the former is a recipe for conflict creation, while the latter lacks self-preservation. Generally, strategies fall somewhere in the middle; a primary goal of this research is to promote strategies that embrace cooperation in the allocation of scarce, transboundary freshwater resources.

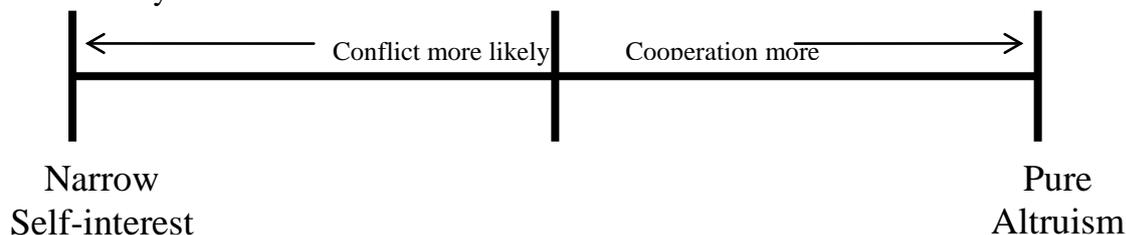


Figure 2. A simplistic continuum depicting the range of game theory strategies.

Water allocation, in a game theory sense, is a non-zero sum game. A *non-zero sum game* refers to a situation where player strategies *may* result in social outcomes where each player receives a net gain, commonly referred to as a “win-win” scenario.¹⁸⁶ In this emerging field of alternative dispute resolution (ADR) in international law, zero sum games are revised as non-zero sum games, where fair division outcomes are the only acceptable solutions.

¹⁷⁷Talbot Page, *Environmental Economics and Policy: A Modeling Approach* (2002), at 2-8.

¹⁷⁸*Id.*

¹⁷⁹*Id.*

¹⁸⁰*Id.*

¹⁸¹*Id.*

¹⁸²*Id.*, at 2-9.

¹⁸³*Id.*

¹⁸⁴*Id.*, at 2-10.

¹⁸⁵*Id.*

¹⁸⁶See generally, Madani, K. *Game Theory and Water Resources*, 381 *J. Hydrology* 225-238 (2010). This outcome contrasts with the classic “cake cutting” problem, where a finite resource (the “cake”) must be divvied up among the players. In this zero sum game, as one player takes more cake, there is necessarily less cake for the other players. The other players become envious and conflict is more likely to ensue as each player seeks to maximize their own benefits.

Although clean water is considered to be a finite resource, advancements in technology, environmental awareness, and cooperative strategies can optimize human ability to sustainably use this resource.¹⁸⁷ In the parlance of a famous American expression, it may thus be possible to have one's cake and eat it too.

Optimal resource utilization is the best case endgame scenario, from an economic perspective, in non-zero sum games.¹⁸⁸ *Optimal* refers to the players in the game each receiving their maximum possible share over all possible scenarios. However, strategies (unsurprisingly) tend toward narrow self-interest as a default starting position in negotiations. When the moral imperative to provide water to your *own* people trumps the moral imperative to provide water to *all* people, the narrow self-interest strategy wins every time. Optimal and economic efficient outcomes need cooperation by the players sharing the water resources to break logjams.¹⁸⁹

Luckily, as this paper strives to demonstrate, narrow self-interest and cooperation are not mutually exclusive strategies. Indeed, it is possible to imagine a scenario where one riparian state cooperates with their neighbor solely for preservation of their own interests. This type of cooperative behavior is exemplified in Egypt's dealings with the Nile River's upstream riparian states.¹⁹⁰ The Nile River situation is best described as adversarial, with the tenuous Nile Water Agreement of 1929 and the 1959 Agreement for the Full Utilization of the Nile dictating the terms of water allocation.¹⁹¹ There has been historically little love lost between Egypt and its upstream riparian states, with Egyptian President Anwar Sadat famously stating in 1979 that, "The only matter that could take Egypt to war again is water."¹⁹² The 1929 and 1959 treaties do not reflect a *spirit* of cooperation; they are strictly utilitarian from a self-preservation standpoint.¹⁹³ The agreements are effective, however, as conflict has largely been avoided in the volatile Nile River basin, and a tragic outcome has not befallen what is indisputably a world treasure.¹⁹⁴

B. The Tragedy of the Commons

The tragedy of the commons, the classic scenario envisaged by Hardin (1968), is an apt descriptor of the failings of the pure narrow self-interest strategy in the absence of cooperation.¹⁹⁵ The reader is asked to imagine a communal pasture (the commons) where herdsmen allow their cattle to graze.¹⁹⁶ Initially, there is plenty of pasture to share among the cattle, whose population remains well below the carrying capacity of the commons.¹⁹⁷ Indeed, it is this ampleness that spurs the tragedy, as each herdsman asks, "What is the utility *to me* of adding one more animal to my herd?"¹⁹⁸ Because the herdsman receives all of the benefits of having one more animal, while the increased strain of this animal on the commons is shared by all the herdsman, there is very little downside, at first.¹⁹⁹ The rational herdsman decides to add another; however, in the absence of cooperation, so does every other herdsman, such that the commons collapses under the cumulative impacts of overgrazing²⁰⁰.

¹⁸⁷*Id.*

¹⁸⁸*Id.* Also referred to as Pareto efficiency, this optimal outcome in game theory is often *only* attainable through coalition-building.

¹⁸⁹Sandra Postel, *Last Oasis: Facing Water Scarcity* (1997), at 80.

¹⁹⁰Ashok Swain, *Managing Water Conflict: Asia, Africa, and the Middle East* (2004), at 94-105.

¹⁹¹*Id.*, at 94.

¹⁹²*Id.*, at 98.

¹⁹³*Id.*

¹⁹⁴*Id.*, at 105.

¹⁹⁵Garrett Hardin, *The Tragedy of the Commons* (December 13, 1968), at 1243-48.

¹⁹⁶*Id.*

¹⁹⁷*Id.*

¹⁹⁸*Id.*

¹⁹⁹*Id.*

²⁰⁰*Id.*

The commons can no longer support one animal or herdsman.²⁰¹ This tragedy exemplifies the unfettered narrow self-interest strategy: casting a blind eye to the environment's limited carrying capacity leads to catastrophe.

The default position of self-maximization has real-world application in the water context. The Aral Sea, in Central Asia, is a familiar example of a tragedy of the commons. A victim of indiscriminate over-pumping for decades, the Aral Sea has become the poster child for environmental collapse. The once-vast inland "sea" (it is really a freshwater lake), has been steadily shrinking due to pumping stresses from the five countries that share its historic drainage basin.²⁰² In a region that is prone to ethnic conflicts and has lacked stability since the dissolution of the Soviet Union in 1991, the Aral Sea is precisely what can happen when cooperative strategies are lacking.²⁰³ The resulting collapse is clearly seen in Figure 3. Remarkably, despite a shared history that is less than conducive for cooperation, the five countries have recently recognized the regional importance of the Aral Sea and have begun workshops to shape their shared future.²⁰⁴ Long-term security in the region depends, in large part, on an ability to cooperate with respect to the region's most significant freshwater resource.²⁰⁵ A tragedy of the commons has led to a *post facto* cooperative outcome. Although an *a priori* solution is most desirable, progress is welcome in any form.

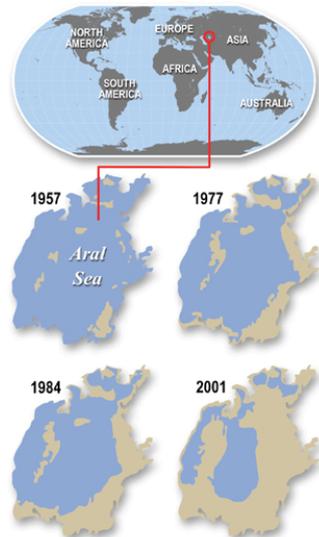


Figure 3. A real-life tragedy of the commons: the shrinking Aral Sea.²⁰⁶

C. The Role of Science

In this effort to change hindsight into foresight regarding the drafting of international water allocation instruments, special attention must also be paid to the unique scientific "law" that ultimately governs these issues.²⁰⁷ Before being bound by any contract, treaty, or

²⁰¹ *Id.*

²⁰² See generally, John E. Moerlins, Mikhail K. Khankhasayev, Steven F. Leitman, and Ernazar J. Makhmudov, *Transboundary Water Resources: A Foundation for Regional Stability in Central Asia* (2008). The five countries are: Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, and Kyrgyzstan. The Aral Sea proper is an international waterbody that spans the border between Kazakhstan and Uzbekistan. See also, *United Nations Aral Sea Development Programme* (2012), http://www.undp.org/content/uzbekistan/en/home/operations/projects/poverty_reduction/un-aral-sea-programme/ (accessed February 21, 2014).

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ *Id.*, at 4-7.

²⁰⁶ Adapted from: <http://www.bracsystemsontario.com/environment.html>

²⁰⁷ Author's aside: This section contains a generalized discussion of the role of hydrology in water rights law based on the author's experiences and does not reflect the views of other contributors.

agreement, players in the international water “game” are bound by the rules of nature. Hydrology is the first, and most significant, arbiter of water rights. This fact does not, of course, render humans powerless to nature’s whims, as mankind has routinely developed models based on long-term hydrological observations such that the floods and droughts that characterize our waterbodies are not surprising, even when not expected. There exists a natural periodicity (and regular peaks and valleys) in the earth’s water cycle that science has sought to understand for time immemorial. The development of water storage facilities such as reservoirs is a testament to this fact.

With greater awareness comes greater predictability, which is the point of the present research. Predictability is a grand goal when speaking of access to water, a fundamental need which is indisputable. Just as hydrologic modeling attempts to better understand our rivers, flexible agreements between states should recognize the inherent variability of surface water flows.²⁰⁸ Embracing the same approaches taken in hydrologic studies to minimize unexpectedness in the drafting of water allocation instruments will arguably lead to more cooperation and a better diplomatic environment for dispute resolution. Predictability equals *terra firma* in international dealings.

Analysis

A. Economic Asymmetries

That disparities exist among the earth’s states is self-evident: Asymmetries color the relationships between riparian states and they must be understood at the outset in treaty drafting. For example, one very important (and fascinating) consideration is cultural differences and how they can help predict a state’s behavior entering international water rights negotiations.²⁰⁹ A riparian state’s level of risk aversion or environmental awareness can be an integral aspect of their cultural identity. Additionally, a state may, as a matter of principle, give NGOs greater sway in intergovernmental negotiations. A more open (democratic) regime may, for instance, *culturally* embrace bringing stakeholders to the proverbial table in negotiation and deal-making.²¹⁰ This is a constructivist approach to international relations, which becomes validated over time as customary international law via the formation of treaties and agreements and through the interactions between groups and communities.²¹¹ Another example is economic asymmetries, which form the basis of the analysis portion of this study going forward.²¹²

²⁰⁸Frank A. Ward, *Forging Sustainable Transboundary Water-sharing Agreements: Barriers and Opportunities*, 15:3 Water Policy 386 (2013).

²⁰⁹See, Marco Verweij, *Transboundary Environmental Problems and Cultural Theory: The Protection of the Rhine and the Great Lakes* (2000), at 15-18 and 45-47. An emerging field within international relations seeks to humanize the differences between states and to consider such differences when negotiating transboundary agreements. Known alternatively as *cultural theory* or *grid-group theory*, this perspective recognizes that norms, mores, and institutions shape each state’s strategic approach to negotiating, bargaining, and risk allocation. While self-evident on its face, such an approach is only now gaining traction in international law studies. Although it is not the focus of the research at hand, the author strongly advocates such positive steps in the pre-drafting of water rights agreements.

²¹⁰*Id.*, at 47.

²¹¹See generally, Susan Park, *The World Bank, Dams and the Meaning of Sustainable Development in Use* (Winter, 2009).

²¹²See, Ariel Dinar, Shlomi Dinar, Stephen McCaffrey, and Daene McKinney, *Bridges over Water: Understanding Transboundary Water Conflict, Negotiation and Cooperation* (2007), at 179. A third type of asymmetry pertinent to this topic concerns geographical asymmetries. International rivers either flow through country borders (*through-border* rivers) or form borders (*border-creator* rivers). The dynamic among riparian states is heavily dependent on the type of international river at issue. A downstream riparian state is more disadvantaged in through-border scenarios because of the unimpeded access the upstream riparian state has to the water before it enters the downstream riparian. Theoretically, when two riparian states share a border

Economic asymmetries are best described as incongruities between two states in key indicators of economic development such as income or gross domestic product (GDP).²¹³ The interactions between two riparian states can be dictated by their relative economic circumstances.²¹⁴ Disparity between two riparian states is not necessarily a formula for abuse of negotiating power; rather, a pattern of negotiated outcomes is observed, typically resulting in tradeoffs.²¹⁵ The theory behind this phenomenon is explained by differential *willingness to pay* for a clean water supply among economically asymmetric riparian states.²¹⁶ Stated differently, riparian states may value differently the same level of access to water resources based on their economic circumstances.

More affluent riparian states generally have more stringent standards for water quality, and have a higher willingness to pay for its public water supply.²¹⁷ Conversely, less affluent riparian states may be inclined to accept lower quality water standards to meet its public demand.²¹⁸ As a result, wealthier riparian states may make up the difference in the water quality of shared resources by incentivizing the poorer upstream riparian state to meet its higher downstream standards.²¹⁹ The method most often employed to achieve this outcome is the *side payment*.²²⁰

Side payments are an efficient method to align incongruent self-interests into a “win-win” outcome for two or more states. While side payments are certainly an incentive to motivate a particular desired action out of an upstream riparian state (e.g., pollution abatement, reduced demand, or flood control), they also reflect the reality that some benefits enjoyed by the downstream state are created farther upstream.²²¹ Side payments are a type of tradeoff where cash is traded for an outcome that has a payoff *at least* in line with each riparian state’s desired end game. Therefore, effective side payments can be considered “win-win” outcomes: The upstream state gets cash, while the downstream state realizes gains in terms of water quality and/or supply.

Sensitivity to another riparian state’s economic situation can pay dividends to a state at a later date.²²² This type of payoff, known as *goodwill value*, is a collateral (and deferred) payoff to the “sensitive” state.²²³ Goodwill value accrues when a more affluent state takes on some or all of the costs of a shared water project or a negative externality (e.g., pollution) originating in the less affluent state, or when the richer riparian is disproportionately generous with a specific water allocation. In this social outcome, the richer riparian state may choose to flout customary international law, such as the “polluter pays principle,” or simply be generous, in an effort to cultivate a cooperative diplomatic milieu.²²⁴ Although a perverse

created by a river, the states are geographically symmetrical. In these cases, such as the U.S.-Mexico border, the role of economic asymmetries is magnified, and thus is the focus of the present research.

²¹³*Id.*, at 182.

²¹⁴*Id.*, at 183-87.

²¹⁵*Id.*

²¹⁶*Id.*

²¹⁷*Id.*

²¹⁸*Id.*

²¹⁹*Id.*

²²⁰*Id.*

²²¹*Id.*

²²²*Id.*, at 188-89.

²²³*Id.*

²²⁴*Id.* The “polluter pays principle” is a core tenet in environmental studies. It is an elegant approach to *post facto* environmental problem-solving: The creator of a negative externality such as pollution is also responsible for its clean-up and repaying the costs to those it impacted. It is closely aligned with the legal principle of damages and is pragmatic. As a common-sense approach, it is considered customary international law. The creativity of the game theoretic approach is thus starkly evident when a “victim pays” regime may be an acceptable outcome for the victim.

outcome, insofar as the victim of pollution or over-pumping also has to pay for the abatement of negative impacts, goodwill payoffs may yet result in a “win” for the more affluent victim. The benefits may manifest as future compliance of the less affluent state with a shared water project that is beneficial to the wealthier riparian, or the benefits may be more general (e.g., less contentious diplomacy).²²⁵ The goodwill is essentially “banked” in trust for future use by the more affluent riparian.²²⁶

B. The Environmental Kuznets Curve

A generalized model for the relationship between affluence and environmental degradation is useful as a backdrop for a discussion about economic asymmetries between two riparian states. The Environmental Kuznets Curve (EKC) (Figure 4) demonstrates the rudimentary inverted U-shaped curve characteristic of this relationship. It was originally developed in 1955 by Simon Kuznets to describe the relationship between affluence and income inequality over time and later adapted in the environmental context.²²⁷ Typically, it is hypothesized on an EKC that key indicators of environmental degradation such as pollution and resource depletion initially increase as a function of increasing economic development.²²⁸ Adherents to the EKC phenomenon hypothesize that environmental protection is a low priority for developing countries that are focused more on establishing political, economic, and civic stability within its populace and with its trade partners and neighbors.²²⁹ However, as per capita income increases over time, environmental degradation slowly begins to occur at a decreasing rate, as priorities shift to meet a growing need for resource protection and pollution abatement.²³⁰ Examples of this phenomenon in the U.S. are the National Parks Service, the EPA (and a host of other agencies), and complex regulatory schemes such as the Clean Water Act, the Clean Air Act, and the Endangered Species Act. It is argued that more affluent states pursue cleaner, more “information-intensive industries and services” while better enforcing their environmental regulations and spending more money on conservation initiatives.²³¹

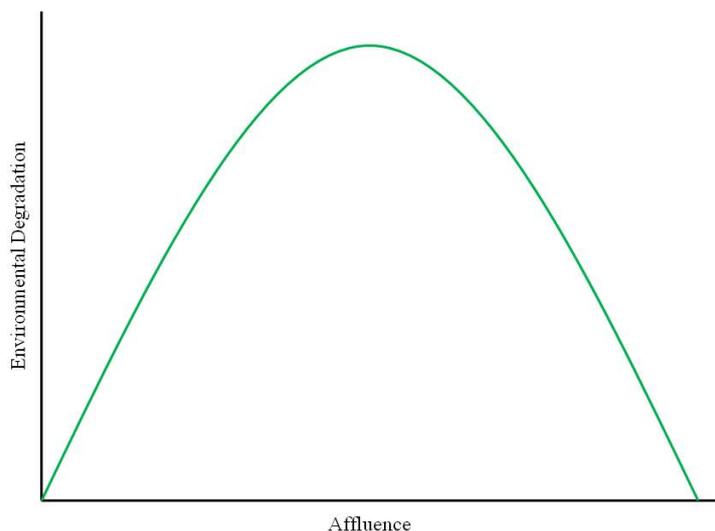


Figure 4. The environmental Kuznets curve.

²²⁵*Id.*, at 163-65.

²²⁶K. Madani, *Game Theory and Water Resources*, 381 *J. Hydrology* 225-238 (2010).

²²⁷David I. Stern, *The Environmental Kuznets Curve* (June, 2003).

²²⁸*Id.*

²²⁹*Id.*

²³⁰*Id.*

²³¹*Id.*

Rather than debate the merits of the EKC theory, this research instead chooses to apply it in the limited context of the priorities of two riparian states where economic asymmetries exist between the players. Reaping the benefits of this approach in the development of strategies in water allocation agreements starts with embracing its core tenets; that is, countries' environmental strategies (which include water allocation strategies) change as a function of their overall wealth. This notion fits well the reality of economic asymmetries between neighboring riparian states. It is thus understandable to see how narrow self-interest, as a default strategy, is reinforced by economic asymmetries, especially as poorer states attempt to protect those resources that are *already* under their control. However, this knowledge can also be used to aid strategy-making, *a priori*, in water allocation agreements. Returning to the IBWC, the very acceptance of this reality with respect to the U.S.-Mexico relationship has colored their agreements in the Rio Grande Basin for decades and resulted in social outcomes that differ markedly from customary international law and default strategies.

Turning now to the real-world implications of this model, the IBWC will be analyzed for examples of negotiated tradeoffs that represent "win-win" scenarios for the U.S. and Mexico.²³² (It is assumed for the purposes of this research that the EKC's predictions apply to the two riparian states and that the U.S. occupies a position farther along the X-axis than Mexico.²³³) Specific examples exist in the IBWC's history that demonstrate the aforementioned strategies of side payments (also known as cost-sharing) and goodwill value. Wastewater treatment and treaty amendment are two of the IBWC settings which illustrate the cooperative principles predicted by game theory.

A key consideration of the IBWC, above basic supply, is water quality.²³⁴ As such, three international wastewater treatment facilities have been built in U.S.-Mexico border metropolitan areas as a result of the IBWC: San Diego-Tijuana, Calexico-Mexicali, and Laredo-Nuevo Laredo.²³⁵ These joint construction projects are cost-intensive; but instead of apportioning costs based on population served or the amount of influent coming into the facility from each riparian state, the costs were distributed based on benefits received.²³⁶ The facilities were designed to meet the U.S.' higher water quality mandate.²³⁷ Coupled with the higher willingness to pay of the U.S., a solution was negotiated where the U.S. assumed a higher portion of the construction costs, even though Mexico was receiving the benefit of cleaner water as well.²³⁸ Further, as U.S. standards continue to rise, the U.S. makes side payments to the Mexico for the increased cost of operations in meeting these effluent benchmarks.²³⁹ A "win-win" outcome has occurred, with U.S. sanitation standards being met and Mexico receiving just compensation.

Amendments to the IBWC, such as cost-apportioning and side payment agreements, occur often and with little dispute between the two riparian parties to the agreement.²⁴⁰ Using "Minutes" to amend the IBWC, the treaty is built on a foundation of trust and good faith. When a change is desired to the IBWC, one of the parties simply makes the alteration, referred

²³²The model referred to is the synthesis of the study of economic asymmetries and the EKC.

²³³According to International Monetary Fund estimates (2009), the per capita GDP in the U.S. is approximately \$46,000 whereas the per capita GDP in Mexico is approximately \$14,000.

²³⁴George B. Frisvold and Margriet F. Caswell, *Transboundary water management: Game-theoretic lessons for projects on the U.S.-Mexico border* (2000), at 101-02.

²³⁵*Id.*

²³⁶*Id.*, at 105.

²³⁷*Id.*

²³⁸*Id.*

²³⁹*Id.*, at 107.

²⁴⁰See, Ariel Dinar, Shlomi Dinar, Stephen McCaffrey, and Daene McKinney, *Bridges over Water: Understanding Transboundary Water Conflict, Negotiation and Cooperation* (2007), at 164.

to as a Minute, and the other party has 30 days to *disapprove* it.²⁴¹ This general goodwill which surrounds the IBWC has specific instances of being parlayed into real-world payoffs. An example of this concerns the original drafting of the 1944 treaty. The U.S. initially allotted a generous amount of water from the Colorado River to Mexico.²⁴² As the southwest U.S. boomed, so did its water demands. Subsequent Minutes to the IBWC, which conveyed new diversions from the Colorado River to the All-American Canal in California, as well as extractions from the lower Rio Grande, all of which solely benefitted the U.S., were approved by Mexico due, in part, to the goodwill accrued from the initial generous drafting of the 1944 treaty.²⁴³ These amendments were not beneficial to Mexico, but the U.S. was essentially able to cash in its “banked” goodwill.

C. Hypothetical *Through-Border* Situations

In order to further illustrate the lessons from the IBWC, two instructive hypothetical scenarios have been developed for *through-border* rivers:

- 1) Imagine a hypothetical two-state international river. The downstream riparian state is at a point much farther along the EKC’s X-axis than the upstream riparian state. How can the downstream riparian state ensure that the quantity and quality of water in the river meets its higher demand and standards?

Because the richer downstream riparian state is in the disadvantageous position in this scenario, their strategy must reflect this reality. With lower levels of environmental protections in place, the upstream riparian state is in the default position where its self-interest is served before meeting the more rigorous water quality standards of the more affluent nation. Thus, in order to reach a negotiated outcome that is compatible with the richer state’s higher standards, side payments for the higher level of upstream pollution abatement will have to be made. The richer state can pay for (or share in the costs of) wastewater treatment at the source in the upstream portion of the international waterbody. The more affluent riparian state would have to meet its internal water quality standards eventually; doing it at this upstream point also preserves the ecological integrity over a greater length of the river.

- 2) Imagine once more a hypothetical two-state international river, except in this scenario, the situations are reversed and the upstream riparian state is at a point much farther along the EKC’s X-axis than the downstream riparian state. What does game theory predict as to the upstream riparian’s strategy?

Goodwill value can be an example of a payoff to the richer upstream riparian state. Their higher willingness to pay for water resource preservation and water pollution abatement may pay dividends later (e.g., cooperation of the downstream riparian in joint projects such as hydropower generation or even non-water allocation issues). This tradeoff outcome is mutually beneficial in that the downstream riparian received more and/or higher quality water while the upstream riparian has done a favor for its neighbor, which can reinforce further cooperation in the future. The idea is that cooperation begets cooperation. A word of caution: There is, however, the danger of paternalism, where the more affluent upstream neighbor dictates the terms of the agreement.²⁴⁴

²⁴¹George B. Frisvold and Margriet F. Caswell, *Transboundary water management: Game-theoretic lessons for projects on the U.S.-Mexico border* (2000), at 105.

²⁴²*Id.*, at 109.

²⁴³*Id.*

²⁴⁴See, e.g., Shlomi Dinar, *International Water Treaties: Negotiation and cooperation along transboundary rivers* (2008), at 27. The argument is made, however, that hegemony is almost a “necessary evil” as to the inducement of cooperation of a less wealthy riparian state by the richer riparian state. The scope of this research does not include an inquiry into this topic.

D. Drafting Better International Water Allocation Agreements

With both real-world and hypothetical examples of conflict avoidance and cooperation to draw upon, a final legal question materializes: Is it possible to create a model agreement for the governance of shared international water resources? Or, in other words, are there certain universal lessons learned that can be accepted as fundamental to the coordinated allocation of water rights? The American Society of Civil Engineers (ASCE) believes so and has produced “model” language for the drafting of water sharing agreements. Rather audacious in its scope, the ASCE project, known as the Model Code for the Shared Use of Transboundary Water Resources (SUTWR), is the culmination of a decade-long response to the challenges set forth in the aforementioned questions.²⁴⁵ Ultimately, the SUTWR seeks *pre*-drafting efficiency, embracing many of the predictions made by game theoretic approaches to water allocation, including differential willingness to pay and tradeoffs, while still maintaining integrity with the broad international goals of equitability and sustainability.²⁴⁶

The SUTWR recognizes the inherent difficulty in the economic valuation of water resources and that different values create controversy and the potential for conflict.²⁴⁷ In particular, two of the lessons learned from the IBWC with respect to economic asymmetries are reflected in the model code’s provisions. First, the model code recognizes that riparian states enter into negotiations in the default state of narrow self-interest.²⁴⁸ It does not, however, endorse maintaining such strategies in the code language, preferring instead to use language mirroring that of game theory. The SUTWR creates a duty to coordinate, cooperate, and even share information among the stakeholder states in negotiating tenable outcomes for all.

Second, the model code is cognizant of the differential willingness to pay of riparian states.²⁴⁹ The SUTWR mandates economic considerations in the creation of international allocation agreements.²⁵⁰ It states that tradeoffs, such as side payments, are useful tools for achieving balance in equitable and sustainable water use.²⁵¹ Understanding that cooperation is oftentimes only bought and sold, there is a seamless integration of economic principles into the model code, despite its stated goal to put environmental conservation and human rights at the forefront.²⁵² The SUTWR’s thematic acceptance of the principles of equitable utilization and sustainability demonstrate that the economic predictions made by game theory, especially the tradeoffs derived from economic asymmetries, are compatible with the moral considerations made by the global community.²⁵³ This interdisciplinary effort suggests that economic efficiency and the moral concerns of a fundamental right to water are by no means mutually exclusive goals.

²⁴⁵See generally, Stephen E. Draper, *Model Water Sharing Agreements for the Twenty-First Century* (2002). The SUTWR is a unique interdisciplinary approach designed to promote *a priori* dispute resolution using perspectives from science, economic, policy, and law. The brainchild of Professor Ray Jay Davis of the Brigham Young University School of Law, the SUTWR was originally designed to deal with U.S. interstate water allocation regimes. It evolved into the development of a model code for utilization of waters in *through-border* and *border-creator* scenarios involving sovereign governments.

²⁴⁶*Id.*

²⁴⁷*Id.*, at 149.

²⁴⁸*Id.*, at 92.

²⁴⁹*Id.*, at 148-49.

²⁵⁰*Id.*

²⁵¹*Id.*

²⁵²*Id.*, at 5.

²⁵³*Id.*

Conclusion

The field of international water law is one that appears to be at a crossroads; stuck between the feel-good sentiment of its major conventions and meetings and the reality of enacting these tenets in reality, problems obtaining results persist. The importance of the field cannot be understated, yet there exist serious short-comings in the equitable and sustainable distribution of scarce international water resources. Rather than pretend that a one-stop-shop for curing these ills exists, incremental change may be the best interim strategy on the global path to fulfilling the fundamental human right to water. The unanimous goals of the international community (equitability and sustainability) should continue to be pursued, while the less attractive goal of economic efficiency may in fact be the best project-specific approach to international water treaty drafting. Game theoretic approaches, while limited in their scope of applicability, foster unifying themes of cooperation and collaboration, such that the dismal science may not be so out of touch with humanity after all.

A. Limitations

A notable omission from this study is the role of multinational corporations in the commoditization and distribution of water. There is no dispute that major corporations control access to copious amounts of the world's freshwater, such as the ongoing dispute between Nestlé and Bolivia.²⁵⁴ And there is similarly no doubt that these entities should be considered key stakeholders in the context of cooperation and conflict resolution. Nonetheless, significant discussion of their role in international water law was left out of this study due to their (ostensible) exclusion from the instrument drafting process. The partnership process, discussed *infra.*, may change this dynamic in the future.

It should also be noted that this research is not designed to be a blind devotional to the role of game theory in international treaty-making. There is a danger in reducing all treaties to mere contractual agreements between states, especially when considering the international public interest that treaties are supposed to uphold.²⁵⁵ If treaties are nothing more than contracts between rational actors seeking to maximize their own benefits, then how can the global good ever be advanced?²⁵⁶ However, in many situations, such as the simplified two-state scenarios discussed in this study, the illustrative qualities of game theory are evident. Game theory may or may not be capable of handling the myriad complexities of transboundary water rights, but it can serve as a novel starting point for understanding state (and other stakeholder) motivations and strategies and how to reach cooperative outcomes.²⁵⁷

B. Recommendations

Oftentimes, when the discussion turns to water resources, the ubiquitous term “water war” springs up. Recent water wars include such armed conflicts as the Cochabamba struggle in Bolivia in 1997 and the aforementioned ethnic clashes near the Aral Sea, as well as the slightly more civil interactions among southern and southwestern states of the U.S. and the omnipresent Nile River disputes between Egypt and the rest of the watershed's riparian states.²⁵⁸ This disturbing trend in the way water is discussed paints a pall over the entire area

²⁵⁴See, e.g., D. Jaffee and S. Newman, *A Bottle Half Empty: Bottled Water, Commodification, and Contestation*, 26:3 *Organization & Environment* 318-335 (September, 2013).

²⁵⁵Jan Klabbers, *The Relative Autonomy of International Law or the Forgotten Politics of Interdisciplinarity* (Winter, 2004/Spring, 2005), at 39.

²⁵⁶*Id.*, at 40.

²⁵⁷*Id.*

²⁵⁸See, e.g., Leif Ohlsson, *Hydropolitics* (1995); Antoinette Hildering, *International Law, Sustainable Development and Water Management* (2004); Ashok Swain, *Managing Water Conflict: Asia, Africa, and the Middle East* (2004); and John E. Moerlins, Mikhail K. Khankhasayev, Steven F. Leitman, and Ernazar J. Makhmudov, *Transboundary Water Resources: A Foundation for Regional Stability in Central Asia* (2008). An incredible amount of literature exists on water conflicts, armed and otherwise, in recent world history. The examples mentioned are but small sample of the numerous disputes that permeate all corners of the globe.

of study such that conflict seems to be a self-fulfilling prophecy. Thus, as a matter of international discursive policy, it is first recommended that a “softening” of the terminology is pursued. The widespread use of “water war” does nothing but reinforce the default position of narrow self-interest and conflict.

One recommendation is to consider local water use groups as the players, instead of the macro view where states are the sole players. This suggestion has two primary benefits. The first benefit, characterized generically as site-specificity, is that these players already have intimate knowledge of the local water needs which would potentially lead to more efficient water use.²⁵⁹ The idea is that those closest to an issue (e.g., use groups like farmers or individual communities) would be most acquainted with the nuances of a specific water allocation problem.²⁶⁰ The second benefit is that NGOs, as a sophisticated entity representing use groups, could thus function as the stakeholder during treaty drafting, rather than merely trying to inform the state as one of many groups trying to get a seat at the table.²⁶¹ In this scenario, the international instrument would serve as the governing document, implemented by the use groups actually impacted by water use on a given transnational waterbody. Ostensibly, this approach would minimize the degrees of separation between those using the resource and the instrument which governs this use.²⁶² Cultural theory, touched on in the beginning of Section III, *supra.*, which encourages community access to the negotiating process, reinforces the site-specific, user group approach.²⁶³

With the possibility of an expanded role for NGOs in international treaty drafting come ever-creative solutions to coalition-building. The rise of public-private partnerships is one such example of this logical progression.²⁶⁴ These partnerships are voluntary, multilateral collaborations of myriad environmental stakeholders, which function as intermediaries between the over-arching goals set forth in meetings such as Rio in 1992 or Johannesburg in 2002 and implementation at the local level.²⁶⁵ Rather than acting as substitutes for intergovernmental commitments, partnerships are designed to strengthen extant agreements by “disaggregate[ing] general worldwide goals into specific local projects.”²⁶⁶ Drawing on the inherent advantage of NGOs, civil society, municipalities, and even private corporations in understanding local nuances, partnerships embody the site-specific knowledge that is becoming increasingly necessary in negotiating effective water allocation agreements.

Significant attention should be paid to unseen transnational waters, such as aquifers.²⁶⁷ Aquifers are instrumental in nearly any state’s freshwater supply regime. But there is evidence that international aquifers lag behind their surface counterparts in terms of protections granted to them by international agreements.²⁶⁸ Despite Minutes which were adopted in two subsequent addendums to the IBWC, in 1973 and 1979, and the “relatively

²⁵⁹ Asher Alkoby, *Theories of Compliance with International Law and the Challenge of Cultural Difference* (Winter, 2008), at 169-70.

²⁶⁰ *Id.*

²⁶¹ Marco Verweij, *Transboundary Environmental Problems and Cultural Theory: The Protection of the Rhine and the Great Lakes* (2000), at 47.

²⁶² *Id.* This could be likened to the euphemism that implores one to bite off only what one can chew.

²⁶³ Asher Alkoby, *Theories of Compliance with International Law and the Challenge of Cultural Difference* (Winter, 2008), at 169-70.

²⁶⁴ See Christopher C. Joyner, *Rethinking International Environmental Regimes: What Role for Partnership Coalitions?* (Winter, 2004/Spring, 2005), at 89-90.

²⁶⁵ *Id.*, at 104.

²⁶⁶ *Id.*, at 105.

²⁶⁷ See, e.g., George B. Frisvold and Margriet F. Caswell, *Transboundary water management: Game-theoretic lessons for projects on the U.S.-Mexico border* (2000), at 109.

²⁶⁸ See Heather L. Beach, Jesse Hammer, J. Joseph Hewitt, Edy Kaufman, Anja Kurki, Joe A. Oppenheimer, and Aaron T. Wolf, *Transboundary Freshwater Dispute Resolution* (2000), at 119.

warm political relations” between the U.S. and Mexico, formal agreement on the allocation of transnational aquifers has yet to be achieved.²⁶⁹ This failure to reach an accord underscores the difficulties groundwater resources still present to instrument drafting.

A final substantive recommendation is for international water treaty drafting to incorporate the precautionary principle as a fundamental component of allocation instruments. Harkening back to the unpredictability of the hydrologic cycle, the precautionary principle is a wise use (common-sense) approach to uncertain futures.²⁷⁰ Borrowing from the law, the principle speaks generally about the burdens of proof in policy-making; where uncertainty exists with respect to environmental or public health, the burden rests on those promoting a particular course of action that it is *not* harmful.²⁷¹ The sheer magnitude of the issue of clean water availability, already shrouded in uncertainty due to hydrologic variability, mandates the guarded approach of the precautionary principle. The moral duty to provide clean water to mankind, as a fundamental right, should not be jeopardized by the whims of one player.²⁷²

Ultimately, there is still a great need for aspirational and far-reaching water rights treaties such as the U.N. Convention on the Law of Non-Navigable Uses of International Watercourses. The Convention, and other treaties, such as the Millennium Development Goals (MDG) and the Ramsar Convention (Ramsar), and meetings, such as Rio and Johannesburg, galvanize shared goals and resonate throughout the international community.²⁷³ These instruments should still function as models, or “umbrella” documents, for the drafting of site-specific international agreements. Consistency in the drafting of water rights instruments is desirable; embracing the common themes of equitability and sustainability is not only a noble but also an important cog in mainstreaming a less economic rights-centric, more human rights-driven message with respect to access to water. In the meantime, understanding the economic motivations of riparian states and how these motives can be dovetailed to reach cooperative outcomes will have to suffice.

References:

- Alkoby, Asher, *Theories of Compliance with International Law and the Challenge of Cultural Difference*, 4 J. of Int'l L. & Int'l Rel. 151 (Winter 2008).
- Beach, Heather L., Jesse Hamner, J. Joseph Hewitt, Edy Kaufman, Anja Kurki, Joe A. Oppenheimer, Aaron T. Wolf. 2000. *Transboundary Freshwater Dispute Resolution: Theory, Practice, and Annotated References*. The United Nations Press: Tokyo.
- Conca, Ken, *Environmental Governance after Johannesburg: From Stalled Legalization to Environmental Human Rights?*, 1 J. Int'l L. & Rel. 121 (Winter 2004-Spring 2005).
- Dinar, Ariel, Shlomi Dinar, Stephen McCaffrey, and Daene McKinney. 2007. *Bridges over Water: Understanding Transboundary Water Conflict, Negotiation and Cooperation*. World Scientific Publishing: Singapore.
- Dinar, Shlomi. 2008. *International Water Treaties: Negotiation and Cooperation along Transboundary Rivers*. Routledge: New York, NY.
- Draper, Stephen E., Ed. 2002. *Model Water Sharing Agreements for the Twenty-First Century*. American Society of Civil Engineers: Reston, Virginia.

²⁶⁹*Id.*, at 120.

²⁷⁰See generally, Antoinette Hilderling, *International Law, Sustainable Development and Water Management* (2004).

²⁷¹*Id.*

²⁷²*Id.*

²⁷³See, e.g., Clare Shine and Cyrille de Klemm, *Wetlands, Water and the Law* (1999), at 27. The Ramsar Convention is a 1971 treaty relating to the protection of wetlands, named for the city in Iran in which it was signed. It has evolved to place special attention on international wetlands and those from which freshwater supplies are derived.

- Frisvold, George B., Margriet F. Caswell, *Transboundary Water Management Game-theoretic Lessons for Projects on the US-Mexico Border*, 24 *Agricultural Economics* 101 (2000).
- Hardin, Garret, *The Tragedy of the Commons*, 162 *Science* 1243 (1968).
- Hildering, Antoinette. 2004. *International Law, Sustainable Development and Water Management*. Eburon Academic Publishers: Delft, The Netherlands.
- Jaffee, Daniel and Soren Newman. *A Bottle Half Empty: Bottled Water, Commodification, and Contestation*. 26:3 *Organization & Environment* 318-335 (2013).
- Joyner, Christopher C., *Rethinking International Environmental Regimes: What Role for Partnership Coalitions?*, 1 *J. of Int'l L. & Int'l Rel.* 89 (Winter 2004-Spring 2005).
- Klabbers, Jan, *The Relative Autonomy of International Law or the Forgotten Politics of Interdisciplinarity*, 1 *J. Int'l L. & Int'l Rel.* 35 (Winter 2004-Spring 2005).
- Madani, K. *Game Theory and Water Resources*. 381 *J. Hydrology* 225-238 (2010).
- Moerlins, John E., Mikhail K. Khankhasayev, Steven F. Leitman, Ernazar J. Makhmudov, Eds. 2008. *Transboundary Water Resources: A Foundation for Regional Stability in Central Asia*. Springer: Dordrecht, The Netherlands.
- Ohlsson, Leif, Ed. 1995. *Hydropolitics: Conflicts over Water as a Development Constraint*. Zed Books: London.
- Page, Talbot. 2002. *Environmental Economics and Policy: A Modeling Approach*. Brown University: Providence, Rhode Island.
- Park, Susan, *The World Bank, Dams and the Meaning of Sustainable Development in Use*, 5 *J. Int'l L. & Int'l Rel.* 93 (Winter 2009).
- Roth, Dik, Rutgerd Boelens, Margreet Zwarteveen, Eds. 2005. *Liquid Relations: Contested Water Rights and Legal Complexity*. Rutgers UP: New Brunswick, New Jersey.
- Shine, Clare, Cyrille de Klemm. 1999. *Wetlands, Water, and the Law: Using Law to Advance Wetland Conservation and Wise Use*. IUCN: Gland, Switzerland.
- Stern, David I., *The Environmental Kuznets Curve*, *Int'l Society for Ecological Economics Internet Encyclopaedia of Ecological Economics* (June 2003).
- Swain, Ashok. 2004. *Managing Water Conflict: Asia, Africa and the Middle East*. Routledge: London.
- Teasley, R.L. and D.C. McKinney. 2011. *Water Resources Management in the Rio Grande/Bravo Basin Using Cooperative Game Theory in Transboundary Water Management — A Multidisciplinary Approach*, J. Ganoulis, J. Fried and A. Aureli (eds). Wiley-VCH: Hoboken, New Jersey.
- Verweij, Marco. 2000. *Transboundary Environmental Problems and Cultural Theory: The Protection of the Rhine and the Great Lakes*. Palgrave: New York, NY.
- Ward, Frank A. *Forging Sustainable Transboundary Water-sharing Agreements: Barriers and Opportunities*. 15:3 *Water Policy* 386 (2013).

REACHING THE GRASSROOTS: CONTRIBUTION OF INDIA IN AFGHANISTAN

Prof (Dr.) Mondira Dutta

Professor & Centre Chairperson Centre for Inner Asian Studies,
School of International Studies Jawaharlal Nehru University, New Delhi, India

Abstract

Women continue to live in a state of abject poverty facing the worst forms of violence in Afghanistan. One often encounters incidents like stoning to death, punishment for adultery, selling daughter/wife for opium and other such atrocities. A society fraught with illiteracy, poverty, lack of awareness, customary laws & traditions, strict religious regulations, etc, are the main causes behind such violence. India is among the top five countries who are working towards the reconstruction process in Afghanistan. Being one of the primary donors, India's expenditure till date has been to the tune of USD 2 billion plus.

The present paper attempts to highlight the impact of government of India's initiatives implemented at the micro level by the NGO partner 'Hand in Hand Afghanistan Organization' (HIHAO) targeting the women and community members in Afghanistan.

Keywords: Afghan Women, Violence against Afghan Women, Reconstruction in Afghanistan, Indian Contribution in Afghanistan, Livelihood Options among Afghan Women, Hand in Hand, Women in Balkh, Community Participation in Balkh, Customary Laws & Afghan Women, India's effort and Afghan Women

Background

Today Afghanistan is far from its hey days of peace and happiness. The elderly Afghans recollect the reign of King Zahir Shah with nostalgia even today. They spoke about the peace and tranquillity that prevailed during his regime despite the fact that people were 99 percent illiterate. Yet there was not a single person who died because of starvation. People helped each other willingly and food security was hardly an issue. Some of the senior citizens recalled that the only university of that time was the Kabul University which soon got transformed into a hub of active politics among strong parties. Parties that were affiliated to various factions of political beliefs and the most dominant among them were affiliated to the USSR rule. The local people were completely naive to understand much about parties. It was mainly the students who got involved and understood the aims and principles behind each political doctrine and about the growing Communist parties. They held demonstrations and slogan shouting was in the air, even though these were anti-Islamic. Such actions got carried over by Islamic parties to religious leaders (Mulas) and this was unacceptable to the local natives. The decision making bodies have been endogenous in nature keeping community participation at a low ebb in all policy prescriptions. Afghanistan unfortunately continues to play the centre stage for all the wrong reasons such as terrorism and insurgency, corruption, war lords, drug lords, and mainly violence against women. Unfortunately the Afghan women have faced the worst brunt of the situation.

Gender equality and empowerment of women is one of the main issues to be targeted through the Millennium Development Goals. For achieving this, 2020 has been set as the deadline for the Islamic Republic of Afghanistan. Thus eliminating all forms of 'Violence

against Women' (VAW) has become a main focus for the world community today. At such a stage it is appalling to come across news clippings (Time, 2010) such as that of 'Aisha' – the 18 year old Afghan woman whose nose and ears were chopped off for fleeing her abusive in-laws. To be meted out with such a treatment by her husband is even more shocking! One such incident takes us scores of steps backwards and one begins to wonder whether we are moving in the right direction after all. Although such an instance is rarest of the rare in the present times but in Afghanistan one often encounters such episodes against the women on a day to day basis.

Women continue to live in a state of abject poverty facing the worst forms of violence. One often encounters incidents like stoning to death, punishment for adultery, selling daughter/wife for opium and other such atrocities. A society fraught with illiteracy, poverty, lack of awareness, customary laws & traditions, strict religious regulations, etc, are the main causes behind such violence. Studies have also revealed that a large section of the men have been victims of war or have left the country as a result of series of civil war and bombings. As a consequence several women who are now widows are left on their own to fend for themselves and their dependent children. The job opportunities that existed for the women had already been throttled by the Taliban.

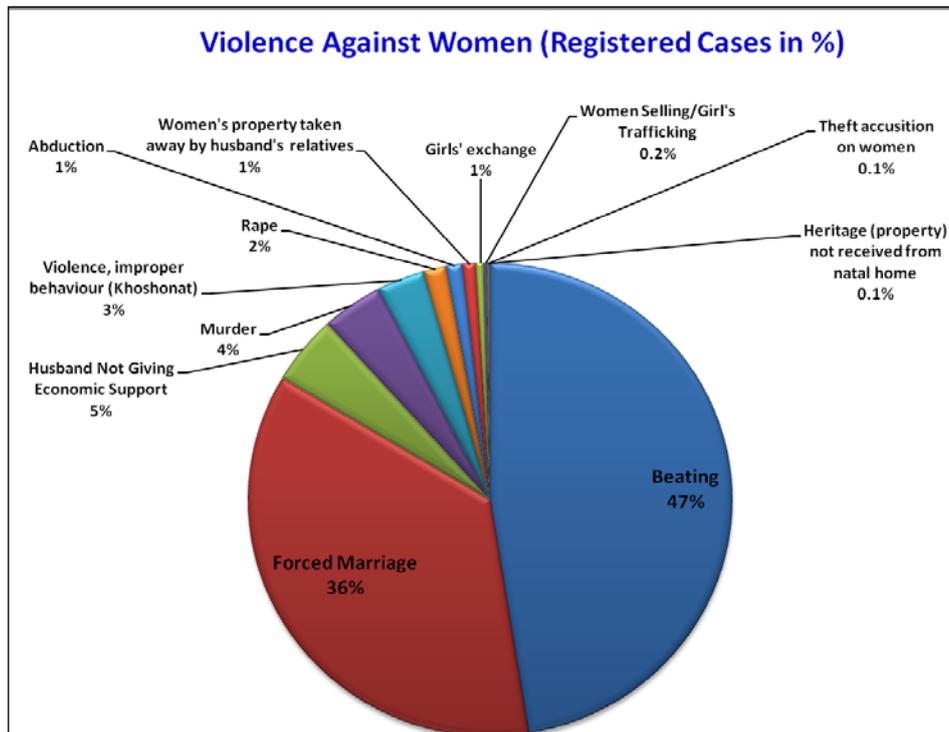
During the Taliban period women were systematically marginalized and eliminated from all walks of life, economy and society. It is indeed "difficult to find another government or would-be government in the world that has deliberately created such poverty by arbitrarily depriving half the population under its control of jobs, schooling, mobility and health care" (PHR, 1998). The anti-women regime of the Taliban days still seems to haunt Afghanistan and the conditions for women remain gory.

Although the Census in Afghanistan is yet to be conducted, but it is interesting to note that reports of various studies conducted by independent organizations and the Central Statistics Organization of the Islamic Republic of Afghanistan indicate more or less common observation regarding the country's women. Some of the observations that emerged from various studies are as follows:

- Out of 23.51 million people in Afghanistan, 48.85% are female (2009) (CSO, 2005)
- Females make up 49% of the population aged 0-19 and 43% of the population 60 years and over (MoWA, 2008)
- The 2005 Gender Development Index for Afghanistan is the lowest in South Asia at 0.310 (HDR, 2009)
- The average woman had 6.6 children in 2008 (UNICEF, 2008)

According to a report, 1940 cases of violence against women were officially registered over the last three years of which 29% were that of forced marriages, physical attacks and other abuses (Pajhwok, 2010). A report of the Ministry of Women Affairs states that in 2006, a total number of 2133 cases were registered out of which 47% were that of beatings and 36% were that of forced marriages. The Afghanistan Independent Human Right Commission emerged with a similar picture in 2006. A majority (47%) of the registered cases were that of beating followed by forced marriage. Unfortunately the exchange of girls, selling of girls and trafficking showed an increase in the registered number of cases.

In March 2006, UNIFEM in cooperation with MoWA for the first time developed a comprehensive data base on violence against women. A total number of 1011 cases were reported from May 2006 to Oct 2007. The number of cases registered may be much higher as each case entails several violations. Physical attacks account for 22% of the cases (refer fig no 2), followed by forced marriages (16%) (UNIFEM & MoWA, 2007).



Data Source: Ministry of Women's Affairs, Legal Department, 2005-2006
Fig No 1

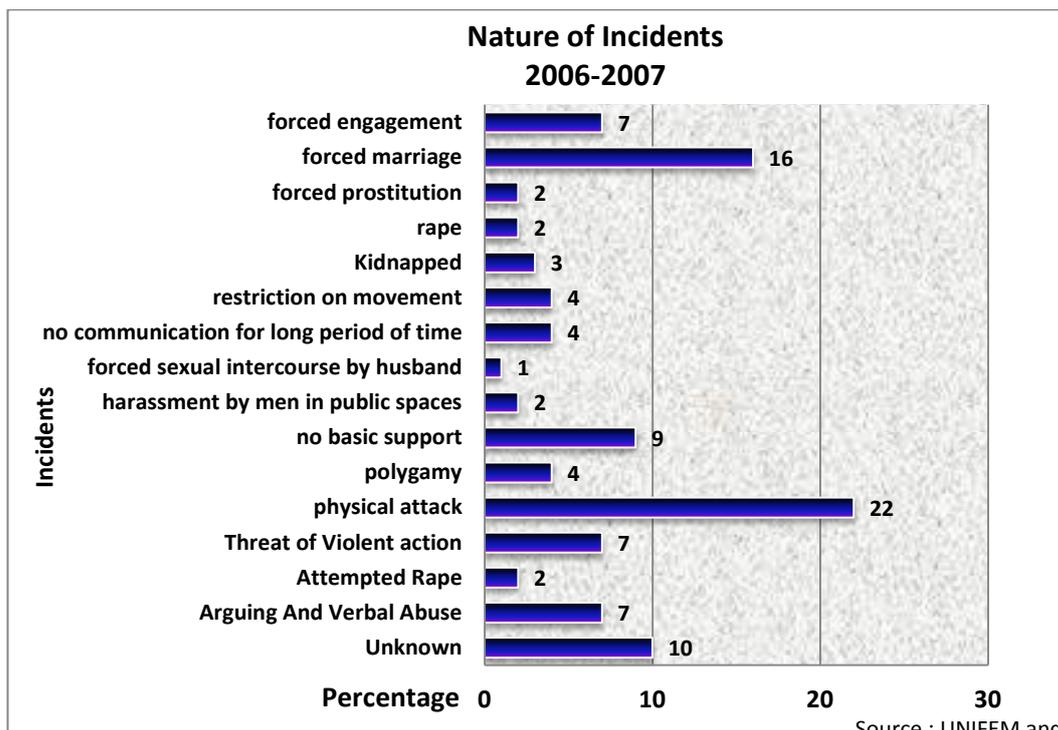


Fig No 2

Source : UNIFEM and I

Data pertaining to the outcome of violence suggests that 3 percent (refer fig no 3) of the cases are reported to be either committing suicide or attempt to commit suicide. The outcome of violence in 65 percent of the cases is unknown. This certainly does not imply as cases that got resolved.

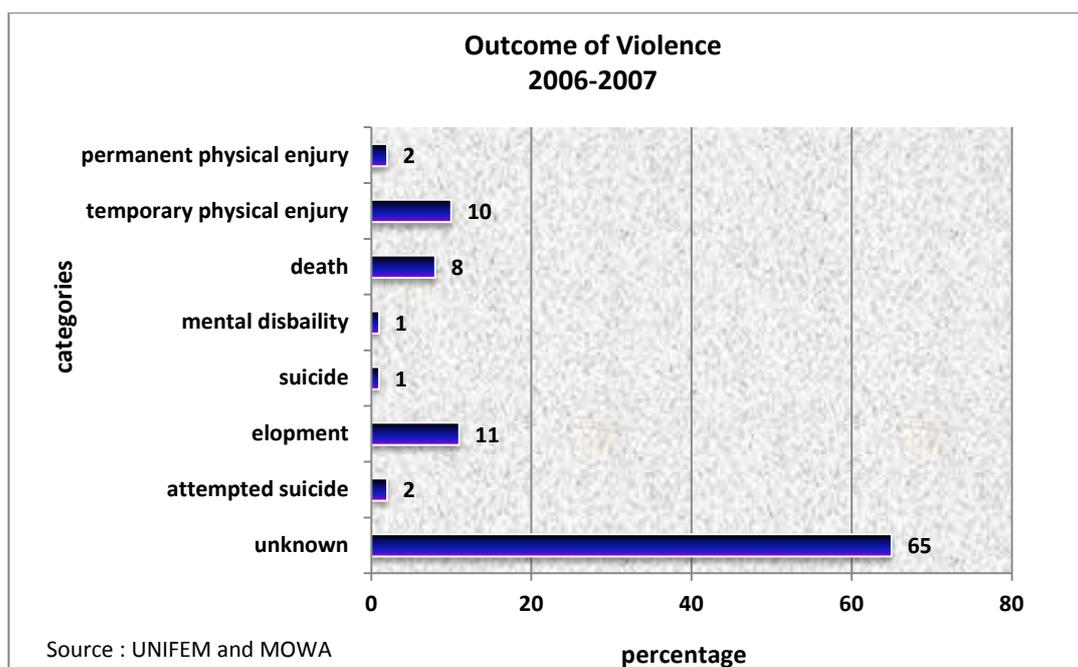


Fig No 3

Indian Contribution in Social Projects

India is among the top five countries who are working towards the reconstruction process in Afghanistan. Being one of the primary donors, India's expenditure till date has been to the tune of USD 2 billion plus. Some of the sectors in which India has significantly contributed include the hydro-electricity, power transmission lines, road construction, agriculture and industry, telecommunications, information and broadcasting, humanitarian assistance, education and health' (Dutta, 2008).

Most importantly, India has been involved in a number of social projects touching the lives of the poor and the vulnerable through capacity building measures and vocational and skill training for livelihood options. Many of the Indian NGOs are the implementing partners for government of India irrespective of the risks involved. They impart training and skill development activities enabling the local Afghans to participate and take on the rebuilding and reconstruction process to its logical end. No doubt this has gone a long way in creating a greater bonding with the locals and India lives in the heart of every Afghan today! Some of the main projects (DCM, Kabul, 2010) supported by the government of India include:

- **Confederation of Indian Industry (CII) project:** This is a government of India funded project, implementing vocational training, where CII provides training in commercial tailoring / garment making to 216 women. Out of them 188 were qualified for being awarded certificates by City and Guilds of the U.K. (Training was also provided to 973 men in construction-related skills such as carpentry, masonry, plumbing & welding)
- **Self Employed Women's Association (SEWA):** It implemented the 'BaagayKhazana' project. The project located at 'Bagh-e-Zanana', Kabul has trained 1000 women in livelihood options such as Garments, Food processing and Eco regeneration. The Afghan women received training for skill development and capacity building along with other income generating activities.
- **'Hand in Hand' (HH) (Das teBadast):** HH has been working in the Balkh and Badakshan provinces of northern Afghanistan. This is a project aimed at creating livelihood options through microfinance and enterprise development. It works towards

community participation by creating Savings Credit Group. The government of India supported this project by giving soft loans without interest to the community complying to the Islamic law.

- **Indian Council of Cultural Relations (ICCR):** provides scholarships for university education: During the past four years (2006-2010) 146 Afghan girls were awarded ICCR scholarships for higher studies in Indian universities. In the current year (2010), 74 girls have been recommended for scholarships.
- **Indian Technical and Economic Cooperation (ITEC), Ministry of External Affairs:** From (2008 to 2010), 78 women officials working in various government ministries were deputed to India under the ITEC scheme for short term technical training programmes
- **Training courses were imparted in India with funding from other donors and facilitated by the Indian embassy:** In the past two years (2008-2010), around 100 women officials have attended various courses in India funded by donors such as USAID, GTZ, the Dutch government, UNDP, etc. Some of the recent programmes were:
 - Training 22 senior women leaders from different provinces in a USAID-funded programme at the Institute of Government Accounts and Finance (INGAF), New Delhi from 5-13 April 2010. The programme included lectures, case studies and experience sharing with eminent Indian women parliamentarians, academicians, policy makers/analysts, women film makers, media experts and social activists
 - Participation of 16 Afghan women in the Institute of Government Accounts and Finance (INGAF), New Delhi in a workshop on “Leadership and Change Management” funded by German Technical Cooperation (GTZ), Gender Mainstreaming Office, Kabul from 3-9 May 2010.
 - Indian Embassy in collaboration with USAID is facilitating a special programme for 17 Afghan women officials in leadership and management in ending May/June 2010 at the Administrative Staff College of India, Hyderabad
 - Capacity for the Afghan Public Service (CAP) Project: In partnership with UNDP, India provided in (2007-09) services of 30 Indian civil servants to work as advisors/coaches in various Afghan line ministries (currently there are only four-including one woman officer). One of the Indian women officials under CAP took the initiative to prepare a 'Gender Mainstreaming Strategy for Afghanistan', which was presented at a "Gender Sensitization Workshop" held by UNDP/CAP on 23 November, 2008. It was attended by a large number of international and national coaches from central ministries and sub-national government offices.
- **India-Afghanistan Foundation:** A seminar on ‘Women between modernity and tradition in India and Afghanistan’ was organized from 30th June to 1st July, 2009 in Kabul by the India-Afghanistan Foundation in partnership with the Ministry of Women’s Affairs.

The present paper attempts to highlight the impact of government of India’s initiatives implemented at the micro level by the NGO partner ‘Hand in Hand Afghanistan Organization’ (HIHAO) targeting the women and community members in Afghanistan.

Data Source & Methodology

The data source was based on both primary and secondary sources of information. The key informants of primary sources were the NGOs, members of various task forces, beneficiaries and other stakeholders. In addition, discussions with government officials, academicians and other civil society actors were undertaken in order to get a clearer perspective.

Methodology employed was based on inputs derived initially from the Ministry of External Affairs, Government of India. The study covered the programme as implemented by 'Hand in Hand' in Balkh province of northern Afghanistan from 2008 to 2010. The programme has relied mainly on the strategic approach of imparting training for mass mobilization into entrepreneurial development and creation of micro credit groups. The analysis focuses on the work at the micro level and its impact on the community. The geographic coverage includes the districts of Khulm and Nahr-e-Shahi of Balkh province in Afghanistan. The study employed formal and informal data collection methods for a qualitative analysis. The field visit survey was conducted to document and understand the relevance, effectiveness, impact and sustainability of programme implementation. The objective was to obtain a deeper insight into the types of change in the attitude, awareness, skills learnt, knowledge and perception towards gender empowerment and capacity building measures.

Primary Survey

A field visit was undertaken in the month of May 2010 to study the ground realities in the remote villages of Khulm and Nahr-e-Shahi. A total of 12 Savings Credit Groups among the community members were interviewed. Each group consisted of 10 to 20 members. Different locations were visited for meeting the groups in Nahr-e-Shahi and Khulm districts. A meeting was also organized with the district sub governors, the National Solidarity Programme's Programme Manager, and the Swedish Committee of Afghanistan in addition to district level CDC member.

The analysis of data was based on descriptive, explorative and analytical designs consisting of compilation, computation, tabulation and analysis of collected information. The data analysis was used to develop the findings and prescribe policy recommendations.

Mass Mobilization into Entrepreneurship (MME)

The region of Balkh is deeply scarred with years of conflict and violence. The Balkh province is one of the regions, which is devoid of roads, regular piped water supply and electricity. Widespread poverty, food insecurity, natural disasters in combination with a weakening state support mechanism has brought forward the associated vulnerability that the Afghans are facing today. Rebuilding their livelihoods and incoming of a regular income is the greatest challenge that they are currently battling with. This is a region with strong cultural binding and prevalence of Islamic law. Thus all developmental activities need to imbibe the local culture and tradition in order to gain community support.

One of the main objectives of the programme was to facilitate large-scale job creation through community microfinance and enterprise development. HIHAO aimed to primarily support the emerging Afghanistan Rural Enterprise Development Programme (AREDP), coordinated by the Ministry of Rural Rehabilitation and Development (MRRD) and other similar government programme under the Ministry of Agriculture, Irrigation and Livestock (MAIL).

HIHAO started its work in Afghanistan in 2006 by helping to adapt and transfer to Afghanistan the 'Self Help Group' (SHG) approach to enterprise development as implemented in Tamil Nadu, India. In order to achieve sustainability, HIHAO's work attempted to adopt an exit strategy to create cluster associations of community groups, and to link both these associations and micro-entrepreneurs to private investors, banks and private service providers.

The Hand in Hand Mass Mobilization into Entrepreneurship (MME) project is supported by the Government of India and private donors, and was implemented during the period (2008-2010). It was un-Islamic to pay interests on loans and hence no bank was

prepared to offer loans to the community. Initially the World Bank came forward and was willing to offer loans without interest but this did not work out. The Ministry of Rural Rehabilitation Development, Govt of Afghanistan then came forward offering interest free loans permissible under the Islamic law. But even this did not work out. It was then that the government of India came forward and offered their support. It was indeed important for the organization at that juncture to keep their promise among the local community in providing interest free loans. The organization would have lost the hard earned trust and faith created among the locals after great persuasion and consistent perseverance. This action of the government of India went a long way in assisting the project to 'take off' creating a deep imprint on the society and the people.

The National Solidarity Programme (NSP) under the Ministry of Rural Rehabilitation Development (MRRD) has created Community Development Committees (CDC) at the village level with a village leader referred to as 'Karyador'.

Formation of Savings and Credit Groups (SCGs)

The principal activity of this programme is the establishment of *Savings and Credit Groups* (SCGs) in rural communities (this also incorporates Common Interest Groups (CIGs).

The methodology for the establishment of these groups is drawn from Hand in Hand in Tamil Nadu, India (Self Help Groups).

The final community selection was based on the following criteria:

- Reasonable road access and good security
- Interest of the CDC / community
- Existing interests / proposals to pursue
- Presence of people to join / attend groups
- Willingness to accept project rules

The members of the SCG were selected provided they were of

- 18 to 60 years in age
- One member per household was selected
- Not involved in migrant labor
- Married (in the case of women)
- Residing in a medium / medium – poor household
- Existing business activities
- Interest in project
- Ability to save 25Afgs / week
- Able to attend weekly meetings
- Under jurisdiction of same CDC as other members
- Acceptance by other members

The SCGs organize people without an asset base, but sharing similar economic backgrounds and a strong will to improve their lives. Group cohesiveness, financial discipline and business skills are developed through regular group meetings with savings, internal lending/repayments and capacity building. When SCGs mature, HIHAO facilitates access to external financing for new or existing family based enterprises. When SCGs mature further, the whole group or parts of them may develop into CIGs. Loyalty to the group is important, as this increases the strength of the group and makes joint action possible, increasing the bargaining power of group members. The Common Interest groups (CIGs) are supported to develop group-oriented micro- and small enterprises as 'producer organisations'.

Mobilization of Groups

With the assistance of HIHAO, the selected Community Development Councils (CDCs) proposed interested community members in line with given criteria for participation.

Separate groups of males and females were formed. Members agreed to meet, be trained and save regularly. The typical size of a group is 15-20 members (although groups can be either smaller or bigger). Groups were mobilised and the microfinance objectives of the project were communicated.

After members contributed their membership fee (usually 50 Afs), weekly savings of around 25 Afs / member were initiated. These savings are recorded in the group books and belonged to the individual (should he / she decide to leave, they are able to withdraw this money). In the weekly meetings, informal training was channelled to the groups - and in particular the leaders - on bookkeeping and group management. A major anticipated milestone at this stage was the opening of a bank account. This has been more difficult (for a variety of reasons including physical access) and groups have tended to keep the money in the community. After approximately 2-3 months, groups were encouraged to begin internal lending for productive purposes. Actual lending transaction often started later due to (initial) low confidence in withdrawing loans for business activities, and capacity to repay. All lending to group members was encouraged to be sharia compliant, primarily using the notions of *Murabaha* ('Cost Plus'), *Bai Mujjal* ('Deferred Payment') and *Mudaraba*, ('Speculation and Profit Sharing').

After 6 months and if the group qualified, members in the group were eligible to apply for \$100 'soft loan' (interest free) from HIHAO. Lack of available funds however had constrained this activity in 2008. When funding was available, HIHAO established a small revolving fund to community credit associations to lend to the groups. As appropriate, HIHAO also facilitated group access to other independent microfinance products, as a complement to HIHAO external loan schemes.

After approximately one month, the project provided formal Business Development Services (BDS) training to the groups (18 one-hour weekly sessions) to strategically support the development of income-generating activities and best practices in business management; and to help identify and establish appropriate market linkages, business models and value-enhanced products.

Major Achievements

HIHAO organized the 'Savings Credit Groups' (SCG) based on the lines of 'Self Help Group' in India. HH formed a total of 274 groups in the Balkh province out of which 131 were women's groups, 103 were men's group and the rest (40) were common interest group. The Balkh province consists of 4899 beneficiaries.

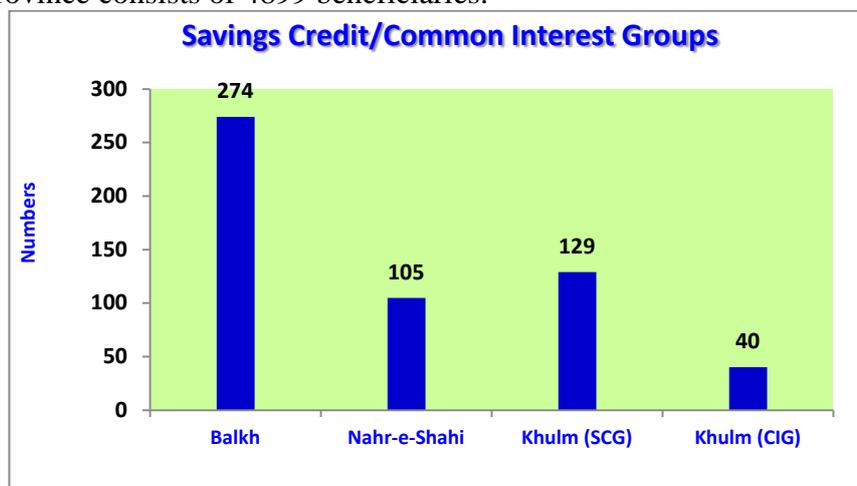


Fig No 4

Situated in the north of Afghanistan, Balkh is one of the 34 provinces in Afghanistan consisting of 14 districts. Deeply scarred and totally demolished, the villages are devoid of roads, regular water supply and electricity and seem to be barely limping back to life. There are no banks nearby and little transportation available on the dilapidated roads still being carved out over the boulders and potholes dotting the entire length. It is not easy to reach such locations. An attempt at community development programme in such areas can be extremely challenging and daunting, especially for a region with strong cultural binding. Capacity Building of the community is perhaps the most appropriate strategy in providing alternative livelihoods. Providing capacity building through formation of micro credit groups has been successfully adapted by countries among the extremely impoverished people for engaging them in self employment projects ushering in regular income. In such areas it is difficult to organize groups even among the men, leave alone women to form a 'Savings Credit Group' (SCG) based on the lines of 'Self Help Group' back home in India. Winning the hearts and minds of people takes a long time. The strategy adopted by Hand in Hand was context relevant, culture friendly and enhanced the capacity building measures. The initial beginning was indeed a path breaking process given the existence of traditional laws and cultural setting. During the field visit, the men's group clearly displayed that they were not only hesitant but against letting their women participate in SCG activities. HIHAO has been successful in forming such groups not only among the men but even among the women as well. They have been able to provide the community with interest free loan as permissible under Islamic law. This brought in a great respect and trust for HH among the people.

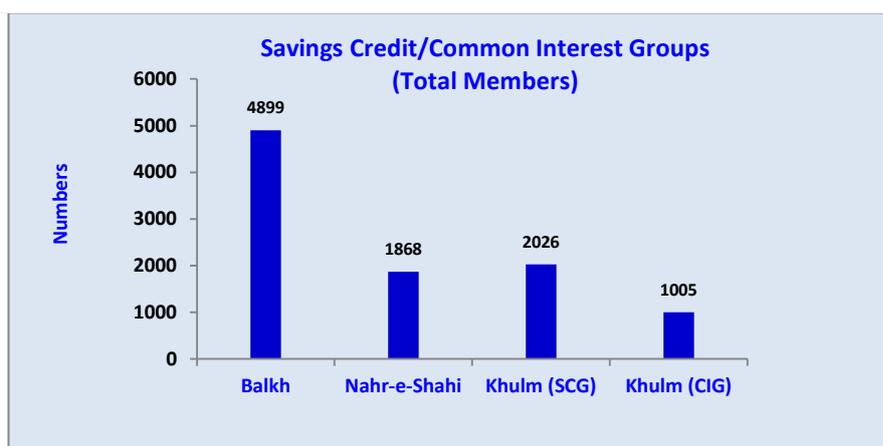


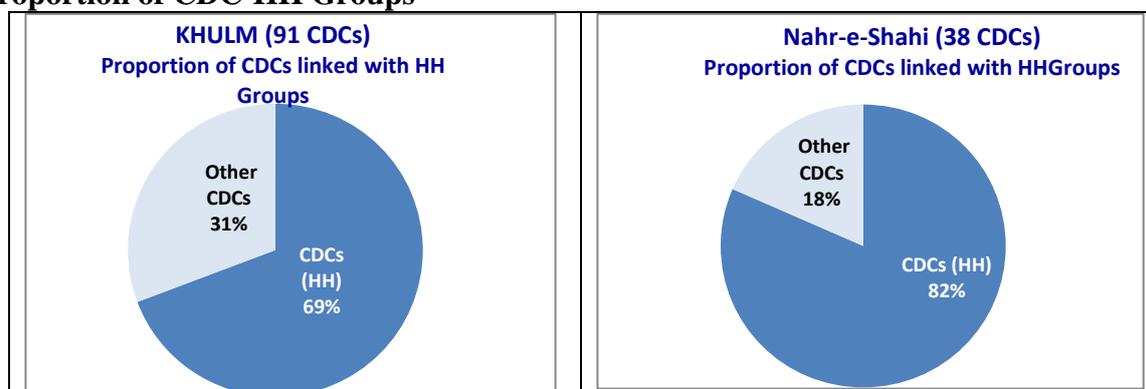
Fig. No. 5

The beneficiaries selected were gender balanced, inclusive and targeted communities from Khulm and Nahr-e-Shahi. Remnants of the conflict and war of several decades stared in the face in all nook and corners of the villages. Innumerable craters on the ground and broken houses all along were a disturbing reality. The whole atmosphere seemed to be filled with a queer and mysterious air where the clustered hutments were located within easy access to each other. All seemed to be vigilant in case history repeated itself! Afghanistan is a multi ethnic nation with concentrations of Tadjiks, Uzbeks, Pashtuns, Hazaras and many others within the backdrop of strong Islamic tradition.

These groups included members from all ethnic communities such as the Tadjiks, Hazaras, Uzbeks, Pashtuns and also some groups consisting of mixed ethnic communities. Every ethnic community had been intrinsically woven within the Hand in Hand groups. Such combinations have significant positive ramifications for an inclusive community development. The HH groups also incorporated members from the Community Development Committees (CDC). The districts of Khulm and Nahr-e-Shahi displayed a large proportion of

common members existing both in the Community Development Committees as well as the Saving Credit Group of the HH.

Proportion of CDC-HH Groups



Data Source: HIHAO, as on Feb 2010

Fig No. 6

The presence of CDC members among the SCG greatly enhances the visibility and authenticity of the group's stature which goes a long way in achieving the programme objectives. The idea of savings was a new concept that the locals were being introduced to. They used to manage earlier by borrowing from each other.

The NSP's Community Development Committees (CDC) is represented by a village leader referred to as 'Karyador' who are often part of HH groups. Some of the villages are still so remote that reaching these involves the services of a horse/donkey in addition to trekking. Bringing together such communities from the remote corners to form SCG groups involves hard work and dedication. The SCG meetings were conducted in an organized manner and after the meeting was over the women displayed their products such as embroidered work, stitched materials, cushion covers and other handicrafts. The men displayed shoes, belts and iron products. The meeting place for the women were usually inside the home of one member who had more space or outside a mosque in the case of men's group.

The entire process of internal savings and lending is handled by the group members and no amount was kept in person by any of the staff members from HH. The treasurer of the group and other office bearers are carefully chosen from the group by the group and all transactions are undertaken within the group itself. There was a tremendous sense of belonging to a particular group. Members were proud of their own group and designated an official name to their group. The group displayed a capacity towards decision-making, accountability and transparency suggesting the emergence of a strong ownership of the project. The capacity building measures did prove advantageous in supporting the local skills including financial management.

HH has been in tune with the framework of the broader strategy of the Afghanistan Rural Enterprise Development Programme (AREDP) thereby gaining in visibility and relevance. Keeping in close proximity with the National Solidarity Programme (NSP), HH has incorporated several of the 'Karyadors' into their SCGs. Field visit revealed that people living in the villages lack capacity build up and are almost 100% illiterate. Many of the beneficiaries from the women's groups had received training from the NSP and were now engaged in entrepreneurial activity from home.

The loan money was utilized to produce finished goods such as embroidery, garment making, horticulture activity, shoe making, production of Iron and metal goods, belts,

livestock raising, etc. There were elderly women who were also engaged in weaving carpets and blankets. The HH goals seemed to be in tune with the National Solidarity Programme.

The effectiveness of any programme with assistance from the local government has always been found as successful and rewarding. Meetings with two district (Khulm and Nahr-e-Shahi) sub governors, the National Solidarity Programme's Programme Manager, and the Swedish Committee of Afghanistan whose staff 'Hand in Hand' had trained revealed the close liaison HH had with the local governance. People who mattered in the local government seemed to be readily available for the HH staff. They were in close link with the organization's efforts towards training the community members. The sub governors were willing to extend all possible help to HH staff for bringing about community development. The sub governor of Khulm district highly appreciated the HH activities especially as they empowered the women from the remote villages. The project was not only an attempt towards capacity building but geared towards societal development. They were appreciative of the efforts by HH especially in their attempts at forming groups within the cultural set up. The goal of NSP was building the capacity of CDCs which is in line with the HH's goals. He believed HH in collaboration with CDCs would certainly be able to bring much relief among the community members in developing mass mobilization and capacity building. In addition to the local government, HH had close links with other NGOs such as the Swedish Committee of Afghanistan (SCA) - a 15-year old organization working in Afghanistan.

HIHAO's organizational structure, managerial support and coordination mechanisms proved to be enabling for effective delivery of the programme in the field. The office staff at 'Hand in Hand' had the necessary gender balance consisting of qualified and trained members consisting of more than 15 core members. Some of the field coordinators had a long experience with other projects and were aware of community development activities. The staff in general seemed to be dedicated and enjoyed their work. The entire team seemed to know exactly what their job responsibility was and each one was engaged in contributing to the daily business. Most of the staff members in HIHAO, have more than 5 years of experience. There are 21 direct project staffs besides others. Days were fixed for groups to meet and this field coordination was conducted with the utmost efficiency.

Challenges and Constraints

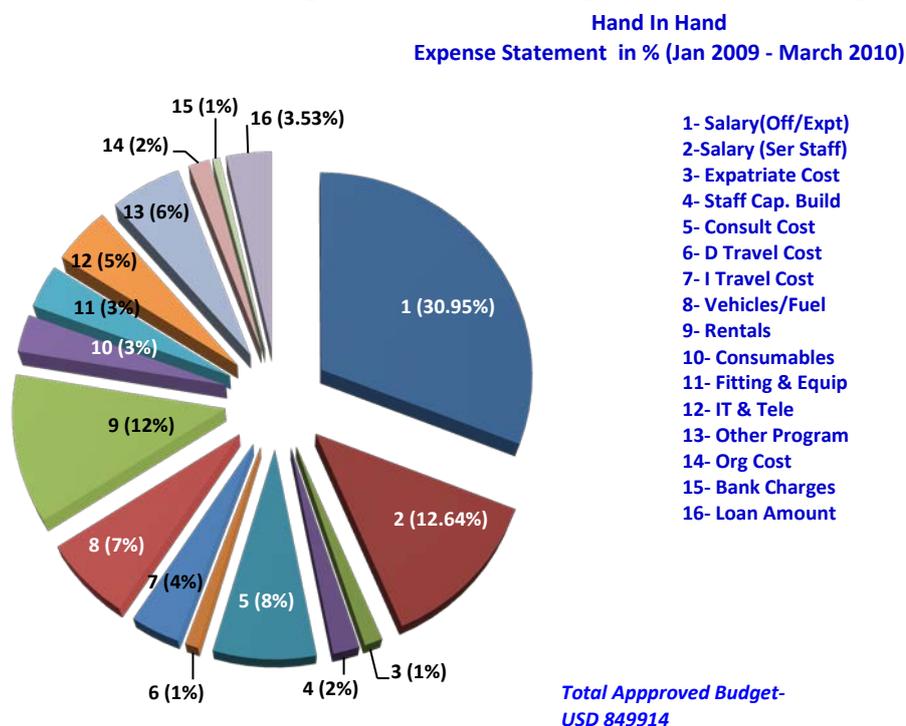
Although HIHAO has achieved considerable success in the effectiveness of the programme but past experiences suggest that there are concerns which need to be factored in for greater effectiveness. Some of the major constraints that face HH activities include access to remote areas with poor roads, security concerns, gender representation, lack of trust on NGOs, drought, poor education of communities with some areas being 100 percent illiterate, local conflict, intra community conflict prohibiting solidarity behind programme and so on. It is difficult to access women in the first place. The women's groups in particular are heavily influenced by men's groups. This was also revealed during the field visit. HH adopted the strategy by forming male groups to gain confidence and trust of the community and through this they were able to employ female staff. Mobilization was done through coordinating with female CDC sub committees in addition to main CDCs. This enabled the initiation of capacity build up of the women's groups, relying less on the men. Providing continuous extra support to women to reassure them and encourage them was one of the strategies adopted. Besides conflict between strong personalities, poor economic situation of communities often pose as a major constraint in the group formation. Sometimes overbearing leaders with previous army commander background dominate the group activities. Building a consensus and reselecting a group leader can be extremely challenging. Under such a situation the basic selection of community for mobilization becomes doubtful.

Afghanistan has seen some of the severe draughts along with conflict and violence for several decades. This has led to mass exodus of people immigrating to the neighbouring areas such as Iran, Pakistan and others in search of livelihood. Such instances can bring severe setback to the SCG activities. Among 500 SCGs that were functional, it is believed 90 groups collapsed due to drought and 80 percent of these groups were then revived by August 2009 (Dutta, 2010). Provisions of such external concerns need to be factored in within the savings group in preparation for any such eventuality.

HH has also suffered setbacks, when the World Bank and the Ministry of Rural Rehabilitation Development (MRRD), Govt of Afghanistan could not help them in providing interest free loans which are permissible under Islamic law. Losing the faith and confidence of the people at this juncture would have been a major loss for HIHAO. HH had earned the trust and faith created among the locals after great persuasion and perseverance. India came forward and provided the support and cooperation at the right juncture. This was a golden opportunity which the government of India has not missed!

Allocation of financial budget for distribution of loans among the beneficiaries was insignificant limiting the coverage of the total beneficiaries. What is disturbing in the budget breakup is the loan to the community, which constitutes only 3.5 percent (30000USD) of the total budget from the government of India's funding. During the field visit it was noticed that although the training programme had created a huge response but unfortunately this could not be translated into action due to the insignificant amount of loan assigned to the beneficiaries. This reflects a faulty designing of the project.

A dissemination of the findings was presented before the stakeholders through a workshop held on 21st Oct 2010. However it was pointed out by the NGO partner that the project's ToR did not specify any funds to be assigned as soft loans and whatever funds were offered as a soft loan was only a pilot, which was being tested for future implementation.



Data Source: HIHAO, Mazar-e-Sharief
Fig No 7

Nevertheless an amount of 100 USD seems too meagre for undertaking any substantial enterprising activity given the high costing of resources and the long distance

transportation of products to be brought from far flung remote areas. The limited no of soft loans available also resulted in catering to only a limited number of beneficiaries. The field visit revealed several beneficiaries who have used the Indian money for entrepreneurial activity, such as manufacturing of shoes, carpet weaving, livestock, embroidery, food processing, tailoring, etc.

During the field visit several members of the group, while appreciating the government of India's loan towards entrepreneurial activity requested for an enhancement of the loan amount from 100 USD to at least 200 USD for beginning a qualitative business entrepreneurship. They stated that this would give them a larger opportunity for meeting the market demand and competition. It is interesting to note that there are a significant proportion of the beneficiaries who have completed the instalments and has returned back 50 to 100 percent of their loans. These have been recycled to fresh beneficiaries. The current status states that a large number of beneficiaries are nearing completion of the repayment of loans.

An Uzbek group named Pamir in village Som, stated that they had to go all the way to Pakistan border to fetch the leather that they used for producing shoes. So in order to save the travelling expenses they sent one person who got material for the entire group. But due to shortage of funds they were unable to purchase the raw material in bulk. Moreover during the winter months they were unable to work in the fields outside. This was a time when they could work sitting indoors to produce the finished products and meet the demand of the summers for shoes, belts, etc. But this was not possible due to the meagre amount available for purchasing the raw material.

In addition they were also keen for some training programme to make new kinds of shoes with modern design along with opportunities for marketing avenues. At present there was only one type of shoes produced. In addition they were also very keen to undertake further skill training, especially the women, who were interested to learn embroidery and other handicraft designing which would sell. They would be able to buy sewing machines and work for the local demand from home itself. They usually got work from the nearby middlemen or shops but in order to keep pace with the market they needed to learn better designing.

Impact

HIHAO is towards gaining the confidence and trust of the communities in the accessible areas of Khulm and Nahr-e-Shahi. HH has come a long way from the days when the community would look at the NGOs with suspicion and distrust. HH have now begun to enjoy the trust and confidence of the people in the areas where they worked. This was amply displayed during the field visits. The community have started getting aware about India's role in strengthening the community participation and in ushering in sustainability in the programme. However this is just a beginning and must not be construed as the end of the process. Given the past experiences (Dutta, 2010) it was witnessed that calamities like drought and domination of groups by war lords, has resulted in the fragmentation of the groups. Additionally there have been instances when the treasurer of the group has decamped with the cash collected from the group members. It was indeed reassuring to see that such a situation was not prevalent in the 12 groups that were surveyed. None of the groups portrayed any such negativity. A lot of caution needs to be exerted while SCG is being formed.

The group activities during the field visit displayed a smooth manner in which they were performed. Every member present was ready with their contribution of 25 Afghani and these were being collected and recorded meticulously. Out of the 12 groups surveyed only a few members stated their inability to contribute their part but promised to pay up quickly. This too was recorded. The members expressed satisfaction in the selection of their treasurer.

Praises for Indian initiatives were conveyed by many members from the groups. One such group was highly appreciative of the timely help by the government of India for the activation of a deep well which had stopped working after being installed in one of the villages. Each deep well supplied water to six or seven villages. After much hesitation people decided to approach the Indian Consulate at Mazar-e-Sharief and placed their problems. The Indian Consulate promptly sent an engineer within a few days and got the tube well working. People were full of gratitude for this gesture of Indian government!

They even stated that they would continue the group activities even if HH leaves. Some of the past disputes had been handled with caution by HH and these got solved amicably. HH has also been successful in removing the nuisance makers from the group. A high degree of transparency and accountability of the group activities was witnessed during the field visit. This is a crucial phase of the project when HH needs to synergize their efforts in translating the capacity and capability into firm actions.

In terms of the linkages with the local governance, this seems to be in place. HH's links with the two district sub governors, the Provincial Managerial unit, National Solidarity Programme, the Nahr-e-Shahi district leader of the Community Development Committee were strong. The sub governors were well aware about the HH's activity.

The sub governor of Nahr-e-Shahi, was of the opinion that 'Hand in Hand' has been extremely effective in solving emergency cases and in running of activities touching the lives of the poor. He stated that "India is our friend and we are hopeful it will come forward and tell us how to do capacity building". He also stated that "We are still in the first stage where opportunities and encouragements are being created and we will continue to support such activities in the future as well".

The sub governor of Khulm, stated that he was the first person who participated initially with 'Hand in Hand' when they started their programme. He was appreciative of their activities as they targeted in empowering women. He felt that the project was not only an attempt towards capacity building but geared towards societal development as well. He was appreciative of the efforts by Hand in Hand especially in their attempts to form the SC groups which are quite difficult given the background and cultural set up. As regards the activities of HH the sub governor was of the opinion that it is crucial that "HH be supported for some more time so that the momentum that has gathered should not wither away". Both the sub governors hoped that the Indian Embassy would help in sharing their experiences and knowledge with fellow Afghans.

The PMU of the National Solidarity Programme was familiar with the activities of 'Hand in Hand' in Balkh province. He believed that HH in collaboration with CDCs would certainly be able to bring much relief among the community members in developing mass mobilization and capacity building. He stated that the main training programme of the CDC was focused on carpet weaving, embroidery, handicrafts, tailoring etc. All these activities were in tune with the HH activities. In Balkh province there has been a total of 216 CDCs created. More than 50 percent of the CDC members are also in the HH groups.

The intra SCG linkages among the HH groups need to be further developed so that the groups could extend strengths to each other. The synergy of the SC groups will usher in greater bonding and oneness among the members generating a feeling of ownership.

Sustainability

HH has shown potential for sustainability but continued support with speed and efficiency of interventions was still necessary for the actual take off. The project has developed the necessary vertical and horizontal linkages imparting rich capacity building

measures. In terms of transparency and accountability it has brought about much visibility. The project has created the necessary ownership and people have expressed a desire to continue even if HH discontinued their support.

With vast potentials for sustainability the project needs to imbibe greater efficiency and speed for introducing entrepreneurial activities. The districts of Khulm and Nahr-e-Shahi have an estimated population of 120000 and 140000 respectively. There are 95 villages in Khulm and about 70 villages in Nahr-e-Shahi. This leaves plenty of scope to do more. Linking of groups with CDCs will go a long way in covering more areas efficiently.

HH has come a long way creating 274 groups, out of which 47 percent are females. A total of 4899 beneficiaries exist. However given the ground realities in the villages, more activities imparting livelihood options need to be introduced on a war footing.

Replicable

The micro finance groups are developing into models that can be replicated provided it can imbibe the need based capacity building measures

As stated by the Provincial Manager of the NSP, in Afghanistan everything that one does is of crucial significance. However if one were to select according to top priority, the most crucial sectors, it would include education, agriculture and security.

In Balkh the issue of education is being addressed through the creation of some 50 schools (Primary, Secondary and High schools). Some got newly created while some old ones got renovated. India also contributed in rebuilding the famous Habibia High School and this has opened since Aug 2005. In Balkh province alone around 2000 projects have been initiated under the NSP in the various sectors such as

- Education (Renovation of Schools, Furniture, training courses to the CDC members, etc)
- Water (Digging of Deep Wells, special reservoirs called 'Kanda' are being created in the mountains)
- Health (Clinics)
- Transport (roads)
- Power (solar energy, power lines)
- Rural Rehabilitation, others

The HH Savings Credit Group can become a replicable model in the region provided it imbibes some of the demanding issues into its mass mobilization mission. Most of the villages lack piped water, electricity and roads. The programme activities must imbibe need based capacity building measures such as adult literacy programme as well as mass awareness. Entrepreneurial activities need to take into account the resource endowment of the region. Programme related awareness and literacy needs to be spread in the region which would contribute to the formation and development of Community Savings and Credit Groups (SCGs) ushering in sustainability.

Recommendations

Although the initiatives have been context relevant and have opened up avenues for Afghan women and the community at large, there remain gaps in the project implementation. The potential of such attempts by the government of India in view of its neutral and respected position among the stakeholders will go a long way in ushering in efficiency, transparency and sustainability to all such programme.

- It is recommended that all training of SCG members need to focus on specializing of entrepreneurship products. The number of beneficiaries may be restricted from each group, depending on the capacity and capability of the members. These members in turn may train others and focus on producing the specialized product.

- Given the high costing of the raw material and the hardship in obtaining such raw material from a distance, HIHAO enhance the loan amount to at least 300 USD per person as against the present 100 USD. This will help the beneficiaries to enhance their speed and efficiency for meeting the growing market demand and at the same time maintain a larger circulation of loan flow among the beneficiaries.
- Based on the field experience and also keeping in tune with the above, it is recommended that the donor agencies design a format for submission of applications from implementing partners, such that it becomes mandatory to assign at least 20-30 percent of the total budget exclusively meant for the target group. This is essential for ushering in an equal and strong matching action oriented programme vis-à-vis the skill development imparted.

References

CSO (Central Statistics Organization), 2005	Islamic Republic of Afghanistan, http://www.cso.gov.af/demography/population.html
DCM - Kabul, 2010	Office of the Deputy Chief of Mission, Embassy of India, Kabul, 2010
Dutta Mondira, 2008	India-Afghanistan Relations: Opportunities and Challenges in World Focus, India's Foreign Policy: Issues and Challenges, 347-348, Nov-Dec 2008, Annual Number
Dutta Mondira, 2010	Project Report on 'Indian Initiatives for Afghan Women - An impact study' sponsored by the Ministry of External Affairs, Government of India. Sponsored by the Ministry of External Affairs, Government of India.
HDR (Human Development Report), 2009	Afghanistan, http://hdrstats.undp.org/en/countries/country_fact_sheets/cty_fs_AFG.html
MoWA (Ministry of Women's Affairs), 2008	Women and Men in Afghanistan, Baseline Statistics on Gender, 2008, MoWA & UNIFEM http://www.mowa.gov.af/
Pajhwok Afghan News, 2010	5th August 2010
PHR (Physicians for Human Rights), 1998	"Treatment of Women in Kabul", International Campaign to Ban Landmines (won the 1997 Nobel Peace Prize for its work against the explosives)
Time, 2010	August 9, 2010
UNICEF (The United Nations Children's Fund), 2008	Afghanistan Statistics, http://www.unicef.org/infobycountry/afghanistan_statistics.html#68
UNIFEM & MoWA, 2007	Violence Against Women Primary Database, UNIFEM & MoWA, 2007, http://mowa.gov.af/english/?page_id=11

ETHNICITY AND ELECTORAL BEHAVIOUR IN NIGERIA

Nwachukwu Sunny Nnabuihe

Department of Political Science Faculty of Social Science
Alvan Ikoku Federal College of Education, Nigeria.

Dr. Austin Aghemalo

Department of Political Science
Ambrose Ali University, Ekpoma, Edo State.

Nwosu Ezekwesiri Okebugwu

Department of History & International Studies Faculty of Social Science
Alvan Ikoku Federal College of Education, Nigeria.

Abstract

It is rather an indisputable fact that ethnicity has marred politics in Nigeria. With ample of data, it is evidently shown that ethnicity determines the choice of votes and voter's decisions in electioneering in Nigeria. The electoral choice of Nigerians are ethnically coloured as party formations are ethnically designated and motivated. The analysis below shows that political parties in Nigeria do not have national platform hence political party that is formed from the majority ethnic group dominate the said region and 2/3 majority is almost difficult to attain except if major parties go alliance. The study began with an examination of the history and electoral behaviours of Nigerians. The result of the first and second republics and their voting patterns have been mapped using the results of these elections to determine the ethnic colouration of the electorate. More so, the researchers further their findings to identifying institutional structures that have aided ethnicity to mar democratic consolidation in Nigeria, various approaches were adopted to study ethnicity in Nigeria and findings showed that ethnicity is the major factor militating against the evolution of the truly modern and democratic nation where the interest, wellbeing and the rights of people are protected.

Keywords: Ethnicity, elections, nigeria

Introduction

Ethnncity and electoral behaviour in nigeria

Ethnicity involves the common consciousness of shared origin and tradition among a group of people (Iain Mclean, 1996; 163). The concept refers to a social identity formation that rests upon culturally specific practices and unique set of symbols and cosmology. (International Institute for Democracy and electoral assistance; 2000). Ethnicity has also been defied as a strained and exaggerated feeling of difference in relation to other ethnic groups (P.Heinecke: 1986; 40).

The term ethnicity is sometimes used interchangeably with ethnic nationalism or ethnonationalism. Ethnic nationalism is a stronger or extreme form of ethnicity. While ethnicity is pursued within the framework of a state, ethnic nationalism seeks for attainment of sovereignty or statehood for an ethnic group. Both terms are applicable to the Nigeria situation as various ethnic groups has at one time or the other has expressed the desire for independence from the federation which reached its peak with the civil war episode. Ethnic nationalism is an extreme belief in the course of the ethnic group, which is usually aggressive in its competitive drive. This attitude, in its manifestation, generally underrates other ethnic

groups and even sees them as inferior. The ethnic group comes first in the mind of an ethnic nationalist in considering national issues and is bent on doing anything possible for the advancement of the ethnic group undermining the state.

The baneful effect of ethnic nationalism or ethnicity on the development of Nigeria has remained unabated even after forty years of political independence and the struggle for the attainment of national integration and unity. This situation besides going unabated has in recent years assumed a more precarious and dangerous dimension.

Ethnicity is apparently experienced in every facet of our national life and has also been blamed for the many woes that have befallen Nigeria. Such problems as electoral malpractice and inability to practice democratic governance have their basis, to a large extent, in ethnicity. Military incursion into politics is seen in some cases to be ethnically motivated. Another example is the issue of census in Nigeria, which has never been successfully conducted without reports of widespread malpractices and protests from various parts of the country. These acts are largely perpetuated in the name of the ethnic groups, just as the phenomenon of ethnicity cannot be said to be peculiar to our country. Rather it is widespread and every ethnic group in Nigeria is guilty of it in various ways and in varying degrees. Ethnic nationalism has earned us unforgettable and bitter experience such as bloodbath of the thirty dark months of the civil war and other civil unrests, which have had a heavy toll on human lives.

The study of ethnicity in Nigeria dates from the colonial era. Ethnicity became very visible first with the tripartite struggle between the elite or spokespersons of the three major ethnic groups. Each of these ethnic groups commanded a preponderance of population over other ethnic groups in each of the then three Regions. The regional dominance led to agitations from the ethnic minorities in these regions for separate states of their own. Prior to independence, the competition was no longer just between the three ethnic groups of the Hausa-Fulani of the Northern Region, Yoruba of the Western Region and the Igbo of the Eastern Region. The minority ethnic groups in each of the Regions also began to perceive members of the majority ethnic groups as their enemies, hence the early cry for separate regions just before independence because the three existing Regions were seen as belonging to the majority groups. The cry of marginalization led to the colonial government's appointment of the minorities' commission (Coleman 1958; 390-396). From the above it is clear that ethnicity and its other related issues have been under investigation long before independence. The adoption of a multi-party system saw the proliferation of parties to the extent that there were eleven political parties in the country between 1951 and 1966, all exhibiting strong ethnic postures. The majority ethnic group parties brought the innovation into the party system by aligning with major political parties outside their Regions. Such alliances include those of the UMBC of the Northern Region linking with the AG of Western Region, while the Mobolage Grand Alliance declared for NPC. The non-Igbo speaking area of the eastern Region allied with the Action. The government that emerged at the centre after 1959 election was a coalition of NPC and NCNC because no party had a large enough majority to form a government. This coalition saw the AG going into opposition (Dunmoye 1990; 90-92)

The view that Nigerian electoral choice is largely based on ethnic considerations as the elections of the pre-independence to the Second Republican election portrayed, has been seriously undermined by the electoral trends of the aborted Third Republic and the present Fourth Republic. Candidates won appreciably in areas outside their ethnic homelands in some instances and in others, some lost in their own ethnic localities. From the foregoing, one would be tempted to assume that ethnic nationalism as previously exhibited in the Nigerian voting patterns, is fast becoming anachronistic in the more recent Nigerian political process. The irony of this development is the strengthened of ethnic nationalism to the detriment of

'central nationalism', a trend which has been clearly displayed in recent times in the rise of various ethnic militia groups in different parts of the country. This coupled with the continuous cry of marginalization from virtually every segment of the country. With this situation, disintegration and succession appear to be lurking permanently in the corner in our national life.

Nationalism is the expressed desire of a people to work for their own unity and political independence within the framework of the nation-state, and to put loyalty to the state above all other loyalties (Jordan, 1978; 308). The only sense in which something akin to nationalism, as expressed above, was exhibited by the generality of Nigerians was in the struggle for national independence from foreign rule. The nationalist struggle tended to keep ethnicity at bay in the meantime or diverted some attention away from the pursuit of ethnic chauvinism. However, the achievement of political independence meant the disappearance of the common enemy. The competition and conflict were now between former allies who fought against foreign rule and domination. So, while the struggle for independence was within the framework of the nation-state, the new struggle of ethnic nationalism in essence has to do with placing loyalty to the ethnic/tribal group above all other loyalties, in particular loyalties, to the nation –state.

This study in essence is interested in ethnic nationalism and its influence on the Nigerian political process over the years, focusing on the voting pattern of the Nigerian electorates.

Ethnicity

Ethnicity is derived from the word 'ethnic' has been variously conceptualized by various scholars. Abne Cohen (1969, 4) views the term as referring to strife between groups in the course of which people stress their identity and exclusiveness. The notion implies a conflictual and competitive relationship between ethnic groups that happen to come in contact (Nnoli, 1978; 5). In addressing ethnicity, Nnoli began by eliciting the possible conditions that give rise to ethnicity. In his opinion, ethnicity arises when two or more ethnic groups come together or are brought together in one political union or society. Usually when two or more ethnic groups interact, ethnocentrism is exhibited by each of them. Ethnocentrism can be said to be the harmless stage or the budding stage of ethnicity. The attributes of ethnocentrism are limited to beliefs, group identity, parochial orientation and group pride. It is a universal phenomenon that one often judges people of other ethnic groups subjectively using one's own ethnic values or expectations as the standard for assessing others. Its essence is to stress the loyalty, pride and devotion to ones ethnic group. Nnoli continued by saying that ethnicity exists only within a political society consisting of diverse ethnic groups. When there are no more than ethnic group in a society as in the case a situation its relations with other groups and societies are characterized by nationalism (Nnoli 1978; 6)

Ethnicity according to Crawford Young is defined thus:

The active sense of identification with some ethnic unit whether or
Not this group has any institutional structure of its own, or whether
It has any real existence in pre-colonial epoch (1965; 234)

Ethnicity or ethnic identity also involves, in addition to subjective self-consciousness, a claim to status and recognition either as superior group or as group at least equal to others groups. Ethnicity is to ethnic category what class consciousness is to class (Brass, 1991; 19)

Joan Vincent views ethnicity as an alternative form of social organization and identification to class but it is a contingent and changeable status which like class, may or may not be articulated in particular contexts or particular times (1974;376-377). Ethnicity, that is the conversion of cultural differences into basis for political differentiation between peoples, arises under certain circumstances. One of the circumstances that give rise to

ethnicity is explained by elite competition. Competition between or among the elite precipitates ethnic conflict under specific conditions which arise from the broader political environment rather than from differences in the cultural values of the ethnic groups in question. This view is consistent with the assumption that ethnic identification is a variable rather than a fixed or given disposition (Brass, 1991:13). Another theoretical argument for the rise of inter-ethnic conflict is the critical role of the relationship established between the elite and the state particularly the roles of collaborators with the opponents of the state authority (Brass, 1991:14)

Ethnic conflict or ethnic politics has long been recognized as one of the more fundamental threats to institutional stability, political order and state cohesion in multi-ethnic societies of the third world (Diamond, 1987). This is not to imply that ethnicity is just a third world or parochial phenomenon. There are few places on earth where ethnic politics cannot be found. Ethnic conflict just as we have in the third world like Afrikaners versus Bantu, the Kurd versus Iraqi, so also it exists in the developed countries, conflicts such as that between Ukrainian versus Great Russia, Turks versus Greek Cypriot, Welsh versus English, blacks versus white (Edger Litt, 1970; 6). The list is endless.

Ethnic group

There is a general consensus among scholars on the 'term ethnic' group even though some stress certain elements which others do not lay much stress on. An ethnic group is a self-perceived group of people who hold a common set of traditions not shared by others with whom they are in contact. Such traditions typically include 'folk' religious beliefs and practices, languages, a sense of continuity, and a common ancestry or place origin (George De Vos and Lola Romanucci, 1975; 9). Paul Brass (1991:19) pointed out that in addition to a distinction from others in terms of major cultural criteria, an ethnic group contains within its membership either in principle or in practice the element of a complete division of labour, forms an ethnic category. The above view emphasizes on class, gender or age grade. An ethnic group is usually associated with a particular racial group. In the United States of America ethnic issues are mainly in terms of racial differences.

Ugbana Okpu (1977:13) considered ethnicity from its evolutionary perspective. Ethnic group according to him, may be the result of fusion of tribes or may come about through inter-marriage, inter-mingling etc. This implies that an ethnic group is not necessarily natural but can come into existence by the activities of men or can be created by men. That is why we find some linguistic and cultural interpretation of groups inhabiting the fringes of some supposedly natural ethnic groups which the result that a new language or dialect emerges which is a blend of the languages spoken on both sides of the ethnic divide.

Eghosa Osaghae (1984:116) asserted that not only do the members of an ethnic group see themselves as one but are seen as being so by others outside the group. He also added that an ethnic group usually inhabits a particular territory to which they hold claim as their ancestral home. The issue of habitation should not be stretched too far as members of a particular ethnic group in modern times are not always confined to one territory. There are ethnic groups whose members still maintain an ethnic identity with a sizeable number to form a community residing far away from their ancestral home and even after several generations. The Jewish communities are in various parts of Europe and even in the United States of America thus giving rise to such terms as the Russian Jews, German Jews, Austrian Jews, Polish Jews, America Jews etc. They maintain their identity even in the diaspora (a situation whereby a people are scattered far away from their ancestral homeland)

The generally assumed number of ethnic groups in Nigeria is far less than the reported number of language groups. It is believed that there are approximately 248 distinct languages, though language is not the only or the most important issue considered in drawing ethnic

demarcations, other cultural attributes are included such as religion, customs, traditions and political institutions.. Some of the major ethnic groups in Nigeria are Yoruba, Edo (Benin), Igbo, Ibibio-Efik Urhobo, Ijaw, Hausa, Fulani, Kanuri, NUpe, Tiv, Itsekiri.

Electoral behaviour

One of the most important features of democracy is the chance for every eligible citizen to choose a candidate to run the affairs of the state. Electoral ideas have developed alongside with the democratic ideal though it has had a turbulent time attracting general acceptability in human society. In its development, the granting of franchise was first to a small privileged group in the society usually based on the membership of an estate. It was gradually extended to possessions of property. Age restriction and even sex discrimination also existed but the latter has virtually been abolished in all democratic societies. However, age restriction is still in most democracies, only citizens that are eighteen years can vote in some countries like Nigeria and USA while some other countries have fixed theirs at twenty or twenty-one years.

Election is believed to serve several purposes in a democracy. Apart from the equal chance to participate in politics, it is used to gauge the political health of a society or government by serving as a stamp of legitimacy for the government of the day. At the same time, election acts as checks on the government, since the elected are aware that they may not be re-elected for another term unless they fulfilled their electoral promises to the satisfaction of the electorate who gave their mandate. Election is both a process of changing governments and making governments alive to their responsibility. It means of bringing periphery into the political arena. (Dowse and Hughes, 1972; 324)

Election is seen as providing peaceful change of government, it also provides social groups with the chance of resolving their conflicting needs peacefully. Voters are considered to be rational and intelligent in their choice among candidates. However, an opposing view sees elections as merely 'symbolic' in character. According to this position, elections are a secular ritual of democracy (Niemi and Weisberg, 1976; 3). This view is in opposition to the one which holds that voters are intelligent and informed about their choice of candidates and that voters vote as a fulfillment of their civic duty. Voters are aid to know next to nothing about the candidates is irrelevant to governance. Our concern in this paper is to examine the electoral behaviour of the Nigerian electorate using ethnicity. In essence our interest is in mapping out the patterns of voting and to see to what extent such patterns are directed by ethnicity.

Ethnic electoral behaviour in Nigeria is as old as election in Nigeria itself. This trend has been identified by various writers on Nigeria election or politics. The NCNC was the only party that started without ethnic base, but had it support from various parts of the country. When the use of carpet rising made it impossible for Nnamdi Azikiwe to get a seat in the West where he had won election in 1953 (Claude B. Ejiluwu: 1997:39). He had to move to the East and the party's fellowship became more of the Igbo ethnic group. Hence the NCNC had nearly all its supporters from the Igbo ethnic group which happened to be that of the leader of the party. Hence Ken post (1963:13) wrote that from 1951, membership of the political parties were reflecting more primordial outlooks. The NCNC had nearly all its supporters drawn from the Igbo ethnic group which happened to be that of leader of the party. Most Yorubas backed the Action Group under the leadership of their kinsmen Chief Obafemi Awolowo. The Norther Peoples Congress remained the party for the Hausa/Fulani ethnic group. Richard Sklar (1963, 474-475) also identified the distribution of party strength and composition of the local affiliates of the party to be strongly affected by tendencies towards ethnic solidarity. The voting decision in the 1959 Federal election according to Ken post (1963:377) was not to be made individually, but as a member of a community. His result of

the 1959 federal elections showed that all parties performed very well in their ethnic bases. The NPC and NCNC won over 75% of the electoral seats or constituencies in the northern and eastern regions, respectively, while AG had over fifty percent (50%) of the seats in the western region (KWJ post 1963: Appendix D).

Strong ethnic sentiment also reared its head in the 1979 election having played a vital role in the electoral crisis of 1965 which culminated in the incursion of the military into Nigerian politics. The result of the 1979 federal election also showed remarkable victories in the ethnic bases of parties candidates or flag bearers. The UPN won in all the Yoruba states, the NPP won the Igbo State of Anambra & Imo while the NPN won a good proportion of the Hausa/Fulani states. This is a repeat of the 1959 scenario.

In the aborted third republic, the general election presented a different picture of electoral behaviour from the previous elections. The voting pattern was largely devoid of primordialism which had seemed to be crucial in our previous general elections. This can be accounted for by the streamlining of the party system to two instead of multiparty system was adopted in 1959 and 1979 respectively.

The 1999 Federal election also went the same way like that of the aborted third republic with candidates winning outside their ethnic base. The eventual winner of the election did not even win in his own state but rode to victory with votes from other parts of the country.

Various approaches have also been applied in the study of ethnicity in Nigeria. The Marxist approach and the liberal approach have been used by various scholars. Nnoli (1978, 12) employed the Marxist approach in his analysis. He views ethnicity as an element of the superstructure of the society (infrastructure). In line with this view, class consciousness (Onimode, 1981). The Marxists, disagree with the view that socio-cultural difference is sufficient to lead to the persistence of ethnic loyalties, nor are biological variations enough reason for the rise of racism. Ethnicity only tends to serve the interest of those who want to divert attention from the assessments of the economic contradictions in the society. This is necessary to avert the revolutionary consequence of the masses becoming class conscious to extend of overthrowing the social order.

The liberal/modernization approach sees ethnicity as connoting the classical definition of a national grouping. Mair (1967) prefers the term "national groups" to the term tribe. An ethnic group (or tribe), is a people having the same historical experience, culture, language, and who share the belief about the future together. The liberal theorists see ethnicity as by-product of modernization or political development. Using the African example of colonialism, Zoberg A (1968) suggests the bringing together of various ethnic groups led to competition for societal values (Ibid 1968). The above authors view ethnicity as only an African or third world or a parochial phenomenon since they conceptualized ethnicity as a by-product of modernization or political development. However, features of ethnicity are found everyday in the countries referred to as highly develop politically. The view seems to reduce the efficacy of the modernization approach. This is not to say that every aspect of liberal modernization theory should be put aside, since value could still be found in contributions from other liberal scholars. For example Oyovbaire (1974) sees the definitional boundary of ethnicity as determined by the way interests coalesce and processed within the political system. Common interests may not always coalesce along tribal lines and an ethnic group may be large, or smaller than tribe or community. The liberal theorists generally see ethnic groups as organized around a set of common activities which may be political, social, economic or psychological.

Mafeja (1971) agreed with the Marxists that ethnic consciousness is false consciousness, but says it may be unnecessary to deny ethnic differences in order to assert class. He suggested that distinction must be drawn between a person who, on behalf of his

ethnic group strives to maintain its traditional integrity, and cultural purity and autonomy, and the person who invokes ethnic ideology in order to attain or maintain a powerful position in a multi-ethnic political system.

Both schools of thought have common grounds in their analysis of ethnicity in Africa. From the Marxist view, ethnicity in Africa is linked with capitalist development in Europe, which resulted in imperialism and colonialism. This view of an external influence on the evolution of ethnicity is also shared by the liberal/modernization theorists. There are agreements on certain other grounds such as the role of the elite or the ruling class in the society. The major ground for disagreement seems to be ideological as the solution proffered, while the Marxist solution entails the destruction of all the liberal structures in order to set up a classless society, the liberal school of thought suggests that increased modernization would eventually efface ethnicity. The struggle for a solution to the problem of ethnicity thus remains a continuous one. Unfortunately, both the Marxist developed and less developed states as well as the liberal developed and less developed states has not solved their problem of ethnicity. None has been able to come up with an Empirical and enduring solution to ethnic problems in their countries, which would serve as a universal model for others.

The effect of ethnicity on electoral behaviour

The effect of ethnicity on the electoral behaviour of the Nigerian electorate. The Nigeria polity is one that has been plagued by many impediments to its political development. Ethnicity has been identified as one of the major factors militating against the evolution of the truly modern and democratic nation where the interest, well being and the rights of the citizens are protected, irrespective of the ethnic, racial, religious, geographical, social and economic background of the individual.

Ethnocentrism is a universal phenomenon when different ethnic group comes in contact, but taken to an extreme dimension it becomes ethnicity or ethnic nationalism. The situation can be said to, have been encouraged by the colonial masters. The idea of separating strangers from natives as was practice in the north continued and intensified ethnic mistrust. The policy of “sabon gari” is in itself akin to apartheid.

The political elite that elite inheritance power from the colonial masters took advantage of the ethnic differences that existed between the people for their person accumulations in terms of economic in the examination of the factors that enhanced the growth and development of ethnicity in Nigeria, colonialism is usually considered as one of such factors. Inter-ethnic strife between the people helped to facilitate the divide and rule policy of the colonial master. The Nigerian indigenous elites are also not free of blame in the nurturing of ethnic nationalism. They have been accused of using ethnic sentiments to mobilize support in their personal struggles for political and economic gains. They have been able to use this as a result of the general level of enlightenment in the country. Our literacy level is still very low that those who cannot easily fall to the manipulations of the elite are very few.

Ethnic clashes have resulted in blood letting from various part of the country. Communities in rural area claiming entitlements of ethnic bases have found it necessary to take on their neighbours perceived to be hindrance. Some of these rural base crises are Hausa-Kataf, Junkun-Tiv, Kuteb-Junkun, Hausa-Mambilla, Ogoni-Andoni, Ilaje-Ijaw, Urhobo-Itsekiri.

Other major destructive incidence on the trail of ethnicity in Nigeria are the Jos riot of 1945, the Kano riot of 1953, the Tiv uprising of 1959 to 1960 and 1964, the general election crisis of 1964 and the western election crisis of 1965 which led to the imposition of a state of emergency and eventually military incursion into politics, the ethnic massacres within the

army and in the North which preceded the civil war in 1967 and the civil war which lasted for 30 months (International Institute for Democracy and Electoral Assistance: 2000:53).

Ethnicity has in the past threatened the co-operate existence of the nation as various ethnic groups have at one time or the other express the desire to secede from the federation. The Yoruba threatened to Secede in 1953 and 1954, the Hausa and Fulani in 1966, the Igbo in 1964. Succession has been declared twice in the history of Nigeria, the Republic of Biafra in 1967 and the Delta Peoples Republic in 1966 (Ibid). These attempt were forcibly repressed by the federal forces, That of Biafra was very costly in terms of lives and other resources that was committed to the prosecution of the civil war that followed the declaration of sovereignty by the Biafra leader.

Ethnicity has remained a serious problem in the development of the Nation. We see it comes to play often in issues such as employment into the federal civil service and in admission into institutions of higher learning. It is common phenomenon in the Nigerian society to see a section or sector or its higher echelons dominated by people of a particular ethnic group, a good example is the domination of the army and sectors like the Judiciary also dominated by the Yoruba ethnic group

In the study of ethnicity in Nigeria, its effect has also been greatly exhibited in our voting pattern. Some of the results of our election present a picture of ethnic lines instead of the candidates, not assessing his personality and even past records. In some other cases the decision to vote or who to vote for is taken by the leaders of the community. The members of the elite group who by their training or education are expected to promote the political education of the electorate so as to enable them to be more critical in deciding on how to go about their civic duty (voting), but they turn out to be instrumental in making the electorates to be more parochial in their political outlook. The members of the elite group in their struggle to acquire or retain political power manipulate the ethnic cleavages in the society. This tendency has not allowed the development of National parties rather our political parties are more of organizations for promoting ethnic interest.

Another development in the issue of ethnicity in Nigeria is the recent rise of ethnic militia in various parts of the country. The idea of cultural union dates from the colonial era, when we had the Igbo State Union, the Egbe Omo Oduduwa, the Jani 'Iyyar Mutare Arewa (Northern People's Congress), and a host of others sponsored by various minority groups. Having ethnic militias however is really something novel in the political development of Nigeria. Some of these ethnic militias include the Odua People's Congress of the Yoruba ethnic group, the Bakassi Boys and the Movement for the Survival of the Sovereign state of Biafra (MOSSOB), a Biafra revivalist movement of the Igbo ethnic group, as the Egbesu boys and several others of the Niger Delta Area. The existence of some of them came to the open after they had a clash with the government, with such development; the country can be described as under siege or resting on a time bomb.

The major political parties of the first republic

The major Political Parties that contested the Federal Election of 1959 will be considered in order of their relative age. In this wise the firm is the NCNC, which was founded by late Dr. Nnamdi Azikiwe in 1944. It began as a nationalist movement. The leader, Nnamdi Azikiwe was prior to it foundation a member of the Nigeria Youth Movement. The NCNC was able to transform itself to a Political Party, to contest the regional elections under the Macpherson constitution while the NYM with the passage of time lost followership. NCNC remained the only political Party that evolved for the National movements if not for certain controversies that surrounded its founding father, Nnamdi Azikiwe. This is in regard to the circumstances surrounding his withdrawal from the NYM, and his close ties with his

Igbo State Union, for which the Party was regarded by many other segments of the nation as an Igbo Party, beside majority of the members were actually of Igbo origin.

The other party that arose was the action group, it is considered by many observers as a purely tribal Political Party by reason of the fact that it metamorphosis from a pan Yoruba cultural group. The Egbe Omo Oduduwa. Its aims and objectives were for the advancement of the Yoruba race.

The Northern Peoples congress arose mainly as a result of the rate of political advancement of North, which was considered at the time to be much slower than in the South, its major objective was to project or protect the political and economic interest of the North, fearing domination by the South which was already far ahead in terms of westernization and political development..

The three parties discussed above are the major political parties that contested the 1959 Federal Election. There were several minor political parties beside the NCNC, AG and NPC, with strong ethnic motive behind their formation.

The ethnic undertone in the formation of a good number of the parties for the 1959 federal election can be deduced from even their names, for example, the NPC, and many of the minor parties.

The following table gives the names of the parties, the names of their leaders, the regional bases and ethnic support.

Political parties and their ethnic bases 1951-1966

PARTY	LEADERS	REGIONAL BASE	ETHNIC SUPPORT
Northern people Congress (NPC)	Sir Ahmadu Bello	North	Hausa/Fulani
Action Group (AG)	Chief Obafemi Awolowo	West	Yoruba
National Council of Nigerian Citizens (NCNC)	Dr Nnamdi Azikiwe	East	Igbo,Edo(Yoruba up to 1960)
Northern Elements Progressive Union (NEPU)	Alhaji Aminu Kano	North (Kano and Zaria)	Hausa/Fulani (Poor people)
United Middle Belt Congress (UMBC)	Joseph Tarka	Middle Belt	Tiv, Biron
Dynamic Party(DP)	Dr Chike Obi	East	Igbo
Mobolaje Grand Alliance(MGA)	Alhaji Adegoke Adelabu	West	Ibadan (Yoruba)
Niger Delta Congress (NDC)	Harold Biriye	East	Ijaw.Kalabari
United National Independence Party (UNIP)	NIP-UNP Coalition	East	Ibibio
Igbirra tribal Union	George Ohikere	North	Igbirra
Nigeria National Democratic Party (NNDP)	Chief Samuel Akintola	West	Osun, Oyo, Yoruba
Bornu Youth Movement (BYM)	Mr Abba Gana	North	Kanuri
Mid-West Deemocratic Front (MDF)	Apostle John Edokpolor	Mid-West	Benin
Nigerian National Allaince(NNA)	NPC-NNDP Coalition	North/West	
Northern Progressive Front(NPF)	NEPPU=UMBC Coalition	North	
Out-Edo	Chief Omo Osagie		
United Progressive Grand Alliance (UPGA)	AG-NCNC Coalition		
Socialist Workers and Farmers Party(SSWFP)	Dr. T Otegbeye		
United National Party (UNP)	Alvan Ikoku	East	Igbo
National Independence Party (NIP)	Dr. E.U Ujoma, Jaja Nwachukwu, Prof. Eyo Ita	East	Igbo
Democratic Party of Nigeria and Cameroun(DPNC)	Dr. Mbadiwe K.O	East	Igbo
National Emancipation League(NEL)	M.R.B Otun	West	Yoruba
Benin Delta Peoples Party (BDPP)	E,B Ogunje	Mid-West	

The following table in addition to the one above gives the Percentage of Ethnic distribution of leaders of the major Political Parties in 1958 as a Percentage of totals

PART Y	IGBO	OTHER EASTERN GROUP	YORUBA	OTHER WESTERN GROUP	HAUSA/FULANI	OTHER NORTHERN	OTHERS
NPC			6.8		51.3	32.4	9.4
NCPNC	49.3	9.9	26.7	5.6	2.8	-	5.6
AG	4.5	15.2	68.2	7.6	3	-	1.5

The 1959 Federal Election

The following table gives the result of the 1959 federal election

REGION PARTY	NORTH		EAST		WEST		LAGOS		NATIONAL AVERAGE	
	NO	%	NO	%	NO	%	NO	%	NO	%
NPC	134	77		0		0		0	13.4	42.94
NCNC/CEPU	8	4.6	58	7.9	21	34	2	67	89	28.52
AG	25	14.4	15	20.5	33	53	1	33	74	23.71
OTHERS	7	3.4	0	0	8	13	0	0	15	4.80
TOTAL	194	-	73	-	62	-	3	-	312	

Source: KWJ post. The Nigerian Federal Election of 1959, Oxford University Press 1963, Appended XD

From the above table, Parties has the highest electoral support from their regional bases of their leaders. NPC won all her electoral victory in the northern region having 77% of the constituencies in the northern region and was not able to capture any in the south. For the other two major, the story would have been much different from the performance of the NPC winning over 50% of the votes in their regional bases. These were the only parties that recorded appreciable victories outside their region. This itself cannot be stressed too far as such victory can easily be explained to be as a result of the alliances they made with minor parties in regions other than theirs.

The federal election of 1979

This election was similar to that of 1959 in some ways. The military authority conducted the election on the eve of their disengagement from politics. The colonial authority conducted the 1959 election on the eve of independence.

The parties that were eventually registered for the 1979 election had strong ties with the parties of the first republic. Five parties were registered for the 1979 election, these parties and their leadership are displayed below their tie with the parties of the first republic will be seen from their leadership hierarchy.

POLITICAL PARTIES	LEADERS
National Party of Nigeria (NPN)	Alhaji Shehu Shagari
Nigeria Peoples Party(NPP)	Dr Nnamdi Azikiwe
Peoples Redemption Party (PRP)	Malam Aminu Kano
Great Nigeria Peoples Party(GNPP)	Alhaji Waziri Ibrahim
Unity Party of Nigeria(UPN)	Chief Obafemi Awolowo

The above is a display of the parties and their leaders for the 1979 Federal Elections. An examination of the table reveals that the leaders of four of the parties were also the leaders of some of the dominant parties of the first republic. The only name that cannot be found in our earlier table for the party leadership of the first republic is that of Alhaji Shehu Shagari. This is not to say that he was not important player in the politics of the first republic. The parties for the 1979 election can be said to be reincarnated or resurrected parties of the first republic (1959). The leader of the Nigerian Peoples Party (NPP) was Dr Nnamdi Azikiwe who led the NCNC of the first republic. The leader of the People Redemption Party was Malam Aminu KAno who was the leader of the Northern Element Progressive Union (NEPU) of the first republic. The leader of the Great Nigerian Peoples Party (GNPP) was the leader of

the Bornu Youth Movement (BYM) of the first republic. Chief Obafemi Awolowo who was the leader of Action group (AG) in the first republic led Unity Party of Nigeria (UPN).

Each of the parties that contested the 1979 election maintained dominance in their ethnic bases as it was in 1959. The result of the election was a clear reflection of the ethnic tendency of that of 1959. This can be seen in the following tables

Ethnic voting in the 1979 presidential election.

TABLE IV.A Election Results in Hausa/Fulani Dominated State

STATE	TOTAL VOTES	GNPP % VOTES RECORDED	UPN % VOTES RECORDED	NPN % VOTES RECORDED	PRP % VOTES RECORDED	NPP % VOTES RECORDED
Bauchi	998,683	15.44	3	62.48	14.34	4.72
Kaduna	1,382,712	12.8	6.68	43.12	31.66	4.72
Kano	1,220,763	1.54	1.23	19.94	76.41	0.91
Sokoto	1,348,697	26.61	2.52	66.58	3.33	0.92

The above table shows that the parties that won the election in the Hausa/Fulani states were off shots of the parties that were dominant in the area in the first republic. The NPN that was more or less the new NPN won decisively in Bauchi (62.48%), Kaduna 43.12% and Sokoto (66.58%). The PRP, an off shot of NEPU, also won in the Kano area, where NEPU had in the first republic been the dominant party with (76.41%) such a high percentage

TABLE IV B election results in yoruba dominated states

STATES	TOTAL VOTES	GNPP	UPN	NPN	PRP	NPP
Lagos	824,414	0.48	82.3	7.18	0.47	9.57
Ogun	744,608	0.53	92.11	6.23	0.32	0.32
Ondo	1,369,849	0.26	94.51	4.19	0.18	0.86
Oyo	1,369,547	0.57	85.78	12.75	0.32	0.55

The above table displayed clearly an increase in ethnic pattern of voting in the Yoruba dominated state. When viewed comparatively with the 1959 Federal election, the AG which metamorphosed into the UPN, a Yoruba dominated party got 53% of the vote in the region in 1959, the table before us show a situation whereby the UPN did not only win in all the Yoruba states, but with very high percentage in Lagos it had 82.30% of the votes in Ogun 92.11%, Ondo 94.51 and Oyo 85.78%

TABLE IV. C Election results in igbo dominated states

STATE	TOTAL VOTES	GNPP	UPN	NPN	PRP	NPP
Anambra	1,209,039	1.67	0.75	13.5	1.2	82.58
Imo	1,153,355	3	0.64	8.8	0.89	86.69

In the Igbo dominated area, the NPP an offshoot of the NCNC of the first republic was victorious in Anambra State; it had 82.58% of the vote in the state in the 1979 Election. In Imo state it got 86.67%

TABLE V D election result in northern minority states

STATES	TOTAL VOTES	GNPP	UPN	NPN	PRP	NPP
Benue	538,879	7.89	2.59	76.39	1.35	11.71
Borno	710,968	54.04	3.35	34.71	6.52	
Gongola	639,138	34.09	21.67	35.52	4.34	
Kwara	354,605	5.71	39.48	53.62	0.67	
Niger	383,347	16.5	3.69	74.88	3.99	
Plateau	548,405	6.82	5.29	34.73	3.98	

The result from northern minority area does not display much of ethnicity as we found in the other areas. An explanation for this may be found in the fact that most of these states were not having one of their citizens in the presidential race. The GNPP an offshoot of the (BYM) Borno Youth Movement still won in the area where it had dominance in the first republic, which is Borno State. A more rational approach for the states that were not fielding somebody for the presidential ticket was achieved, for example the NPP a predominately Igbo party won in Plateau state, NPN won in Benue State with a percentage of (76.39). The NPN also won in Gongola, Kwara and Niger state. Apart from success of the GNPP in Bornu state, the party came second in Gongola state (34.09), losing first position to NPN (34.52) with just a margin of 1.43 percent

TABLE IV E Election result in the western minority state

STATES	TOTAL VOTE	GNPP	UPN	NPN	PRP	NPP
Bendel	669,511	1.23	53.19	36.19	0.73	8.6

In the western minority state, the UPN, an off shot of the AG maintain her dominance in the area in the area as it was in the first republic

TABLE VI. F Election result in eastern minority states

STATES	TOTAL VOTES	GNPP	UPN	NPN	PRP	NPP
Cross River	661,103	15.13	11.76	64.4	1.01	7.66
Rivers	687,751	2.18	10.33	72.65	0.46	14.35

The NPN swept the polls in the eastern minority area. In Cross River State the NPN had 64.40% of the vote. This area had no citizen that vied for the presidency but they gave their votes as was the case in the first republic to a party that has its base in the North.

*Source: The tables were adapted from R.A Joseph
Democracy and prebendal politics in Nigeria: The Rise
And Fall of the Second Republic, Ibadan Spectrum
Books, 1991 P.127*

The following table further displays the closeness of the voting pattern of the 1959 election and that of the 1979. Both exhibited ethnic pattern of voting.

TABLE V Ethnic voting in the 1979 presidential election

State	Victorious party	Ethnic base of party	Previous Regional Identity	Party leader	First Republic Party in Region/Phase	Party Leader
Anambra	NPP	East	East	Azikiwe	NCNC	Azikiwe
Bauchi	NPN	North	North	Shagari	NPC	Alhaji Ahmadu Bello
Bendel	UPN	West	West	Awolowo	AG	Awolowo
Benue	NPN	North	North	Shagari	NPC	Alhaji Ahmadu Bello
Borno	GNPP	North	North	Waziri	BYM	Waziri
Cross River	NPN	North	North	Shagari	NCNC	Azikiwe
Gongola	NPN	North	North	Shagari	NPC	Alhaji Ahmadu Bello
Imo	NPP	East	East	Aminu Kano	NCNC	Azikiwe
Kaduna	NPN	North	North	Shagari	NPC	Alhaji Ahmedu Bello
Kano	PRP	North	North	Awolowo	NEPU	Aminu Kano
Kwara	NPN	North	North	Shagari	NPC	Alhaji Ahmedu Bello
Lagos	UPN	West	West	Awolowo	AG	Awolowo
Niger	NPN	North	North	Shagari	NPC	Alhaji Ahmedu Bello
Ogun	UPN	West	West	Awolowo	AG	Awolowo
Ondo	UPN		West	Awolowo	Ag	Awolowo
Oyo	UPN	West	West	Awolowo	AG	Awolowo
Plateau	NPN	East	East	Azikiwe	NPC	Alhaji Ahmedu Bello
Rivers	NPN	North	North	Shagari	NCNC	Azikiwe
Sokoto	NPN	North	North	Shagari	NPC	Alhaji Ahmedu Bello

Source: Adapted from Previous tables

From the above table, the pattern of ethnic voting in the federal election of 1959 was replayed twenty years later. The deviation from the 1959 patterns could be accounted for. The areas that were in conflict with the dominant parties in their regions pitched tent with parties, usually outside their region. This exemplified by Rivers State (a former part of the eastern region) which gave much of their vote to the NPN because of their dislike of fear of Igbo domination.

The presidential election of 1983

The 1983 Federal election was an important one in many respects; first it represented a test of political maturity on the part of the political class. It was an election that would have midwife a successful transfer of power from an elected civilian leader to another or a successful return of incumbent in a free and fair election. The 1959 and 1979 elections were supervised by the colonial and military authorities.

The Federal Electoral Commission registered one more party the Nigeria Advance Party (NAP) under the leadership of Tunji Braithwaite along side with the five that contested the 1979 election.

Many things went wrong right from the preparation for the elections. There was widespread desire on the part of the politicians to win at all cost. Not only were there accusation of parties printing their own voter's card, there was multiple registrations of voters for the election. The final list of registered voters that were released for the election was a shocking 65,304,818 voters, greater than entire population below the minimum voting age of 18 years. The register implied a total population of at least 130 million. The exceeded reasonable estimates by 30 to 50 million (Larry Diamond, 1988, 69). The electoral register was inflated in all the states by as much as 100 percent (Obadina 1983)

The preparation for the election was fraught with irregularity malpractices. The actual conduct of the election manifested more irregularities and malpractices as well as widespread electoral violence leading to the death of some people and arson in parts of the country. Apart from the issue mentioned above the election also suffered logistic problems. Voting materials and personnel were not available on time in some area or were not available at all.

We shall go ahead to see how ethnically color the result of the 1983 presidential election was

The results in hausa dominated states

TABLE VI.A Election results in Hausa Dominated States

STATE	TOTAL VOTE	NPN	UPN	NPP	GNPP	PRP	NAP
Bauchi	1,782,122	84.57	5.55	3.66	2.09	3.05	1.07
Kaduna	2,137,398	59.28	40.57	10.58	3.08	14.02	1.75
Kano	1,193,050	32.19	4.06	22.98	2.95	36.63	1.19
Sokoto	2,837,786	91.83	2.66	2.23	1.65	0.85	0.78

The above result reveals that the National Party of Nigeria (NPN) maintained its lead in the election, as was the case of 1979. While the PRP still won in Kano its traditional base.

TABLE VI.B Election Results in Yoruba Dominated States

STATE	TOTAL VOTE	NPN	UPN	NPP	GNPP	PRP	NAP
Lagos	1,640,381	7.59	83.39	7.28	0.72	0.04	0.05
Ogun	1,261,061	3.47	95	0.04	0.55	0.35	0.23
Ondo	1,829,343	20.03	77.25	1.11	0.65	0.39	0.58
Oyo	2,351,000	37.55	59.39	1.48	0.57	0.39	0.42

From the above table result of the 1983 election show that UPN, a Yoruba dominated party won in all the Yoruba states. In Lagos state it had (83.39%) of the votes in Ogun it had (95.00%) of the above vote from the state in Ondo it still maintained its lead with a score of

(77.25%) of the votes. The party was also victorious in Oyo state with 59.39% of the votes caste.

TABLE VI.C Election Results in Igbo Dominated States

STATE	TOTAL VOTE	NPN	UPN	NPP	GNPP	PRP	NAP
Anambra	1,158,283	33.36	2.06	57.79	3.12	1.39	2.38
Imo	1,588,975	25.07	1.43	66.99	3.29	1.16	2.06

The NPP an Igbo dominated party returned winner in the Igbo dominated states of Anambra with (57.79%) of the votes and Imo with (66.99%) of the votes in the area. This result is also to that of 1979 election.

TABLE VI.D Election Results in Northern Minority State

STATE	VOTES	NPN	UPN	NPP	GNPP	PRP	NAP
Benue	652,795	58.83	12.21	23.31	3.05	0.98	1.62
Borno	718,043	48.6	16.73	3.76	24.96	3.76	2.19
Gongola	735,648	38.44	21.85	20.13	3.47	11.04	5.07
Kwara	608,422	49.25	45.2	2.66	1.26	0.61	1
Niger	430,731	63.17	3.66	2.23	3.01	2.03	1.9
Plateau	652,302	44.86	5.86	43.05	2.85	1.77	1.61

The voting- pattern of the minorities in the north has tended to maintain what it was in 1979 except in cases of Borno State, which the GNPP had in 1979 that the NPN claimed. The case of Plateau state, which the NPP had in 1979, that fell into the hands of the NPN.

TABLE VI.E Election Results in Western Minorities

STATE	VOTES	NPN	UPN	NPP	GNPP	PRP	NAP
Bendel	1,099,851	41.17	51.45	4.35	1.05	0.67	0.79

The Western Minority State as was the case in previous Federal Elections (1959 and 1979) gave their vote to the UPN an offshoot of the AG of the first republic

TABLE VI.F Election Result in Eastern Minorities

STATE	TOTAL VOTES	NPN	UPN	NPP	GNPP	PRP	NAP
Cross River	1,295,710	54	39.43	3.61	1.29	0.54	0.85
Rivers	1,357,715	67.88	18.55	11.15	0.95	0.34	1.11

Source: The above tables were carefully adapted from A.B.C Nwosu's political parties are electoral process in Victor Ayeni and Kayode Soremekun (Eds) Nigeria's second republic: Presidentialism, politics and administration in a developing state. Daily times publication 1988 P. 54

The vote in the eastern minority area did not vary from what was recorded in the 1997 results.

TABLE VII Ethnic Voting Pattern in the First and Second Republic

State	Victorious Party 1997	1983	Ethnic base of party	Previous Regional identity	Party leader	First Republic Dominant Party in Region/Place	Party Leader
Anambra	NPP	NPP	East	East	Azikiwe	NCNC	Azikiwe
Bauchi	NPN	NPN	North	North	Shagari	NPC	Alhaji Ahmadu Bello
Bendel	UPN	UPN	West	West	Awolowo	AG	Awolowo
Benue	NPN	NPN	North	North	Shagari	NPC	Alhaji Ahmadu Bello
Borno	GNPP	NPN	North	North	Waziri	BYM	Waziri
Cross River	NPP	NPP	North	North	Shagari	NCNC	Azikiwe
Gongola	NPN	NPN	North	North	Shagari	NPC	Alhaji Ahmadu Bello
Imo	UPN	UPN	East	East	Aminu Kano	NCNC	Azikiwe
Kaduna	NPN	NPN	North	North	Shagari	NPC	Alhaji Ahmedu Bello
Kano	PRP	PRP	North	North	Awolowo	NEPU	Aminu Kano

Kwara	NPN	NPN	North	North	Shagari	NPC	Alhaji Ahmedu Bello
Lagos	UPN	UPN	West	West	Awolowo	AG	Awolowo
Niger	NPN	NPN	North	North	Shagari	NPC	Alhaji Ahmedu Bello
Ogun	UPN	UPN	West	West	Awolowo	AG	Awolowo
Ondo	UPN	UPN		West	Awolowo	Ag	Awolowo
Oyo	UPN	UPN	West	West	Awolowo	AG	Awolowo
Plateau	NPN	NPN	East	East	Azikiwe	NPC	Alhaji Ahmedu Bello

...87....Timetable for the transition programme, where the political bureau recommended the termination of the programme in 1990 the government extended it to 1992. The government accepted the two-party system for the country. This option according to President Babangida could serve as a prophylactic against all the social upheavals that have bedeviled our past political experience.

Many political parties and associations sprang up after the ban on political activities was lifted. They were not registered by the government on the ground that they smack of the traits of the parties of the defunct republics. The government created two political parties namely: National Republic Convention and Social Democratic Party as recommended by the political bureau.

The two party systems were experimented at the local government election in the last quarter of 1990. In 1991, election was held into state legislature and executive. These elections were done using the option a4 that is the open ballot system, which helped a great deal in checking electoral malpractices

In the presidential primaries that were held by both parties, Alhaji M.K.O Abiola emerged as the candidate for the SDP and Alhaji Bashir Tofa emerged as the candidate for the NRC. The election which was scheduled for January 1993, was shifted to June, on the 12th day of June 1993, Nigerian went to the poll to cast their vote for the candidate/party of their choice.

The election according to observer is the freest election in the history of Nigeria. Like other elections that have been successful, it was done under the supervision of the military

The result of the election was not fully released officially but following table shows a break from the result of past elections in Nigeria, ethnicity was greatly reduced. A situation in which Bashir Tofa lost his home state, Kano to Alhaji M.K.O Abiola goes a long way to buttress this claim. The voting pattern in Yoruba dominated state still reflected the ethnic tendency. Chief M.K.O Abiola was obviously the popular candidate.

TABLE VIII. A Election Result I Hausa-Fulani Dominated States

STATES	TOTAL VOTES	N.R.C		S.D.P	
		NO	%	NO	%
Bauchi	847,274	513,077	60.56	334,197	39
Jigawa	228,388	89,836	39	138,552	61
Kaduna	726,573	336,860	46.36	389,713	55
Kano	324,428	154,809	47.72	169,619	52
Sokoto	469,986	372,260	79.21	97,726	21
Katsina	442,176	271,000	61.3	171,169	39
Kebbi	286,974	209,872	73.1	77,102	27
Yobe	176,054	65,133	36.99	110,921	63

From the above table, it is obvious that voting pattern in the Hausa-Fulani dominated states was not ethnic. The SDP flag bearer Chief M.K.O Abiola won four out of the eight states. He also made appreciable performance in the other states.

TABLE VIII.F Election Result in the Eastern Minority State

STATES	TOTAL VOTE	NRC		SDP	
		NO	%	NO	%
Akwalbom	414,129	199,342	48.14	214,787	52
Rivers	1,026,824	646,952	63	379,872	36.9
Cross River	342,755	153,452	47.08	189,303	52.2

The voting pattern in the eastern minority state shows that none of the party dominated the other source. The above table was adapted from Idahosa and otoghile (2000) Ethnic politics in Nigeria, Benin Journal of Social Sciences Vol. 8 and 9 Nos 1 and 2, P 126-128.

The 1999 federal election of the 4th republic

The lack of political wills on the part of the military to usher in the third republic with adoption of the result of the 1993 presidential election plunged the nation into new era of military dictatorship. This time under General Sani Abacha who sacked the Interim National Government (headed by Ernest Shonekon) that General Babangida set up on the eve of his resignation.

After struggling for legitimacy for almost two years, General Abacha announced a programme of transition to civil rule on October 1st 1995 under the program five political parties- UNCP,DPN,CNC,CNPN and GDM were registered. As events unfolded, it became clear the general was out to transform himself from a military head of state to a civilian president this dream or programme was halted by his untimely death on June 8th 1998.

His former chief of Defense Staff, General Abdusalami Abubakar, who on assumption of office released political prisoners and embarked on a speedy transition to civil rule programme. The implementation of the transition to civil rule programme began with the registration of the electorates by the National Electoral Commission. Political Parties were registered to contest elections to various political offices such as local council, state legislature, gubernatorial positions as well as the national assembly. These parties were the Peoples Democratic Party (PDP), Alliance for Democracy (AD) and All Peoples Party (APP). Two of the parties went into coalition for the presidential election. They were the All peoples Party and the Alliance for Democracy. Their presidential flag bearer for the election was Chief Olu Falae while the presidential candidate for the Peoples Democratic Party was General Olusegun Obasanjo rtd.

The presidential Election like the other elections that took place in the fourth republic was conducted using the secret ballot system. The last in the series of the election was the presidential election, which took place on the 27th of February 1999. General Olusegun Obasanjo emerges victorious according to the result released by the Independent National Electoral Commission.

Observers believe that the election was seriously rigged. This accusation was leveled against all parties hence the conclusion that the best rigger emerged the winner. Each of the parties perpetrated this act especially in their area of influence.

The eventual winner of the presidential election General Olusegun Obasanjo achieved his victory with votes from parts of Nigeria other than his. He lost even his home state to his opponent Olu Falae. The Yoruba states gave their votes to Olu Falae and seem to have their back against Obasanjo who is also their son. Apart from the fact that the two contestants were Yoruba's, they are also Christians by religious inclination.

TABLE IX.C Election Result in Igbo –Dominated State

STATES	TOTAL VOTES	APP/AD		PDP	
		NO	%	NO	%
Abia	535,918	175,095	32.67	360,823	67.33
Anambra	833,178	199,461	23.94	633,717	76.06
Ebonyi	345,921	94,934	27.44	250,987	72.56
Enugu	835,586	195,168	23.36	640,418	76.64
Imo	736,106	314,339	42.7	421,767	57.30

The Igbo dominated area presented a result that show PDP winning in all the states in the zone, giving a sharp contrast to what the Yoruba area presented Ethnicity cannot be said to have influenced this result as neither of the contestants is from this area.

TABLE IX.D Election Result in Northern Minority States

STATES	TOTAL VOTES	APP/AD		PDP	
		NO	%	NO	%
Adamawa	845,107	177,868	21.05	667,239	78.95
Benue	1,252,957	269,045	21.47	983,308	71
Borno	915,975	334,593	36.53	581,382	63
Kogi	984,710	476,807	48.42	507,903	52
Kwara	659,598	189,088	28.67	470,510	71
Nasarawa	597,008	173,277	29.02	423,731	71
Niger	871,130	140,465	16.02	730,665	84
Plateau	672,442	173,370	25.63	499,072	74
Taraba	871,029	81,290	9.33	789,749	91

The table shows that PDP candidates also won in all the states of this zone.

TABLE IX.E Election Result in Western Minority States

STATES	TOTAL VOTES	APP/AD		PDP	
		NO	%	NO	%
Edo	679,784	163,203	24.01	515,581	76
Delta	816,574	240,344	29.43	576,230	71

The result in the western minority area also show that General Obasanjo the PDP candidate also emerged victorious, scoring over seventy percentage of the votes cast.

TABLE IX.F Election Result Eastern Minority States

STATES	TOTAL VOTES	APP/AD		PDP	
		NO	%	NO	%
Akwabom	883,278	152,534.00	17.27	730,744	82.73
Bayelsa	610,032	152,220	25	457,812	75
Cross River	876,156	283,468	32	592,688	68
Rivers	1,565,603	213,328	14	1,352,275	86

The above table also shows that PDP candidate also carried the day in the Eastern minority states.

The PDP candidate also won in the Federal Capital Territory (FCT) with 59%- 82% of the vote cast in the area.

Source: the above tables were adapted from the result of the 1999 Presidential Election released by the Independent National Electoral Commission as published by the observer on Tuesday 2nd march 1999, p.2

The fourth republic gave a result that can be said to be akin to that of its immediate predecessor (the incomplete third republic). The party choice was limited like that of the aborted third republic. Voting choice was also not ethnically influenced.

Conclusion

The nation was highly ethnicized up to the second republic as the research has shown. The result of the election of the aborted third republic and that of the fourth (1999 election) republic has presented a progressive trend with its radical deviation from the initial inclination of the earlier republic.

One other conclusion that can be drawn from this research is that the fewer the choice of political parties, the less ethnically inclined are the electorates. The influence of the elites on the electoral choice of voters can also be said to be less, in the more recent elections as the time lapse between republics seemed to have given the people useful political education beside the general increase in the literacy rate of the people.

Ours has been a kind of political engineering-learning to coexist with other ethnic groups and learning the western democratic system of government. It is hoped that more progress will be recorded with continued experimentation of democratic governance in the country.

References:

- Alan Renwick and Ian Swinburn (1980) *Basic Political Concepts*. Hutchinson, London, 1980.
- Arthur Bentley in Peter B. Harris' (1976) *Foundation of Political Science* Hutchinson London, 1976.
- Barongo Y.R ; Ethnic Pluralism and *Democratic Stability: Basis of Conflict And Consensus* in S.E Oyovbiare (E.D) *Democratic Experiment in Nigeria: Interpretative Essays* Omega Publisher Ltd, Benin City 1987.
- Clive S. Thomas (1993) First World Interest Group. "A Comparative Approach" in Frank L Wilson *Concepts and Issues in Comparative An introduction to Comparative Analysis* Prentice Hall, New Jersey 1996.
- Cohen Abner "Custom and Politics in Urban Africa" in Sanda A.O (Ed) *Ethnic Relations in Nigeria*, Department of Sociology, University Of Ibadan, Nigeria 1976.
- Coleman, J.S (1958) *Nigeria: Background to Nationalism*, Brobury and Winstrom, Benin city and Katrineholm. David Truman The governmental process in S.P Varma's *Modern Political Theory*, Vikes publishing House PVT Ltd India, 1975.
- Dell Gillette Hitchner and Carol Levine (1967) *Comparative Government and Politics* Dodd., Mead and Company, Inc New York. Diamond, Larry "Ethnicity and Ethnic Conflict", in Rotimi T Suberu *Ethnic Minority Conflicts and Governance* Spectrum Books Limited, Ibadan, 1996.
- Diamond Larry in Victor Ayeni and Kayode Soremekun Eds (1988) *Nigeria's Second Republic: Presidentialism, Politics and, Administration in a Developing State* Daily Times publication, Apapa Lagos
- Dunmoye, A.R "Critical analysis of party systems and ethnicism in Nigeria" In amadi I.E.S and Hinjari W (Editors) *Party Systems, Democracy And political Stability in Nigeria*, Nigerian Political Science Association, North Western Zone. 1990.
- Ejiluwu Claude, "Perspectives on electoral process" in Oyin Ogunba (Ed) (1997) *Goverance and Electoral Process: Nigeria and U.S.A* Published by American Studies Association of Nigerian Studies Association of Nigeria, Lagos.
- Frank L Wilson (1996) *Concepts and Issues in Comparative politics: An Introduction to Comparative analysis*. Prentice-Hall New Jersey, 1996.
- George De Vos and Lola Romanucci (Eds) (1975) *Ethnic Identity: Cultural Continuities and change*, University of Chicago press, Chicago and London.
- Heinecke (1986) *Popular Fallacies in Nigerian Social Sciences*. S.Asekome And company publishers Okpella Nigeria.

- Howard J Wairda, (1982) *Corporatism and National Development in Latin America* in French L Wilson's *Concepts and Issues in Comparative Politics. An introductory Analysis* Prentice Hall, New Jersey 1996.
- Iain Mclean (1996) *The Concise Oxford Dictionary of Politics*, Oxford University Press.
- Idahosa S. and Otoghile A (2000) *Ethnic Politics and Elections in Nigeria*
The 1979 and 1993 Presidential Elections in Comparative
Perspective, Benin Journal of Social Sciences Vol.8 and No 1 and 2, University of Benin,
Benin City
- Joan Vincent "The structuring of Ethnicity: Human organization" in Paul R. Brass *Ethnicity and Nationalism: Theory and Comparison*, Sage Publication India 1991.
- John Hatch cited in Claude Ejiluwu, Perspective on electoral process a Chapter in Oyin Ogunba (Ed) *Governance and the electoral process Nigeria and the USA*. Published by the American Studies Association Of Nigeria, 1997.
- John Hatch cited in Oyin Gunba (Ed) (1997) *Goverance and the electoral Process: Nigeria and the U.S.A*. Published by the American Studies Association of Nigeria, Lagos
- Latham "The Group Basis of Politics", in S.P Varman's *Modern Political Theory*, Vikes Publishing House PVT Ltd India 1975
- Leo Kuper and M.G. Smith (eds) (1969) "Pluralism in Africa" in S.E Oyovbaire (E.D). *Democratic Experiment in Nigeria: Interpretative Essays*, Omega Publisher L.t.d, Benin City, 1987.
- Leo Kuper and M.G. Smith (eds) "Pluralism in Africa" in S.E Oyovbaire (Ed).(1987) *Democratic Experiment in Nigeria: Interpretative Essays*, Omega Publisher L.t.d, Benin City, Litt Edgar (1970) *Beyond Plurarism: Ethnic Politics in America*, Scott, Foresman and Company Illinios.
- Mafeje, A "The Ideology of tribalism", in Amadi I.E.S and W. Hingari (Eds) *Party System .Democracy and Political Stability in Nigeria*, Nigeria Political Science Association, North West Zone, 1990
- Mair, L. "Primitive Government", in Amdi I.E.S and W. Hingari (eds) *Party Systems, Democracy and Political Stability in Nigeria*. Nigeria Political Science Association, North Western Zone 1990
- Nnoli,O.(1978) *Ethnic Politics in Nigeria*, Fourth Dimension Publishers, Enugu, Nigeria.
- Obadina T, in Victor Ayeni and Kayode Soremekun Eds (1988) *Nigeria's Second Republic: Presidentialism, Politics and Administration in aDeveloping State*, Daily times Publication, Apapa, Lagos.
- Onimode, B (1981) cited in Dunmoye, A.R "Critical Analysis of party System and ethncism in Nigeria" in Amdi I.E.S and Hingari W (Editors) *Party System, democracy and Political Stability in Nigeria* Nigeria Political Science Association, North Western Zone. 1990.
- Osaghae Egbosa "Ethnic Participation in Nigeria, A theoretical Exploration In Ugochukwu Uba (Ed), *democracy and National Development 1983 and beyond*, Nigeria Political Science Association North Western Zone 1984
- Oyovbaire, S.E (1974) 'On the concept of Ethnicity and African Politics In Amdi I. E .S and W Hingari (Eds) *Party System, democracy And Political stability in Nigeria*, Nigeria Political Science Association Northwestern Zone 1990
- Paul Brass (1991) *Ethnicity and Nationalism: Theory and Comparison* Sage Publications PV. Ltd New Delhi.
- Peter Katzenstein (1985) "Small States in World Market" in Frank L Wilson *Concepts and issues in Comparative Politics: An Introduction to Comparative Analysis* Prentice-Hall New Jersey 1996.

- Phillipe C. Schmitter and Gerhard Lehmbruch (1996) 'Trends Towards Corporation Intermediation', in Frank L. Wilson's *concepts and And issues in Comparative Politics, An Introduction to Comparative Analysis* Prentice Hall, New Jersey 1996.
- Post K.W.S. (1964) *The Nigerian Federal Elections 1959* Oxford University Press.
- Post K.W.S. (1963) *The Nigerian Federal Elections 1959* Oxford University Press.
- Post and Vickers (1973) *Structure and conflict in Nigeria 1960-1965*, London, Heinemann Educational Books Ltd.
- Robert E. Dowse and John (1982) A. Hughes *Political Sociology*, New York John Wiley and sons 1982.
- Robert, S.J (1978) *Government and Power in West Africa*, Ethiopia Corporation, Benin City.
- Robert A. Dahl A 'Preface to Democratic Theory' in David Garson's *Handbook of Political Science Method*, Holbrook press, Inc Boston 1976.
- Sanda, A.O (ed) (1976) *Ethnic Relations in Nigeria*, Department of Sociology, University of Ibadan, Nigeria.
- Truman in Ronald H.Chilcote's *Comparative Politics*, Westview press, Inc Boulder Colorado USA 1981
- Ugbana Okpa, (1977) *Ethnic Minority Problems in Nigerian Politics* Liber Truck, Stockholm, 1977
- Varma (1975) *Modern Political Theory*: Vikes Publishing house PVT LTD India.
- Williams, A. (2000), "Epic Battle against Age-Long Scourge", *The Guardian*, Lagos: (October 8), Pp.16-17.
- Young Craford 'Politics in the Congo: Decolonization and independence' in Isanda A.O (ed) *ethnic relations in Nigeria*, Department of Sociology University of Ibadan, Nigeria, 1976.
- Young Oran (1968) *System of Political Science*, Prentice-Hall Inc Wood Cliffs New Jersey 1968.
- Zolberg, A R (1968) "The structure of Political Conflict in the new states of Tropical Africa" in Amdi I.E.S and W. Hinjari (Eds) *Party Systems Democracy and Political Stability in Nigeria*. Nigerians Political Science Association, North Western Zone, 1990.
- International Institute for Democracy and Electoral Assistance 2002
- Richard G. Niemi and Herbert E Weisberg, *Controversies in voting Behaviour*, Congressional quarterly Inc, Washington D.C. 1984.

LEGITIMIZING THE U.S. FOREIGN POLICY TOWARDS AUTHORITARIAN REGIMES: A FRAMEWORK FOR ANALYSIS

PhD, Jaroslav Zukerstein

Charles University Prague, Czech Republic

Abstract

Although the democracy and human rights promotion are among the top priorities of the U.S. foreign policy, administrations historically have also supported various authoritarian regimes. This framework for analysis based on the theory of propaganda and speech act theory suggests that there is a possibility to deconstruct the intentions of the U.S. administrations by disclosing the propaganda elements in a discursively constructed reality. The two-layer critical discourse analysis enables scholars to discover the methods the U.S. political elites use in a neo-gramscian sense to create a public consent with a foreign policy towards authoritarian regimes.

Keywords: United States, Foreign Policy, Legitimization, Critical Discourse Analysis, Authoritarian Regime

Introduction

The spread of democracy, rule of law and human rights promotion are among the long-term and most prominent features of the foreign policy discourse of the United States. Washington has been commonly perceived as a guarantor of the democratic values, inherently related to the free capitalist world. However, particularly during the Cold War and also in the subsequent decades as a result of various geopolitical and other reasons the United States decided to support foreign regimes despite their poor human rights performance and in violation of the democratic principles and good governance. Historically, the support has not been only diplomatic, but Washington has offered economic and openly military aid.

Based on the observation that the U.S. society has been repeatedly able to voice the opposition to the fashion how various administrations handled the domestic and foreign policy issues, it is possible to assume that if the controversial foreign policy (such as the support of the authoritarian regime abroad) would reach a particular level, pointing on the discrepancy of what has been proclaimed about democracy and what has been actually performed, the U.S. electorate would voice the opposition opinion again.

Such behavior would be perceived negatively in the administration and thus efforts would have been made to eliminate the opposition. But what is the procedure to avoid it? How do the U.S. administrations legitimize the foreign policy which is considered problematic? The discursive use of sophisticated propaganda elements in the public appearances eventually enables to understand why the U.S. society historically decided not to express the disagreement with administrations.

I.

To test the assumption that the U.S. administrations consciously and systematically have been spreading opinions and information about the foreign authoritarian regime in a way to avoid the voiced criticism and the being blamed for a hypocrisy for its foreign policy

performance and thus created a desirable social consciousness about an allied regime it is necessary to perform a two-layer discourse analysis.

Since a language does not only describe the world reality, but as a performative force it also enables us to construct the reality by social interaction and communication (Berger and Luckmann, 2011) in a way applicable to international relations (Onuf, 1989), the U.S foreign policy discourse could use the performative dimension of a language as a legitimization tool. Based on the speech act theory (Austin, 1975) the utterance formulated with a particular purpose has a power to change the socially constructed reality and shift its meaning as a performative utterance.

The U.S. foreign policy discourse could create, through speech act, a desirable constructed image of the foreign authoritarian regime by using the methods of the human mind manipulation or propaganda (Herman and Chomsky, 2011; Ellul, 1973). These methods could eventually be used systematically and on purpose, by repetition the discourse could become hyper-normalized and being created spontaneously (Yurchak, 2013). The set of methods is comprised by (but not limited to) demonizing the enemy, anti-communism, spread of fear, oversimplification, stereotyping, inevitable victory, glittering generalities, disinformation and many others.

Therefore, the first layer of the analysis has to focus on the normatively interpreted relations between the United States and the authoritarian regime, distributed solely within the administration and foreign policy community and undisclosed for public. The set of classified documents includes memoranda, letters, recommendations, dispatches, analyses by intelligence services and other. For historical research the data from National Security Archive, Foreign Relations of the United States, Declassified Document Reference System are suitable for analyses. The complementary source of data mainly for more contemporary history may include leaks as well. In this set of data it is possible to get an accurate notion of discourse from within, what kind of information the administrations have had and how did they assess the situation.

To find the answer to the questions how did the U.S. administrations tried to legitimize the foreign policy towards authoritarian regimes in front of its own electorate, how did the government officials explained the steps which they knew were contradictory with the long-standing proclaimed goals of the country's foreign policy and what kind of image of the foreign authoritarian regime has been constructed to legitimize such policy it is necessary to analyze the discursively constructed reality from a critical school of thought perspective. The U.S. official foreign policy discourse believes in a neo-gramscian sense that its own view on the relations with authoritarian regimes is the right one; therefore it requires constructing the framework in which the U.S. public would identify itself with the view of the political elites.

To deconstruct the reality discursively created and articulated by U.S. administrations and circulated by various media outlets the critical discourse analysis (Fairclough, 2013; Wodak, 1989, van Dijk, 2008) has to be performed. Bearing in mind the structure of information dominance of the political elites the use of specific words and their implicit meaning within the complex foreign policy discourse is to prove that the discrepancy between the proclaimed reality and actual reality does exist.

The specific events of bilateral importance can be linguistically confronted and the intention what kind of reality would wished to be constructed would become exposed. The confrontation analysis would also disclose what kinds of propaganda methods have been used. If the propaganda elements have been found, the historical analysis of relations between the United States and a foreign authoritarian regime enables to produce a set of techniques that have been used for legitimization of the controversial foreign policy. They could be therefore tested on the policies towards another regimes or more contemporary developments when declassified data is not widely available for research.

Conclusion

Historically, the United States has considered itself as a guardian of democracy, rule of law and human rights in the free world and beyond. Sometimes, however, the paradox of promoting democracy and supporting dictators has emerged. While the support of the foreign authoritarian regime alone is not the issue to be questioned in this analysis, it is rather the fashion how to “sell” the policy, which is considered by Washington officials themselves as problematic, controversial or even so bad that the full details of the support should never be disclosed to the electorate who would eventually be in opposition to such policy. This framework for analysis is meant to disclose the sophisticated propaganda methods used by the U.S. political elites by analyzing the discursively constructed reality where as speech act theory indicates the propaganda elements would not have just a descriptive, but also a performative power.

References:

- Austin, John Langshaw. *How to Do Things with Words*. Harvard University Press, 1975.
- Berger, Peter L. and Thomas Luckmann. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Open Road Media, 2011.
- Ellul, Jacques. *Propaganda: The Formation of Men's Attitudes*. Vintage Books, 1973.
- Fairclough, Norman. *Critical Discourse Analysis: The Critical Study of Language*. Routledge, 2013.
- Herman, Edward S. and Noam Chomsky. *Manufacturing Consent: The Political Economy of the Mass Media*. Random House, 2011.
- Onuf, Nicholas. *World of our making: rules and rule in social theory and international relations*. University of South Carolina Press, 1989.
- Van Dijk, Teun. *Discourse and power*. Palgrave Macmillan, 2008.
- Wodak, Ruth. *Language, Power and Ideology: Studies in Political Discourse*. John Benjamins Publishing, 1989.
- Yurchak, Alexei. *Everything Was Forever, Until It Was No More: The Last Soviet Generation*. Princeton University Press, 2013.

AN ANALYSIS OF THE REPRESENTATION OF FEMALE MEMBERS OF THE UNITED KINGDOM PARLIAMENT IN THE BRITISH PRESS

Michela Insenga, Ma

Research assistant in the Centre for Excellence in Educational Opportunities at the University of Liverpool, UK

Abstract

This study analyses the media discourse of the British press on female politicians in the UK deconstructing the language used to depict them as political candidates, aiming at identifying recurrent patterns and stereotypical frameworks. Main aim of this research is to argue that the media discourse plays against the targets set by the Europe2020 strategies to achieve gender equality, perpetuating gendered media constructions of women. To carry out this research project, the newspapers have been chosen with mind to a balance between broadsheets and tabloids from the conservative and liberal side. A mixed methodology of content analysis and some framing mechanisms has been used to test the argument. Findings suggest that the British press depict female politicians through a number of stereotypical frameworks that involve physical appearance, emotional status, their family role as mothers or wives, or their association to the so-called 'compassion issues'. Although there are evidence of differences due to affiliation to different parties, or to different political roles, the UK newspaper media actively – although it cannot be said whether this is consciously or subconsciously – re-attaches women political leaders to communal gender stereotypes, ensuring that the public are reminded that a female political leader is 'always a woman, sometimes a politician'.

Keywords: Women politicians, leaders, British press, media studies, gender equality, gender studies

Introduction

In recent times the General Election of 2010 in the UK represented the greatest opportunity for female politicians at Westminster to enhance their representation in Parliament and to achieve greater gender parity. Many party leaders had made public commitments to select a greater number of women candidates to enhance the modernisation of their respective parties. Opportunities for women to increase their Westminster representation had also been enhanced by the large number of MPs standing down following the parliamentary expenses scandal of 2009. Despite these suppositions and although 'an unprecedented 142 women MPs were elected to the British House of Commons' (particularly from the Labour side), the election has been defined as a 'missed opportunity' for women (Childs, 2010:109). Yet female representation in Parliament reached less than one quarter of the total number of politicians in the House of Commons, while

... the UK ranks joint 52nd in the global league table, behind countries as diverse as Rwanda (56 per cent); Sweden (46 per cent); South Africa (45 per cent); Argentina (39 per cent) and Portugal (27 per cent). The overall increase in the number of women MPs at Westminster since the last general election in 2005 is also tiny – a net gain of only 2.5 per cent (Childs, 2010:109).

This is certainly not the hoped result among those who seek gender sex parity at Westminster and who wish to fight gender discrimination in leadership roles. Less than a quarter of MPs in the House of Commons today are women, while female members of the House of Lords make up about a fifth of the total membership. Overall there are currently 147 female MPs, out of a total 650 members of parliament. Why is there such a disparity in the representation of women and men in the British Parliament? 'Women executives are clearly not drawn disproportionately from any one cultural region, type of society or category of regime. This leaves theories of modernisation and cultural explanations as somewhat implausible' (Murray, 2010: xv). It remains difficult to grasp the exact reasons for why representation of women executives appears to be so scarce. While any other explanation appears to be inconclusive, the cultural factor and the media narrative, either at local or national level, appear to play an increasingly important role.

The gender-media discourse has historically framed women and politics as an antithesis, representing politics as a 'dirty business' from which women should better 'stay away' (Sreberny and van Zoonen, 1996:1). Literature, the media, popular genres such as Hollywood movies have traditionally represented politics as an 'odd' place for women, drawing on an antithesis between femininity, as a symbol of purity and innocence, and politics, as a 'cesspit of dishonesty in which everyone is after his own interest' (Sreberny and van Zoonen, 1996:1). By and large the representation of femininity through the media places an emphasis on a set of characteristics generally associated with female individuals, such as compassion, empathy, politeness and passivity; whereas men are associated with antagonistic behavioural traits, such as ambition, selfishness, toughness, aggressivity, competitiveness, all characteristics that are perceived as "most adequate" features for ideal candidates for presidential roles. There has been extensive research in social psychology to examine the role of gender stereotypes and the impact that they produce on the public perception of a political candidate during the period of an election, through the typical association of characteristics related to women and men, as well as through the 'ideological perception' of a candidate in relation to his/her sex (Murray, 2010:xvi). However, the existing literature on the area remains limited; one of the plausible reasons for the limited literature available could be because of the limited number of female politicians at a national executive level, and even fewer in number are the women who run for presidential roles. The role of women in politics often remains of 'secondary' importance, at any level. Re-engagement with the gender/politics relationship is very much needed in order to challenge traditional gender stereotypical roles and to develop a better understanding of the power of the local and national media in driving the audience towards one direction or the other. Research on the media discourse in shaping public perceptions of female politicians and leaders raises awareness of the inequality and the disproportion of women and men in leadership roles and therefore improves cultural identities and, more generally, democracy.

There has been a long view that if politics is to serve the national interest, then it should firstly be more representative of the society it serves. Equal representation in political institutions signifies a greater connection between the public and the political world and increases public confidence in politicians. Primarily, the scope of this paper is to provide an overview of the existing studies on the gender-politics relationship through the media discourse, and more specifically, on women candidates for presidential roles. Secondly, it aims at presenting the findings of a research project conducted on newspaper articles through the use of content analysis and a deconstruction of the language adopted in the press, using some framing analysis for a more in-depth research to highlight evidence of gendered stereotypical constructions of women politicians.

A critical introduction to the gender-politics relationship as represented in the Media

The supposed antithesis of women and politics is a common recurrent theme in the traditional media-gender discourse. Previous studies of female candidates in political elections indicates that women's characteristics are perceived by the electorate as 'not adequate', odd, or negative in executive office, where strength is perceived as the most necessary quality of the ideal candidate. In earlier studies of female politicians' successes as leaders, scholars have often argued that the characteristics usually attributed to men, such as toughness, decision, strength and ambition, are generally seen as 'more adequate' in the political context. In Huddy and Terkildsen's work in 1993, the scholars have pointed out that women are more likely to succeed in political careers when they manage to convince voters that despite their femininity they possess masculine attributes, such as strength and ambition (Huddy and Terkildsen, 1993:504). At the base of their work there is an assumption that voters 'stereotype' candidates by taking into consideration their gender as a factor, and assuming that women are associated to qualities as warm, gentle, empathic, kind and passive, while men are seen as assertive, tough, aggressive and ambitious. Their interpretations are based on previous studies of presidential figures where critics pointed out that masculine personality traits are usually associated with the idea of the "ideal candidate" for presidential roles, while feminine personality traits are often seen as more appropriated to lower on non-executive levels, especially the judiciary, where attributes such as empathy and compassion can be seen of benefit to the society. However, to assume presidential office, these characteristics are not predominant; areas such as economics or the military, where male personality traits are prevalent, are perceived as more important for leadership roles, rather than areas such as healthcare, where female attributes are perceived as more beneficial (Huddy and Terkildsen, 1993:505). Their research stated that

... based on the 1972 Virginia Slims national survey, Mueller (1986) found that voters were less willing to back women for the presidency and vice-presidency because they were perceived as less competent to handle traditional male issues (war, economy, big business), while the perception that women were more competent on typical female compassion issues neither helped nor hurt their electoral chances (Huddy and Terkildsen, 1993:505).

If the media helps in representing the stereotypical image of women as more capable in coping with issues such as healthcare, education and welfare, that will ensure that women are in a disadvantageous position when running for senior leadership roles. The same assumption concerning masculine personality traits in the public view has been observed by scholars in more recent times. Schwindt- Bayer, in her 2011 study theorised, in line with Huddy and Terkildsen's interpretation of the status of women who succeed in political careers, that women who win office in Latin American legislatures are more similar to than different from the traditional male political leadership elite, having learnt how to play the male-defined political game (Schwindt-Bayer, 2011:29). Women who succeed in leadership roles did not challenge gender stereotypes, but rather adopted male attributes in order to demonstrate more similarities than differences to men. McKay's 2011 research, *Having it all?: Women MPs and motherhood in Germany and the UK*, provides evidence that it is easier for female politicians to break through the glass ceiling in political contexts when they can fit into the male-dominated political game, when proving themselves as possessing male attributes, rather than challenging gender role stereotypes. According to McKay, even at local levels, in both countries the political context is largely dominated by outdated notions that recall gender roles and are shaped by traditional male behaviours (McKay, 2011:18).

After the UK General Election of 2010, in their study on media's representation of female politicians, Mavin, Bryans and Cunningham analysed newspaper articles and the worldwide web to detect recurrent media constructions of women in the British Parliament

that contributed to the stereotyping and trivialisation of women and which framed leadership in masculine styles, and as more suitable for men. In their recent study conducted immediately after the 2010 Election, the scholars argued that women in politics face a key dilemma, whether to represent their femininity, thereby meeting non-leadership role stereotypes and to not be considered as credible as leaders, or to fail to match up with the feminine, communal and traditional stereotypes of women. However, the authors argued that even when women politicians match male traditional characteristics they are still perceived in a far more negative way than their male counterparts, tending to be associated with negative attributes such as ‘bitter, quarrelsome and selfish’ (Schnurr, 2008:310), and being perceived as more ‘masculine’ than men (Mavin, Bryans and Cunningham, 2010:556). In the authors’ words, their dilemma is ‘whether they should be feminine or “business like”, babies or bitches’ (Mavin, 2009), female politicians’ gender is seen as a negative factor that disadvantages them *a priori*. In other words, as the association between masculine and leadership persists, women who refuse to match themselves with their feminine and traditional roles are seen as refusing the established gender order and consequently as odd, atypical, ‘abnormal’, perceived negatively and inadequate as potential leaders (Mavin, Bryans and Cunningham, 2010:556). One of the issues at stake is Parliament’s ‘misrepresentation’ of the society it intends to serve, and as a consequence there is a lack of trust by the public towards politics. Some researchers have claimed that ‘while equal opportunities may not rest on equal numbers, the Parliament should be more representative of the society it serves and political parties need to connect with the public by understanding and sharing their experiences and concerns’ (Mavin, Bryan and Cunningham, 2010:552). Previous studies have furthered a common view between researchers and politicians that female politicians would change dominant views and values in politics; women’s interests are generally seen as much more protected and promoted by elected women in parliament.

Gender stereotypes play an even more important role in presidential elections, an office which is overwhelmingly associated with men. In her 2010 study of women’s presidential election campaigns, Rainbow Murray argues that ‘presidential capacity is gendered to the masculine’, as so many characteristics associated with the role of president are perceived and associated with men and masculine attributes (Murray, 2010:9). In her very recent work, Murray found that the association of women with the so-called ‘compassion issues’ was particularly problematic for female executive candidates, and it placed them in a disadvantageous position in the public mind when they were asked to decide who could be seen as a competent president, as they are not identified with the tough leadership skills expected in that role. In contrast, men’s association with issues such as the military and the economy made them more likely to rise to higher levels of office (Murray, 2010:10). The study also researched evidence that the media reinforced gender stereotypes of candidates in a number of ways. First and most important was the under-reporting of female candidates during elections. Heldman et al reported the significantly poorer media coverage received by Elizabeth Dole, in comparison with her counterpart John McCain, during the 1999 Republican presidential primary, although polls initially saw her as the more favoured candidate (Murray, 2010:11). Secondly, the news media generally promote candidates in a stereotypical way, endorsing the view of men’s campaigns as represented by their policies, whereas women were perceived

... in terms of horse-race coverage (that is, coverage of the candidates’ relative leads). This can make it harder for voters to become sufficiently well informed about a woman candidate’s policies. Additionally, negative horse-race framing (‘losing her head’, ‘catching her up’, ‘falling behind’ and out of the running’) can all be highly detrimental to a campaign, and this is accentuated if it is not accompanied by sufficient issue coverage (Murray, 2010:11).

There are many stereotypical ways in which the media frames women. We can start listing some of the most typical frameworks, which will be further analysed in the next sections. Firstly, the media gives an overwhelming attention to women candidates' appearance, family status, personal life, and emotional attitudes. They often label women candidates as the "first woman" running for a particular executive office, no matter how many women came before her; this still perpetuates the view of politics as an unnatural, odd place for women (Murray, 2010:14). The use of first names also has a damaging effect, rendering the candidate too familiar to the public, thus diminishing her authority, or, in conjunction with the surname, also perpetuates the perception of the candidate as unknown by the public, and needing to be newly introduced by the media. In addition the usual attribution in terms 'wife of' or 'mother of', contributes to the impression of a woman candidate as an individual dependent on someone else, or as important in relation (and only in relation) to her family role. Another stereotypical message conveyed by the media is that while men usually benefit from the public demonstration of their family role, associating them with the right values to pass down to a younger generation, a woman candidate with her family and children is seen as the one who would 'bring [along] the burden' of domestic obligations on her shoulders (Murray, 2010:14), and would be unable to dedicate herself enough to the heavy workload required of politicians. Female candidates will be seen as 'too dedicated to the family' or 'too dedicated to the job'; moreover, women are often constructed in the news media discourse in terms of 'dichotomies': attractive or smart, saint or sinner, too young or too old, too feminine or too masculine... they are simply never right. The culturally produced masculinity of the executive office as portrayed by the news media discourse slows up the progress of women working in the political environment, and contributes to the maintenance of male dominance over the executive office. An analysis of British press content, in the next section, will help in demonstrating the hypothesis outlined here.

Content and framing analysis mixed methodology

According to its scope, this research project utilises both a qualitative and a quantitative approach, in its use of frame codes to enable the researcher to collate the data for the framing analysis. The primary aim was to narrow down the focus of the research. To do so some filters have been used to reduce the number of articles analysed and the number of MPs taken into consideration by this research. The first filter was used in order to focus on some British newspapers as representative examples of the wider British press. After careful consideration, two broadsheets and two tabloids have been selected, namely *The Daily Telegraph* and *The Guardian*, *The Sun* and *The Mirror*, some representatives of a conservative and some of a liberal viewpoint. The focus of the research has been narrowed down to a single four month period, from the 1st April 2012 to the 1st August 2012, which allowed to undertake the research in more depth. After typing in the 119 names of female Members of Parliament at that time from both the Conservative and Labour parties, using *Lexisnexis* as a database system, I have strategically included in the research the three MPs from each party that have received the most substantial coverage by the four newspapers previously mentioned, as there were more probability that their analysis will have shown the widest media coverage as possible. According to *Lexisnexis*, on the Conservative side there is no doubt that Theresa May has received a disproportionate amount of coverage compared to every other female Tory politician according to our time frame and the newspapers chosen, followed by Caroline Spelman and Louise Mensch. For the Labour Party, Yvette Cooper, Harriet Harman and Rachel Reeves have been selected as the "most covered" female politicians in that period of time and in the four papers chosen. The result comprises 148 articles, according to the database, which have then served to the scope of this analysis.

After having analysed a wide body of the existing literature, I have drawn on a set of frameworks which has been this research project's foundation. Firstly, the use of a politician's first name rather than the last results in some clear consequences. Female politicians called by first names or nicknames appear to be more accessible to the public, diminishing the authority associated with being an MP. The use of their first and last name together, however, can create the sense that the person is still relatively unknown to the public, and so they need to be introduced again. The use of their husband's surname can have another negative impact on the public as it appears that the female politician counts only in terms of her family status more than for her political views. Finally, naming a politician by her political role (Home Secretary, Minister for Equalities, etc) can have a positive effect as it can provide authority to the politician by ignoring her/his sex, not considering it as part of the issue. The second set of frameworks used here aims to reveal the presence of stereotypical attributes for describing female politicians in the language commonly used by the media. The set of frameworks identified can be found in references to their appearance, their family role (the recurring description of a female politician is as a wife or a mother), the reference to female politicians as 'emotive' persons, which can undermine their authority and trustworthiness in the public's perception, and, finally, the repeated assumption of women as more inclined toward liberal political viewpoints, while men are seen as more conservative. The frameworks have been used to draw a number of tables for quantitative analysis of the data collected. A face to face interview with Louise Ellman MP has been personally conducted and analysed to the scope of this project, and findings are included in the presentation below.

Contours of coverage: presentation of findings

Media constructions of female politicians present some clear differences from woman to woman, depending on her political role and party affiliation; however, in the analysis conducted on the six British politicians, it appears clear that women in politics are represented mostly with reference to their gender. These gendered stereotypical representations presented as thematic frames are this research project's foundations.

Physical appearance

Primarily, the findings reveal that the politicians analysed received largely different types of coverage and attention from the newspaper media. It appears clear that one of the most common and notorious aspects is the overwhelming attention journalists pay to female politicians' physical appearance. Through this analysis of a sample of articles it can be argued that women's physical appearance and sexuality, as it has always traditionally been, attract more attention in terms of the media and it is more appealing to the public than male physicality. An interpretation of the data shows that if a male politician is coping with issues of national interest, nobody pays attention to his unattractive outfit; in the case of female politicians, such as Theresa May and others, it is acceptable in the press to be spotlighted and labelled as 'an ugly bunch' (*The Sun*, June 2012). In analysing the media constructions of Louise Mensch, it seems even more difficult for the public to gather any information about her as a politician and to look at her as a serious candidate for political elections, when she has been treated as a celebrity/beauty contestant with overwhelming attention paid by the press to her photo shoot and interview published by GQ in the last few months. In June 2012 an article in *The Telegraph* titled 'The MP who's taking on Twitter has too many talents to Menschn', reported some comments left by the public on the news that the MP Mensch was about to launch her social network Menschn, which defined 'Louise Mensch [as an] an attention-seeking, self-adulating nobody' (*The Telegraph*, June 2012). Another comment read 'Let's hope this is the only Menschn it gets' and a final one, 'Not this tedious woman again. Get back to Corby!' Different is the media discourse on Theresa May, Home Secretary. May

represents an exception in her construction by the British press, as she is treated as one of the 'most high-profile exceptions' to a Cabinet 'mainly filled by white men educated at public schools and Oxbridge' (Morris, 2010). The press construction of Theresa May is almost entirely reflective of her 'exceptional' status, treating her as a serious and reliable candidate for leadership positions. Most of the articles analysed covered her for her job and political role, treating her as a politician that clearly 'knows her stuff'. Apart from occupying one of the most senior positions in the Cabinet, May seems to display credible and accepted behaviours to treat issues of national importance such as foreign affairs, therefore not often framed as other female MPs, associated to their family role, personal affairs, covered for their appearance or made invisible. She displays agentic 'leader-like' behaviours, therefore not associated with traditional feminine characteristics. However, for those reasons it seems that May causes some problems to the British press in terms of her representation, being one of the few female politicians in a male dominated environment and in displaying accepted and reliable leaders' behaviours. Therefore, it appears that journalists may have felt the need to re-attach her image to a gender stereotype by a renewed emphasis of her femininity, in a series of articles that focused on her shoes, outfits and makeover.

Personal and family affairs

Another typical gendered media construction is that one that covers female politicians for their family role, as faithful wives and mothers. The Shadow Home Secretary Yvette Cooper has received a considerable amount of coverage during the timeframe of this research; however Mrs Cooper has generally been covered when standing for other members of Parliament or when contrasting her opposite number, Theresa May. Although a great number of articles quoted Cooper's political roles, she is by and large presented when she stands in for Ed Miliband, and as his 'best political friend and protégé', and in contrast with Theresa May's political decisions, and as either reinforcing or discouraging May's positions. One possible interpretation when reading articles about Yvette Cooper, is that the press intends to highlight Theresa May's role in the political debates, using other political figures to challenge or emphasise her decisions; and in this role-playing game Yvette Cooper, as her direct opposite number and one of the most visible politicians in the Labour Party, suits the role perfectly. This impression is reinforced as Cooper, different to May, is not seen as showing masculine and, therefore, agentic behaviours; the Shadow Home Secretary is portrayed in her feminine capacity, as demonstrated by the number of articles where she is presented in her family role, as the faithful wife of her political partner in the Labour Party, Ed Balls, and as the mother of three.

Association to women's issues, compassion issues or women's rights

In the articles analysed Harriet Harman has never been associated with common feminine stereotypes and behaviour, and no particular attention has been paid to her physical appearance or her family status. It is noticeable that the Labour Deputy Leader has constantly been associated with 'compassion issues', as defined by Huddy and Terkildsen and as mentioned in the previous paragraph. Apart from her role in the Leveson Inquiry, Harman appeared in newspaper articles exclusively in relation with social mobility, helping the disadvantaged, political campaigns, anti-race and sex discrimination, equality laws, the phone hacking scandal and the freedom of press, and others issues such as these. Harman's representation by the British press conveys a complex message. Although she is not depicted as a beauty pageant or as a celebrity, and although her image as a politician is presented as credible, she is clearly often associated with what have been defined 'compassion issues' (Mavin, Bryans and Cunningham, 2010:560). As argued before, the association with 'compassion issues' denies women of their political credibility as leaders, as these issues are not perceived as holding value and significance in national governmental policy, in contrast to military, budgetary and economic and foreign policy issues.

Underrepresentation: 'her-story' often made silent or invisible

Other politicians appear to be underrepresented in the British press, either on personal affairs or political talent. Findings about Rachel Reeves show that in most of the articles analysed the politician is mentioned as a 'secondary actor' in articles that have as their 'main actor' other politicians, such as Ed Miliband, Ed Balls and Chloe Smith. Reeves has often been quoted as 'Chloe Smith's opposite number' in a number of articles. She is also named as 'the rising star' of the Labour Party. Reeves has never been covered for her personal affairs, and her family status never attracted attention. However, her case is a clear case of underrepresentation by the press. This is demonstrated by her appearance in the newspaper articles only in conjunction with other 'principle' politicians (the ones I mentioned above, for instance), and there are no direct quotations of her words as reported by journalists. As argued in the previous paragraph, her name on newspaper articles appears many times, but it seems to be used as a token, to back someone or contrast someone else, rather than to attract attention on her political talent. Another case of underrepresentation by the press is the case of politicians covered on a single 'story', generally a personal story. Caroline Spelman, former Secretary of State for Environment, Food and Rural Affairs, has been largely covered by the British press but only regarding her parental role, as her son has decided to become a bodybuilder, a decision that his parents did not approve. The data collected demonstrates that she has been portrayed as a 'mommy' and covered as an emotional individual in the articles printed in the last few months, especially from the left-wing press and, as expected, even more by tabloids, who are always keener on personal drama and affairs. The 'emotional' frame is often mentioned when spotlighting female politicians. In the case of Spelman, *The Mirror* stated 'it must have caused distress to Environment Secretary Mrs Spelman, who'd battled at huge expense to keep Jonny's drug use out of the headlines to protect him' (*The Mirror*, June 2012).

Discussion and conclusion

Through the content and framing analysis of the media constructions of the MPs Louise Mensch, Theresa May and the others, this project intends to provide the readers with some illustrative examples of stereotypical images communicated by the press to the public regarding female politicians at Westminster. The evidence presented in this study suggests two main conclusions. Firstly, that women in politics are still perceived 'always as women, sometimes as politicians'; stereotypes and typical expectations based on sex categories play a role in political elections contributing in undermining women's contribution to politics, thus trivialising their image and limiting their chances, sometimes in an irredeemable way, to become leaders. Women at Westminster have to contend with prejudice and discrimination as perpetuated by the press; they carry the burden of competing with male politicians in an environment already largely determined by out-dated notions of gender roles and by practices shaped by traditional male lifestyles. Secondly, not all the women politicians are seen as playing gender-expected roles in the same way. The way they present themselves to the public and the media – the characteristics they display, whether they match expected female behaviour and roles or not – can make a difference in the way the media present them, as shown by the antithesis between Theresa May and Louise Mensch. Also, women who win in the political game by and large have adopted the rules of a male-dominated environment, avoiding displays of their femininity and their feminine characteristics, competing with men by learning how to play the traditional, male-defined, political game. In short, the evidence suggests that female politicians face additional challenges than their male counterparts when entering politics; the same challenges that, as it can be argued, are faced by all women in leadership positions, managers, businesspeople, in the newsroom media, etc., as the main issue is that feminine traditional characteristics are seen as affecting their leadership potential

and their credibility in senior positions. As supported by the evidence collected through the press discourse, women politicians represented by the media industry sometimes follow the destiny of all the women represented in news media: they are made silent or invisible, represented by stereotypical frameworks, following a marginal pattern. In spite of these obstacles, women in Parliament have achieved senior and leadership positions, as demonstrated by the example of Theresa May and Harriet Harman; nonetheless having to play by male-defined rules, displaying accepted agentic behaviours, or being judged on the basis of their appearance, family status, and emotional status, etc, also damages them. Many steps have already been taken in the right direction to achieve gender parity at Westminster, however, many are still to be tackled. This study wants to argue that to achieve the targets set by the Europe2020 strategies for gender equality there is a need of a cultural shift which stems from the media discourse on the gender-politics relation. This research supports the feminist argument that an increase in the representation of women in parliament, and women in leader positions in society in general, would not only support democracy in symbolic terms but would also transform democracy in substantive terms.

References:

- Alexander, D., Andersen, K., “*Gender as a factor in the attribution of leadership traits*”, Political Research Quarterly, 1993, vol. 46, issue 3, pp. 527-545
- Ashe, J., Campbell, R., Childs, S. and Evans, E. “*‘Stand by your man’: Women’s political recruitment at the 2010 UK general election*”, Macmillan Publishers Ltd., 2010, 1746-918X British Politics Vol. 5, 4, pp. 455–480
- Byerly and Ross, “*Women and media: International perspective*”, Oxford: Blackwell publishing, 2004
- Byerly and Ross, “*Women and media. A critical introduction*”, Oxford: Blackwell publishing, 2006
- Campbell, R. and Childs, S. “*‘Wags’, ‘Wives’ and ‘Mothers’ . . . But what about Women Politicians?*”, Parliamentary Affairs, Vol. 63 No. 4, 2010, pp. 760-777
- Carilli, T., Campbell, J., “*Women and the media: diverse perspectives*”, Lanham: University Press of America, 2005
- Childs, S. “*A missed opportunity: women and the 2010 UK General Election*”, IDS Bulletin, Volume 41, issue 5, 2011, pp. 109-116
- Dines, G., Humez, J. M., “*Gender, race and class in media: a critical reader*”, SAGE Publication, Thousand Oaks, CA:2011.
- Durham, G. M., “*The Lolita effect*”, New York: The overlook Press, 2008
- Gauntlet, D., “*Media, gender and indentity: an introduction*”, London: Routledge, 2002
- Gill, R. C., “*Gender and the media*”, Cambridge: Polity, 2007
- Harrison, L. : “*Women Candidates and Party Practice in the UK: Evidence from the 2009 European Elections*”, Parliamentary Affairs, Volume 63, Issue 3, pp. 524-533
- Hartmann, H., “*Gendering politics and policy*”, Journal of women, politics and policy, vol. 27, n.1\2, 2005
- Hayes, D. “*When gender and party collide: stereotyping in candidate trait attribution*”, Politics and Gender, vol. 7, 2011, pag. 133-165;
- Hill, L., “*The Political Gender Gap: Australia, Britain and the United States*”, Policy and society, Volume 22, issue 1, 2003, pp. 69-96
- Huddy, L., Terkildsen, N. “*The consequences of gender stereotypes for women candidates at different level and different types of office*”, Political Research Quarterly, 1993, vol. 46, no. 3, 503-525
- Mavin, S., Bryans, P. and Cunningham, R., “*Fed-up with Blair’s babes, Gordon’s gals, Cameron’s cuties, Nick’s nymphets. Challenging gendered media representations of women*

- political leaders*”, *Gender in Management: an International Journal*, vol. 25, No. 7, 2010, pp. 550-569
- McKay, J., “‘*Having it All?*’ *Women MPs and Motherhood in Germany and the UK*”, *Parliamentary Affairs* Vol. 64 No. 4, 2011, pp. 714–736
- Murray, R., “*Cracking the highest glass ceiling: a global comparison of women’s campaigns for executive office*”, Praeger, 2010
- Pan, Z., Kosicki, G. M. (1993), “*Framing analysis: an approach to news discourse*”, *Political Communication*, vol. 10, issue 1, 1993, pag. 55-75
- Ross, K., “*Gendered media*”, Plymouth: Rowman and Littlefield Publishers, 2010
- Ross, K. “*The handbook of gender, sex and media*”, Wiley: Hoboken, N. J., 2012
- Ross, K. “*Women, politics and Change*”, Oxford: Hansard society series in politics and government, 2002
- Schwindt-Bayer, L. A. “*Women who win: social backgrounds, paths to power and political ambition in Latin America legislatures*”, *Politics and Gender*, vol. 7, 2011, pag. 1-33
- Sreberny, A., Zoonen, L. van, “*Gender, politics and communication*”, New Jersey: Hampton press, INC, 2000

THE CONTRIBUTION OF “CRITICAL GEOPOLITICS” IN THE UNDERSTANDING OF THE LEBANESE SOCIO-POLITICAL LABYRINTH

Francisco Salvador Barroso Cortes

Assistant Professor of International Relations and Geopolitics at the Higher Institute of Political and Administrative Sciences, Holy Spirit University of Kaslik (USEK), Lebanon

Abstract

Why is it important to study the distribution of power in Lebanon, whose theoretical framework is offered by “Critical Geopolitics”? In an attempt to answer this question we must analyze the distribution of settlements of different minorities, and communities, which will help us understand the impact they have on Lebanon, and the Geopolitical pressure that the war in Syria from the north side is presenting, and the pressure that could erupt again if a war between Hezbollah and Israel from the southern flank starts once again.

This paper also provides a description and an explanation of the confessional community map of Lebanon. To do this, we will use the main ideological and cultural factors that affect the complex interplay of local and regional factors on Lebanese security and defense concerns. Using the theoretical framework of “Critical Geopolitics” we will present the mosaic of communities that reflects the Geopolitical pressures experienced by this country from all its flanks and how domestic and foreign policies respond to this Geopolitical pressure.

Keywords: Geopolitics, Lebanon, Critical Geopolitics, Confessionalism, Communalism

Introduction

Since the War in Syria started in January 2011, the relationship between Lebanon and Syria became more dangerous due to traditional links between the two countries. In fact, Lebanon is slowly getting closer to becoming involved in this war because of the participation of the Shia militia of Hezbollah, in favor of Bashar Al Assad’s regime. This participation is further proof of the escalation of tension between the Shia and Sunni communities that we are currently witnessing within the Middle East.

Because of this war we are obliged to pay attention to the connection between religion and power. Indeed, the religious factor can be used to explain how power is distributed in a certain area or territory. Be that as it may, we cannot afford to forget that both countries are bound by a group of minorities, which consist of different communities, each of which has a different perception of the country, its reliance on power, and its understanding of democracy.

When we talk about Lebanon we have to consider the many problems that the country is facing, in regard to stability and security; such as, state weakness, sectarian tensions, clashes at the border areas, political assassinations, abductions, as well as the impact of the refugee flows from Syria, which all add up to make a highly complicated situation. Beirut’s inability to cope with these problems further highlight how weak and unstable the situation of successive governments have been in this nation.

This is a country where political instability and chronic insecurity linger because of so little attention to remedy the confessional system was introduced since its independence in 1943. Likewise, successive governments’ inability to emend the political Power-Sharing

mechanism, edified around 1943 National Charter, underscored its ineffectiveness. The existence of large coalitions of political parties, the system of mutual veto, proportional representation of different religious groups, and the segmentation of autonomy, all have caused Lebanon to suffer from a social and political instability that could be critical for any future system. We also cannot forget the weakness that the state itself represents, which is justified by the same regulatory framework that does not allow it to operate normally.

The situation that Lebanon is going through at present is a good example of what has been dominating the country as the revenge of geography, postulated by Robert Kaplan (2009). Lebanon's location is establishing itself as one of the guidelines to understanding the permanent instability that is constantly present. In fact, many geopolitical factors affect the increase of insecurity, as well as the increase in demands in the field of defense. Therefore, we opt to use a critical approach of conventional Geopolitics if we want to carry out a more efficient analysis. Thus, it may be useful to develop a theoretical framework offered by "Critical Geopolitics"²⁷⁴, which will help us draw a map of the distribution of power while taking the ideological and cultural factors into account along with its geographical nature.

This study analyzes the distribution of settlements of different minorities and communities to understand their impact on Lebanon and the Geopolitical pressure that the war in Syria from the north side is inflicting, and the pressure that could erupt again if a war between Hezbollah and Israel starts once again, in the south.

My aim is to describe and explain the confessional community map of Lebanon. To do this, we will look at the main ideological and cultural factors that affect the complex interplay of local and regional factors on Lebanese security and defense concerns. After understanding these factors, we will be able to see a mosaic of different communities that represent the country and reflect Geopolitical pressure experienced from all sides; and how policies, domestic and foreign, as well as other regional socio-political factors that the Lebanese are subjected to, lead citizens to respond to this dilemma from a geopolitical perspective.

This paper suggests the vital importance that is presented by the distribution of different communities in Lebanon, based on confessionalism, to better understand the current political game of alliances and rivalries displayed in it. For this reason, we are going to consider territoriality as a strategy and as it manifests itself (Novak, 2011:742). Such an approach, will allow one to better understand power politics, as practiced by different local actors.

Once, we have submitted the incidence of confessionalism and communalism on the socio-political reality of Lebanon, and after the theoretical framework of "critical Geopolitics" is clarified, we are able to get into the analysis of the conflict between Hezbollah and Israel from a critical and Geopolitical viewpoint. Below, we tackle the importance presented by both, communitarianism as well as confessionalism, in the analysis of the northern border between Lebanon and Syria. This will allow us to understand how the settlements of the different communities in the border areas would partly explain the geopolitical pressure experienced by the Lebanese. This geopolitical pressure would have influence on the patterns of Lebanese security in the context of its defense. Finally, we

²⁷⁴ We can consider the born of this discipline when the book of Simon Dalby was published in 1990 under the title: "Creation the Second Cold War: The Discourse of Politics", Guilford, New York.

In general we can point out three main textbooks where you can find a definition of Critical Geopolitics. The textbooks are the next:

Agnew, John. Geopolitics: Re-visioning World Politics, 2nd Edition, Routledge, London, 2003; Doods, Klaus. Global Geopolitics: A critical introduction, Harlow: Pearson, 2005; Ó Tuathail et Al. The Geopolitical Reader" 2nd Edition, Routledge, New York, 2006.

address some conclusions concerning the Lebanese Geopolitics trends in the medium and long terms.

Critical Geopolitics and the distribution of Power : The incidence of Confessionalism

Lebanon is sublimely defined by critical Geopolitics. A new way, that takes into account not only the purely geographical elements but also notes the economic, environmental, and cultural elements as well²⁷⁵, avow to its intractable dilemmas. Indeed, the main purpose of this new perception of Geopolitics consists in gathering the ideas of the political and symbolic and territorial boundaries that exist in a specific territory. In this way, we will be able to understand properly the political space as, highlighted by the contribution of Dr. John Agnew who linked the meaning of knowledge with the notion of space. Dr. Agnew provides us with five new manners to use the geography of knowledge to understand what is happening in the world of politics. For our study, we are going to focus on the hegemonic thinking (Agnew, 2007:142-146), because it will help us understand the competition of ideas and practices concerning the use of power in specific areas keeping the religious factor in mind.

Geopolitics cannot be understood by only paying attention to geographical factors and the behavior of the State as an actor in charge to execute sovereignty (Agnew, 1994). Yves Lacoste suggests an explanatory theory for understanding the concept of Geopolitics where he argues that it is necessary to study the rivalries of power that are taking place in a certain place (Lacoste, 1995:3). Lacoste points out that it is essential to get away from the geographical determinism. For this reason we are going to use for our analysis the contribution of Robert Sack, concerning the concept of territoriality. For him, territoriality is *“an attempt by an individual or social group to affect, influence, and control people, phenomena and relationships by delimiting, and asserting control over a geographical area”* (Sack, 1986:19). Our main goal is to try to analyze the control over a certain territory using the ideological and religious factors.

The idea is to consider political ideology and political culture prevailing in each geographic area to better understand the distribution of power and the formation and consolidation of identities and feelings of belonging to a community. In order to do a right analysis of the cultural influence we have to take into consideration the definition of Geopolitical culture provided by O’Loughlin, ÓTuathail and Kolossov. Indeed, they understand Geopolitical culture as a combination of factors among which we could stress, for instance, on the network of power that exist in a given society, debates concerning national identities, the kinds of geopolitical codes, the varieties of foreign policy measures devised by the state, etc...(O’Loughlin et Al., 2005:324). All these factors will provide the basic information to understand how culture affects the distribution of power based on ideology.

Therefore, we will explain the importance of territorial settlements based on a community identity and / or present religious landscape, in relation to the Lebanese security and defense. In this sense, it’s important to remember that the civil war changed considerably the location of the sectarian composition of the population. This issue is very important to take into account because it will help us understand the framework of alliances and rivalries that exist nowadays throughout Lebanon. Furthermore, Lebanon is presented as a special case study in order to go in depth concerning Beirut as a politicized space of competing meanings. Indeed, we can talk about *“Beirutization”* in comparison with the *“Balkanization process”* as

²⁷⁵ We are facing a concept constantly updated due to a number of factors, among which we should highlight the phenomenon of globalization Thanks of this, we are obliged to reconsider our conception related to the relation between sovereign and territory. In fact, we cannot conceive Geopolitics as a simple geopolitical struggle or competition for territory. For instance, we are astonished attending to the phenomena of international terrorism which attempts to expand globally a particular ideology.

a space of destruction and sectarian warfare (Nagel, 2002:718). Consequently, how power centers operate in certain regions gains additional value, which assist in understanding the ways critical Geopolitics affect the game of rivalries on specific spaces.

Confessionalism's predominance and the Lebanese State's weaknesses are making us think about the problem of effective sovereignty in relation to the legitimate exercise of power and authority. Concerning this idea we have to mention differences that exist between *de jure* and *de facto* sovereignty. Indeed, we can consider the fact that the Lebanese State has the jure sovereignty provided for being a State. On paper, Lebanon should enjoy a full sovereignty over all its territory and population. If we conform to the reality, we have to admit that Lebanon as a "State" is sharing its quotas of sovereignty with the 19 communities which are playing on the Lebanese socio-political scenario and with some fundamentalist and insurgent movements, which are out of Lebanese control as could be the case of Hezbollah, Al Qaeda, Fatah al Islam, and others. In addition, we have to mention the *external dependence, assent of cooperation among Elites*, corrupted practices that are socially accepted, *poor level of infrastructure*, and the independent refugees' camps (Agnew, 2005:445). All of these factors are, for the Lebanese State, resting quotas of sovereignty.

I would hypothesize that three contextual factors have interacted to reproduce the dominant view about the distribution of power among the different communities who compound the Lebanese socio-political system. The first one is related to the impact of confessionalism and communalism on the Lebanese political system. As we already know, it relies on a kind of consociational democracy in which communalism assumes an important role in the political game. Thus, confessionalism is presented as the cornerstone to understanding the distribution of power between the nineteen communities that affect the Lebanese socio-political reality. In fact, the religious communities and not the people, as stated in the preamble of the Lebanese constitution, are those who exercise sovereignty. Therefore, the distribution of power is encouraged on ideological basis for the triumph of political confessionalism, and political Power-Sharing mechanism. In relation to this idea, we have to take into consideration the impact of some structural problems which are affecting the latent instability suffered by this country. Among these problems, and according to Professor Mounir Corm, we could point out: feudalism, communalism, social sclerosis, corruption, political and economic patronage, foreign interventionism, etc... (Corm, 2012:89).

For this reason, it is crucial to delve into this distribution of power with ideological basis for understanding the transformations that settlements of different communities behave toward the establishment of alliances, military assistance, participation in armed conflicts, etc.... We will focus on critical geopolitics to elucidate how power is exercised in terms of the community that predominates in a specific geographical area. This will allow us to understand the pressure that Lebanon is subjected to from all its geopolitical sides.

The second factor is related to the geopolitical codes that are found when analyzing the Lebanese case. We can assert that the next geopolitical codes are increasing the impact of the first structure. In this sense, we have to point out that Lebanon would register a special and particular construction of us and them. The last point stresses the importance of carrying on a discourse analysis of political and religious elites, who are committed to establishing a stubborn defense of the identity of their respective communities. Indeed, the prevalence of any community's identity surpasses, national identity, which is probably unique to Lebanon²⁷⁶. However, if we consider the case of the "Party of God" (Hezbollah), the rhetoric of service to the state as a main force of resistance to the threat of invasion by Israeli forces falters now more than ever, especially when party leaders compromise the stability of

²⁷⁶To go in depth in the exploring of the Elites role concerning the promotion of geopolitical discourses in regional conflicts, see: Ó Tuathail, Gearoid. Localizing geopolitics: Disaggregating violence and return in conflict regions, *Political Geography*, 29, 2010, pp. 256-265.

Lebanon with their participation in the war in Syria. In this sense, Hezbollah's speeches always pose the same question, either you are with me or you are against me. However, it is worth to point out that other communities display, more or less, a similar trend of behavior when they protect and promote their intrinsic interests.

The second geopolitical code that is bringing up importance within the Lebanese political system is related to the special construction of space, place, and time. In this sense, we have to refer to the civil war which took place between 1975 and 1990, where the leader of each community arose as a true "Lord of War" (Warlord), and politically and militarily controlled a certain area of the country²⁷⁷. For this reason, warlords continue to perceive that the sources and use of power, in a specific territory are directly tied to their possession of said territories. Lebanon is still claiming certain areas based on a religious justification. In fact, Fatah al Islam, that is allegedly a cell of so-called Al Qaeda, operates on Lebanese soil through the use of Palestinian refugee camps. It aims to restore Palestine, and expel Jews from the Holy Land as a prerequisite for the imposition, through the use of violence, of the Islamic *Ummah*, as a community of believers throughout the Levant (Agnew, 2006:93).

The third structural geopolitical code concerns the Syrian war. Actually, Lebanese stability is being compromised by what is happening in Syria, since the civil there has become a transnational conflict where the participation of the Shiite militia Hezbollah is compromising Lebanese security and defense. Such participation is based on the historic debt that Hezbollah seems to have towards Syria due to the political, military, and logistical Syrian support in its fight against Israel. Such participation would justify the need to defend the "axis of resistance" composed of Iran, Syria and Hezbollah. It is presented as a clear example of the increase in the hostilities between Sunni radicalism and Shiite fundamentalism in the context of the destabilization that the region suffers from. In this regard, this war is bringing up the main geopolitical factors to understand how the geographical knowledge is being used by the states and powers.

In relation to the persistence of political imagination, we must emphasize the fact that the borders have gained unusual prominence, as they have emerged as one of the essential elements to understand the origin of the current conflict. In fact, the boundaries are presented as strategic elements where traditional geopolitics is founded, but are now used to explain the formation and implementation of certain policies of identities that can be used to cause the outbreak and continuation of armed conflict.

²⁷⁷ The leader of the Progressive Socialist Party (PSP) Walid Jumblat, who is also the leader of the Druze community, became strong in the Chouf area where he was one of the main protagonists of the well-known "War of the Mountain". This war took place between Druze and Christians for the control of certain parts of the Chouf. Concerning Dr. Samir Geagea, who is the current leader of the Lebanese Forces (FL), he was strong in the Bsharre area, and other northern areas of the country, and was accused due to his participation in the execution of four political killings during the civil war. In this case we have to highlight the assassination of the former Prime Minister Rashid Karami. Related to the current Lebanese parliament Speaker Mr. Nabih Berri, who was one of the leaders of the Shiite Amal movement, had the leading role in the heavy fighting with the Druze in Beirut area. Regarding the Free Patriotic Movement (FPM) leader, General Michel Aoun, who as a commander of the Lebanese armed forces carried out numerous military episodes which were, sacrificed in vain the lives of many Lebanese soldiers. Finally, concerning the figure of Hezbollah leader, Sheikh Hassan Nasrallah, to point out that during this time his insurgent movement was responsible for numerous attacks on U.S. and French interests, as well as, the confrontation that occurred between Hezbollah and the Amal movement, both Shiites, for the control of certain areas near Beirut. These clashes provoked a rise of the political and sectarian violence in Lebanon.

The critical geopolitics would be focused on identifying resources, practices, and representations that allow the control of territory and extraction of resources²⁷⁸. It also could allow us to understand the dynamics of struggle in relation to regional and global domination²⁷⁹. In the case of Lebanon, this point has demonstrated crucial importance because it is presented as a space where competition from opposing regional interests, different views of Islam, and different types of democracy are all noticed.

The incidence of Confessionalism on the Lebanese socio-political reality

The impact of confessionalism can be noticed in every single field of Lebanese life. The Lebanese constitution recognizes the importance of the confessionalism on the Lebanese political system as communitarism and confessionalism appear as the cornerstones of the political system in place. There is a consociational democracy model that rests on a clear confessional political system. For the Lebanese case we could point out the link existing between sectarian politics and traditional political clientelism (Rigby, 2000:178).

Concerning the feasibility of this kind of political system, we have to pay attention to the regional factor because it can be used to cease the Elite consensus (Seaver, 2000:249), and therefore, it can involve the failure of the "Power-Sharing" formula as a political mechanism. In relation to this, we have to stress that the current political situation is demonstrating the triumph of the tendency of dissociation at intra and inter confessional levels. Thus, at the present day, we have to pay attention to this challenge because if it finally happens, we will be able to see the end of the current stability.

Lebanon is nowadays the battle field between jihadist Sunni and Shia fundamentalism. In fact, we can consider that Lebanon is an example of what is happening in the whole region. As a matter of fact, it is impossible to understand what happens in Lebanon without understanding what is happening in the region and what are the international trends that influence this small and divided country.

To better highlight this complex game and assess the impact that confessionalism exerts on its own politics, we have to mention the constitutional articles, which justify this influence. The most important article where the legitimation of confessionalism can be found in articles 22²⁸⁰ and 24. The latter would make reference to the phenomenon of the religious families. This concept would justify the distribution of major elective and administrative functions in response to the religious obedience factor²⁸¹. Indeed article 24 is presented as the key aspect to understand the impact of political confessionalism²⁸² because it presents

²⁷⁸ Ó Tuathail, Gearóid et Al. *Rethinking geopolitics*, Routledge, Nueva York, 1998; Ó Tuathail, Gearóid et Al., *Geopolitics Readers*, Routledge, Nueva York, 2006; Doods, Klaus. *Political Geography III: Critical Geopolitics after 10 Years*, *Progress in Human Geography*, 25 (3), 2001.

²⁷⁹ Para profundizar sobre las nuevas formas que están asumiendo los estudios de la geopolítica crítica, véase: Jones, Laura et Al., *New directions in critical geopolitics: an introduction*, *GeoJournal*, 75, 2010, pp. 315-325.

²⁸⁰ In the Senate, all religious communities have to be represented when the members of House of Deputies are no longer elected on a confessional basis (art. 22).

²⁸¹ Related to religious obedience we have to point out the incidence of well-known concept of spiritual families. Indeed, this concept is presented by the Article 22 of the Lebanese Constitution. This article would serve to justify and legally enshrine religious communities. This dimension of confessionalism that could brand as a politician, we should highlight the other side of confessionalism, the administrative type that would focus on the jurisdiction applicable to the personal status of each citizen. In fact, as can be deduced from Article 9 of the Constitution, the law of each community stands as the essential jurisdiction in relation to personal status of each person. Therefore, we can imagine the impact of this confessionalism on the private and daily life of Lebanese. This is important in order to understand the manipulation which is carried out by some political leaders in order to take advantage of this link based on identity.

²⁸² The distribution of the seats of the House of Deputies or Parliament equally between Christians and Muslims and proportionally among each of them until such time as the House of Deputies has enacted an electoral law not on the basis of religious representation (art. 24).

equality between Christians and Muslims. In fact, of the 128 seats that the Lebanese parliament has, 64 are for Christian deputies, and the other 64 are for Muslim MPs.

In relation to this, we should highlight the article 12 of the Lebanese constitution, which refers to the impact of the religious factor on the distribution of public jobs, stresses that the religious factor predominates. Regrettably, such a system promotes immobility and, inevitably, increases political clientelism.

Nevertheless, concerning the impact of confessionalism on the Lebanese political system we have to point out the fact that Lebanon has a patriarchal society. This issue is important to take it into account because it would justify individual obedience to the authority of the family and the community. For this reason, we have to analyze jointly the impact of confessionalism and communitarism.

An important aspect to keep in mind is related to the *Ta'if Agreements*, signed on October 22, 1989 in Ta'if, Saudi Arabia and ratified by the Lebanese Parliament on November 5, 1989. These agreements were presented as a sorely needed emendation of the power-sharing mechanism introduced in 1943. It picked up the new confessional equilibrium where Shiite community was partially recognized, their aspirations to achieve a balance between population and their share of political representation. Shias were recognized before too. What Ta'if did was to introduce parity between Muslims and Christians, which the Shias reject. They prefer the Thulathiyyah (trilateralism) in which Christians form a third, Sunnis a second third, and Shias the last third. Such a system will erase the Ta'if parity. Thus, after these agreements we have a new balance among the nineteen Lebanese communities.

In spite of this advance concerning the stability of the country, we have the incident of confessionalism without solution. We still face one of the most important contradictions in the Constitution. In fact, this contradiction affects the new preamble of the Lebanese Constitution, where we can read "*the abolition of political confessionalism is a vital national goal*"²⁸³. But, what actually happens is that it is encouraging and justifying the intrusion of religious communities in the political game²⁸⁴. This issue, still without resolution, reflects what the 2005 Cedar Revolution attempted to address but, perhaps, left unfinished (Safa, 2006:37).

Still, the impacts of the Ta'if Agreements were of vital importance, but it must be acknowledged that its effectiveness has been undermined ever since the early 1990s. In fact, Ta'if indicated the end of the civil war and the formulation of a new constitution for the Republic of Lebanon. The Ta'if Agreements supposed the end of sectarian violence in Lebanon but failed to promote cooperation among the different Lebanese groups with respect to the restoration of sovereignty. The Ta'if Agreements reinforced the principle of political confessionalism, because instead of strengthening government institutions, it allowed communities to strengthen their internal bonds by promoting sectarian ideology and commissioning practice of political clientelism, and further differentiated in relation to the other groups (Haddad, 2002:293).

Lebanon has proven effective to have an inability to govern itself, and this is not due to poor wording of its constitutional documents, but rather, to the failure and the ambiguities presented by its officials. Consequently, the Constitution was purposefully kept ambiguous, and the absence of a hierarchy of norms meant that Lebanon failed to create an authentic, as well as an effective rule of law. All this contributes to the political instability that seems chronic, that in turn, has been used by various insurgent movements operating in Lebanon.

²⁸³The New Preamble of the Constitution was established by the constitutional law of 21/09/1991 in order to pick up the political principles established by the Ta'if accords that were signed on November 5, 1989.

²⁸⁴Actually, Sovereignty is exercised by religious communities. In fact, we have 64 deputies Christians, and other 64 deputies Muslims.

In any case, we have to pay attention to the link between confessionalism and the increase of sectarianism (Kota, 2012:103-104)²⁸⁵ and religious fundamentalism. Likewise, we have to analyze how the foreign intervention tries to reinforce the level of sectarianism and religious fundamentalism. Lebanon is a good case to analyze how the regional and international powers are using the different communities to display the corresponding influence on the Lebanese game board. In this sense, we could think that in Lebanon the positive attitude towards sectarianism means also to have positive attitude towards fundamentalism, trust only within the community, and being favorable related to the foreign intervention (Moaddel et Al., 2012: 27).

The Geopolitics pressure from the Southern Flank: Hezbollah Versus State of Israel

When we want to ask about the relationship between Lebanon and Israel, there are many factors that, from a Geopolitical viewpoint, would display an important role. On one hand, we have to mention the type of border existing between these countries. In fact, if we accept the thesis of Agnew, who argues that borders makes the nation and not vice versa (Agnew, 2007b:399), we shall talk about the "improvised states"(Jeffrey, 2013:2). Indeed, the most probable changes of this border demonstrate that we are facing a "state improvised" due to the weak State and the problems of the Lebanese and Israeli governments to implement their respective quota of sovereignty over all the territory and population. In fact, we might ask in relation to Lebanon, if we are truly in front of a State or not, as the Lebanese state has neither the monopoly on the use of force, nor has it the legitimation to act concerning its population. We also have to add the fact that the Lebanese government is not capable to carry out control over all the territory that makes up the Lebanese space.

According to the logic of Geopolitics small countries assume two stances: either a passive or an aggressive position. In our case of study, Hezbollah and above all, Israel have carried out a considerable change for radical actions²⁸⁶. At this point, we can stress the importance of the religious factor. Indeed, if we take into consideration the confessional factor to be a normal factor, then the logic of conflict between both countries would make sense. Moreover, since Lebanon accounts on a multi confessional system, whereas the State of Israel accounts on an exclusive religious one. The importance of Critical Geopolitics becomes clearer given that we could explain the relations between these two actors according to the distribution of power based on ideological factors.

Another element to take into consideration is related to the Palestinian cause and the entire Arab-Israeli conflict²⁸⁷. Indeed, this conflict has unfortunately marked the history of Lebanon. In fact, we could say that the settlement of Palestinian Fedayeen in the Lebanese territory since 1948 has been used as a political pretext by Israel to carry out a series of reprisals, and two great invasions, which took place in 1978 and 1982. The settlements of Palestinians, predominantly Sunnis in Lebanon, and in which certain radical jihadist groups operate, such as Fatah Al Islam, come to form about 10% of the Lebanese population. The different Palestinian refugee's camps appear as one of the main focal points of instability for

²⁸⁵ Dr. Suechita Kota pointed out the existence of three kind of Sectrarianism: Firstly, we would find the sectarian identity due to the clientelism mentality and mutural distrust among the sectarian groups. Secondly, we could talk about sectarian practice based on the political Elites behavior, and finally, we shall talk concerning the sectarian as an institution due to the strong link between confessionalism and the Lebanese political System. Dr. Suechita Kota stressed the interaction among these three kinds of sectarism. In no way, these types are mutually exclusive.

²⁸⁶ Since January 2013, Israel bombarded Syrian territory in three occasions. The latest attack took place on May 5, when they bombarded an arsenal located at west of Damascus, where it seemed that they were a series of missiles, of Iranian origin, ready to be transferred and delivered to the Shiite militia of Hezbollah .

²⁸⁷ In Lebanon when the conflict between the Palestinians and the Israelis was internalize, the country set up, at this moment, the first stone for its civil war (from 1975 till 1990).

Israel. This problem must be contextualized like one of the most influential sources of instability operating in the country. Therefore, the settlement of the Palestinian refugee's camps distributed throughout Lebanon, for its location, and taking into account the faith of the community that predominates in each zone, will allow us to point out, that the Palestinian cause will still be one of the most important elements of destabilization in relation to the Lebanese constant precarious stability.

Without any doubt, Hezbollah is one of the most important threats for Israel's security and Defense. In fact, Hezbollah, or Party of God appears nowadays as the face of Arab resistance against Israel. Till now three armed conflicts have been registered between the State of Israel and Hezbollah in 1982, 2000 and in 2006.

Hezbollah is more than a simple political party. It can be classified as a terrorist group, Islamic religious movement, Lebanese national party, or a puppet in the hands of Iran and Syria (Samaan, 2007:7). It can also be all of these things simultaneously. At the same time, we can consider that we are talking about one important social movement which represents the stronger insurgency movement in Lebanon. We also have to point out that Hezbollah had decided to increase its efforts on the political arena, which would count against its insurgency activities.

Regardless of Hezbollah's origins which presented its militia and political party as a formation that sought to achieve higher levels of representation and power for the Shiite community due to its population growth during the 80s and 90s. Nowadays, Hezbollah has emerged as the largest community within the mosaic of communities that is present on the Lebanese scene; besides the legitimacy it was granted as a result of its victory against Israel in the 2006 war.

Today, the image of resistance used in a biased way has deteriorated as a consequence of its participation in the war of Syria. Despite of signing the "Baabda Declaration", where the Lebanese political forces pushed for dissociation in relation to any kind of conflict or crisis that can be displayed in any Arab country, Hezbollah did not keep its pledges and began sending troops and technical assistance forces to the regime of Bashar Assad. In this way, the Shiite militia breached again another national agreement.

We have to point out that the Shiite community is mainly located in the south and in the north of the country. This distribution affects Beirut, where Hezbollah has a considerable military capability, and which gives the party the chance to control all the geopolitical dynamics registered on Lebanese soil. Therefore, we will continue analyzing the day by day, in order to devise whether Hezbollah is going to continue improving its arsenal, due in part to aid dispensed by Iran and Syria. Another factor to follow is concerning its transformation in terms of expansive and aggressive impulses that present this militia in relation to the State of Israel. We should not forget that its main goal is to eliminate Zionism completely.

In the management of this border, we have to pay attention to the role that the United Nations Interim Forces in Lebanon (UNIFIL) has been playing in the area. Had it not been for UNIFIL the period of relative stability and safety which we are living nowadays would have been impossible. However, there are a few more points to take into consideration when we analyze the conflict between the State of Israel and Hezbollah. For instance, we have to point out the problem of the "Golan Heights" and "Shebaa Farms". Both areas are still pending of being resolved concerning which country has sovereignty and where Hezbollah can play an important role in relation to the security and defense of Lebanon, Israel and Syria.

The "Golan Heights" and the problem of the "Shebaa farms" area present a significant challenge to Lebanese security affairs²⁸⁸. As a result of Hezbollah's involvement in the war of

²⁸⁸ The Golan Heights are occupied by Israel since "the Six Day War" in 1967, and then again, from the "Yom Kippur War" in 1973. This plateau is located among Israel, Syria, Jordan and Lebanon. The Golan Heights is presented from a geostrategic viewpoint as a cornerstone due to what can happen in the War of Syria. If the

Syria, its leader Hasan Nasrallah delivered a clear and explicit message in relation to the support that Hezbollah is going to offer to Bashar El Assad regime's forces in order to recover the Golan Heights for Syria, a commitment which increases the possibility of fresh confrontations at two levels. On one hand, we can witness an interstate conflict between Lebanon and Israel. In fact, for Israel the security control of the Golan Heights is presented of vital importance, not only for military reasons, but because 35% of the supply aquifer of Israel comes from that area. From a military viewpoint, in addition to this control and if Israel could penetrate into southern Lebanon, Israel will have two fronts to attack Syria (Seaver, 2000: 260). Thus, this factor will involve a rise of the tension level among Lebanon, Israel and Syria. On the other hand, it is possible to notice an intrastate conflict among the Shiite community and the Sunni and/or Salafist communities. In the attempt to recover the Golan Heights, it is likely to think that Hezbollah is going to face a fierce resistance from these communities.

Another actor to take into consideration is the Free Syrian Army (FSA), which is composed, in its majority, by Syrian Sunni rebel groups and Lebanese Sunni and Salafist rebel groups coming from Lebanon. These groups are operational on Syrian soil and it could be seen how some forces belonging to the Palestinian and Syrians refugees' camps could fight against Hezbollah on the border with Israel. On Lebanese territory it is equally likely that this conflict can also be registered in the border areas with Syria and the Bekaa Valley. Regarding the southern flank it could indicate that it is more than likely that clashes can be seen in the most important cities of the south of Lebanon like Saida and Tyre, between Hezbollah's supporters and followers of the "Assiri movement", led by the Sunni Salafist leader Sheikh Ahmed Al Assir.

At this moment in time, an important increase in the climate of confrontation has been observed. This issue is backed by what is happening in Syria because it could be used to spark off a new armed conflict between Israel and the Shiite militia. In this sense, we should emphasize other elements that are increasing the climate of tension in that area. For example, we would have to highlight what is happening in the "Golan Heights" where the United Nations Force Disengagement Observer Force (UNDOF) is missing components after the withdrawal of Croatian soldiers, and soon the same will happen with the Austrians contingent. This issue coupled with recent Hezbollah threats, best expressed in the intention to help Bashar al-Assad's forces to recover the Golan Heights, certainly compromises the safety of the whole area. In this sense, we have to stress on the importance of this area because if finally Hezbollah could recuperate it for Syria, the Shia militia could make a corridor making a kind of Shia belt. As a result of this Shia corridor, Israel would increase its level of insecurity because Hezbollah would have a better position to attack it.

Another factor that is increasing the climate of tension results from continued violations of the Lebanese airspace by the Israeli Air Force. Lebanese authorities are powerless against this nearly daily breach of their airspace given inadequate defense capabilities. Even worse, Lebanese airspace, but, in certain cases, breaches in maritime boundaries as well, place UNIFIL forces in a difficult situation. The feeling of humiliation and ineffectiveness which UNIFIL is subjected to concerning the actions of Israel and

armed forces of Bashar al-Assad's with the help of Hezbollah are capable to recover this plateau, Hezbollah could set a kind of corridor up, and that would connect the Golan area with the south of Lebanon under Shiite community control. Of this way, it would create a kind of common and united front to strengthen Hezbollah, in relation to its position and pressure control over their natural enemy, Israel. For this to occur, Hezbollah should recover the area of the Shebaa farms, which it is also under control of Israel, as a result of its victory in the "Six Days War". Over this area, there is a dispute regarding its sovereignty. This problem is affecting to Syria and Lebanon. In this sense, we will have to see if its traditional alliance with Hamas (Sunni), due to the fact that they share the same enemy, will continue or by the contrary it is going to deteriorate as a result of sectarian strife existing today between Sunni and Shiite respectively.

Hezbollah forces requires on one hand, the expansion and improvement of the functions of its mandate, and on the other hand, an improvement regarding the number of troops deployed to enhance its own military capabilities.

Of course, lack of coordination between UNIFIL contingents and the Lebanese Armed Forces hinder the situation because the European Union (EU) has included Hezbollah on its list of terrorist organizations. It is more than likely that if this initiative succeeds, there will be a substantial increase of attacks against UNIFIL forces.

To summarize, we have to point out the importance of the settlements of Palestinian and Syrian refugees because it would appear a more than likely conflict between the Sunni community and the Shia community led by Hezbollah. The traditional areas under control of Hezbollah can be threatened by the increase of Sunni community as a result of the increasing number of these refugees. Furthermore, we have to follow day by day what is happening in the Syrian war because Hezbollah is playing its own future there.

The Geopolitics pressure from the Syrian War

There can be little doubt that Lebanese stability is being compromised by what is happening in Syria. The Syrian war has become a transnational conflict where the participation of the Shiite militia of Hezbollah is compromising Lebanese security. As discussed above, Hezbollah may be paying a historic debt to Syria because of the latter's political, military, and logistical support in its decades-old resistance against Israel. This participation would justify the need to defend the "axis of resistance", that is compounded by Iran, Syria and Hezbollah and appears to be a clear example of increased hostilities between Sunni radicalism and Shiite fundamentalism in the context of the destabilizing that the region is going through.

In this sense, we cannot forget the strong relationship existing between Syria and Lebanon²⁸⁹. Indeed, the Lebanese political system rests on two major coalitions of political parties. Both coalitions are organized around the kind of influence Syria could exert on Lebanon. This way, we can find on one hand, the "March 14th Alliance," which is contrary to any political interference or influence by Syria. On the other hand, we can find the "March 8th Alliance", which involves, for example, Hezbollah, and that it focuses on protecting Syrian interests in Lebanon. This group of political parties conceives Lebanon as a natural extension of Syria. In fact, together both would form the "Greater Syria". The whole process of interference and control, over the Lebanese political reality by Syria, had its peak during the period when Syria imposed a protectorate over Lebanon, which allowed it to strengthen its control over the country of the cedars in all the spheres of public life, including the rearmament of the Shiite militia of Hezbollah.

In addition, due to the instability and disorganization that Lebanon has displayed since its birth, Syria was able to improve its control and influence on the Lebanese chessboard. Syria's role as a "big brother" is becoming increasingly clear, and it makes us think that the war of Syria is taking place also on Lebanese soil. In fact, what is happening in Tripoli, and more specifically, in Bab al Tabane (mostly Sunni) and Jabal Mohsen (which concentrates the minority Alawite) is a true reproduction in Lebanese territory of the clashes that are taking place in the Syrian war.

In any case, the participation of Hezbollah forces in the Syrian war has provoked the prompt reaction on behalf of the Free Syrian Army (FSA). In fact, this rebel group has attacked some positions inside Lebanese soil at Aarsal and throughout the Akkar region. Both are located in the north abutting the Bekaa Valley, which compounds one of the hottest spots

²⁸⁹Lebanon and Syria have already signed several cooperation agreements among which we would highlight on one hand, the Treaty of Friendship and Cooperation signed in May 1991. On the other hand, the Agreement of Security and Defense signed in September of that year.

in the north of the country. In this case, we cannot forget that Aarsal is an area controlled by Sunnis within an area mostly controlled by Hezbollah. The geographical area close to the border with Syria comes as a geographical space where it performs a fratricidal insurgency. Moreover, the existence of diffuse boundaries and lack of control make it very easy to penetrate in these natural boundaries which have become a perfect area for weapons trafficking, ammunition, movement of soldiers, displaced refugees, illegal drugs, etc ..., which are being used by Hezbollah, the Free Syrian Army, some Sunni groups²⁹⁰ and brigades linked to Al Qaeda fighting against the regime of Bashar Al Assad. Therefore, the Bekaa area is still presented as a risky area where the influence of Syria in relation to Lebanon can still be felt since the period between 1976 and 2005, also known as "Syrianization". In fact, during this period there was a significant presence of Syrian troops in the region, as well as statues of Bashar El Assad family members and giant portraits of the Syrian leader Hafez El Assad in areas like Chtaura and Baalbek (Bennafla, 2008:8). As a result of the Syrian domination the presence of the Lebanese Shia groups as Amal and Hezbollah was possible in certain areas as Baalbek and Hermel.

Therefore, if we describe the world in terms of territorial struggle, religion could be used to give legitimacy to such conflict. In this sense, we should highlight the fact that in general, trahe entities that blend geopolitics and religion are non-state actors, as it could be the case of Hezbollah, which does not have a clear geopolitical vision, because all that they want is to expel that does not of an area those who do not share a particular version of Islam. That is why, the religious factor even if it is not the main cause of the conflict itself, gains in importance once at territorial conflict starts. The entire northern region could thus be used as a clear example in which religion propels a struggle over territory.

All the border between Lebanon and Syria are configured as a conflictual space in which a kind of network could be established, where you could identify a whole range of complex interactions between a multitude of actors (Bashar's regime forces, the Free Syrian Army (ESL), Alawite community, Sunni and Shia communities, radical jihadists, related to Al Qaeda cells as Fatah al-Islam in Lebanon area, and Jabhat al-Nusra on the Syrian territory, transnational rebels²⁹¹, etc ... This fragmentation of actors is presented as a fundamental challenge for two reasons. The first to guarantee the restoration of peace, and the second to explain whatever motivations, which may lead a particular group to participate in this armed conflict.

This conflictual space would understand the war as the result of political decisions made within a context where several states share a border, and where this fact offers limited opportunities for economic relations, political alliances, rivalries, and existing cultural ties (Flint et Al., 2009:829). The issue of alliances and rivalries, as refer to techniques, are vitally important to understand the extent and the level of increase of the conflict through the phenomenon of contagion. In this sense, and for the present case, the alliance between Bashar al-Assad's regime and Hezbollah could be interpreted as a network of relationships that have the ability to unite different geographical areas of different countries based on an identity and collective action in order to share the same preferences and respond to the same political incentives.

²⁹⁰ Free Syrian Army, Syrian Liberation Front and Syrian Islamic Front.

²⁹¹ When we are talking about transnational rebel groups, we would be talking about those rebels who not only act on its territory but deliberately cross borders, often without authorization of the second country involved. Its activity is enhanced by the fact that the regular armed forces of the countries involved are not able to control their insurgent activity. For the present case we have to emphasize the idea of operational deficit presenting the Lebanese Armed Forces. In fact, the presence of these forces, although are recorded in the city of Tripoli, are almost nonexistent on the border area that stand in an area without control.

Conclusions: Medium and long terms Geopolitical trends

In response to current events and using emotions geopolitics as a way to apply the *modus operandi* of critical geopolitics, we could include Lebanon, as well as other Arab countries, within the category of a “culture of humiliation”. In fact, it is mostly due to the showing of impotence relative to the control of their present and their own future in the medium and long term. Indeed, there are many factors that have influence on and play a special role in the Lebanese checkerboard. Concerning these factors, we would highlight the preponderance of communalism, sectarianism, foreign interventionism, state and institutional weakness, potentially conflicting neighbors, triumph of particularism of national interest, failure of Power-Sharing as a political mechanism, frequent practice of political patronage based on certain neo feudal structures, leadership of the political game by "warlords" and an increased in religious fanaticism and extremism. In relation to these factors, I am convinced that its impacts will be increased when the Syrian war ends, and we will be able to observe how a new intercommunity equilibrium will rise in Syria and Lebanon. In addition, as a result of the incidence of porous borders, it will be possible to notice an increase of the presence of Al Qaeda cells on Lebanese soil.

The Geopolitical developments that are going to take place in Lebanon, over the medium and long term, will be determined by the new religious balance to be recorded in the region as a consequence of the end of Bashar’s regime. In this sense, we could point out that the downfall of Bashar’s regime would put Hezbollah in a total isolation because it would break the “axis of resistance”. Moreover, Syria will become a tough opponent to Iran because most probably we will have a Sunni republic. This issue will be translated in a rise of tension between Sunnis and Shiites. In fact, I believe that we will have a Sunni Islamist regime so much in Syria as in Lebanon in response to the new confessional equilibrium registered once the war ends.

Concerning the role of UNIFIL, we have to indicate that it is more than likely to see its tenure and responsibility increased in the Lebanese theatre of operations. In this sense, we cannot dismiss the notion that UNIFIL may have to expand its range of operations, and increase their participation in the management of the northern border between Syria and Lebanon. Therefore, it is presented as *condition sine qua non* to provide UNIFIL with the military, economic and logistical resources that this mission really deserves.

Syria in the post-Bashar Al Assad era is likely to have a “National Pact” based on the Power-Sharing political mechanism just like the one practiced in Lebanon. We will have to see then, whether the new Syrian system will be able to handle the management of minority communities that coexist in Syria at this moment.

Besides, we can realize internally, the lack of political reforms due to the incompetence of the Lebanese State and the effect of religious communalism. This confessionalism puts on top the particularistic interests over the Lebanese national interest. This issue will continue to demonstrate that we are facing a "State improvised", due to weak institutions and the problems of the Lebanese state to implement its sovereignty over all its territory and population. In fact, we might ask if we are truly analyzing a State or not, as the Lebanese State has neither a monopoly on use of force, nor the legitimacy to act in relation to the whole population, nor exercises control over all the territory that compounds the Lebanese space.

Geopolitical forces will continue to exert pressure on Lebanon from all its geostrategic flanks, especially because of its location and the distribution of power among its different communities. Thus, we will continue to record the current major geopolitical trends because of the fact that different communities and denominations continue making the future political developments in this country, and the increase of interventions at household level and interference by the local, national, regional and international actors.

The issue of the Lebanese geographic location provides this country with a very complicated neighborhood, which creates an ideal environment for the installation of a permanent structural crisis. This pessimistic landscape would only be resolved through intervention and protection by external powers. Thus, as Zahar argues, in Lebanon the Peace has lasted only when there have been foreign protectors (Zahar, 2005:219-240). So at the end, we will have to see if Lebanon will continue resisting or not, the triumph of a geopolitical clash of civilizations, and the hegemonic ambitions showed by foreign powers interested in managing its affairs.

References:

- Agnew, John. The territorial trap: the geographical assumptions of international relations theory, *Review of International Political Economy* 1:1, Spring, 1994.
- Agnew, John. *Geopolitics: Re-visioning World Politics*, 2nd Edition, Routledge, London, 2003.
- Agnew, John. Sovereignty regimes: Territoriality and State authority in contemporary world politics, *Annals of the Association of American Geographers*, 95 (2), 2005.
- Agnew, John. Entre la Geografía y las Relaciones Internacionales, *Tabula Rasa*, Bogotá (Colombia), n°5, 2006.
- Agnew, John. Know- Where: Geographies of knowledge of World Politics, *International Political Sociology* 1, 2007.
- Agnew, John. No Borders, no Nations: Making Greece in Macedonia, *Annals of the Association of American Geographers*, Vol.97, n°2 (June), 2007b.
- Bennafla, Karine. Le développement au péril de la géopolitique : l'exemple de la plaine de la Bekaa (Liban), *Geocarrefour*, Vol.81, n°4, 2008.
- Corm, Mounir. *Pour une III République Libanaise. Étude critique pour une sortie de Taëf*, L'Harmattan, Paris, 2012.
- Dalby, Simon. *Creation the Second Cold War: The Discourse of Politics*, Guilford, New York, 1990.
- Doods, Klaus. *Global Geopolitics: A critical introduction*, Harlow: Pearson, 2005.
- Flint, Colin et Al. Conceptualizing Conflict Space: Toward a Geography of Relational Power and Embeddedness in the Analysis of Interstate Conflict, *Annals of the Association of American Geographers*, 99 (5), 2009.
- Lacoste, Yves. *Dictionnaire de Géopolitique*, Flammarion, Paris, 1995.
- Haddad, Simon. Cultural diversity and sectarian attitudes in postwar Lebanon, *Journal of Ethnic and Migration Studies*, Vol.28, n°2, April, 2002.
- Jeffrey, Alex. *The improvised State: Sovereignty, Performance and Agency in Dayton Bosnia*, First Edition, Wiley Blackwell, 2013.
- Jones, Laura et Al., New directions in critical geopolitics: an introduction, *GeoJournal*, 75, 2010.
- Kaplan, Robert D. The Revenge of Geography, *Foreign Policy*, May/June, 2009.
- Kota, Suechita. Undemocratic Lebanon?: The Power-Sharing Arrangements after the 2005 Independence intifada, *Journal of Ritsumeikan Social Sciences and Humanities*, Vol.4, n°6, 2012.(Available online in: http://www.ritsumei.ac.jp/acd/re/k-rsc/hss/book/pdf/vol04_06.pdf).
- Moaddel, Mansoor, Kors, Jeans, and Garde, Johan. *Sectarianism and Counter-Sectarianism in Lebanon*, Population Studies Center Research Report 12-757, May 2012.
- Nagel, Caroline R. Reconstruction space, re-creating memory: sectarian politics and urban development in post-war Beirut, *Political Geography*, 21, 2002.
- Novak, Paolo. The Flexible Territoriality of Borders, *Geopolitics*, n°16, 2011.

- O'Loughlin, John, Ó Tuathail, Gearoid, and Kolossov, Vladimir. Russian Geopolitical Culture and Public Opinion: The Masks of Proteus Revisited, *Transactions of the Institute of British Geographers*, 30m (3), 2005.
- Ó Tuathail et Al. *The Geopolitical Reader*, 2nd Edition, Routledge, New York, 2006.
- Ó Tuathail, Gearoid. Localizing geopolitics: Disaggregating violence and return in conflict regions, *Political Geography*, 29, 2010.
- Rigby, Andrew. Lebanon: Patterns of Confessional Politics, *Parliamentary Affairs*, Vol.53 (1), 2000.
- Sack, Robert D. *Human, Territoriality. Its theory and history*, Cambridge University Press, Cambridge, 1986.
- Safa, Oussama. Lebanon Springs Forward, *Journal of Democracy*, Vol.17, n°1, January, 2006.
- Samaan, Jean Loup. *Les métamorphoses du Hezbollah*, Editions Karthala, Paris, 2007.
- Seaver, Brenda M. The regional sources of Power-Sharing failure: The case of Lebanon. *Political Science Quarterly*, Vol.115, n°2, 2000.
- Zahar, Marie-Joelle. Power Sharing in Lebanon: Foreign Protectors, Domestic Peace, and Democratic Failure, in Rotchild, Donald and Roeder, Phillip. *Sustainable Peace: Power and Democracy after Civil Wars*, Ithaca, Cornell University Press, 2005.

“ZOMBIES AND COWBOYS: HOW TO WIN THE APOCALYPSE”

Dr. Mark Cronlund Anderson

Professor of History Luther College, University of Regina, Canada

Abstract

“Zombies and Cowboys: How to Win the Apocalypse ”

Suddenly zombies are everywhere. From graphic novels to Hollywood, from academic treatises asking us to consider the real-world implications of a zombie invasion to prime time television series. The undead haunt us as never before.

The most common scholarly responses to the irruption of zombie popularity have noted the more than coincidental association with 9/11. Put simply, American popular culture has reacted to 9/11, for a variety of reasons identified by scholars, by churning out tales of a zombie apocalypse much as it had, though to a lesser extent, when the zombie film first emerged as a response and reaction to the cold war in the 1950s.

Taken literally, the zombie invasion of course threatens American (and the world’s) very survival. It becomes a game changer. It calls for entirely new rules, the emerging new roles of zombie interpretation suggest.

Or does it?

The phenomenon of the apparently unprecedented zombie onslaught in the wake of 9/11 and as a response to 9/11, likely reflects something far more prosaic—in other words, a continuance more than a rupture. For example, AMC’s hugely popular dystopic zombie series, *The Walking Dead*, set in real time in the American south, relies on the deepest of American narrative tropes—the frontier cowboy, to carry its story of resistance and rebirth. In this way, while zombies may conjure up a fright symbolically akin to that rendered by 9/11 (or the martial response to 9/11), or may have been feasting on American trauma borne of 9/11 (or to the trauma of the ensuing wars), not to worry, the cowboy—that is, in the serie, Rick—can still best solve America’s (and thereby the world’s) problems. As such, *The Walking Dead* is really fairly banal, a classic example of adapting an age-old genre to fit contemporary events. This cuts two ways because, yes, it fits the classic zombie mold. But it runs deeper, too, because the frontier tale in fact is America’s birth story, as old as the settler nation itself. In other words, *The Walking Dead* serves the highly useful purpose of symbolic rebirth, American-style. Cowboy Rick plays the role of proto American messiah.

My paper explores how and why zombies ultimately stand no chance against Rick, *The Walking Dead*’s cowboy protagonist, Carl, Rick’s son and cowboy-in-the-making.

Keywords: Zombie apocalypse, frontier myth, Walking Dead

Paper:

Didn’t 9/11 change everything? Wasn’t the world born anew?

Arguably, yes, to both questions. Everything changed in the way that mythical rebirth always reboots things and then it all begins anew—all over again. That is, rebirth. In itself it is neither original nor unique to the United States. But what makes it here distinctly American is the back story that accompanies 9/11 and the ways in which American culture reacted more or less as it always has—the frontier genre conventions, best exemplified in the western that

tied the myth loosely to American material history, and the regenerative violence, which spins imperial gambits into defensive, who-me? struggles for survival itself. The cultural response to 9/11, according to John Mead, has been “a sort of boldly definitive American experience for the dawning of a frightening new world. What we actually get is a series of well-drawn and entertaining clichés culled from the lexicon of American tough-guy iconography and adventure yarns: frontier and war stories, thrillers and westerns.”²⁹²

I.

9/11 has rippled through television. Shortly after the film *Zombieland*, starring Woody Harrelson, was released, on April 13, 2009, *Relevant* magazine reported that the actor “attacked a paparazzo in New York on Tuesday, and claims it was because he mistook the man for a zombie. Harrelson just finished shooting a zombie movie, and says he was still in character when he was startled by the cameraman.”²⁹³ Now the event may well have been tongue-in-cheek and designed to sell tickets, but it points to a deeper truth about 9/11 and trauma. Somehow Harrelson’s reaction oddly makes sense in a way that it would not have prior to 9/11. In part, the context in which Harrelson’s remarks might be best assessed derives from an idea Scott Poole presents nicely:

These creatures [zombies]...appeared as pop culture phenomenon at a historical moment when the body had become of central concern in American culture as the vehicle of pleasure, of theological meaning, or of personal happiness (or all three at once). Anxiety over threats to the body became a paramount concern as evidenced by the popularity of dieting and exercise regimens, public health campaigns, and the growing acceptance of plastic surgery.²⁹⁴

Right, and just think about the growth of the horror genre, especially the unparalleled spurt in zombie flicks and television programs, since 9/11.

Traditionally, the zombie phenom in visual culture has been understood as a reaction to the trauma of real-world events ranging from the cold war to the Vietnam war and now to 9/11.²⁹⁵ “Popular culture often provides a window into the subliminal or unstated fears of citizens, and zombies are no exception,” writes Daniel Drezner.²⁹⁶ “The horror genre experienced a dramatic resurgence over the last decade,” note the editors of *Horror after 9/11*, published in 2011.²⁹⁷ “We have come to expect that a monster is never just a monster, but rather a metaphor that translates real anxieties into more or less palatable form,” they add.²⁹⁸ At one level, and necessarily, argues Terrence McSweeney, “We see ourselves in the enemy.”²⁹⁹ Not surprisingly, then, Laura Frost suggests, we understand 9/11 as “a national

²⁹² John Mead, “9/11, Manhood, Mourning, and the American Romance, in Birkenstein, Froula, and Randell, eds.

²⁹³ “Natural Born Killer Zombie,” *Relevant* magazine (April 13, 2009).

²⁹⁴ Poole, 196.

²⁹⁵ Mathias Nilges, “The Aesthetics of Destruction: Contemporary US Cinema and TV Culture,” in Birkenstein, Froula, and Randell, 24; Anna Froula, “Prolepsis and the ‘War on Terror’: Zombie Pathology and the Culture of Fear in 28 Days Later...” in Birkenstein, Froula, and Randell, 195.

²⁹⁶ Daniel W. Drezner, *Theories of International Politics and Zombies* (Princeton: Princeton University Press, 2011), 4. Also see Shawn McIntosh and Marc Leverette, eds., *Zombie Culture, Autopsies of the Living Dead* (Lanham, MD: Scarecrow Press); Kevin J. Wetmore, *Post-9/11 Horror in American Cinema* (New York: Continuum, 2012); Jeff Berkenstein, Anna Froula, and Karen Randell, eds., *Reframing 9/11: Film, Popular Culture and the “War on Terror.”* (New York: Continuum, 2010).

²⁹⁷ Aviva Briefel and Sam J. Miller, eds., *Horror After 9/11* (Austin: University of Texas Press, 2011),

²⁹⁸ *Ibid.*, 4.

²⁹⁹ Terrence McSweeney, “The Land of the Dead and the Home of the Brave: Romero’s Vision of a Post-9/11 America,” in Birkenstein, Froula, and Randell, 115.

wound.”³⁰⁰ In a dazzling little book, Drezner makes the point with deep humour and insight as he chews over the international policy ramifications for the United States of an actual zombie outbreak.

Reminding us of the centrality of popular culture, writes David Altheide avers, “We learn about the world and how the world is run through the mass media and popular culture. Indeed, the state of a citizen’s worldview can be gleaned by its dominant news sources.”³⁰¹ Elsewhere, Henry Giroux has employed zombies to take aim at the contemporary state of American politics. He observes, “The zombie, the immoral, sub-Nitschean, id-driven ‘other’ who is ‘hyper-dead’ but still alive as an avatar of death and cruelty—provides an apt metaphor for a new kind of authoritarianism that has a grip on contemporary politics in the United States.”³⁰² Stephen Asma echoes Giroux, in part, “An environment with too much wealth can also dehumanize. Americans appear zombie-like because their *raison d’être* appears to be the consumption of goods, making us seem more attached to plastic surgery, reality television, and giant SUVs than to family, honor, and integrity.”³⁰³ So it goes. The zombie phenom has become a well established genre, a vessel into and from which it becomes possible to draw upon a wide variety of meaning.

Like Woody Harrelson, Americana maintains itself “still in character” or ever-ready to slip into character with respect to the frontier myth, America’s creation story,³⁰⁴ decades of scholarship have shown.³⁰⁵ What I am suggesting is that there exists a natural affinity between the frontier myth and the zombie genre. Both are triggered by and feed on trauma. War reflexively engenders a compulsive symbolic replaying of the myth in popular culture. And both fixate on rebirth, which makes zombies ideal vessels for frontier tales, not unlike the ways in which the western has so capably served “over many generations,” according to John Cawelti.³⁰⁶ In particular, once we have taken the zombie bait and accept that some kind of apocalypse has descended upon us, what then? “Narratives about the living dead use small communities or families as their unit of social analysis,” Drezner summarizes.³⁰⁷ Enter the frontier myth because, in effect, zombie stories boil down to survival stories, yes, but also they tend heavily therefore toward tales of regenerating the nation.

The survival of the human race in the face of a zombie holocaust depends, ultimately, upon the choices the survivors make. And who better to seize the reins at the rim of catastrophe, at the edge of the world, than the frontier cowboy? That is what he has always done. For example, during the 1950s and 1960s the frontier myth dominated American television in the form of the western. The western derives its semiotic power from its conflation of frontier symbology with a genre centered imaginatively in the post-bellum west. But wait, given its lust for and long track record in war, doesn’t the United States find itself more or less always in a post-bellum state? The answer is, emphatically yes. And the Walking Dead, the surprise zombie hit for AMC, based on the New York Times’ bestselling comic book series,³⁰⁸ makes this point with real emphasis. Interestingly, the show pays homage to

³⁰⁰ Laura Frost, “Black Screens, Lost Bodies, The Cinematic Apparatus of 9/11 Horror,” in Briefel and Miller, eds., 34.

³⁰¹ David Altheide, “Fear, Terrorism, and Popular Culture,” in Birkenstein, Froula, and Randell, 11.

³⁰² Henry A. Giroux, *Zombie Culture and Politics in the Age of Casino Capitalism* (New York: Peter Lang, 2111), 2.

³⁰³ Asma 241.

³⁰⁴ See Patricia Nelson Limerick

³⁰⁵ See Richard Slotkin

³⁰⁶ Cawelti, 9.

³⁰⁷ Drezner, 14.

³⁰⁸ Robert Kirkman, Charlie Adlard, Tony Moore, and Cliff Rathburn, *The Walking Dead, Compendium One* (Berkeley: Image Comics, 2013).

the myth by casting its two protagonists among the ensemble cast, as a frontiersman and the frontiersman's son in-training to be like dad. They are imaginary cowboys, in other words. But what does a cowboy look like? How well might he fit today with the Walking Dead. Fortunately, we can actually measure the results of such an inquiry.

In 2004, Erik Beard, an enterprising journalist at the Village Voice sought to assess George W. Bush's cowboy credentials (and found Bush wanting, as noted). As is well known, Bush endeavored to ingratiate himself in the press and with Americans as a kind of cowboy president, what with his ranch, his folksy oratory, his relocation to Texas, his penchant for wearing cowboy hats, cowboy boots, and photo ops that showed him driving around on his ranch in a pickup truck. To assess Bush, Beard employed Gene Autry's cowboy code, readily available on-line, which provides a wonderful sketch of the cowboy archetype. Autry had rocketed to fame as a singing cowboy in the 1930s, on radio, movies and later, television. He performed in nearly 100 films over several decades. He even wrote some hit Christmas tunes, including "Rudolph the Red-Nosed Reindeer." Autry was beloved for the straight-arrow characters that he portrayed. Adjusted to fit the times, Dead's Rick, the central character and leader of a shifting band of survivors, including his immediate family, (in contradistinction to Bush, at least in Beard's eyes) does Autry proud. "Wherever we find monsters, there, too, we also find heroes."³⁰⁹

Gene Autrey's rule number one: "The Cowboy must never shoot first, hit a smaller man, or take unfair advantage." Given that Rick and his cohort face the constant threat of un-dead death from zombies as well as from other humans who may not be trustworthy (lots of those in the series), following a catastrophe that is neither explained nor discussed, you might expect Rick and the others to be a tad trigger happy. But not Rick, though he suffers and he questions the nature of his suffering, his moral compass remains true on this point: he doesn't engage in pre-emptive violence against his kind (the undead are, well, undead and therefore don't count).³¹⁰ You might quibble and say that the undead are merely symbols for the dehumanizing effects of the trauma of 9/11; but my point is simply that, with respect to other non-undead people, Rick scores well on this count. Even when, early on, Rick learns that his best friend Shane has had sex with his wife Lori (they all believed for a time that Rick was dead...you know, the series is richly melodramatic too) and when Shane later appeared set to kill Rick in order to have Lori for himself (yes, the gender stereotyping is blatant), Rick couldn't shoot first... until there is no doubt that Shane will fire. Now Rick acts like Bush and moves preemptively. He sidles up close and stabs Shane to death. First death. Rick would still have died, though, if not for his son Carl, budding frontiersman, yet not quite made at this point, who then shoots un-dead/zombie Shane in the head.

Rule number two: "He must never go back on his word, or a trust confided in him." This is pure Rick. He is honest and completely trustworthy. For example, in season three Rick faces the Governor, a sort of classic incarnation of the corrupted east we are meant to understand first by his pompous self-applied title. He is a suave, two-faced killer. Rick, though wary, keeps to his word in all their dealings. The message is clear: government cannot be trusted but the deeper cultural resonance upon which government was fashioned in the United States, the frontiersman and his story, remain true to the ideal upon which the nation invented itself. Rick willingly imperils the group to remain straight and true.

Rule number three: "He must always tell the truth." Rick is no liar. Sometimes, it costs him popularity but never respect. He lives a truthful life also in the sense that he stays loyal to his frontiersman typecasting. Crucially, and this figures in so many westerns, in keeping with his one true path, he nurtures Carl and mentors him the ways of the all-

³⁰⁹ Asma, 23.

³¹⁰ If you interpret the zombies as so many Indian stand-ins, then Rick's violence may be seen as adhering to the Bush Doctrine, that is, pre-emptive

American boy. We get this visually as Rick's Stetson become Carl's Stetson, as Carl picks up the gun, as Carl, despite his tender years employs the gun, as Rick inadvertently and unintentionally teaches Carl, as Lori puts it, to become detached, turn "cold" to the world. But hey, a boy's got to learn how to do what a man's got to do.

The government is the liar in this horror show. It made promises it couldn't keep and Rick is doing something about it. "The very real sociophobia in the wake of 9/11," Kevin Wetmore argues, "is a fear of ongoing war on terror in which 'America,' by which we mean the government, the military and all authority figures, is unable to protect or solve the problems."³¹¹ So cowboy Rick steps up

Rule number four: "He must be gentle with children, the elderly, and animals." Rick is a good dad to Carl. He constantly puts himself in danger—and, from Lori's perspective, too often abandons them—for the greater good of the group. This is both lamentable and excusable, for Rick wears the burden of a messiah, too. He carries the weight of it and, so that we fully understand his suffering on the group's behalf, it shows; and yet he manages it after all is said and done and he doesn't not complain. As a father, Rick endeavors first and foremost, to protect, teach, and love Carl. He hurts when Carl hurts (especially when Carl takes a bullet). And he is physically demonstrative toward his son, at least some of the time. After all, his loyalties are decided because he must also play father to the group.

In the television series, the character of Hershel, who owns a farm where the survivors stay for a time, is an old man. Rick walks a fine line here. His first allegiance is to safeguarding and nurturing America, I mean, the survivors. Yet the TV program (not the comic book) casts Hershel as an older and wiser man (though at first he is obstinate, another common enough casting—the old coot archetype). Thus, he and Rick get on well; yet, Hershel also defers to Rick, as you might expect of an older man who sees in Rick the youth and vigor needed to regain the world.

Animals do much figure in the *Walking Dead*. Nonetheless, firmly establishing his cowboy cojones, early on in the comic series Rick is delighted to find a horse to ride for a time. The image is classic western. He's got the horse, the pistol, and the cowboy hat. And like any good hero, he is on a mission to save the world. But this is horror after all, a kind of weird inverted homage to 9/11, so things tend to die graphically and noisily, except frontiersmen.

Rule number five: "He must not advocate or possess racially or religiously intolerant ideas." The world has changed a lot since Autry's days. We see it in *Dead* where people of colour play important roles. For example, Glenn, who is little more than a kid, saves Rick early on, finds love in the arms of Hershel's daughter Maggie (let's "fuck," she presses him several times in the comic series). Glenn is Korean-American. And while he plays an important role he also willingly subordinates himself to Rick's white leadership. So do the various, short-lived black cast members (with the exception of the lethal, sword-wielding Michonne).

Rule number six: "He must help people in distress." At times, it seems, that this is all that Rick does. He leads a group of survivors, after all. The examples are simply too numerous. One case. On AMC Rick and Glenn risk themselves by going to town to a long deserted bar to rescue Hershel from himself (you know the cliché, former alcoholic doubts himself etc etc). Suddenly two unknown survivors approach them. Ultimately one goes for his weapon and Rick, qua gunslinger, shoots and kills them both. Before they can return to Hershel's farm, however, others from the unknown group arrive and pepper the bar with fire. Eventually, Rick, Hershel, and Glenn escape but not before Rick risks them all in order to free one of the aggressors whose leg is impaled on a fence post. And then he takes the kid

³¹¹ Wetmore, 163.

in—but blindfolded so as not to endanger his own clan even as he seeks to aid someone who might otherwise have killed him (creating, btw, another sore point with Shane, as their relationship continues to deteriorate). Before Shane eventually kills the kid by breaking his neck, the boy is shackled, black hood pulled over his head, shuttled around in vehicle trunks, held in solitary, and tortured. Pure Guantanamo Bay.

Rule number seven: “He must be a good worker.” Again, it is all work and little play in the Walking Dead. Organizing, gathering supplies, killing zombies, burning zombie bodies, securing more ammo, fighting other survivors who are not friendly, and so on. The program is both frequently diverting, often boring, and entirely humourless.

Rule number eight: “He must keep himself clean in thought, speech, action, and personal habits.” Rick struggles with this because, especially as leader, he faces unpalatable choices. For example, by the time TV Hershel is bitten in the leg by a zombie it is clear that he will not “turn” quickly, but he will turn eventually. To that point, the choices that presented themselves in the series were to abandon Hershel to his fate or to shoot him in the head and thereby pre-emptively destroy a future zombie before it could menace the group. But Rick, like any good frontiersman, is clever and has the ability to think outside the box. So he cuts Hershel’s leg off well above the bite in order to save his life. It is a calculated gamble that pays off. It also further softens Hershel’s character. One result is that where Rick may not exactly be clean shaven, we cut him slack. I mean, come on, it is the apocalypse.

Rule number nine: “He must respect women, parents, and his nation’s laws.” Whether intentional or not, Atruy uses the term “nation” rather than “country.” The frontiersman represents the heart of the American nation. Rick is a true and faithful nationalist.

He does respect parents. He is a parent and embraces the duty and sacrifice that such a role requires. And he respects women, even if the series unevenly deals with gender stereotypes. For example, Lori is feminine in a pained and lame kind of way. She is pretty, a devoted mom, but given to slightly hysterical behaviour. Her behaviour also borders on treasonous to the family unit as she falls prey to despair. Ever the pragmatist, Rick will push on ahead without her, too, if need be, we learn. Yet other females are slightly more complicated. Andrea, as close to a sexy-kitten as the series offers (and it is not very close), also discovers a predilection for marksmanship. She is good at shooting zombies in the head and enjoys doing it. Then there is Michonne, the black loner female whose weapon of choice is a sword, good for lopping zombie noggins. She saves Andrea. Rick treats them all with respect. But, as Rick shouts at Lori, let there be no doubt, “I’m in charge.” The burden weighs on him, too. “These people look to me to keep them safe. I owe it to them to do everything in my power.”

Rule number ten: “The cowboy is a patriot.” If a patriot loves one’s country, then the series throws Rick a curveball because the country is gone. Civilization has been decimated and the survivors are compelled to invent it all over again. Rick holds true, however, to a pre-apocalyptic model of behaviour, adjusted to fit the horror, but never abandoned or compromised. He doesn’t budge from it, however much Lori or Carl or Shane might want him to. In short, insofar as the nation prefaces the country, yes, Rick is more than a mere flag-waving patriot; he embodies, he lives and breathes the nation. He gives it life.

Thus, while the Dead proposes a scary new world, it is, in fact, much like the world the United States has imaginatively inhabited off and on since the coming of the Puritans. In this way, the series, despite the use of salty language (in the comics) and free and easy sexuality (in the comics) and a lot of gore, relates a deeply conservative and ultimately comforting tale not merely of survival, but of growth (Lori even gives birth! ...then dies and Carl is forced to shoot her in the head before she turns) in the face of the monstrous other.

The series is also clever about its use of cultural markers. For example, Shane serves a narrative purpose not unlike his namesake in the 1953 classic film Shane, starring Alan Ladd

(as Shane) and Jack Palance (as the sensual and sinewy black hat). In that film, Shane appears as if magically, thrust into the film's (and nation's eternal mythical) conflict that is also both a historical struggle and figures prominently in Turner, that is, farmer-settler versus rancher.³¹² Ranchers, as the film has it, tamed the west in order to make it safe for families. But the ranchers won't go quietly and the farmers are ill equipped to fight back. So Shane does it for them even as he and the key rancher, Ryker, agree that they both have outlived their historical moment.

Movie Shane's first imperative is to protect movie mother and son, Marion and little Joe. Once that is accomplished and once his regenerative killing work is done, Shane is disappeared. And this is also how Dead's Shane's story plays out. Shane protects Lori and Carl, even gets Lori pregnant and aims to be a good father to Carl. In the movie, though Shane and Marion spark and Marion's husband Joe acknowledges the mutual attraction as normal, it was released to a general audience and the year was 1953—iow, no sex. But again, once Dead Shane has served his purpose in the series, he is disappeared.

But more than that, the Dead also conjures up the stages of development at work in the film Shane. It works like this. Initially, Rick and Shane are small-town cops, fighting to protect regular Americans. Then Rick gets shot and ends up in the hospital. In the meantime, the apocalypse descends. Rick wakes up at the hospital and everything has changed and everyone, apart from zombies, is gone. Shane, assuming the worst, has left and set out to find Lori and Carl so he can protect them in this new wild-west like universe, where everyone is apparently on their own. In time Rick finds them.

Rick and Shane at first are fine. But problems emerge because it turns out that Shane is more linear in his thinking. In a kill or be kill world, he lays aside the comfortable cloak or morality that civilization may afford one. For example, a girl about Carl's age, Sophia, goes missing. Rick is willing to endanger the whole group in order to find her whereas Shane argues that the group must prevail at all costs, even if it means leaving Sophie behind to die (it turns out she has turned and Rick shoots her in the head).

Shane's end comes as he slowly goes mad. But is he crazy or simply at odds with Rick's cowboy morality? Either way, by this time they find their group living on Hershel's farm. But in the new world, as in the very oldest of American worlds, this is not sustainable. Stages of development beckon and they have got to move on. Shane cannot last; the farm cannot last. But before they go it is here, as in the film, that Shane meets his end because he has outlived his usefulness. The series, as noted, frames him loosely as increasingly unstable but seems to suggest that he isn't really crazy but, rather, implies a postmodern observation that morality functions to reflect changing material conditions. Really, it is not unlike E.P. Thompson's Marxist argument that morality serves as function of the prevailing economic base, what he termed a "moral economy."³¹³ "The conviction and moral courage of Ronald Reagan"

Among others, Frederick Pike has argued that the closing of the frontier, which was a misnomer because the country was hardly fully settled (it is not today), propelled "the desire for imperialist expansion."³¹⁴ Turner argued in 1893 that America had been conditioned to expand at all costs exactly because of the conditioning effects of having done so for nearly three centuries, as the country grew inexorably westward and therefore wouldn't and couldn't stop the frontier impetus. Instead, it embraced the frontier impetus, made it an ethos, and wrapped it in mythological, religious drapings. And of course the expansionism has never really abated. American politicians debate, sometimes heatedly, how to go about it, but

³¹² It is not a one-way street. Other films, demonstrating the wide-ranging ideological utility of the frontier myth, such as Kevin Costner's 2003 *Open Range*, reverse this equation.

³¹³ E.P. Thompson, *The Making of the English Working Class* (New York: Vintage, 1966).

³¹⁴ Pike, 157.

nobody in Washington seriously challenges the value of and need for expansion. And why should they? After all, America's wars, in particular those conflicts that occurred in the western hemisphere, have been regenerative frontier wars in much the same way, as were the early and protracted struggles against Indians on the continental frontier.

But what about all the talk about expanding freedom and democracy? Stephanson puts it this way: "To be free was precisely to understand this destiny and conform to the direction of divine will."³¹⁵ Divine will, as expressed and embedded in the frontier myth, meant never having to say you are sorry; and it never meant for those subjected to American hegemony the kind of freedom and democracy in the way that Americans have experienced and understood them. Forget any ideas about winning hearts and minds. The United States has walked away from every one of its frontier wars without so much as throwing a scrap away. The key has always been expansion, growth. "Growth is key to individual liberty and progress. The substance of growth is empire. Thus empire is benevolent. Hence the policemen who guarantees the law and order that is necessary to progress is undeniably benevolent."³¹⁶ Such observations abound. In the post-9/11 world the point is simply that Bush had a plan, he stuck to it, and it worked until reasonably well into his second term when Americans just grew sick of war, sick of lies, and then got hammered by a serious economic downturn. Americans also grew weary of Reagan's lies and the clandestine war he waged in Central America. The difference between these presidents derives from the fact that Reagan, first, got lucky with the economy, whereas Bush's popularity paid the price (i.e., the Great Recession of 2008) for the deregulatory economic policies that Reagan initiated. Second, Reagan stuck rigorously to his mythical frontier cant whereas Bush employed it successfully but intermittently, West and Carey show. If words mean anything, Reagan's greater popularity derives, at least in part, from his more relentless commitment to frontier mythopoesis.

America's frontier wars parallel how a creationist explains the world and you can see this clearly by exploring the faith as it has been preached in popular culture. Now to do so, you might say, is pointless because creationists are silly, the world is more complicated, causation is more complex. But I would disagree. The signs and wonders are all around us if only we open our eyes to see them, soaked through to the bone in newspapers, erupting from movie screens, starring on television, and sermonized in presidential rhetoric. Too big to ignore, too important to dismiss, so all-encompassing that it becomes mostly invisible (or pleasantly suffocating?), in other words. But to dismiss creationism is to ignore the world as it exists, knowing full well that tens of millions of Americans organize their lives to fit its perceived demands—and that in itself makes creationism, or the frontier myth, which clearly has a much broader audience, worthy of study. And, unlike creationism, which is parochial and posits a kind of anti- or shadow culture, the frontier myth is mainstream all the way, from Hollywood to the White House.

Conclusion:

Since the time of the Puritans *the* central American cultural vision has portrayed the frontier as a special, enchanted place, a veritable cauldron of primal Americanization—in this way the historical frontier begets the mythical frontier. "Ideology is not simply imposed on ourselves," observes Žižek. "Ideology is our spontaneous relationship to our social world."³¹⁷ In this vein, the frontier myth provides the rosier reflection of Americana. This is where America peers into the mirror and is delighted to find some guy like John Wayne or Gary Cooper or the Walking Dead's Rick grinning back, aw shucks.

³¹⁵ Stephanson, 8.

³¹⁶ Williams, *Empire*, 109.

³¹⁷ Žižek, *Pervert's Guide to Ideology*.

References:

- Asma, Stephen T. *On Monsters, An Unnatural History of Our Worst Fears*. New York: Oxford University Press, 2009.
- Althide, David, "Fear, Terrorism, and Popular Culture," in Birkenstein, Froula, and Randell, *Reframing 9/11: Film, Popular Culture and the "War on Terror."* New York: Continuum, 2010.
- Birkenstein, Jeff and Anna Froula, and Karen Randell, eds., *Reframing 9/11: Film, Popular Culture and the "War on Terror."* New York: Continuum, 2010.
- Briefel, Aviva, and Sam J. Miller, eds. *Horror After 911*. Austin: University of Texas Press, 2011.
- Cawelti, John G. *The Six-Gun Mystique Sequel*. New York: Popular Press, 1999.
- Drezner, Daniel W. *Theories of International Politics and Zombies*. Princeton: Princeton University Press, 2011.
- Frost, Laura. "Black Screens, Lost Bodies, The Cinematic Apparatus of 9/11 Horror," in Briefel and Miller, eds.
- Froula, Anna. "Prolepsis and the 'War on Terror': Zombie Pathology and the Culture of Fear in *28 Days Later...*" in Birkenstein, Froula, and Randell.
- Giroux, Henry A. *Zombie Culture and Politics in the Age of Casino Capitalism*. New York: Peter Lang, 2111.
- Kirkman, Robert, Charlie Adlard, Tony Moore, and Cliff Rathburn, *The Walking Dead, Compendium One* (Berkeley: Image Comics, 2013
- Limerick, Patricia Nelson. "Turnerians All: The Dream of a Helpful History in an Intelligible World." *American Historical Review* 100: 3 (June, 1995).
- McIntosh, Shawn and Marc Leverette, eds., *Zombie Culture, Autopsies of the Living Dead*. Lanham, MD: Scarecrow Press, 2008.
- McSweeney, Terrence. "The Land of the Dead and the Home of the Brave: Romero's Vision of a Post-9/11 America," in Birkenstein, Froula, and Randell, eds.
- Mead, John. "9/11, Manhood, Mourning, and the American Romance, in Birkenstein, Froula, and Randell, eds.
- Nilges, Mathias. "The Aesthetics of Destruction: Contemporary US Cinema and TV Culture," in Birkenstein, Froula, and Randell, eds.
- Pike, Fredrick. *The United States and Latin America: Myths and Stereotypes of Civilization and Nature*. Austin: University of Texas Press, 1992.
- Poole, W. Scott, *Monsters in America, Our Historical Obsession with the Hideous and the Haunting*. Waco, TX: Baylor University Press, 2011.
- Slotkin, Richard. *Gunfighter Nation*. Norman: University of Oklahoma Press, 1998.
- Stephanson, Anders. *Manifest Destiny: American Expansion and the Empire of Right*. New York: Hill and Wang, 1996
- Thompson, E.P. *The Making of the English Working Class*. New York: Vintage, 1966.
- Wetmore, Kevin J. *Post-9/11 Horror in American Cinema*. New York: Continuum, 2012,
- William Appleman Williams. *Empire as a Way of Life* New York: Ig Publishing, 2007.
- Žižek, Slavoj. *Pervert's Guide to Ideology*. Directed by Sophie Fiennes, 2013.

THE ROLE OF REGIONAL ECONOMIC COMMUNITIES IN FIGHTING TERRORISM IN AFRICA: THE CASE OF INTER-GOVERNMENTAL AUTHORITY ON DEVELOPMENT (IGAD)

Memar Ayalew Demeke, Lecturer

Addis Ababa Science and Technology University,
Governance and Regional Integration at the Pan-African University,
Institute of Governance, Humanities and Social Sciences, Cameroun

Solomon Gebreyohans Gebru, Lecturer

Department of Political Science and Strategic Studies, Mekelle University, Ethiopia
Governance and Regional Integration at the Pan-African University,
Institute of Governance, Humanities and Social Sciences, Cameroun

Abstract

In Africa, Regional Economic Communities (RECs) were initially established to tackle the economic challenges of the continent. However, overtime, they expanded their mandate to deal with the security threats of the continent such as terrorism. In fact, the fight against terrorism has been internationalized following the September 9/11 terrorist attack in the U.S.A. Since then, RECs have been giving considerable attention to preventing and combating terrorism in their respective regions. Similarly, IGAD has been involved in preventing and combating terrorism. So far, however, little has been done with regard to what IGAD has performed in fighting terrorism. Therefore, this study was intended to describe and analyze the legal and practical activities carried out by IGAD in its fight against terrorism in the region general and in Somalia in particular. Both descriptive and analytical methods were employed and data were analyzed through qualitative approach. Finally, based on the findings, the study argues that, instead of overreliance on hard power as a means of fighting terrorism, IGAD should invest more on the political and socio-economic problems of its member states so as to address the root causes.

Keywords: Regional Economic Communities, IGAD, Terrorism, Treaties

The Genesis of Regional Economic Communities in Africa

The idea and practice of regional integration in Africa is not a new phenomenon. Africa has a long track record of economic cooperation and regional integration since independence in the 1960s (Bourenance, 2002). The changing nature of the international trade due to the globalization of the world economy has increased the urgency of economic cooperation and integration among African countries to gain a large share and benefits from the international trade.

The urgency for regional economic communities in Africa has been reinforced by both external and internal factors (Memar, 2012). Externally, the end of the Cold War and the acceleration of the globalization process, along with Africa's risk of further marginalization from the global market, presented the establishment of regional economic communities (RECs) as an imperative. According to Okoth (2004), the emergence of a strong desire to have regional economic communities was a clear response to the events of the end of the

Cold war. In fact, in Africa, there had been regional economic communities such as the Economic Community of Western African States (ECOWAS), Southern Africa Development Community (SADC), East African Community (EAC) and Inter-Governmental Authority on Drought and Desertification (IGADD) prior to the culmination of the Cold War,

Internally, the proliferation of intra-state conflicts in Africa following the withdrawal of the then Super powers (the U.S.A and U.S.S.R), necessitated the establishment of RECs as the only mechanism to handle the security matters of the continent. The prevalence of bad governance, human rights violation, poverty, humanitarian catastrophe and environmental degradation presented the argument that RECs are the essential vehicle to address these key challenges by promoting maximum mobilization of regional resources while minimizing external dependence. There was also a recognition that regionalism could create a springboard for economic liberalization and free movement of labour which would enable neighbouring countries to deepen commercial ties and to solidify their economies through harmonization of policies for mutual benefits and joint regional development.

The imperatives of RECs has also to do with the dynamism and the complexity of the global economy, as an instrument to increase flow of investment and to promote economic growth through better leverage in international trading (Ndomo, 2009). It also offers the opportunity to broaden national markets and production scales; and to advance trade in services and inter-regional investments. According to the first report of the United Nations Economic Commission for Africa (ECA), regional integration provides a number of opportunities which includes but not limited to sustainability; increased foreign and domestic investment; increased global competitiveness; promotion of regional public goods; prevent conflict; consolidation of economic and political reforms (ECA, 2004).

The genesis of a concerted effort to integrate the African continent economically can be traced directly to the Lagos Plan of Action and to the OAU Charter. This effort resulted in the adoption of the Treaty Establishing the African Economic Community (The Abuja Treaty) in June 1991. The Abuja Treaty recognizes RECs as the only viable means to overcome underdevelopment and the security challenges of the continent (The Abuja Treaty, 1991). It emphasizes, in one way or another, the need for regional integration given “the nature of Africa’s economies, which, being small and fragmented, stand to enjoy a variety of economic benefits that would come from integration, in addition to becoming a stronger voice in international economic decision-making” (Janneh, 2012).

The African Economic Community (AEC) was established as an integral part of the OAU with the primary objective of promoting the integration of African economies. In this regard, Chapter XIX of the treaty emphasizes the importance of establishing the AEC “through the coordination, harmonization, and progressive integration of the activities of regional economic communities” (Abuja Treaty, 1991). It further underscores that member states have the responsibility “to promote the coordination and harmonization of the integration activities of regional economic communities of which they are members with the activities of the community” (Ibid, 1991). In addition, Article 3 of the Constitutive Act of the African Union also recognizes the need “to coordinate and harmonize the policies between the existing and the future RECs for the gradual attainment of the objectives of the Union” (AU Constitutive Act, 2002).

However, multiplicity of membership, lack of political commitment coupled with ineffective organizational structure and regulatory policies have impeded their success and the delivery of expected outcomes. In this regard, Naceur Bourenane has summarized constraints which have been hindering the process of regional integration in Africa into six categories. These are: i) infrastructural constraints; ii) institutional constraints, which refers to organizational matters and choice of economic policy; iii) constraints related to country’s economic structure; iv) those concerning the international environment and its changes; v)

constraints linked to the players involved and their strategies; and vi) conflicts. Among other things, lack of well established infrastructures continue to be the biggest challenge of the RECs which has been obstructing the expansion of cross-border regional trade and the deepening of economic integration by combating security threats such as terrorism and piracy. Although the challenges differ from region to region, terrorism, for instance, have been the most challenging security threats of IGAD.

Regional Economic Communities and the Fight Against Terrorism

The fight against terrorism came to be an international phenomenon following the Sep. 9/11 terrorist attack on the U.S.A. Since then, international and regional economic communities have taken the issues of combating terrorism as a priority in their efforts to maintain international peace and security. For example, the UN has introduced various legal and institutional counter-terrorism mechanisms to fight against terrorism. In addition, the UN security Council through its 1373 (2011) resolution recognized and mandated RECs as a viable means of battling terrorism due to its transnational nature (Rosand and etal., 2008). Following that, several RECs established legal and institutional regimes within the context of their regional peace and security frameworks to prevent and combat terrorism. Besides, they have also developed counter-terrorism strategy that reflects the terrorist threat posed by international and/or regional terrorist organizations within their own regional contexts.

Although the target was the U.S.A, it was after the 1998 attack in the U.S embassies in Kenya and Tanzania that took the life of many Africans that Africa became alerted to international terrorism. It seems for this reasons that, the then OAU adopted the “Convention on the Prevention and Combating Terrorism” in 1999. The convention was later supported by Protocols and Institutional Mechanisms. “The AU Plan of Action” adopted in 2002, provided a framework and road map for RECs and African Stats to implement international counter-terrorism measures as provided in the OAU Convention, as well the measures mandated by the UN Security Council resolution 1373 (2001) (OSAA, 2006). Following that, several of Africa’s sub-regional RECs involved in Peace and Security Programs. However, out of the eight RECs, only IGAD and ECOWAS “--have established significant counter-terrorism capacity building programs in each of their respective regions for the benefit of their members” (OSAA, 2006:37). In the following section, we shall see how IGAD evolved and incorporated combating terrorism as part of its mandate.

The origin of IGAD

The Inter-Governmental Authority on Development (IGAD) was established in 1996 to supersede the Inter-Governmental Authority on Drought and Desertification (IGADD) which was created in 1986. The original founding members of the organization were Djibouti, Ethiopia, Kenya, Sudan and Uganda. Later on, Eritrea became the seventh member of the Authority in Addis Ababa in 1993 (IGAD, 1996). However, it withdrew from its membership in 1998. In 2011 South Sudan admitted as a new member to the Authority. Initially, IGADD was created to mobilize and coordinate resources of member states to prevent the spread of drought, famine and desertification.

Later on, the organization was revitalized into a full-fledged regional political, economic and security entity in the mid-1990s. This time, member countries recognized that economic development and regional integration could not be achieved without the existence of perpetual peace and security in the region. Consequently, they transformed the organization and expanded its mandate to incorporate wide array of regional issues especially in areas of conflict prevention, management and resolution in 1995 (Kiefe, 2007).

The role of IGAD in conflict prevention, management and resolution had shown significant progress when it carried out conflict resolution and mediation attempts in the

Sudan and Somalia. IGAD also attempted to mediate Ethiopia and Eritrea during the 1998-2000 war (Lata, 2007:12) although they remained to date in a state of no-war no-peace situation. The ultimate objective of IGAD is to achieve economic cooperation and integration by averting the destructive energies of conflict into regional cooperation and development (IGAD, 1996). It also aims to harmonize the policies of member countries in order to maintain lasting peace and security in the region. To achieve these objectives, it has established four hierarchical and complementary operational structures which include the Assembly of Heads of State and Government, the Council of Ministers, the Committee of Ambassadors and the Secretariat (Ibid, 1996).

The IGAD region has been the most conflict and terrorism torn zone in the world. Since the 1998 terrorist attack on the U.S. embassies in Kenya and Tanzania fighting terrorism has been one of the international obligations of IGAD. Following the adoption of the Draft Implementation Plan to Counter Terrorism in 2003, IGAD has taken a more proactive role in strengthening cooperation against terrorism and transnational organized crime in region (CGCC and ISSP, 2012).

Conceptualizing Terrorism

There is no concept as controversial as terrorism. Its meaning has been a bone of contention among scholars and politicians since antiquities. It did not start with the demise of the Soviet Union or with the horrors of September 9/11. It has deep roots in history.

The term terrorism entered in the English language at the time of the 1789 French Revolution (Weinberg and Eubank, 2006). At that historical juncture the term was used to refer to a time (1793-1794) during the revolution when the Jacobins, a radical group, who controlled the government, executed thousands of people at the guillotine whom they considered as threats of the revolution (Ibid). Since then, the term has been used to refer different forms of political violence by different actors. However, the modern usage of the term, "developed in the mid-twentieth century, regards terrorism as a tool of ethnic and religious fanatics to serve political ends, such as liberation from an alien occupying group, or simply to exact righteous vengeance against a group labeled as a threat or enemy" (Forst, 2009:3).

As its meaning, labelling the perpetrator of the act as a terrorist is also debatable. This is to say that what is a terrorist for one group may be a freedom fighter for the other. Needless to say, some individuals who involved in a "liberation" struggle were labelled as "terrorists" by the Western governments or media. Later, the same individuals, as leaders of the liberated nations, were called "statesmen" by Western governments. Two examples of this phenomenon were the Nobel Peace Prize laureates Menachem Begin and Nelson Mandela.

There are many definitions given to terrorism by different authorities. For instance, in November 2004, the United Nations Secretary General report described terrorism as any act "intended to cause death or serious bodily harm to civilians or non-combatants with the purpose of intimidating a population or compelling a government or an international organization to do or abstain from doing any act". Still others define it as a political violence in an asymmetrical conflict that is designed to induce terror and indiscriminate psychological fear through the violent victimization and destruction of non-combatant targets. Such acts are meant to send a message from an illicit clandestine organization. The purpose of terrorism is to exploit the media in order to achieve maximum attainable publicity as an amplifying force multiplier in order to influence the targeted audience(s) to achieve short- and midterm political goals and/or desired long-term end states (Held, 2008). What distinguishes terrorism from other forms of political violence and war is the deliberate killings of innocent people and this has been widely considered as the central characteristics that defines terrorism.

For the purpose of this paper we have used Seumas Miller's (2009:36) definition of terrorism. According to him, terrorism is a "political or military strategy that consists of violent actions directed against civilians involving such methods as assassination (targeted killings), indiscriminate killing, torture, hostage taking, kidnapping, ethnic cleansing and the use of chemical, biological or nuclear weapons in order to cause some other group to do what they otherwise might not have done". In his definition, he underscores that terrorism is a strategy used by state or non-state actors to engender widespread fear in the target political or social groups and to achieve a political goal. Generally, terrorism has been carried out in different forms by different actors.

Types of Terrorism within the IGAD Region

The IGAD region is one of the most volatile and conflict-ridden parts of the world (Kinfe, 2006). Some commentators describe it as the hot-bed of the world. The region has been the epi-centre of continental instability and humanitarian catastrophe. States of the region experienced authoritarian regimes which massacred thousands of people. They also undergone through conflicts over ethnic identity, resources and boundary questions (Medhane, 2004, Wood Ward, 1996). Thus, the region has seen very little of democratic governance and economic development. Furthermore, the IGAD region is also drought, famine and refugees affected area of the globe. Among other things, terrorism has been of the great security challenges of the IGAD region. According to David Shinn (2003) the region has seen three types of terrorism. Each type varies mainly on the basis of the nature of the terrorist organizations and the objectives they sought to achieve.

The *first* type of terrorism is an acts perpetrated by organizations outside the region. This type of terrorism is usually known as international terrorism. The organizations which are perpetrating the acts either be states, non-state actors or the combination of the two. By their very nature, the terrorists are not indigenous to the region. Their primary goal is not to injure the country where the terrorist attack takes place; rather it is designed to harm a third party which is the target of the act. The assassination attempt by the Palestinian terrorist group Black September in 1973 of the American Ambassador and a Belgian diplomat in Khartoum is a typical example of a terrorism act that falls in this category. The attempted assassination against the then Egyptian President, Hosni Mubarak, in 1995 in Addis Ababa by the Egyptian terrorist group *Gama'at al-Islamiyya* is also an example of this kind. Other examples include the bombing by *al-Qaeda* in 1998 of the American embassies in Dares Salaam, Tanzania, and Nairobi, Kenya, and the simultaneous *al-Qaeda* attacks at Mombasa, Kenya, in 2002 against an Israeli airliner and bombing of an Israeli owned hotel popular with Israeli tourists (Molla, 2000:43-44).

The *second* type is an act committed by organizations within the region. It is conducted by organizations in the region against neighbouring countries. Example of this type include, a series of attacks carried out by Somalia-based *al-Ittihad al-Islamia/Al-shabbab* against civilian targets in Ethiopia in the 1990s (Medhane, 2002). The terrorist acts that have been committed by same organization in Kenya and Uganda also fall under this category.

The third type is a terrorist acts instigated by insurgent groups fighting the government within a particular state. These groups aim to either control the government, influence the policy of the government towards the people they are fighting for or greater autonomy (secession) or to change the regime by deliberately attacking and harming civilian population (Held, 2008). They generally are not aimed at a third party. Example of this category includes insurgent groups such as the Lord's Resistance Army (LRA) and Allied Democratic Front (ADF) in Uganda and the Ogaden National Liberation Front (ONLF) and Oromo Liberation Front (OLF) in Ethiopia, which committed terrorist attacks in Uganda and Ethiopia respectively (Medhane, 2004).

It is crystal clear that the most common and dominant form of trans-national terrorism in the IGAD region has been the second type; an act of terror committed by organization operating within the region. *Al-shabbab* has been the major terrorist organizations operating within the IGAD region. It declared itself as an *al-Qaeda* affiliated organization with the primary objective of establishing an Islamic republic state in Somalia (Menkhaus, 2005). With the gradual erosion of the power of factional leaders in Somalia and due to the absence of effective regional or inter-regional political force, it came to dominate the political dynamics in Somalia in 2006 and controlled the entire parts of Mogadishu.

It is apparent that the 2006 Ethiopia's intervention in Somalia by the invitation of the Transitional Federal Government (TFG) of Somalia had broken the backbone of AIAI and consequently it fractured into several segments. Ethiopian's primary objective was to crush AIAI, and to deter the spread of political Islam in the region (Medhane, 2002:155). The evacuation of the Ethiopian military force in 2008 had created a fertile ground for *Al-shabbab* to revive and to regain its dominance in the South-central part of Somalia including the capital, Mogadishu. Although *Al-Shabbab* was driven out from its strong hold by AMISOM, it still remains a great security threat not only to Somalia but also to the entire IGAD region. It is enough to note the recent terrorist attacks in Kenya, Westgate, and in other areas perpetrated by *Al-Shabbab* to recognize how it is challenging the peace and security of the region. The fight against Al-Shabbab requires regional coordination of resources and sharing of intelligence information.

IGAD and the Fight against Terrorism

As mentioned elsewhere above, IGAD has been involved in preventing and combating terrorism. In the following sections we shall deal with the conventions, institutional mechanisms and programs introduced with the purpose of preventing and combating terrorism. Following that, we shall see the practical activities that IGD performed in its attempt to preventing and fighting terrorism.

Conventions/ Treaties and Institutional Mechanisms

Terrorism is perceived as a present challenge and an eminent threat to the sub-region. Since 1990s, terrorism has increasingly threatened the security of the IGAD region. The major acts of transnational terrorism in the IGAD region emanates from Somalia, a state that has been virtually "failed" to provide security since the downfall of the Siad Barre government. Somalia's geographic location and its failure to function as an effective sovereign state has created an opportunity for several Al-Qaeda linked terrorists from North Africa and the Arabian Peninsula to establish Al-Qaeda cell in the region. Here is what United Nations Office of the Special Adviser on Africa (UNOSAA) has to say how acts of transnational terrorism in the IGAD region have been emanating from Somalia:

"Al-Qaida and al-Shabaab pose serious terrorist threats to the countries of the Horn of Africa, destabilizing the sub-region. Somali territory provides safe haven for terrorists and is used by them as a recruiting and training ground for terrorists. It was from the Somali territory that the 1998 terrorist attacks on the US embassies in Tanzania and Kenya were launched. Al-Shabaab now controls and operates in a vast area of Somali territory, which also provides safe haven and staging ground for pirates plaguing international shipping in the Indian Ocean off the Horn of Africa" (UN-OSAA,nd:38).

Recognizing transnational nature terrorism, IGAD member states agreed that no individual member can single-handedly be able to deal it effectively (CGCC and ISSP, 2012). Consequently, the Draft Implementation Plan to Counter Terrorism was adopted by IGAD in 2003 in Kampala, Uganda, with the purpose of combating terrorism. It was the first major

step towards legal cooperation against terrorism taken by IGAD. It called on member states to work towards a common legal framework, develop extradition and Mutual Legal Assistance (MLA) treaties, and encouraged ratification of relevant continental and international instruments. The plan also called for increased information exchange, training coordination, and international cooperation and highlighted the importance of respecting human rights while countering terrorism (Ibid).

In late 2009, acting on a desire to implement the United Nations Global Counter-Terrorism Strategy in the region, the IGAD Council of Ministers adopted two new Conventions, one on Extradition, and the other on MLA. Another further step taken by IGAD in combating terrorism was the adoption of the Security Strategy in 2010. With its adoption, IGAD restructured what was known as IGAD Capacity Building Programme Against Terrorism (ICPAT) and established the IGAD Peace and Security Strategy (IPSS). The transformation of ICPAT to ISSP was motivated by the recognition of the changes in security situation in the region that includes a convergence of various transnational crimes. ISSP has four pillars: Counter-terrorism (CT), Transnational Organized Crime (TOC), Maritime Security (MS) and Security Institutions Capacity Building (SICB) (Capital, 2013).

IGAD Member state as well ratified several international conventions on combating terrorism. The major ones among them are the UN Convention for the Suppression of Financing Terrorism and the AU Convention for the Prevention of Terrorism (CGCC and ISSP, 2012). IGAD member States have also ratified the following key legal documents of AU's Counter-Terrorism Initiatives: The 1999 Algiers Convention (the OAU, 1999); Convention on the Prevention and Combating of Terrorism; The 2002 AU Plan of Action for the Prevention and Combating of Terrorism in Africa (AU, 2002), and The 2004 Protocol to the Algiers Convention (AU, 2004; Wani, 2007; Wesi and Aning, 2006 and Ford, 2011). In addition to acceding to global, regional and sub-regional treaties on counter-terrorism, IGAD member states have been introducing legal codes that help them in fighting terrorism and other transnational crimes at national level (CGCC and ISSP, 2012).

Currently, IGAD has a *program unit* established to handle issues of security. This unit is called the IGAD Security Sector Program (ISSP). The ISSP replaced ICPAT and is mandated with enhancing "the capacity of IGAD member states to combat terrorism, to deal with maritime security threats, contain the intensity and impact of organized crime, and provide security efficiently and effectively through security sector reform with capacity building as an overarching component" (CGCC and ISSP, 2012:13). IGAD also works in collaboration with the Eastern Africa Police Chiefs Cooperation Organization (EAPCCO).

IGAD has also been working with the USA led Combined Joint Task Force-Horn of Africa (CJTF -HOA) in its attempt to combat terrorism. The CJTF -HOA's mission is to detect, disrupt, defeat and deny terrorist activity in the Horn of Africa. The CJTF -HOA is a joint and combined effort of personnel from all US services and allied officers from numerous other countries, such as Djibouti, Ethiopia and Kenya. CJTF -HOA provided military training to Ethiopia, Uganda, and Djibouti; and trained the navies of Kenya and Djibouti (Nzau, 2010).

Practical Activities

IGAD through IGAD Capacity Building Program against Terrorism (ICPAT) has been engaged in developing program aimed at counter-terrorism capacity building of its member states and promote regional security cooperation. In 2006, ICPAT launched a four-year programme in Addis Ababa called the now replaced by ISSP. IGAD's counter-terrorism program targets five areas: (a) enhancing judicial capacity; (b) working to promote greater inter-agency coordination on counter-terrorism within individual IGAD member states; (c) enhancing border control; (d) providing training, sharing information and best practices; and

(e) promoting strategic cooperation. In this regard, IGAD's program is often held up as an example for other African Regional Economic Communities to emulate (UNOSAA, nd).

IGAD through its ICPAT/ISSP and in collaboration with international organizations have been performing the following practical activities with the intention of combating terrorism and to ensure peace and security in the IGAD region.

Working on Democracy, Development and Interconnectedness

The structural problems on which terrorism thrive is attributed to poverty, unemployment, ignorance, bad governance, disorder, insecurity (Nzau, 2010), extremist ideology and lack of tolerance (Shinn, 2008) as well as state failure. Recognizing the roots of terrorism and with objective of reducing its impact on the peace and security of the region, IGAD has been working on democratizing its member states. This is particularly important because, domestic terrorism in the region emanates mainly from acts of marginalization, exclusion and bad governance. This is particularly true in Uganda, Ethiopia, Somalia and Sudan where several aspects of conflict have led to armed insurgency and outbreaks of domestic terrorism (Glenshaw, 1994).

Moreover, IGAD has been working hard by designing policies that prevents drought from turning into famine and strengthening interconnectedness among its members through trade and infrastructure. To realize this, IGAD delegated its member states to play a leading role in the implementations of its projects. Accordingly, Ethiopia is delegated to lead the construction of trans-boundary infrastructure; Kenya on drought resilience and resource management; Uganda on peace and security issue; Djibouti on maritime security and Sudan on trade harmonization (Chatham House, 2014). No doubt, if properly implemented, these projects will have a significant contribution to minimizing acts of terrorism in the region.

To prevent state collapse and insecurity, IGAD has been working on conflict prevention, mediation and capacity building between member states. In this regard, IGAD was highly involved in the Sudan peace process that culminated in the signing of the Comprehensive Peace Agreement and later in the process of holding South Sudan's referendum. IGAD has also held a long-lasting role in the reestablishment of sovereign government in Somalia (Ibid).

Provision of training to the security sector

Since 2006, training projects and seminars were designed by the ICPAT to enhance the knowledge and skills of officials working in the security sectors of IGAD member states (defense force, police force, border guards, and intelligence service and justice institutions) and to enhance their familiarity with working together to solve shared problems. Accordingly, the following training and/or seminars were conducted.

In 2008, the ICPAT, in collaboration with the EAPCCO, has delivered Training on "Counter-Terrorism" for selected Ethiopian law enforcement officials. The same training was given in Uganda, Somalia and Sudan for similar officials (IGAD, 2008). On May 13 and 14, 2009, IGAD, in collaboration with United Nations Counter Terrorism Executive Directorate (UNCED), organized a seminar on "border security", in Kampala, Uganda. IGAD member states were represented by "officials from ministries of foreign affairs, law enforcement and counter terrorism agencies, and customs authorities" (ICPAT, 2009). The seminar was focusing on enhancing border security (including the introduction of community policing) and the coordination of counter-terrorism (Ibid).

Furthermore, from 18-21st October 2011, ISSP organized a 4 days training seminar on "Advanced Interrogation Skills in Counter Terrorism" in Kampala, Uganda. According to the ISSP, the training was "a follow up of the series of trainings provided by ICPAT and CGCC that focused on the implementation of the IGAD Extradition and Mutual Legal Assistance

Conventions and the strengthening of cross-border cooperation networks amongst law enforcement officials in IGAD states”(ISSP, 2011). In this training, officials from member states were “drawn from the National Security Services, Police, National Counter Terrorism Centres and Magistrate” (Ibid). Moreover, in the same year, the following trainings were given to counter terrorism practitioners of IGAD member states: “Lessons Learned From Investigating Terrorism Incidents,” Nairobi, 18–20 May 2011; “Open Source Analysis and Information Sharing,” Nairobi, 14–16 June 2011; “Community Engagement to Counter Terrorism,” Addis Ababa, 14–16 July 2011; and “Advanced Interrogation Skills in Counter-Terrorism,” Kampala, 18–21 October 2011 (CGCC and ISSP, 2012).

From May 22-23, 2012, the ISSP, in collaboration with CGCC, organized annual convention for counter terrorism practitioners who came from the IGAD member states, Tanzania, Yemen and other stakeholders involved in counter-terrorism. Here participants discussed on “trends and outlook of the threat of terrorism in Eastern Africa, strengthening the legal cooperation and building partnership against terrorism, strengthening regional financial infrastructure, new approaches of tackling terrorism in Somalia, and the human rights as a necessary condition for effective counter terrorism” (Ibid: 2012:1).

From 27-28 March 2013, ISSP in collaboration with the Global Counter Terrorism Forum (GCTF) organized a training that brought together senior prosecutors and police officers from IGAD countries in Uganda. The training was mainly designed to enhance the knowledge of the trainees from good practices and case studies on effective counter terrorism in the criminal justice sector. Witness and victim protection, interagency cooperation, incentives to terrorist suspects to cooperate and investigating and prosecuting preparatory offences were the principle topics of the training (ISSP and GCTF, 2013).

Finally, the ISSP, on April 14, 2014 and March 20, 2014, organized a one day workshop “International Instruments to Counter-terrorism” for Kenyan and Ethiopia senior counter-terrorism officials respectively (ISSP, 2014). So far, more than 300 law enforcing personnel from IGAD member states were trained (Ibid).

Facilitating and backing (unilateral or collective) interventions against terrorists in Somalia.

On March 2006, IGAD mandated Ethiopia and Uganda to deploy a peacekeeping force in Somalia to fight the Union of Islamic Court (Rosand, et al, 2012). IGAD deployed the Peace and support mission in Somalia (IGASOM) which was the precursor to the African Union Mission in Somalia (AMISOM) in 2007. It played a major role in facilitating and persuading the UN and AU to intervene in Somalia. Although AMISOM is AU’s peacekeeping mission in Somalia, IGAD member states are the chief contributors and AMISOM operates in close collaboration with IGAD (Chatham House, 2014). Moreover, IGAD backed the unilateral intervention of Ethiopia in 2006 and Kenya in 2011. For example, in its 19th extra-ordinary meeting the IGAD Assembly of Head of States and Governments welcomed the unilateral intervention of Kenya to fight Al-shabbab jointly with Somali’s Transitional Federal Government troops. According to the communiqué released from the meeting, IGAD “understands, appreciates and supports” the joint operation and Kenya’s move against Al-shabbab and sees it as “unique opportunity” to “restore stability and security” in Somalia (IGAD, 2011). Commentators argue that IGAD has been resorting to hard power in its fight against terrorism. Thus, IGAD has been very active in attracting the attention of the international community concerning the crisis of Somalia in general and the situation of terrorism in the IGAD region in particular. It has also been involved in mobilizing financial, material and human resources in fighting international terrorist in Somalia.

Sanctions, Travel and Financial Bans and Extradition

As a fighting strategy against terrorism in the region, IGAD has been introducing sanctions, including travel and financial bans on suspected terrorists and individuals or organizations suspected of supporting terrorists. IGAD has also been calling up on the AU and the UN to take similar actions. In this regard, in June 2006, IGAD Council of Ministers (IGAD-CM) ratified a Kenya-led travel ban on Somali warlords. Furthermore, in its 33rd extraordinary session held on May 29, 2009, IGAD-CM passed the following resolution.

Recognizing the fact that Al-Shabbab and other international terrorists have used the porous borders of Somali specially the airports at KM 50 and KM 90 to receive supplies of arms and ammunitions, and personnel from their foreign backers, IGAD calls upon United Nations Security Council (UNSC) to impose a non-fly zone, except for humanitarian purposes authorized by the Somalia government, on the airport of Kismayo, baidoa, KM 50, Balidoogle, Waajid, Hudur, all airports in Gedo, Isaley and Johwar. On the same session, IGAD-CM also called up the UNSC to impose blockage on sea ports, particularly on Kismayo and Merka, to prevent the further in-flow of arms and foreign fighters, and urges the UNSC to reach out to the international naval forces present in the region to enforce the blockade.

The council also reiterated to take the necessary action to impose targeted sanctions, including travel bans, freezing of assets among others, against all those in and outside of Somalia and calls up the AU and the UNSC to do the same (IGAD, 2009). In the spirit of the IGAD-CM resolution 2009, the National Bank of Ethiopia has blocked individual bank accounts, detected at the Harar branch of Dashen Bank and the Commercial Bank of Ethiopia, linked with the Barakat International Companies (BICO), which is known to be involved in the financing of terrorist activities in 2011 (IGAD, 2013).

Due to the initiatives developed by IGAD concerning extradition and Multi-Legal Assistance, there have been formal and informal extraditions of terrorist suspects. For example, suspects from Kenya were moved informally to Uganda following the July 2010 terrorist bombings in Kampala; there was a formal extradition process for suspects from Kenya to Uganda. There was also an informal extradition of suspects from Kenya to Ethiopia (CGCC and ISSP, 2012:13).

Rebuilding the Somali State

Somalia has been the epi-center of terrorism and source of international terrorism in the IGAD region. This is because Somalia has been unable to ensure its internal security and to control its borders as well as protect its territory from local and international terrorist. Thus, rebuilding Somalia's security apparatus and reinstating a sovereign legitimate government in Somalia has been one of the major priorities of IGAD in fighting terrorism in the region. Accordingly, via its member states, IGAD has been providing various trainings to Somali security forces. Until the end of 2013, "between 14,700 and 15,000 troops had already been trained by IGAD countries" (Mahaboub Maalim, executive secretary of IGAD, quoted in Rift Valley Institute (RVI), 2013). It also supported Somalia to develop about five major policy frameworks expected to contribute to uprooting terrorism and ensuring lasting peace in Somalia.

One of the major policy document developed with support of IGAD is "the Somali government's 2016 Vision for Somalia, which outlines the process for creating a Somali federal system, removing Al-Shabbab, and holding elections in 2016" (Ibid, 2013:1). However, IGAD's involvement in Somalia is criticized for not doing enough due to lack of capacity and competitive national interest of member states and weak collaboration with civil society organizations (Farah and Halima quoted in RVI, 2013:2).

Finally, it should be acknowledge that the US, EU and several European states (unilaterally) have been funding the various trainings given to Somalia security forces by IGAD member states under the auspices of IGAD. In some cases European, U.S and Turkish security personnel were directly involved in the provision of the training (Amnesty International, 2010). Moreover, the US played its own role in fighting terrorists in Somalia by conducting air raids in different areas, particularly since 2007.

Challenges

IGAD has been facing several challenges in its attempt fighting against terrorism. The first major challenge is lack of trust among member states due to the legacy of inter-state and intra-state conflict. The IGAD region is characterized by endemic inter-state and intra-state conflict. Some IGAD member state were and (still are) supporting or hosting each other's rebel groups (including those classified as terrorist groups) fighting a neighboring member state. Such acts happened between Ethiopia and Sudan, Ethiopia and Eritrea (still happening) Sudan and Eritrea, Uganda and Sudan (Kidist, 2009). IGAD states have been showing competing national interest over the Somalia civil war and towards the Al-Qaeda linked terrorist and other Islamists in Somalia. For example, in 2006, "IGAD warned particularly Ethiopia and Eritrea from taking unilateral actions that undermine the powerless but internationally recognized TFG" (The East African, 2006, cited in Nazau, 2010:6). All such experiences might have made it difficult for IGAD states to fight domestic and international terrorists effectively.

The second major challenge comes from the difference on the definition of terrorist organization and lack of cooperation among member states in fighting domestic terrorism. Due to the dynamic nature of terrorism, member states do not have common definition on what constitutes terrorism and who is a terrorist. Moreover, while majority of terrorism in the IGAD region do not constitute international terrorism, as a regional body, IGAD has been focusing on terrorist acts emanating from Islamic fundamentalist and Al-Qaeda linked terrorists operating in Somalia. However, the vast terrorist acts in the IGAD region has been committed by groups labelled as domestic "terrorist" in the respective countries, where IGAD had no significant role in abating it. Such terrorist acts were committed by the Lord Resistance Army (LRA) in Uganda, the Janjaweed in Sudan, and Al-shebab in Somalia and [the Oromo Liberation Front (OLF) and Ogaden National Liberation Front (ONLF) in Ethiopia] (Ibid).

The third challenge is attributed to overreliance on hard power and extrajudicial options in dealing with terrorism. However, the presence of *Al-Qaeda* linked *Al-shabbab* and other Islamic fundamentalists in Somalia indicate that hard power may not succeed in uprooting both domestic and international terrorism in the region.

The fourth challenge is related to external intervention in Somalia both from IGAD member states and from outside the region. The unilateral intervention of Ethiopia in 2006 and Kenya in 2011, which were implicitly supported by the West has been perceived as a fight on clash of civilization instead of a combat against terrorist threat in Somalia. Moreover, the fact that the U.S has been carrying out air-rids in Somalia and the fact that the U.S, E.U and several European states have been behind the trainings given to Somalia's Transitional Government security forces as well as other State rebuilding process have been giving an impetus to local and international terrorists in Somalia to commit more terrorist acts in the IGAD region including by recruiting new personnel (Shinn, 2013).

Other challenges include, weak integration of broader legal and policy frameworks, lack of financial capacity, coordinated intelligence analysis and policy making capabilities, the withdrawal of Eritrea from IGAD and the nature of the Eritrean government as well as the

modern digital communication has also made terrorism and other transnational crimes vastly easier to coordinate on a worldwide scale (Sims, 2007).

Conclusion

IGADD was established in 1986 to combat the spread of drought and desertification in the Horn of Africa. But, it transformed itself into a full-fledged regional political, economic and security authority (IGAD) in 1996 recognizing the need to maintain peace and security for sustainable economic development and regional integration. However, terrorism has still remained as a challenging and destabilizing factor for the peace and security networks of the region. Although IGAD has been fighting terrorism by introducing various conventions and institutional mechanisms, it remained as major security threats of the region.

IGAD has been overlaying on hard power and external assistance in its fight against terrorism. Therefore, the authority must direct resources to combat TTC by galvanizing its member states. Moreover, it should focus on issues of political marginalization and polarization, social and economic inequality, endemic poverty, pervasive corruption, bad governance, lack of tolerance and extremist ideologies, which Shinn (2008:1) argues are “all greater threats than terrorism to the political stability and economic progress in the Horn of Africa”.

References:

The Abuja Treaty (1991), Treaty Establishing the African Economic Communities, Abuja, Nigeria.

Amnesty International (2010), Somalia: International Military and Policing Assistance should be Revised, London, Amnesty International.

Bourenane, Naceur (2002), Regional Integration in Africa: Situation and Prospects, in: *Regional Integration in Africa*, African Development Bank, Development Centre of the Organization for Economic Co-operation and Development.

CGCC and ISSP (2012), Fighting terrorism through justice: Implementing the IGAD Legal Framework for Cooperation against Terrorism, New York and Addis Ababa.

ECA (Economic Commission in Africa) (2004), Assessing Regional Integration in Africa II: Rationalizing Regional Economic Communities, Addis Ababa, ARIA-II.

Ewi, Martin and Aning, Kwesi (2006), “Assessing the Role of the African Union in Preventing and Combating Terrorism in Africa”, *African Security Review* 15, No. 3.

Ford, Jolyon (2011), “African Counter-Terrorism Legal Frameworks a Decade After 2001”, *Institute for Security Studies [ISS] Monograph*, No. 177.

Glenshaw, Martha (1994), *Terrorism in Africa: the International Library of Terrorism*, New York, Macmillan.

Held, Virginia (2008), *How Terrorism is Wrong: Morality and Political Violence*, New York, Oxford University Press.

Jannah, Abdoulie (2012), *Integrating Africa*, Addis Ababa, Ethiopia Economic Commission for Africa.

Juba, Monica (2007), “The role of the Intergovernmental Authority on Development in Preventing and combating Terrorism”, in: A Le Sage (ed), *African counterterrorism cooperation: Assessing Regional and Sub Regional Initiatives*, Potomac Books Inc, Dulles, VA, p 57-76. Online: www.issafrica.org/cdterro/english2.htm (last consulted: 12/04/2014).

Kidist Mulugeta (2009), *The Role of Regional and International Organizations in Resolving the Somali Conflict: The Case of IGAD*, Addis Ababa, Friedrich Ebert-Stiftung.

Kinfe Abraham (2006), *The Horn of Africa: Conflicts and Conflict Mediation in the Greater Horn of Africa*, Addis Ababa, EIIPD and HADAD.

- Medhane Tadesse (2007), IGAD and Ethiopia: A Historical and Functional Profile, in *Occasional Papers*, Vol. 9 (25), Pp. 7-27.
- (2002), *Al-Itihad: Political Islam and Black Economy in Somalia*, Addis Ababa, Mega Printing Enterprise.
- (2004), *Turning Conflict to Co-operation: Towards Energy-Led Integration in the Horn of Africa*. Addis Ababa, Friedncih-Elbert-Stiftung.
- Memar Ayalew (2012), *The Role of Regional Organization in Conflict Transformation: The Case of IGAD's Mediation Efforts in Somalia*. Germany, Lambert Academic Publishing.
- Menkhaus, J. Kenneth (2005), Somalia and Somaliland: Terrorism, Political Islam, and State Collapse, In: *Battling Terrorism in the Horn of Africa*, Virginia: R.R Donnelley Harrioshburg.
- Miller, Suma (2009), *Terrorism and Counterterrorism: Ethics and Liberal Democracy*, USA, Blackwell Publishing.
- Molla Mengistu (2002), Ethio-Sudanese Relations, unpublished M.A. Thesis, Addis Ababa University.
- Ndomo, Atiento (2009), Regional Economic Communities in Africa: A Progress Overview, Nairobi, GTZ .
- Nzau, Mumo (2010), Counter-Terrorism in the Greater Horn of Africa 2004-2010: Revisiting the Somalia Question, *Journal of Language, Technology & Entrepreneurship in Africa*, Vol.2. No.2
- OAU (1999), OAU Convention on the Prevention and Combating of Terrorism, online: http://www.africaunion.org/root/au/Documents/Treaties/Text/Algiers_convention%20on%20Terrorism.pdf (last consulted: 20/04/2014).
- Okoth, P. Godfrey (2004), Regional Institutional Responses to Security in the Era of Globalization, in: *African Regional Security in the Age of Globalization*, Germany, Heinrich Böll Foundation.
- Rosand, Eric, Alistair Millar and etal. (2008), *The UN Global Counter-Terrorism Strategy and Regional and Sub-Regional Bodies: Strengthening a Critical Partnership*, Centre on Global Counter-Terrorism Cooperation, October 2008.
- Shinn, David (2008), Implications of Terrorism and Counter-terrorism in the Horn of Africa, paper Delivered at the Horn of Africa Conference-VII, Faith, Citizenship, Democracy and Peace in the Horn of Africa City Hall, Lund, Sweden.
- (2003), Terrorism in East Africa and the Horn: An Overview, *The Journal of conflict Studies*, the GREGG Centre for the study of war and peace, Vol. 23. No. 2, online:<http://journals.hil.unb.ca/index.php/jcs/article/view/218/376>(last consulted/15/04/201)
- Sims, Jannifer (2007), "Intelligence to Counter Terror: The Importance of All-Source Fusion" *Journal of Intelligence and National Security*, Vol.22.
- UN-OSAA (United Nations Office of the Special Adviser on Africa) (nd), "Africa and International Counterterrorism Imperatives", Expert paper prepared by the Office of the Special Adviser on Africa.
- Wani, Ibrahim J. (2007), "The African Union Role in Global Counterterrorism", in Andre Le Sage (ed) *African Counterterrorism Cooperation*, Pp. 39-56.
- Weinberg, Leonard and William L. Eubank (2006), *The Roots of Terrorism: What is Terrorism?*, New York, Chelsea Hose Publisher.
- AU (2004) , "Protocol to the OAU Convention on the Prevention and Combating of Terrorism, online: <http://www.africa-union.org/root/au/Documents/Treaties/> .
- (2002), "Plan of Action of the African Union High-Level Inter-Governmental Meeting on the Prevention and Combating of Terrorism in Africa," adopted 11-14 September 2002 meeting, online: [http://www.iss.co.za/ AF/Reg Org/unity_to_ union/pdfs/ oau/ keydocs/PoAfinal.pdf](http://www.iss.co.za/AF/Reg%20Org/unity_to_union/pdfs/oau/keydocs/PoAfinal.pdf) (last consulted: 14/04/2014).

Capital (2013), “IGAD to establish counter-terrorism cent”, Capital News Letter, Monday, 25 February 2013, online: http://capitalethiopia.com/index.php?option=com_content&view=article&id=2530:igad-to-establish-counter-terrorism-centre&catid=35:capital&Itemid=27 (last consulted: 13/05/2014).

Chatham House (2013), “Africa Summary: IGAD’s Role in Stability and Diplomacy in the Horn of Africa”, online: <http://www.chathamhouse.org> (last consulted: 14/05/2014).

ICPAT (2009), “ICPAT-UN Border Security Seminar held in Kampala”, online: <http://www.icpat.org/index.php/events-archive-mainmenu-81/283-icpat-un-border-security-seminar-held-in-kampala> (last consulted: 06/05/2014).

IGAD (2013), “IGAD, EU Sign Regional Maritime Security Agreement”, online: http://igad.int/index.php?option=com_content&view=article&id=630:igad-eu-sign-regional-maritime-security-agreement&catid=46:executive-secretary&Itemid=123 (last consulted: 06/05/2014).

(2003), “Report on IGAD Conference on the Prevention and Combating of Terrorism”, UN Conference Centre, Addis Ababa 24-27 June 2003.

(2008) “ICPAT Training Course for Ethiopian Police”, online: <http://www.icpat.org/index.php/events-archive-mainmenu-81/34-icpat-training-course-for-ethiopian-police-ends?format=pdf>.

ISSP and GCTF (2013), “Criminal Justice Sector and Rule of Law Working Group and Horn of Africa Region Capacity-Building Working Group: Implementing the Rabat Good Practices in Investigating and Prosecuting Terrorism Cases” 27-28 March 2013, Entebbe, Uganda, online: <http://www.thegctf.org/documents/10291/43239/Meeting+Summary-Rabat+Good+Practices+Workshop+Entebbe+2728+Mar+2013> (last consulted: 17/05/2014)

ISSP (2014), “National Workshop on Promoting International Instruments to Counter Terrorism”, online: <http://igad.int/index.php?option=> (last consulted: 16/05/2014).

ISSP (2012), “First Annual Convention for Counterterrorism Practitioners”, online: <http://www.icpat.org/index.php/component/content/article/1-latest/581-first-annual-convention-for-counterterrorism-practitioners> (last consulted: 06/05/2014).

(2011), “ISSP Conducted a Training Seminar on Advanced Interrogation Skills in Counter Terrorism”, online: http://igad.int/index.php?option=com_content&view=article&id=364:issp-conducted-a-training-seminar-on-advanced-interrogation-skills-in-counter-terrorism-&catid=45:peace-and-security&Itemid=128 (last consulted: 16/05/2014).

RVI (Rift Valley Institute) (2013), “Somalia and IGAD”, Rift Valley Institute Meeting Report, Nairobi Forum, 25 October 2013, online: <http://riftvalley.net/event/igad-and-somalia#.U3aNqIFdVUA> (last consulted: 05/05/2014).

SABAH (2013) “European Union and IGAD co-operate to fight piracy”, online: http://sabahi-online.com/en_GB/articles/hoa/articles/newsbriefs/2013/06/16/newsbrief-06 (last consulted: 04/05/2014).

Xinhua (2013), “EU Grants 37 Million Euros to IGAD Countries to Fight against Piracy”, online: <http://english.cri.cn/6826/2013/06/14/2821s770200.htm> (last consulted: 06/05/2014).

AN ACCOUNT OF HUMAN RIGHT VIOLATIONS IN NIGERIA (PRE-BRITISH, BRITISH AND POST INDEPENDENCE)

Sunny Nwachukwu N

Department Of Political Science School Of Social Science
Alvan Ikoku Federal College Of Education, Owerri, Nigeria

Dr Austin Aghamelo

Department Of Political Science Ambrose Alli University, Ekpoma Edo State, Nigeria

Nwaneri Stanley

Department Of Political Science School Of Social Science
Alvan Ikoku Federal College Of Education, Owerri, Nigeria

Abstract

The problem we have sought to address entails a discussion on the status and dynamics of human rights violation from British to Post Independence. We shall equally be examining the extent to which genuine democratization can resolve the hydra-headed crisis of human right abuses. At the inception of the present Fourth Republic in 1999 under the leadership of Olusegun Obasanjo, Nigerians had a sigh of relief that democracy and its twin sister, the rule of law, which is the basis for the protection of human rights, will come to stay. Unfortunately, everybody was amazed and disappointed at the level of human rights violation even in the democratic regime of Obasanjo.

Keywords: Human right, independence, democracy

Introduction

Conceptualization of human right

Human rights are those categories of rights that nature has bestowed on man. They presume the sacredness of the human person in any society in the world to doggedly resist any constraints upon this right as they underlie his humanity and freedom.

In its modern form, where the dominant terminology has taken the phrase "human" rather than "natural" human rights is defined as a...

Universal moral right, something which all
Men, everywhere, at all times, ought to have
And something of which no one may be
Deprived without grave affront to justice
Something which is owing to every human
Being simply because he is human. ((Ibid)
Issa Shivji goes to opine that:

There is only one universal conception and
Formulation of human rights. Human rights a
Are universal. They inhere in human beings
By virtue of their humanity alone...they are
Neither privileges nor contingent upon any
Duties by entitlements against the state.
Conceptually, the dominate outlook on

“human right’ centers around the concept of ‘human nature’. Human nature is an abstraction both from history as well as society. (Klenner, 208,p8)

Conceptualization of human right and national security

The realist school of thought views security as a two-issue character orientation: state and military. It views security⁶ in the parochial military terms and concentrates on the different military strategies adopted to contain external threats to state security. It is in this context that Walter Lippmann opines that “a nation is secure to the extent that is not in danger of having to sacrifice core values if it wishes to avoid war, and is able, if challenged, to maintain them by victory in such a war” Marx, 1980, p.123) in this wise, security is conceived as the acquisition of formidable military weaponry to protect the territorial integrity from external threats. This implies the propensity of security to rise and fall, which is why Arnold Woffers posits that security rises and falls within the ability of a nation to deter an attack or defeat it (Woffers, 1966, p. 185) this variant of security posits that aggression of threat to the state is wholly externally directed. It leads to build up of weapons and arms race that in turn culminates into what can aptly be described as “security dilemma’. The concomitant product of security dilemma is what is termed ‘spiral insecurity’ that tend towards a position of permanent insecurity in the system as a whole, or at best only temporary security for any given power at any time.

In this scenario, there exists a pall of insecurity. What one country does to enhance its own security causes reaction from other countries that in the end can make the initial stage less secure. Thus, the scenario of action and reaction goes on in an unending pursuit to achieve security and therefore, it determines the behaviour of states in and anarchical international system. In spite of state pursuits, security continues to be elusive. There are incidents of civil conflicts, killings, arson, torture, brutality, repression and victimization everywhere, which have resulted in the deaths of millions of people. Many of these seasonal terrors and mayhem were occasioned by internal factors as against external threats, along the line postulated by the realist school of thought (Imobighe, 2001, p.44)

The neo-realist school of thought represented a “new thinking” about security. It extends the concept from the “state and military” brackets to include non-military issues and vulnerabilities that have really posed as threats to state security. It reinforces the essence and the propensity of internal issues to threatening state security. This school of thought sees security in a broader term. It now includes the gamut of human needs, which includes the right to life, liberty and pursuit of happiness. In its broadcast from, it connotes freedom from or elimination of threat, not only to the physical existence of the state, but to its ability for self-protection, development and the enhancement of the general well-being of the populace (Imobighe, 2001, p.39).

Thomas Imobighe affirms further that: security must have a positive impact on the condition of life of the individual within these states and provide all the inhabitants with the right atmosphere for their self-improvement and its actualization.

The components of national security may include territorial security of a state, food security, social security, political and economic security, physical safety and security of citizenry etc, a state could be secured to the extent in which these components are presents.

An account of human right violations in nigeria (pre british and british era)

Contrary to widely held views that human rights violations in Nigeria were initiated at the inception of the military in politics, the problem actually has its historical origin traceable from pre-colonial to colonial era. For instance, in 1849 with the imperial activities of John

Beecroft, the British Crown Consul in Nigeria. It was John Beecroft who introduced the concept of “gun-boat diplomacy” in Nigeria, (Batten, 1939, p.11 through which he compelled questionable agreements and treaties upon local rulers in the area, offering them “protection” in exchange for allowing British traders special and unlimited access to trade and economic activities in their domains. Some of the kings that refused to comply with his selfish rule were extended with gun-boat diplomacy and it resulted to violence and low-intensity war. These rulers were hounded, nuzzled and their domain torched. They were either dethroned or exiled.

It was in this context that violence and inhuman treatment came into Nigeria. Another earlier indulgencies of human right abuse was Brinsmen crisis with the Royal Niger Company at Akassa in 1895, it was recorded that much harm was done to property and many lives were lost. Although it was alleged that the actual extension of British authority over many of the coastal and land tribes was partly due to human right abuses by some of the pre-colonial chiefs in 1817 for instance, the consul dethroned the king Pepple of Bonny for making war on other chiefs and misruling his country. Also, in 1887, Jaja of Opobo was turned out for checking the trade of British merchants with the inland tribe; and in 1893, a Jekri Chief, Nana, who still kept on slave-raiding and ill-treating other tribes was also conquered and put down. In 1897, Benin was consumed and Oba Ovoramwen was sent away to Calabar due to slave-raiding, making human sacrifices and killing a number of peaceful Englishmen without cause. The condition of Benin at the time of its capture has been described thus:

Huge hole, 40 to 50 feet deep, were found
 Filled with human bodies, dead and dying
 And a few poor prisoners were saved...On
 The principal tree of sacrifice, facing the main
 Gate to the Kings courtyard there were two
 Crucified bodies at the foot of the tree,
 Seventeen bodies without heads, and forty
 Three more bodies that had been dead for
 Some... to the westward of the kings
 House was a large open space, about three
 Hundred yard in length, simply covered
 With the remains of some hundreds of human
 Sacrifices. The same sights were met with all
 Over the city. (Batten, 1939:13)

In 1903, Sokoto was attacked and the Sultan escaped. and a new Sultan was appointed by the High Commissioner. The Fulani emirs had ruled their subjects very badly indeed, taxing them severely, and even rendering their own subjects slaves. They also cruelly punished those who had displeased them, as the following quotations shows.

“the Emir’s best-killed slaves... ordered for their
 enemies inhuman punishment which they themselves
 invented. Finger-nails were torn out, arms and legs
 were still alive, important people who had displeased
 the emir were burnt up alive gradually on the town
 walls. Till after a period of terrible pains, the head
 of the dying man was at least walled up. The public
 prison of the Fulani became places of cruelty, from
 which few who were shut up in them could escape
 alive. (Batten, 1939:12)

From these records it is evident that the British influence on the geopolitical entity of Nigeria began as imperial enterprise whose sole target was exploitation of the economic resources, the institutionalization of violence and the use of coercion as instrument of

political control. Many believed that the problems associated with human rights violations are not unconnected with the method of British acquisitions and administration. The British, through a combination of force and cunning, subdued the different ethnic groups in Nigerian state and brought them into political stronghold tagged modern Nigeria.

O.Nnoli posits that:

In Nigeria, the colonialists were not interested in
 Making their system of production serve the
 Basic needs of the local population.

The understanding here is that the British political, social and economic policies were formulated and executed to the extent that they served British interests and left Nigeria with no basis for economic and political structures for the future developments of the Nigerian State because of self quest of the colonialist, human abuses were institutionalized

Nigeria, even after the declaration of Human Rights by the United Nations, (Eso, 2008), p.17) still possesses the status of colonialism. In 1947, two years after the Universal Declaration of Human Rights, abuse of Human rights in Nigeria came to a head. There was the Bristol Hotel incident, which is worth elaborating upon. Keith and Ivor Cunnings, was an Afro West Indian. Before leaving Britain, both officials had been booked to stay in Bristol Hotels, Lagos and a Hotel which catered only for whites. It was run by Greek hotelier.

Upon arrival, Keith was given a rousing and sumptuous reception while Ivor Cunnings was embarrassed with a very cold welcome. Upon all the unceremonious reception given to Ivor, he was not accommodated in the already booked Bristol Hotel, because according to the hotelier, the hotel was an exclusive reserve for the whites. We see this as another dimension to human right abuse. Imagine, because of colour, Ivor was discriminated against.

Nigeria since independence has had different political experiments and experiences. Firstly, it was British Parliamentary or Cabinet system of government up to end of the first republic in 1965. Then came the American presidential system in 1979 of the second republic.

The plight of democratic experiences shows that Alhaji Tafewa Balewa, prime Minister of the first republic was killed in the military coup of 1966, this led to the Nigerian civil war that almost brought the federation to wreckage. The Shagari administration (1979-1983) after a first-term in office was also overthrown by the military in 1983. There was the denial of a sovereign mandate given willingly by Nigerians to Moshod Abiola in June 12th 1993 presidential election. The illegal Interim National government of Ernest Shonekon was also booted out by General Sanni Abacha. It is being argued that military overthrow of elected government is part of human right abuse.

On the part of military, there have been coups and counter coups. There was a counter-coup against military government of General Aguiyi Ironsi which brought General Yakubu Gowon to power in July 1966. Gowon himself was overthrown by the coup that brought Generals Murtala/Obasanjo to power in July 1975. The military resurgence again with the coup of General Mohammed Buhari on December 31, 1983 which was overthrown by General Ibrahim Babangida who later stepped aside for General Sanni Abacha to take advantage of the situation to boot Ernest Shonekon out of power on November 27th 1993. That has been the same sad pictures of political instability that engulfed this nation

In the thick of the struggle to emancipate the nation from the strangulating grip of military dictatorship, the activists vowed not to surrender, but rather to continue to fight for freedom, justice and the enthronement of democracy in Nigeria. Their doggedness and near fanatical devotion to the ideal no doubt tasked the military dictators in the country. Consequently, there was the need to meet the daunting challenges that will eventually lead to freedom. Irrespective of age, sex, ethnic origin, everyone was entitled to full and positive

enjoyment of fundamental human rights. These fundamental human rights cover a very wide spectrum of human existence, including the specific abuses from which people should be protected, such as arbitrary arrest, unlawful detention and torture.

Human rights issues received legal backing with statutory provisions made in the 1999 Constitution of the federal Republic of Nigeria. Section 33 to 43 of Chapter IV specifically covered the fundamental human rights that the government and society not only acknowledge, but also guarantee to protect from infringement. (Constitutional rights project, 1997, 3) Previously, however, the human rights record in Nigeria particularly under military era from 1985 to 1998, which covered the Generals Ibrahim Badamosi Babangida and Sani Abacha regimes, witnessed high levels of human rights abuses and violations in the country. Instructively, there was perhaps no basic right that was nor abridged in the period under review. There was military brutality against the civil populace, case of extra-judicial killings soared, access to justice by ordinary Nigerians was severely restricted, international passports and other traveling documents of individuals and officials were seized with impunity to prevent opposition and cow articulate critics of the juntas into submission.

To worsen matters, the unconstitutional practice of arresting relations in lieu of accused persons-whether factual or fabricated-among other vices, intensified the level of insecurity in the country. There were waves of baffling and unresolved assassinations as well as recurring incidents of bomb explosions in several parts of the country/. Extra-judicial killings, arbitrary arrests, unlawful and prolonged detention, brutal torture of accused person and degrading treatment bordering on dehumanization of critics and opponents of the military regimes became a common scene in the country. (Ayoob, 1994, p.5)

Thus, human rights and national security are intricately interwoven to such extent that one reinforces the other, and a decline in one is a direct threat to the other, which consequently results in general societal retrogression. Component of human security include right to life, right to dignity of the human person, right to persona; liberty, right to fair hearing, right to freedom of thought, conscience and religion, right to freedom of expression and the press, right to peaceful assembly and association, right to freedom of movement, right to freedom from discrimination.

Identification of problems

Human right violation the world over, has become an ignominious act which attract the condemnation and attention of international organizations like UN, the Commonwealth, AU, Governmental Organization and others. Nigeria as a sovereign state has not fared any better in the protection of fundamental human rights of her citizens instead, it has been a situation of wanton abuses of their inalienable rights with impunity.

The regimes of General Babangida and Sani Abacha witnessed widespread human rights violation. Both regimes ushered in unprecedented levels of political and economic regimentation in Nigeria,, and the scale of violation of human rights abuses reached such magnitude that it led to widespread dissatisfaction in all spheres of the society. (Owunwa, 198, p.189)

For instance, the resulting absence of legal restraints on agents of the regimes gave free rein to human right violations. The human right abuses of the regime were perpetuated by the government through their agents operating in different institutions and agencies of the state. Most prominent were the armed forces, including the paramilitary organs of the state such as the State Security Services (SSS), the customs and Prisons Services, the National Intelligence agency, and the Police Force. They all collaborated extensively in launching an all-out war, on behalf of the ruling junta, against human rights issues and activists.

Soon enough, civil officials of known human rights inclinations were suspended dismissed or retired from public service institution. Others, such as academic, intellectual and

students union activists that also maintained similar posture as that of the human right activists, were either harassed, brutalized or arrested (in the case of the former two), or were rusticated or expelled in the case of the later

In 1988, some leaders of the Nigeria Labor Congress were detained for criticizing the General Babangida regime on SAP and when in 1993 striking ASUU members refused to be intimidated by threats from the regime, which were expected to force them back to lecture halls without first of all meeting their demands, the regime issued the Teaching (essential Services) Decree under which teachers all levels of educations would lose their jobs if they went for more than one week.

It is remarkable that in the opinion of Bola Ajibola, violation of human rights was quite compatible with military rule. In an address that he delivered at the Nigerian Bar Association conference in Kaduna in September 1988, on the theme Courts and Liberties in Military Revolution, he opined thus

If we accept that a military regime is an
Aberration, then we should be prepared to
Logically assume that it cannot satisfy the
Condition of regular government in terms of
Human rights. (Tell Magazine, 1993, p.6).

To secure his regime, he clamped Chief M.K.O Abiola into jail. Shortly after, General Olusegun Obasanjo, Chief Frank Kokori and countless others followed. The right to freedom of expression and the press was at best in abeyance, owing to the fact that newspaper houses were shut down on official orders or were fire-bombed by unknown persons who always were never apprehended by the police authority. The existence of the Strike Force, the Directorate of Military intelligence (DMI) and the State Security Services (SSS) further worsened the violation of human right

On 10th November, 1995, Kenule Beeson Saro Wiwa- a renowned figure whose reputation was known worldwide on account of his agitations for equitable appropriation and utilization of the oil wealth of his community in particular and Niger Delta in general-and eight other Ogoni environmental activists were sentenced to death by hanging. This was the climax of years of struggle by the Ogonis in creating general awareness about the environmental devastation that the exploration of crude oil in their communities by foreigners in collaboration with the Nigerian government, has wrecked on the indigenous peoples without noticeable improvement of their standard of living. (Aron, 1966, p.32)

Herein lies the problem of the study, which is the establishment and evaluation of the dialectical relationship that exists between human rights, its violations and what this portends for the national security of the country such as Nigeria.

Theoretical analysis

The theory of transition and authoritarianism as it relates to the state is adopted as our framework of analysis. Human right violations have been swinging between transitions from authoritarian colonial rule to “elected democratic rule” when elected civilian incumbents subverted rules of democracy with distain. The country has had more military era than civilian. The state and its structures were repressive by power concentration and client relation. Authoritarianism overtook rationality. The army, rather than being nationalistic, was occupationist. Power rigidly restricted the political landscape. Military rules accentuated authoritarianism –more restriction personalizing governance, straightening the federal center and total abuse of power and human rights became subservient to the state rather than a check on it.

The elites in Nigeria help up in this contraption. Given the unyielding dominance of the state, they see human rights violations and abuses as a means to reach and control it. Between human rights violations and social value the Nigerian political elites prefer the human right violations.

Apart from the interpretation of human right violations, the nature and character of the state hardly conforms with the tenets of good governance. According to Claude Ake:

Nigeria...democratizes with no separation of power
All powers having been rested on an imperial
Presidency. There is hardly any rule of law no
Plausible system of justice no transparency. The
Coercive institutions of the state are above the law
Civil society is below it, ordinary people are out of
Sight far beyond its protection. The bureaucracy is
Oppressive and arbitrary. The Nigerians state like
The colonial state before it turns on the calculus and
Strength. (Ekeh, 1978, p.318)

The Nigerian state, incidentally, evolved from outside the Nigerian society. This is because the Nigerian state was a colonial creation having its precursor in the colonial Nigerian state—a state that was put in place by British colonialism for the realization of its imperialist objectives. The colonial state in Nigeria instead of emerging as a reaction to the need created for it by the Nigerian people, strategically evolved as a colonial instrument for the administrative and organizational control of the Nigerian people brought under the imperialist control of Britain through colonialism. The colonial state in Nigeria was therefore a state lacking in natural legitimating ideals because it was not desired by the people internally, since it was an external imposition.

More than that, however, the *raison d'être* of the colonial state was the domination of the people since the state derived the import of its existence from the subjugation of the society on which it was foisted. As a state instituted for the promotion and realization of the objectives of colonialism, the colonial state in Nigerian necessarily had to make its duty the exploitation and domination of the people of Nigeria if the full objectives of colonialism, obviously antithetical to the interests of the people, were to be pursued effectively. The colonial state was, as such, conceived and presented as a *forcemajeure*, relying on force and violence, especially given its monopoly of the instruments of violence, to subjugate and dominate the Nigerian society.

The oppressive nature of the colonial state also derived in part from the lack of correspondence between it and the Nigerian society in economic matters. This is because; while the colonial state was the instrument of the metropolitan government that was superintending a capitalist economy at home, the Nigerian society was still essentially subsistent in production, depending on agricultural production with minimal trade and exchange. (Joseph, 1991, p.193) since the *raison d'être* of the colonial state was the subjugation of the colonized society, it meant that the subsistent production system of the Nigerian society had to be destroyed to make for the introduction of a capitalist system of production that would facilitate capitalist exploitation by the colonial state. Unfortunately, the colonial state, in terms of the conception of the metropolitan state, was also expected to finance the subjugation of the colonized internally, that is through revenue extracted from the colony. This meant that the colonial state could embark on the total destruction of the extant subsistent production since it was needed to rely on the proceeds of this production system through taxation to finance itself. Nonetheless, since taxation was to be paid in British currency, it was assumed that chestnut would be put out of fire of subsistent production through exchange imposed by the quest for British currency. The colonial state was therefore

still set, even though more methodically than should normally be expected, to destroy the economic fabric of the subsistent production of the colonized people and substitute it with an economic system in its own image.

The combination of the alien, suppressive and oppressive nature of the state and the fact that it was not performing any positive role for the colonized Nigerian society in terms of economic production outside of the negative influence of unjustifiable taxation, meant that the people did not see the state as 'something technically necessary' for their continued existence. The state was therefore in every respect an unaccepted one lacking in legitimacy and surviving only on strength of the instruments of force within its control. It is noteworthy that the state relies on this absence of legitimacy and acceptance for its relation with the society. The colonial state was governed by the principle of *amorality* since the people did not accept the state in terms of the society's morality. (Olagunju, 1993, p.39) This created a duality in citizenship commitment and consciousness formation. The duality has its root the civil society and primordial values of the dominated Nigerian (indigenous) formations.

Incidentally, the coming of independence did not fundamentally transform the state in Nigeria, because the people who supplanted the British at independence were a carefully selected class of Nigerians who continued to protect the interest of the Britain. The Nigerian state retained its forceful and authoritarian character, with the indigenous leaders realizing that they had to continue with erstwhile colonial process of suppression to assure themselves of prominence and authority which could not be got legitimately. Instead of transforming the state and making it relevant to the satisfaction of the needs and wants of the people of Nigeria, the emergent leaders were contented with using the enormous authoritarian structures of the state to appropriate economic gains to themselves. There was really no incentive for this kind of transformation: having control of their instruments of force was enough to assure the leadership of advantageous placement in society particularly since the state had enormous resources through forceful social appropriation from society. Here human rights must be continuously suppressed to eliminate challenges.

Nevertheless, the fact that the state, given its enormous resources, was the most secured and quickest source of accumulation after independence meant that politics as the struggle for the control of the instruments of the state became a fierce battle. Many people became interested in the state, not because it was useful for the generality of the society but because it could be exploited for personal material gains. Claude Ake writes:

...the Nigerian state appears...to own virtually everything including access to status and wealth
Inevitably, a desperate struggle ensues, since this
Control means for all practical purposes being all
And owing everything. (Ake, 1992, p.6)

The desperation that became the most important characteristic of the competition for a control of state offices meant that the struggle in this competition need not be peaceful. What became important was to win and all factors and resources had to be deployed to ensure success. This characterizes the Obasanjo 2006/2007 command to the PDP followers that election should be a do or die affair. In a situation as this, competition degenerates into conflict and the end-result in this instance, was the emergence of the military as a key actor in the political scene with the military taking over the reins of power from the civilians. This development is not surprising since the military normally holds the aces in a situation of conflict and violence. But the demand of the structural contradictions of the position of the military and the impact of the environment, susceptible as it were to the covert and overt sensitization of the erstwhile civilian leaders, made a result of political power to civilians by the military only returned the polity to its starting stage of unregulated competition necessitating the 'return' of the military. We have, therefore, been having a cycle Billy

Dudley describes as mere 'stop-gap expedient' since no fundamental change is witnessed, except changes of rulers. (Ekeh, 1992, p. 88)

More important is the fact that the emergence of the military on the political terrain only reinforces the predilection of the state towards force and authoritarianism. Since the military intervenes in the first place because of the precariousness attendant on the unregulated competition among civilian politicians, the usual first act of the military on getting political power is to impose a ban on politics and run the government through the hierarchical and rather bureaucratic scheme of the military. Politics is divisive and should therefore be expunged from social life if peace is to reign. The citizens become politically immobilized with the taking away of the nominal leeway they have of taking part in the affairs of the state.

Conclusion

The reality is that both at the levels of civilian and military governments, the post-colonial state in Nigeria have consistently mirrored the authoritarian and repressive nature of its colonial antecedents. Furthermore, the state has not been able to attract normative legitimacy from the populace given its penchant for forceful extraction of resources from the society while not relating itself in any concrete sense to the existential realities of most the citizens. This is why despite the attempt by the Nigerian state to play the role of a development state by engaging in developmental projects, Claude Ake still characterizes the Nigerian state as an 'irrelevant state' because its activities and resources rarely positively affect majority of its citizens. (Sandbrook, 1998, p. 241)

References:

- Ake Claude: Is Africa democratizing? CASS Monograph No. 5
- Akan Claude (1992), *The feasibility of democracy in Africa*, Ibadan: CREDU
- Annan Kofi (1998), *The causes of conflict and promotion of durable peace And sustainable development in Africa* New York: United Nations.
- Aron Raymond (1996), *Peace and war*. New York: Doubleday.
- Ayoob Mohammed (1994), *the third world security predicament: State Making, regional conflict and the international system* London Lynne Reinner Publishers.
- Batten T.R (1939), *Tropical Africa in World history*. Africa in modern History after 1800. Britain: Oxford university press.
- Constitutional Rights Project, (1997) *Human rights practices in Nigeria*: Lagos CRP.
- Ekeh peter, (1978), Colonialism and development of citizenship in Onigu Otite (ed), *Themes in African social and political thought*, Enugu: Fourth Dimension Publishers.
- Ekeh Peter P. (1992) "The constitution of civil society in African history And politics" in B. Caron et al (ed) *Democratic transition in Africa*, Ibadan CREDU
- Eso Kayode, (2008, May 8). The Guardian
- Garuba Chris (1988), Security in the post-cold war era: The need to break New grounds, *the African peace review*, Vol. 1, No.1
- Imobighe.T.A (1999), cited in Llyed Pettiford and Melissa Curley, *changing Security agenda and the third world*. London: printer press
- Imobighe Tom (2001), An overview of the theoretical issues in African Security in Akindele, R.A and Bassey Ate (eds), *Beyond conflict Resolution: managing African security in the 21st century*. Lagos N.I.I.A.
- Joseph Richard (1991), *Democracy and prebendal politics in Nigeria*, Ibadan: Spectrum Books.
- Klenner Hermann, (2008, May 8). The Guardian: Human rights.

- Max Karl (1980), *the moral impracticities of human rights. A world survey* London: University Press
- Oputa Chukwudifu (1986), "Human rights in the political and legal culture Of Nigeria. Paper presented at the occasion of the second Idigbe Memorial lecture, University of Benin, Benin City on Friday 28th November.
- Owunwa Shedrack (1998), *Nigerian government and politics since Independence* Owerri; Hudson-Jude Nigeria Publishers.
- Shivji Issa G (1989), *The concept of human rights in Africa* London: Codesria Book Series, 1989.
- Sandbrook Richard,(1988), Liberal democracy in Africa: A socialist- Revisionist perspective. *Canadian journal of African studies*, Vol.22 No. 2
- Tell magazine (1993 June 13)
- Tunji olagunju, Adele Jinadu and Sam Oyovbaire (1993), *transition to Democracy in Nigeria (1985-1993)*, ibadan; Spectrum Books.
- Woffers Arnold (1966), "National security as ambiguous symbol" in Martins E. Nee Level, *Dimiension of American foreign policy: Readings andDocuments*. New York: Van Nostrand Company Inc

THE ISSUE OF TRUCK BRAKING, THEIR ACCIDENT RATE AND ECONOMIC LOSSES INCURRED IN TRAFFIC ACCIDENTS IN THE CZECH REPUBLIC

Jiri Prnka, Ing.
Lukas Zemanek, Ing. et Ing.
Michal Novotny, Ing.

Brno University of Technology/Institute of Forensic Engineering, Czech Republic

Abstract

The article's theme is the issue of truck braking, their accident rate and economic losses that incur in relation to traffic accidents in the Czech Republic. First, the issue of the accident rate of trucks is outlined here, as well as the consequences of traffic accidents relating to them, development of accident rate of truck drivers between 2006 and 2012, and then the economic losses incurred in traffic accidents are outlined here depending on the type of injury or damage. Then this article introduces the issue of legislation requirements for truck brakes and the results of the performed measurement of braking of trucks and truck trains going in a straight direction depending on the load, as well as braking of trucks with/without ABS and last but not least, truck braking when driving in a curve.

Keywords: Braking, truck, accident rate, economic losses

Introduction

The economy of any country depends on movement of commodities. The movement is performed by road transport, particularly by trucks. Unfortunately, there are also negative effects relating to road traffic, including traffic accidents. The lay public often thinks that most crashes and serious traffic accidents are caused by trucks. The fact is that when an accident occurs involving a truck or a truck train, consequences of such accidents are often serious. However in reality, the number of accidents in the Czech Republic caused by trucks only represented approximately 14% (of which 9% were trucks without a trailer or semi-trailer, 1% trucks with a trailer and about 3.5% trucks with a trailer) in 2012 for example. It is obvious that in the case of an accident between a truck and a passenger car, the car occupants have much lower chance of survival in comparison with the truck's driver or crew. Moreover, in truck accidents the incurred damage is much more extensive, not only to the vehicles involved and to the transport infrastructure, but also to the transported cargo.

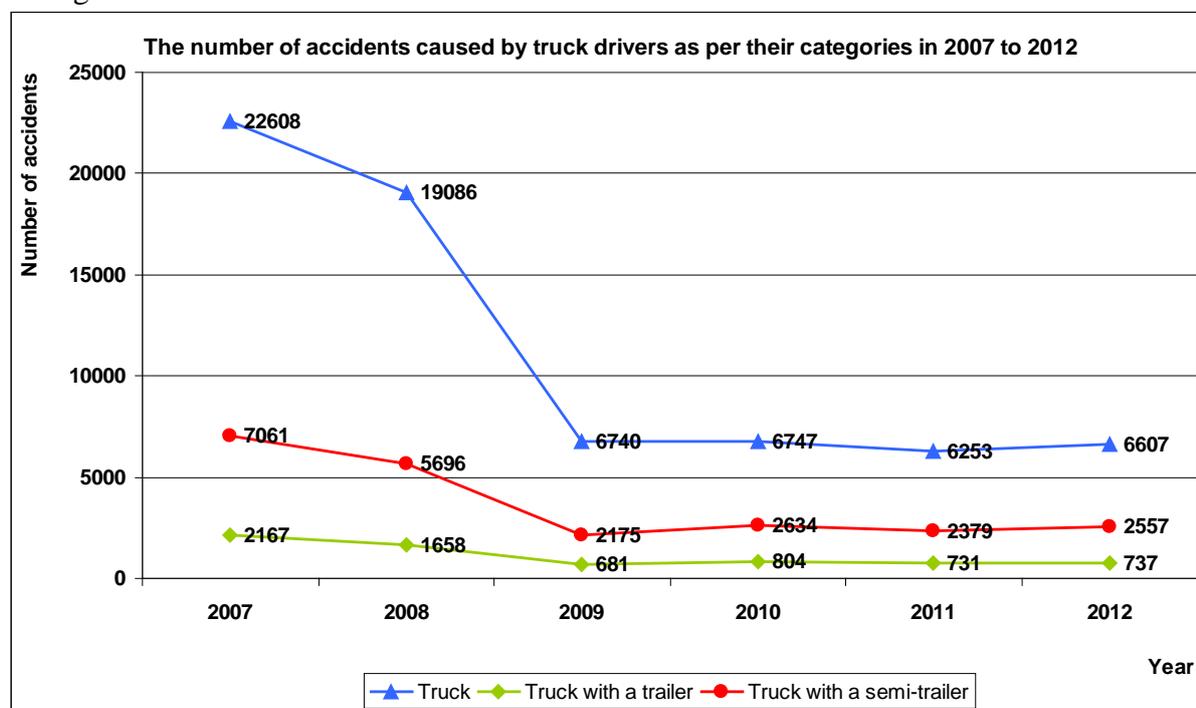
Truck accident rate, its consequences and economic impacts

All advanced countries including the Czech Republic strive to reduce the number of traffic accidents, which is in accordance with the White Book published by the European Commission. The statistical data regarding traffic accidents are the meter of success of such efforts. The accidents caused by truck drivers have a relatively significant share in this statistical data. The extent of involvement is obvious from the following table, from which it is apparent that in 2012 truck drivers caused 17.2% of traffic accidents of motor vehicles in total as offenders. In these traffic accidents, 86 road traffic participants died. Out of the aforementioned number, 11.5% were drivers of trucks without a trailer or semi-trailer, 1.3% drivers of trucks with a trailer and 4.4% drivers of trucks with a semi-trailer.

Motor vehicle category	Number of accidents	Category share [%]	Killed
Motorcycle	1605	2.8	51
Passenger car	44507	77.3	470
Truck	6607	11.5	58
Truck with a trailer	737	1.3	6
Truck with a semi-trailer	2557	4.4	22
Bus	996	1.7	4
Tractor	263	0.5	3
Tram	133	0.2	0
Trolleybus	44	0.1	0
Other motor vehicle	145	0.3	1

Tab. 1: The number and consequences of TAs in 2012 as per the type of the offender's motor vehicle

The following diagram shows the development of the number of accidents caused by truck drivers in 2007 to 2012. The diagram shows a considerable decline in the relevant number of accidents in 2009 in comparison with the previous year. This decline was caused by the fact that starting from 01/01/2009, the amount of damage incurred in an accident, after which police may be called, was increased from the previous amount of about *EUR 2,000* to *EUR 4,000*. From 2009, the number of accidents caused by truck drivers stagnates on average.



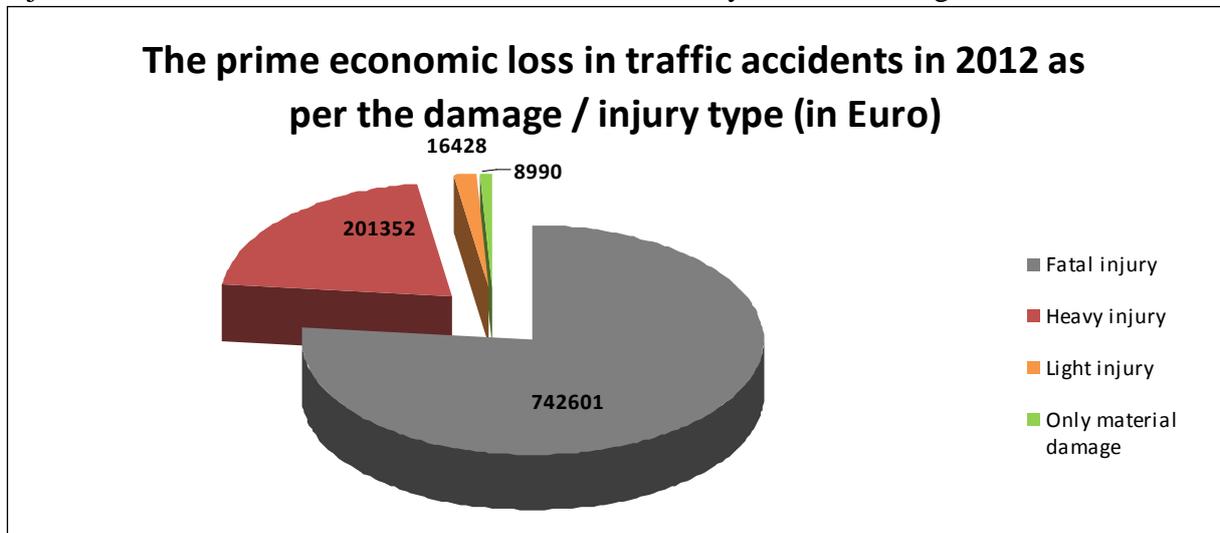
Graph 1: The number of accidents caused by truck drivers as per their categories in 2007 to 2012

A more objective criterion to judge the development of the accident rate in the independent truck categories for the last 6 years is the number of people who died in accidents caused by truck drivers. Such accidents must always be reported to the Police of the Czech Republic according to law. The trend in consequences of accidents caused by drivers of the individual truck categories in 2007 to 2012 is obvious from the following table. It shows that the number of persons killed and injured at traffic accidents caused by drivers of all types of trucks from 2007 to 2012 was decreasing, with the largest decline in 2008. In 2012, there was a slight increase in the number of killed persons (by two) at accidents caused by drivers of trucks with a trailer.

Truck type	Consequences	Year					
		2007	2008	2009	2010	2011	2012
Truck	<i>Killed</i>	103	83	80	60	59	58
	<i>Injured</i>	2097	1967	1879	1638	1643	1586
Truck with a trailer	<i>Killed</i>	17	8	4	8	4	6
	<i>Injured</i>	191	159	134	163	144	102
Truck with a semi-trailer	<i>Killed</i>	41	19	21	22	24	22
	<i>Injured</i>	467	373	348	390	410	337
Total	<i>Killed</i>	161	110	105	90	87	86
	<i>Injured</i>	2755	2499	2361	2191	2197	2025

Tab. 2: The number of killed and injured at TAs caused by drivers of the individual truck categories

The important criterion for evaluation in the area of accident rate is the amount of economic losses incurred in traffic accidents. Such losses depend on many factors, including the extent of injury or the extent of material damage. The economic losses caused by traffic accidents are calculated annually in the Czech Republic. In their calculation, the accurately defined methodology of mathematic evaluation of the accident rate economic consequences is applied, using so-called "human capital method". The costs incurred at traffic accidents comprise of the direct and indirect costs. The indirect costs include the costs of medical care, cost of fire fighting unit, cost of police, material damage including the costs of insurance companies and the costs of courts and state authorities. Direct costs include loss of production and social expenses. The following diagram shows quantification of the economic losses in the case of fatal injury, from which it is obvious that the prime economic losses caused by the traffic accident consequences in 2012 amounted to *EUR 742,601* in the case of fatal injuries, *EUR 201,352* in the case of heavy injuries, *EUR 16,428* in the case of light injuries and *EUR 8,990* in the case of accidents with only material damage.



Graph 2: The prime economic loss in traffic accidents in 2012 per person as per the damage / injury type (in €)

Our Institute of Forensic Engineering of Brno University of Technology has many years of experience drawn in analysing traffic accidents. On the basis of the experiences we know that a large part of such accidents is caused by failure to stop the vehicle by braking before the accident. This failure to stop by braking may be caused by late driver's reaction or due to improper function of brakes or by a combination of several causes. To be able to find the cause, it is necessary to know the braking deceleration the trucks are able to achieve. That is why we devoted our investigation to measuring the achievable deceleration of trucks.

Legislative requirements for truck brakes

The Directive 71/320/EEC is applied to testing brake devices in certification of new trucks in the EU. The Directive in particular regulates the manner and the methods of testing the proper functionality of braking devices. Pursuant to the aforementioned Directive, three types of tests are performed:

- Type 0 test (ordinary test of effect with brakes cold)
- Type I test (residual brake performance)
- Type II test (long downhill vehicle behaviour test)

The requirements for braking effects according to the said standard for Type 0 tests are specified in the following table.

Categories of vehicles		Buses (lighter than 5 t)	Buses (heavier than 5 t)	Trucks (from 3,5 to 12 t)	Trucks (heavier than 12 t)
Type of test		0 - I	0 - I - II	0 - I	0 - I - II
Type 0 test with engine connected	prescribed speed	60 km/h	60 km/h	60 km/h	60 km/h
	$s \leq$	$0,15v + \frac{v^2}{130}$			
	$d_m \geq$	$5,0 m/s^2$			
Type 0 test with engine disconnected	$v = 80\%$ v_{max} but \leq :	100 km/h	90 km/h	100 km/h	90 km/h
	$s \leq$	$0,15v + \frac{v^2}{103,5}$			
	$d_m \geq$	$4,0 m/s^2$			
	$F \leq$	700 N			

Tab. 3: Effects of truck braking devices¹⁾

where:

- v - testing speed [km/h]
- s - stopping distance [m]
- d_m - mean full braking deceleration [$m.s^{-2}$]
- F - force applied to the brake control [N]
- v_{max} - maximum vehicle speed [km/h]

The values specified in **Table 3** are however according to regulations and it is questionable if such values are achieved by vehicles under normal operating conditions as well. Many measurements were performed (as specified in the following chapter) to identify actual deceleration values.

Measurement of braking deceleration of trucks

The achievable truck deceleration depends to a large extent on the vehicle load, version and type of the braking device and its overall technical condition. The values of deceleration of a fully loaded or even overloaded vehicle are of particular importance. It is obvious that a fully loaded or overloaded vehicle will have much longer stopping distance than an empty vehicle.

¹⁾Directive 71/320/EEC: Braking devices of certain categories of motor vehicles and their trailers [online]. [cit. 2014.05.05]. URL <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1971L0320:20070101:EN:PDF>>.



Fig. 1: Orthophotomap of the measurement spot, scale: 100 m



Fig. 2: Location of devices in the vehicle cabin

All measurements were made on the road at the place indicated on **Fig. 1**. The straight section and the following curve are highlighted in blue. In this location, the traffic is minimal and the road surface is bituminous and without any defects. The measurements were performed under ideal weather conditions (sunny). Two appliances were used to measure the braking deceleration. One of them was decelerograph XL MeterTM PRO made by Inventure, which measures deceleration / acceleration with the frequency up to 200 Hz in two axes *x* and *y* in the interval $\pm 14,00 \text{ m.s}^{-2}$ with the sensitivity of $0,01 \text{ m.s}^{-2}$. The second one was the apparatus Racelogic operating on the basis of the principal of location change using GPS coordinates. Its measuring frequency is 10 Hz, it measures along three axes in the range $\pm 39,2 \text{ m.s}^{-2}$ with sensitivity of 0.1 m.s^{-2} . The location of both devices in vehicles is obvious from **Fig. 2**.

Measuring of deceleration in a straight direction for trucks with various loads

This measurement was focused on comparison of braking deceleration (braking distance) in a straight direction if the truck weight is changed. For economic reasons, the trucks are often loaded up to their maximum loading capacity, therefore our trucks were loaded to the maximum; in several measurements, even 2 tons beyond the permitted limit were loaded. Two similar vehicles were used for measurement. Vehicle I was a three-side dump truck SCANIA, type P 380 (empty weight 11,660 kg), Vehicle II was a three-side dump truck SCANIA, type P 320 (empty weight 11,500 kg). First, only empty trucks were braking, then they were gradually loaded. The initial speed for this series of measurements was chosen to be 50 to 55 km/h (this speed was decreased in the following series of measurements for safety reasons). Several measurements were performed for every load and an average has been calculated for the resulting values. The following **Table 4** shows the results.

Vehicle I		Vehicle II	
Load [kg]	Average deceleration [m.s^{-2}]	Load [kg]	Average deceleration [m.s^{-2}]
11,660	7.2	11,500	6.7
16,980	7.0	26,000	5.0
24,060	6.1	28,000	4.1
-----	-----	30,000	3.2

Tab. 4: Achieved deceleration of trucks with various loads in straight direction

Measuring of deceleration in straight direction for trucks with and without ABS

The purpose of the following measurement was to compare braking deceleration, i.e. the braking distance of vehicles fitted with ABS and vehicles without ABS. Two comparable vehicles were measured, when the main difference was in ABS, or respectively in its absence. The vehicle without ABS was a three-side dump truck LIAZ (empty weight 11,870 kg), see **Fig. 3** and the vehicle with ABS was a three-side dump truck SCANIA

(empty weight 11,190 kg), see **Fig. 4**. A loose mixture of gravel was used as the load, like in the similar series of measurements. For the given initial speed (40 to 42 km/h) and every load, several measurements were performed and an average has been calculated for the resulting values. The results of the measurements are shown in the following **Table 5**:

Vehicle without ABS		Vehicle with ABS	
Load [kg]	Average deceleration [$m.s^{-2}$]	Load [kg]	Average deceleration [$m.s^{-2}$]
11,870	6.91	11,190	7.49
27,190	4.58	25,860	5.45

Tab. 5: Achieved deceleration of trucks with/without ABS, in straight direction



Fig. 3: Vehicle without ABS - LIAZ 6x4



Fig. 4: Vehicle with ABS - SCANIA 6x4

Measuring of deceleration in a curve for trucks with and without ABS

A critical situation may occur at the moment the truck must brake in a curve. Braking in a curve is more difficult for the vehicle and the driver than braking in a straight direction. Therefore one series of measurements was focused on braking of vehicles in a curve. A curve with radius of 14 m was selected (see **Fig. 1**). The same vehicles were chosen as in the previous series of measurements, i.e. a vehicle without ABS - LIAZ 6x4 and a vehicle with ABS - SCANIA 6x4. In the case of the loaded truck intensively braking in a curve, puncture of the overloaded front tire might occur due to inertia forces. For safety reasons, this series of measurement was only performed with vehicles without the effective load. The initial speed before braking was chosen in the interval 35 to 37 km/h. Several drives were performed and an average was then calculated from the resulting values. The results of the measurements are shown in the following **Table 6**.

Vehicle without ABS		Vehicle with ABS	
Load [kg]	Average deceleration [$m.s^{-2}$]	Load [kg]	Average deceleration [$m.s^{-2}$]
11,870	5.58	11,190	6.18

Tab. 6: The achieved deceleration for trucks with and without ABS driving in a curve

Measurement of deceleration in straight direction for truck trains

The last series was focused on measuring the braking deceleration of truck trains. The truck trains are most often utilised for transport of commodities between individual countries. Two similar vehicles with the same type of braking device and with ABS have been selected. The Truck Train I comprised of a tractor DAF CF and a semi-trailer SCHMITZ (**Fig. 5**, total empty weight of the Truck Train I was 23,490 kg). The Truck Train II comprised of a tractor DAF XF and a semi-trailer KRONE (**Fig. 6**, total empty weight of the Truck Train II was 17,240 kg). The initial speed before braking was chosen in the interval 31 to 33 km/h. First, empty vehicles were braking, then the semi-trailers were uniformly loaded with pallets with cargo. The Truck Train I was loaded up to the weight of 39,190 kg; the Truck Train II was loaded up to 42,190 kg. Eight measurements in total were performed

with each vehicle and each load. The results of the measurements are shown in the following Table 7.

Truck Train I		Truck Train II	
Load [kg]	Average deceleration [$m.s^{-2}$]	Load [kg]	Average deceleration [$m.s^{-2}$]
23,490	6.75	17,240	7.42
39,190	5.27	42,190	5.18

Tab. 7: Achieved deceleration of truck trains without any cargo and with a load



Fig. 5: Truck Train I – DAF CF, semi-trailer SCHMITZ



Fig 6: Truck Train II – DAF XF, semi-trailer KRONE

Conclusion

The accident rate statistics showed that trucks caused about 14% of traffic accidents in 2012 (of which about 9% were caused by trucks without any trailer or semi-trailer, 1% by trucks with a semi-trailer and about 3.5% by trucks with a semi-trailer). From 2009, the number of accidents caused by truck drivers stagnates on average. The number of killed and injured persons in traffic accidents caused by drivers of all trucks declined in the period of 2007 to 2012, with the largest decline in 2008. The prime economic losses resulting from consequences of a traffic accident in the Czech Republic in 2012 were EUR 742,601 in the case of fatal injury, EUR 201,352 in the case of heavy injury, EUR 16,428 in the case of light injury and EUR 8,990 in the case of accidents with only material damage.

The measurement results of braking deceleration of trucks revealed that there are large differences between braking an empty or a fully loaded vehicle. The decrease in braking deceleration of a fully loaded vehicle when compared with an empty one is 25%. In the case of an older vehicle without ABS, the difference is even higher, almost 35%. Also the absolute values of deceleration are lower for the vehicle without ABS than for the vehicle with ABS. In the case of a less loaded truck train, the difference in deceleration for the empty and for the loaded vehicle was about 20%; in the case of more loaded truck train, it was more than 30%. In the case of overloading a truck (with ABS) by 2 tons it was demonstrated that the deceleration value is less than a half and may even get below the value required by regulations in some cases. However, many drivers of trucks and truck trains do not realise this fact when they drive fully loaded or even overloaded vehicles. The distance necessary to stop the vehicle is then considerably longer. Moreover, the overloaded vehicle has much higher kinetic energy at the same speed and therefore the consequences of such accidents are worse. Older vehicles achieve lower braking deceleration. The statistics of registered vehicles clearly show that the older vehicles are most often represented in the vehicle fleet of carriers. The average age of vehicles of category N2 (from 3.5 to 12 tons) is more than 20 years in the Czech Republic.

References:

- Bradáč, Albert, et al. *Soudní inženýrství*. Brno: Akademické nakladatelství CERM s.r.o., 1997. p. 725. ISBN 80-7204-057-X.
- Central bank exchange rates fixing: monthly averages in 2012*. Prague: Czech national bank, 2012. [cit. 2014-05-01]. URL <http://www.cnb.cz/en/financial_markets/foreign_exchange_market/exchange_rate_fixing/year_average.jsp?year=2012>.
- Motl, Jakub. Impact of the Instantaneous Weight of Vehicles on Their Stopping Distance. *Junior Forensic Science Brno 2011: Collection of Abstracts*. Brno: Institute of Forensic Engineering of Brno University of Technology, 2011. p. 7. ISBN 978-80-214-4276-4.
- Novotný, Michal. Analysis of Immediate Overloaded Weight on Its Commercial Vehicle Braking System. *Junior Forensic Science Brno 2013: Collection of Abstracts*. Brno: Institute of Forensic Engineering of Brno University of Technology, 2013. p. 8. ISBN 978-80-214-4704-2.
- Sobotka, Petr, and Tesařík, Josef. *Statistický přehled nehodovosti* [online]. Prague: Police of the Czech Republic, 2014. [cit. 2014-05-05]. URL <<http://www.policie.cz/clanek/statistika-nehodovosti-900835.aspx?q=Y2hudW0%3d%3d>>.
- VBOX Mini 10Hz GPS Data Logger (RLVBM01)*. Buckingham: Racelogic UK, 2014. URL <http://www.racelogic.co.uk/_downloads/vbox/Datasheets/Data_Loggers/RLVBM01_DATA.pdf>.
- Vyskočilová, Alena, Valach, Ondřej, and Tecl, Jan. *Výše ztrát z dopravní nehodovosti na pozemních komunikacích za rok 2012*. Brno: CDV, 2013.
- XL meter™ Pro Gamma Brake Performance Tester*. Budapest: Inventure Automotive Electronics, 2009. URL <<http://www.inventure.hu/upload/downloads/XLMPLFEN22.pdf>>.

TRAFFIC VOLUME AND ACCIDENT STUDIES ON NH-22 BETWEEN SOLAN AND SHIMLA, INDIA

Rajiv Ganguly, PhD
Ashok Kumar Gupta, PhD
Mudit Mishra, M.Tech

Department of Civil Engineering, Jaypee University of Information Technology,
Waknaghat, District Solan, Himachal Pradesh, India

Abstract

This paper is an attempt to study the basic differences between rigid and flexible pavements based on LCCA, durability, recycling, local preference, and safety features. An observation of the traffic count was conducted at Tuttikandi in Shimla and Chambaghat in Solan and difference in vehicular flow was computed. The process involved making manual count of the vehicles passing by on weekdays and weekends. Vehicle fleet was characterized as cars, buses, trucks and motorcycles. The mean traffic flow throughout the week was computed by considering the average of the number of vehicles observed on weekdays and weekends. The study also involved in identifying the 'black spots' which refers to those stretches on Shimla – Solan highway of NH 22 reported with the most number of accidents. Reconnaissance of these locations was carried out to identify the various causes for these accidents. Further, sample of materials used for construction of the highway was collected from these stretches and material testing was carried out. We calculate the SSD and OSD at the regions of 'black spots' and based upon those results suggest suitable remedial measures to prevent such accidents in future including installing various road furniture like convex mirrors, fluorescent sign boards, light poles.

Keywords: Accident, Overtaking Sight Distance (OSD), Stopping Sight Distance (SSD)

Introduction

Pavements are generally classified as flexible or rigid pavements. While flexible pavements are made of bituminous layer and transfers the load from one layer to the other, rigid pavements are generally made of cement concrete and load transfer occurs through slab action (Khanna and Justo, 2010).

NH-22 area between Solan and Shimla is a highly accident prone area with many black spots and this has been marked and noted by the concerned authorities. The total road length between Solan and Shimla is 50 Km with about 46% of the total stretch in Solan district and the remaining in Shimla district. The NH-22 stretch between Solan and Shimla witnesses a large number of accidents every year. The local police and National Highway Authority of India (NHAI) have demarked it as one of the most accident prone regions of Northern India.

The paper attempts to identify the locations on the NH-22 between Shimla and Solan which are most accident prone, tries to evaluate the causes of such accidents and suggest remedial measures.

Research Methodology

The research methodology involved checking the sustainability of the aggregates used in the construction of NH 22 by performing Aggregate Impact Value, Los Angeles Abrasion Test and Flakiness and Elongation Indices test on the aggregates and comparing them with the values provided in MoRTHs. We identified 'black spots' on the NH 22 on the Solan and Shimla stretch from the data collected. Variation of traffic pattern was also observed on the weekdays and weekends to check the propensity for accidents on weekdays and weekends. Analysis of geometrical design components of roadways including SSD, superelevation and length of curve were calculated. Existing straight stretches of the road were evaluated for OSD and the length of these stretches.

Material Testing of Aggregate used for construction of NH-22

Material testing is the first and the most important component to identify the reasons for accidents on roads. Worn out roads due to aggregates can cause the presence of porous surfaces on roads which can severely affect the skid resistance and the speed of the vehicle. This can reduce the efficiency between tyre road interactions and can lead to increase of accidents (Bullas, 2004). The tests conducted on material aggregates included Aggregate Impact Value Test, Abrasion Value Test and Elongation and Flakiness Index Indices.

Toughness is the property of the material to resist impact due to traffic loads and often the road stones are subjected to the pounding action or impact and there is high possibility of stones breaking into smaller pieces. The road stones should therefore be tough enough to resist fracture under impact. For this purpose aggregate value testing was completed and an aggregate impact value of 25.45% was determined.

Due to the movements of traffic, the road stones used in the surfacing course are subjected to wearing action at the top. Resistance to wear or hardness is therefore an essential property for road aggregates especially when used in wearing course. The selected road stones should be hard enough to resist the abrasion due to the traffic. Testing was done using Los Angeles Abrasion Testing equipment and the percentage wear was calculated to be 35.25%

The particle shape of aggregates is determined by the percentages of flaky and elongated particle contained in it. In the case of gravel it is determined by its angularity number. For base course and construction of bituminous and cement concrete types, the presence of flaky and elongated particles are considered undesirable as they may cause inherent weakness with possibilities of breaking down under heavy loads. Rounded aggregates are preferred in cement concrete road construction as this increases the workability of concrete. Angular shapes of particles are desirable for granular base course due to increase stability divided from the better interlocking. When the shape of aggregates deviates more from the spherical shape, as in the case of angular, flaky and elongated aggregate, the void content in aggregate of any specified size increases and hence the grain size distribution of a graded aggregate has to be suitable altered in order to obtain minimum voids in the dry mix of the highest dry density. The angularity number denotes the void content of single sized aggregates in excess of that obtained with spherical aggregates of the same size. Thus angularity number has considerable importance in the gradation requirements of various types of mixes such as bituminous concrete and soil-aggregate mixes. The evaluation of shape of the particles, particularly with reference to flakiness, elongation and angularity is necessary. The flakiness index of aggregates is the percentage by weight of particles whose least dimension (thickness) is less than three-fifths (0.6) of their mean dimension. The test is not applicable to sizes smaller than 6.3 mm. The following observation was made and have been reported in Table 1.

Sieve Size	Retained on IS sieve (mm)	Wt fraction consisting of at least 200 pieces (gm)	Thickness of gauge sizes	Wt of aggregates	Length of gauge size	Weight of aggregates retained on length gauge
63	50	0	23.90	0	-	-
50	40	0	27	0	81	-
40	31.5	0	19.5	0	58	-
31.5	25	0	16.95	0	-	-
25	20	0	13.5	0	40.5	-
20	16	272.25	10.8	72.45	32.4	47.95
16	12.5	526.4	8.55	80.90	25.25	114.65
12.5	10	247.5	6.75	25.25	20.3	65.85
10	6.3	237.3	4.8	33.55	14.7	106.05

Table 1: Sieve Size analysis of aggregates used for construction of NH-22

Using the above information, the Flakiness Index was calculated to be 16.5% and the Elongation Index was calculated to be 26.06%. As per Ministry of Road Transport and Highways (MORTH), the physical requirements of coarse aggregates for water bound macadam for sub base and base courses should have a maximum aggregate impact value of 30%, maximum Los Angeles abrasion value of 40% and the combined elongation and flakiness index should be a maximum of 30% (MORTH, 2000). The tests conducted on the aggregates show that they are within the permissible limits of MORTH guidelines.

Accident Studies on NH-22

The problem of accident is a very acute in highway transportation due to complex flow pattern of vehicular traffic, presence of mixed traffic along with pedestrians. Traffic accident leads to loss of life and property. Thus the traffic engineers have to undertake a big responsibility of providing safe traffic movements to the road users and ensure their safety. Road accidents cannot be totally prevented but by suitable traffic engineering and management the accident rate can be reduced to a certain extent. For this reason systematic study of traffic accidents are required to be carried out. Proper investigation of the cause of accident will help to propose preventive measures in terms of design and control.

Data was collected from the police stations at Kandaghat, Solan and Shimla. The information collected included the number of accidents that took place in District Solan and Shimla over the past 10 years. Based on the data the police authorities have also marked a number of black spots on the highway where the rate of occurrence of accidents has been quite high. We cross-checked the analysis and found that the black spots marked by the police exactly matched our analysis. The details of these black spots have been summarized in Table 2. The exact locations of these places on NH-22 have been shown in Figure 1.

Serial No	Name of locality	Distance	Cause of Accident	Problems	Measures adopted
1	Kathleeghat	27 Km from Solan towards Shimla	Rash Driving	Narrow Curve	Curve has been widened by HPPWD
2	Shalaghat	30 Km from Solan towards Shimla	Rash Driving	Narrow Curve	Curve has been widened by HPPWD
3	Kiarighat	21 Km from Solan towards Shimla	Rash Driving	Narrow Curve	Curve has been widened by HPPWD
4	Waknaghat	24 Km from Solan towards Shimla	Rash Driving	Narrow Curve	Curve has been widened by HPPWD
5	Kandaghat	15 Km from Solan towards Shimla	Rash Driving	Poor Visibility	Curve has been widened by HPPWD
6	Kiari bungalow	21 Km from Solan towards Shimla	Rash Driving	Narrow curve	Curve has been widened by HPPWD

Table 2: Summary of accident details at black spots

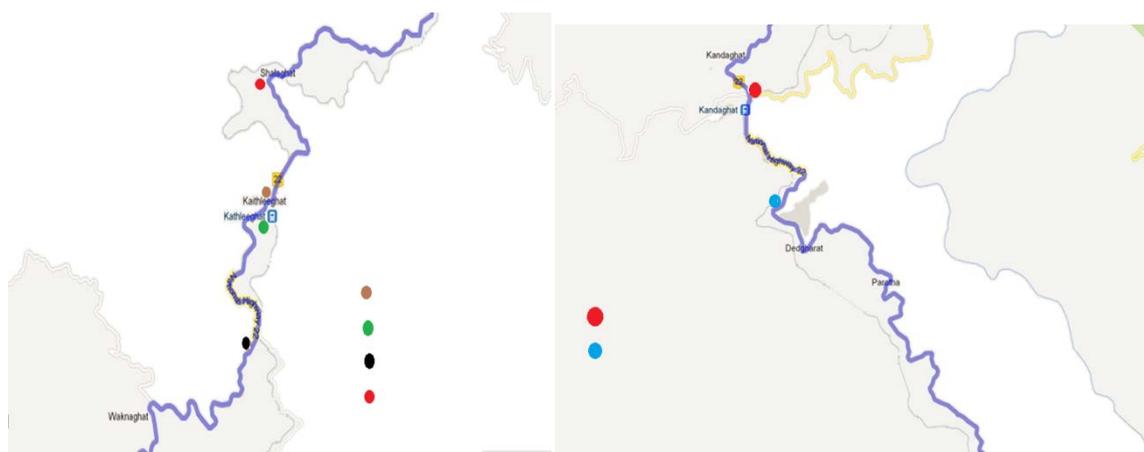


Figure 1: Location of black spots on NH-22 highway between Solan and Shimla

From the data analysis and physical verification of these 'black spots' the major reasons for such high probability for accidents are mainly due to the following reasons:

Majority of the drivers have a tendency to overtake on curves which leads to accidents since when the drivers try to overtake on a blind curve the overtaking sight distance (OSD) is almost negligible.

Narrow curves are provided due to the topography of the area. A driver while driving on these curves must slow down the vehicle but in many cases due to inexperience of drivers or any other causes, results in accidents as high speed on these narrow curves often lead to overturning of the vehicle.

The region is in a hilly terrain and experiences heavy fog during winters. Due to fog the shortest sight distance (SSD) is greatly reduced. This causes the reaction time for the drivers to be reduced which lead to collisions.

The region also experiences excessive rainfall. During rainy season the roads become slippery and the coefficient of friction between the tyres and the road surface is greatly reduced. This leads to slipping of vehicles especially two wheelers.

The regions close to Shimla experience lots of snowfall in the months of December and January. The presence of snow on carriageway also poses significant threat to the vehicles. Most of the cases of overturning and slipping of vehicles into gorges are reported during this period of the year.

The region being a hilly area driving in night time depends entirely on the headlight of the vehicle approaching from the opposite direction. This is also another important reasons for accidents as the drivers often do not safely negotiate the curve from the correct driving side by lowering the speed which may lead to collision with crash barriers or other vehicles.

Traffic Volume Studies on NH-22

Traffic volume is the number of vehicles crossing a section of road per unit time at any selected period. Traffic volume is used as a quantity measure of flow. The commonly used units are vehicles per day and vehicles per hour. A complete traffic volume study may include the classified volume study by recording the volume of various types and classes of traffic, the distribution by direction and turning moments and the distribution on different lanes per unit time. There are variations in traffic flow from time to time. Daily traffic volume varies considerably during the week, the peak weekend volume may be much higher than average weekday volume. In classified traffic volume study, the traffic is classified and the volume of each class of traffic i.e. buses, truck, passenger cars, other light vehicles, rickshaws, bullock carts, cycles and pedestrians is found separately.

Traffic volume counts maybe done by manually and by mechanical counters. Due to unavailability of mechanical counters the traffic volume study was done manually.

The method employs a field team to record traffic volume on the prescribed record sheets. By this method it is possible to obtain data which cannot be corrected by mechanical counters, such as vehicle classification, turning moments and counts where the loading conditions or number of occupants are required. However it is not practically feasible solution particularly if the data has to be collected for 24 hours over the entire year. In our study manual counts were made on Wednesday and on Sunday representing weekday and weekend respectively

For Solan district manual counts were made at Chambaghat. Traffic counts were recorded from 9.00 AM in morning till 6.00 PM in evening. Counting was done and vehicle fleet distribution was done to include like cars, motor cycles, buses, trucks, tractors, cycle and others which included JCB and trailers. Similar methodology was followed for weekend count of traffic data. The change in traffic flow between weekdays and weekends were calculated. Similar methodology was followed for Shimla. Records of traffic counted for both weekdays and weekends for Solan and Shimla have been shown in Table 3 and 4 respectively.

Traffic	Weekdays			Weekends		
	Count	VDF	Traffic in MSA (10^6)	Count	VDF	Traffic in MSA (10^6)
Cars	1273	1	1273	1817	1	1817
Two-wheelers (MC and scooter)	366			424		
Buses	249	1	249	256	1	256
Trucks	213	4	852	143	4	572
Tractors	5	4	20	0	4	0
Cycles	7			2		
Others (JCB and trailers)	3	3	9	1	3	3

Table 3: Vehicle fleet distribution at Solan for weekdays and weekends

Traffic	Weekdays			Weekends		
	Count	VDF	Traffic in MSA (10^6)	Count	VDF	Traffic in MSA (10^6)
Cars	1112	1	1112	1317	1	1317
Two-wheelers (MC and scooter)	179			237		
Buses	216	1	216	244	1	244
Trucks	356	4	1424	193	4	772
Tractors	1	4	4	0	4	0
Cycles	0			0		
Others (JCB and trailers)	1	3	3	0	3	0

Table 4: Vehicle fleet distribution at Shimla for weekdays and weekends

The traffic volumes were calculated in terms of Million Standard Axles (MSA). For Solan on weekdays the MSA value was calculated to be 0.002403 MSA and on weekends it was calculated to be 0.002648 MSA. Similarly for Shimla, the MSA values calculated on weekdays were found to be 0.002759 MSA and on weekends it was 0.0023 MSA. The average traffic flows at Solan and Shimla were calculated to be 0.002507 MSA and 0.002552 MSA respectively. There is an increase in total number of vehicles traversing on weekends as compared to weekdays at Chambaghat junction in Solan. There is a substantial increase in number of cars and motor cycles which can be attributed to the number of tourists visiting Shimla during the weekends. It is also observed that there is a sharp decrease in the number of commercial vehicles i.e. trucks and buses primarily due to holiday in schools and colleges on Sunday.

Geometric design parameters for black spots on NH-22

We have already determined the six black spots on the NH-22 stretch of road lying between Solan and Shimla. In this section, we evaluate the different road geometric parameters at these black spots. The road geometric design parameters evaluated were length of curve, SSD and superelevation. Standard formula prescribed by IRC (IRC:37 -2001) were used to evaluate the data.

At Kathleeghat, the length of curve was measured to be about 151m. Using the provisions of the IRC code the length of the curve was calculated to be 27 m assuming a speed of 40 km/hr which is well within the permissible limits. Similarly, the SSD was measured to be 34.5 m. The SSD value calculated for different speeds of 20, 30 and 40 km/hr and was computed to be 24.39 m, 34.37 m and 69.8 m respectively. Hence, it was observed that the SSD was apt for speed of about 25km/hr which is less than the design speed (40 km/hr) at Kathleeghat. IRC: 37-2001 suggests that the superelevation values for hilly regions should be 0.1. The superelevation calculated was found to be 0.016 which was appropriate for speed of 20 km/hr

At Wagnaghat, the length of curve was measured to 139 m. Using the same assumptions as above, the length of the curve was computed to be 37 m and was well within the permissible limits. Similarly, the SSD was measured to be 34 m. The SSD values remain the same as the previous case because we assume similar velocity conditions. Hence, SSD values were apt for speed of about 25km/hr which is less than the design speed (40 km/hr) at Kathleeghat. The superelevation calculated was found to be 0.034 which was appropriate for speed of 18 km/hr

Similar evaluation of geometric design parameters were carried out and have been presented in table 5

Place	SSD (m)	Length of curve (m)	Superelevation
Wagnaghat	34	139	0.12
Shalaghat	37.5	51.62	0.31
Kathleeghat	34.5	151	0.06
Kiarighat	34.6	134.9	0.10
Kiaribungalow	30.3	63.8	0.085
Kandaghat	27.5	65	0.27

Table 5: Summary of geometric design parameters for black spots location on NH-22

Similarly length of straight stretches was determined at Kathleeghat and Shalaghat. It was assumed that the speed of overtaking vehicle was 50 km/hr and speed of approaching vehicle was 20 km/hr. The requirements of OSD at these two locations have been shown Table 6.

Place	Speed of overtaking vehicle (km/hr)	Speed of approaching vehicle	OSD available (m)	OSD required (m)(As per IRC:37-2001)
Shalaghat	50	20	135.6	248.16
Kathleeghat	50	20	78.5	248.16

Table 6: Summary of OSD for straight stretches on NH-22 between Solan and Shimla

Remedial Measures

The following remedial measures are suggested to reduce the number of accidents on NH-22 between Solan and Shimla. These include erection of signboards on turns and at blind spots.

Further, to ease the drive conditions during night time and to make them aware of the curves ahead fluorescent signboards must be used. The authors suggest provisions of installing convex mirrors on the curves. The convex mirrors installed on all the blind spots or sharp curves will give visibility of the approaching vehicle from the other side. Lack of retaining walls along the carriageway leads to landslides from the hills especially during the

rainy seasons causing accidents. As such, retaining walls should be provided at all such blind spots and sharp curves. Finally, the authors suggest installation of light poles of suitable height must be installed to enhance the visibility of drivers at night. Care must be taken that there is sufficient light on the carriageway so that visibility is increased.

Conclusion

The paper attempts to analyze the main reasons for the occurrence of accidents on NH-22 stretch between Solan and Shimla. Identification of black spots were done using the information collected from various police stations in Kandaghat, Solan and Shimla. Data analysis of these black spots revealed the main reasons for accidents on the black spots on NH-22 were poor visibility, rain and snow, insufficient SSD and OSD on curves, late reaction time of drivers, heavy traffic at night, distance between headlights, narrow curves and inexperience of driving on hilly terrains. Interestingly, no design details exist for this highway as it was constructed in the pre-independence era of India. Further, there have been no amendments that have been done on this stretch of the highway (from Solan to Shimla) for the last decade. However, keeping in mind the safety of the travellers serious thoughts need to be given to driver safety to prevent accidents. The authors on their part suggest installations of various road furniture's like convex mirrors, fluorescent sign boards, light poles and where possible provisions of retaining walls to reduce the risk of accidents

References:

- Bulas, J.C. Tyres, road surfaces and reducing accidents – an overview. A report on research carried out for the AA Foundation for Road Safety Research and the County Surveyors' Society, 2004. Available on www.roadsafetyfoundation.org/media/11323/aa_foundation_fdn34.pdf . Accessed on 11th June 2014
- Indian Road Congress (IRC:37-2001). Guidelines for design of flexible pavements, 2001
- Khanna, S.K, Justo, C.E.G. Highway Engineering. Nemchand Brothers and Sons, 2010
- Ministry of Road Transport and Highway. Specifications of Road and Bridge Works, 2000 Available from www.dnh.nic.in/Rules.../MinistryOfRoadTransportAndHighways.pdf , Accessed on 11th June 2014.

TEACHING DIGITAL FORENSICS AND CYBER INVESTIGATIONS ONLINE : OUR EXPERIENCES

Elizabeth K. Hawthorne, PhD

Rose K. Shumba, PhD

University of Maryland University College

Abstract

This paper describes our experiences of teaching cyber investigations and digital forensics online. Additionally, it discusses open source toolkits and remote virtual labs appropriate for teaching cyber investigations and digital forensics effectively in a distance education environment. Both faculty and student experiences as well as lessons learnt from teaching these courses online at the University of Maryland University College (UMUC) are covered.

Keywords: Digital forensics, cyber investigations, online education

Introduction

According to the 44th President of the United States, “America's economic prosperity in the 21st century will depend on cybersecurity” (Obama, 2009). “While billions of dollars are being spent on new technologies to secure the U.S. Government in cyberspace, it is the people with the right knowledge, skills, and abilities to implement those technologies who will determine success. However there are not enough cybersecurity experts... to implement the CNCI (Comprehensive National Cybersecurity Initiative)... we must develop a technologically-skilled and cyber-savvy workforce...” (CNCI Initiative 8, 2008). Consequently, new in the international Association for Computing Machinery/Institute of Electrical and Electronics Engineers Computer Science Curricular Guidelines is the Information Assurance and Security knowledge area (ACM & IEEE, 2013). Because of its increasing importance, digital forensics is included in this new security knowledge area.

Digital forensics is an emerging area within the broader domain of computer/cyber security whose main focus is the discovery and preservation of digital evidence for proof of corporate or criminal wrongdoing and ultimate prosecution of illegal activity (Jarrett, 2010)

Evidence gathered from computing devices is becoming a routine part of criminal cases with nearly 85% of the current caseloads involving digital evidence (Davis, Cowen, & Philipp, 2005). The prediction is that the field cannot meet the demand for digital forensics professionals in the near future. Consequently, many colleges and universities are adding forensics courses and degree programs to their curriculum in order to satisfy the need for forensics specialists. Given the vital need for digital forensic professionals [4] and the steady rise in the number of colleges/universities offering online courses [5], this paper describes an online Digital Forensics (DF) program at UMUC, the resources identified as useful in teaching the DF courses, as well as lessons learned from both student and faculty experiences.

The UMUC Digital Forensics Program

The University of Maryland University College (UMUC) headquartered in Adelphi, MD is a leader in online education teaching students across the globe. The UMUC offers an online undergraduate course CCJS 321 entitled *Digital Forensics in the Criminal Justice*

System(UMUC undergraduate, 2014), an online Digital Forensics and Cyber Investigation Graduate Masters and Graduate certificate program (UMUC graduate, 2014).

A baccalaureate degree from UMUC with a major in cybersecurity requires the successful completion of 120 credits of coursework, including 33 credits for the major; 41 credits in general education requirements; and 46 credits in the minor, electives, and other degree requirements. At least 17 credits in the major must be earned in upper-level courses (numbered 300 or above). Coursework focuses on network security, digital forensics and ethics in information technology. Specific course requirements for the cybersecurity major include the following:

- Required foundation courses (9 credits): CSIA 301, CMIT 265, and IFSM 304
- Required core courses (15 credits): CSIA 303, 412, and 413; CMIT 320; and CCJS 321
- Supplemental major courses (6 credits): Chosen from CCJS 390 and 421; CMIT 321, 340, 424, 425, 440, and 460; and any CSIA
- Required capstone course (3 credits): CSIA 485

The *Digital Forensics in the Criminal Justice System* course is “An overview of the criminal justice system and the application of digital forensic evidence in criminal justice cases. The objective is to apply Constitutional and case law to the search and seizure of digital evidence, determine the most effective and appropriate forensic response strategies to digital evidence, and provide effective courtroom testimony in a case involving digital evidence” (UMUC undergraduate, 2014). Course titles and descriptions for the remaining undergraduate courses in the cybersecurity bachelor’s degree program are available from www.umuc.edu/academic-programs/bachelors-degrees/cybersecurity-major.cfm. An articulation agreement between UMUC's Undergraduate School and Graduate School allows eligible students who complete their undergraduate degree at UMUC with a major in cybersecurity to reduce their total coursework for the MS in cybersecurity or cybersecurity policy by 18 credits (UMUC, 2014)

The Masters of Digital Forensics and Cyber Investigations requires that students complete 36 credits including the following courses:

- CSEC 610: Cyberspace and Cybersecurity,
- CSEC 620: Human Aspects in Cybersecurity: Ethics, Legal Issues and Psychology,
- CSEC 650: Cyber Crime Investigations and Digital Forensics,
- CSEC 661: Digital Forensics Investigation, and
- CSEC 662: Cyber Incident Analysis and Response

The CSEC 650 course covers the theory and practice of digital forensics. Topics include computer forensics, network forensics, cell phone forensics, and other types of digital forensics. Discussion also covers identification, collection, acquisition, authentication, preservation, examination, analysis, and presentation of evidence for prosecution purposes.

The CSEC 661 covers the processes and technologies used in the collection, preservation, and analysis of digital evidence in local, networked, and cloud environments. An examination of policies and procedures related to security incidents, exposures, and risks and technologies used to respond to such threats.

All the students in the program are required to take a Cybersecurity Capstone course, CSEC 670. The CSEC 670 course is a study of and an exercise in developing, leading, and implementing effective enterprise- and national-level cybersecurity programs. Focus is on establishing programs that combine technological, policy, training, auditing, personnel, and physical elements. Challenges within specific industries (such as health, banking, finance, and manufacturing) are explored (UMUC graduate, 2014).

Resources for Online Teaching

UMUC’s Virtual Classroom

UMUC uses both open source tools and commercial tools and remote virtual labs for teaching online DF courses. UMUC has its own virtual lab that has been used to teach the Cybersecurity courses. Hands-on learning is an integral part of UMUC's online classroom. UMUC uses two labs to teach Cybersecurity/Information Assurance courses, 1) the Virtual Lab and 2) the Virtual Desktop and Applications Environment.

UMUC Virtual Lab: The architecture of the UMUC Virtual lab is such that it has VMware Vcloud Director Server software, and VSphere hypervisor servers. The hardware consists of seven high end Dell PowerEdge R710 servers, Dell gigabit switches, and a Dell Storage Area Network (SAN).The lab allows at the moment a maximum of 265 VM connections concurrently. The Virtual lab isolated and is accessed through a VPN. Students are provided with two sets of instructions; one to access the VPN and the other for accessing the Virtual Lab. The virtual lab has open source tools installed.

The UMUC Virtual Desktop and Applications Environment: UMUC also has a Virtual Desktop and Applications (VDA) environment provided by a cloud service provider Aeronomy. Two courses in our Digital Forensics program and the undergraduate students use the Virtual Desktop Infrastructure part of the environment. The Virtual Desktop Infrastructure access instructions are provided by UMUC IT Services. The VDA has Guidance Software EnCase, Access Data Ultimate Toolkit and Mobile Plus installed. CSEC 661 and CSEC 662 are using the VDA lab.

Open Source Toolkits

One of the challenges facing students enrolled in online courses is having access to expensive, commercial forensic tools, such as Guidance Software EnCase, Access Data Ultimate Toolkit, and ProDiscover Forensics. Nevertheless, online students need the opportunity to gain hands-on experience with digital investigation technologies, and freely accessible open source forensics toolkits and remote virtual laboratories are viable options for distance education instructors who may not have the budget to purchase commercial forensic tools. This paper describes five open source digital forensics toolkits: (1) Sleuth Kit with Autopsy, (2) Sans SIFT Workstation, (3) DFF, (4) DEFT with DART, and (5) Helix. Open source toolkits run on a variety of operating system platforms, such as Windows, Linux, UNIX and Mac OS. Table 1 delineates these five different open source toolkits by supported operating systems, while Table 2 lists these same toolkits by supported image formats.

Table 1: Open source toolkits by supported operating systems

Open Source Toolkit	Supported Operating Systems			
	Windows (DOS, FAT, NTFS)	Linux (EXT)	Unix (UFS)	Mac OS (HFS)
Sleuth Kit with Autopsy	X	X	X	X
Sans SIFT	X	X		
DFF	X	X		
DEFT with DART		X		
Helix	X	X	X	

Table 2: Open source toolkits by supported image formats

Open Source Toolkit	Supported File Formats		
	Raw Format (DD)	Advanced Forensics Format (AFF)	Expert Witness Format (E01, EWF)
Sleuth Kit with Autopsy	X		
Sans SIFT	X	X	X
DFF	X	X	X
DEFT with DART	X	X	X
Helix	X		

The Sleuth Kit™ is a collection of command line tools for investigating disk images. These low-level tools are used to recover electronic evidence; its core functionality is the in-depth analysis of volume and file system data (Sleuth Kit, 2014). Autopsy™ is a digital forensics platform and graphical interface for Sleuth Kit (Autopsy, 2014). The Sleuth Kit™ and Autopsy™ run on Windows, Linux, OS X, and other Unix platforms.

The SANS Investigative Forensic Toolkit (SIFT) Workstation is a VMware appliance, pre-configured with the necessary tools to perform detailed digital investigations. An international team of forensics experts created the SIFT Workstation and made it available to the whole community. SIFT version 3.0 matches modern forensic tool suites demonstrating that advanced investigations can be accomplished using freely available and frequently updated open source tools (SANS Institute, 2014). The SIFT Workstation runs on both Windows and Linux platforms.

The Digital Forensics Framework (DFF) was updated in February 2013 and is open source digital investigation software built on top of a cross-platform Application Programming Interface (API). DFF is appropriate for both novice and professional examiners. Separate user and developer guides are available online supported by a rich community via blog, wiki, forum and an IRC chat channel (Digital Forensics Framework, 2014). DFF runs on both the Windows and Linux platforms.

The Digital Evidence & Forensic Toolkit (DEFT) is made up of a live GNU/Linux distribution and includes the Digital Advanced Response Toolkit (DART). In addition to a long list of open source Linux applications and scripts provided in DEFT, the DART suite contains another impressive list of open source Windows applications. DEFT and DART are used to support the digital forensics course currently offered at the University of Bologna and many other Italian universities (Fratepietro, Rossetti, & Dal Checco, 2012).

Helix was designed to be forensically sound and very careful not to touch the host computer in any way. As a live Linux distribution, Helix focuses on incident response. Student examiners must have a sound understanding of incident response and forensic technique for proper use of Helix. For example, this tool can be used to scan for graphic evidence, such as JPEG and GIF images on a live Windows system. Helix executes on the Windows, Linux and UNIX platforms (SecTools, 2014)].

Remote Virtual Labs

The three remote virtual labs - CSSIA, RAVE, and VITAL - suitable for teaching digital forensics and cyber investigations at a distance are discussed. CSSIA, the Center for Systems Security and Information Assurance at Moraine Valley Community College in Illinois is a National Science Foundation Advanced Technological Education (ATE) National Resource Center. One of its incredible resources is the development and maintenance of national infrastructure models for learning based on scalable and affordable remote virtual lab environments. The standardized virtual data center provides the means for cybersecurity educators to develop multiple curriculums that can easily be deployed and shared by institutions interested in teaching all types of cybersecurity programs. The CSSIA virtual environment currently supports five complete courses and plans to develop additional courses in digital forensics as well as Microsoft and Linux OS platforms (Center for Systems Security and Information Assurance, 2013).

With initially funding from the National Science Foundation of the United States, the Remote Access Virtualized Environment (RAVE) was created to help meet the national need for experienced cybersecurity workforce by providing access to valuable hands-on laboratory opportunities for students around the nation. RAVE is a remotely accessible state-of-the-art virtual lab environment, allowing thousands of students from a wide range of institutions to enrich their educational experience. This system was developed and tested at the University of Alaska Fairbanks and is replicated at the United States Military Academy at West Point.

RAVE provides access to cybersecurity lab facilities and materials to a wide range of intuitions, and, consequently, provides more students with empirical learning opportunities in this critically important field. Qualitative and quantitative metrics inform the development of new lab-based learning activities (Nance, 2010).

The Virtual Information Technology and Assurance Lab (VITAL) at New York University Polytechnic (NYU-Poly) was created in response to the critical need for a simple virtualization environment designed for teaching cybersecurity courses. Utilizing the open source XEN virtualization environment, VITAL was specifically customized to be easy to use for both students and professors. VITAL makes use of Virtual Machines (VMs) within a closed networking environment, providing hands-on access to a diverse blend of operating systems (e.g., Linux and Microsoft) and digital forensics tools. All access to VITAL is done via a web browser. VITAL is designed to work with a wide range of browsers (Firefox 3+, IE8, Safari 4) under a variety of OS (BSD, Linux, Windows, Macintosh). VITAL was initially funded by a NSF capacity building grant with continued support from NYU-Poly Department of Computer Science and Engineering and the NYU-ePoly Online Learning Program. Lab and lesson materials are available for download along with the installation materials and documentation (NYU-Poly, 2014).

Lessons Learnt from Our Experiences

Feedback from students indicates that lab exercises appear to be a very effective method for teaching digital forensics. Students would like more labs to be added to the classes. As most of the courses are being migrated to the Virtual Desktop and Applications (VDA) environment, the resources will be more elastic and more hands-on exercises will be available. The majority of the students commented that the commercial digital forensic toolkit *Encase* from Guidance Software is a very powerful with too many features, making it less user friendly. Another student team exclaims “It is NOT always possible to recover everything and it is NOT always possible to figure out 100% of the crime given the evidence that is recovered. The larger the volume of files to be analyzed, the more complex and time consuming the investigation becomes.”

UMUC faculty and students use several Internet-based resources that are very useful to supplement the chosen textbooks for the online digital forensic courses. These include:

- *Best Practices In Digital Evidence Collections*(SANS, 2009). This discusses evolving evidence handling procedures.
- *Best Practices for Computer Forensics* (Scientific Working Group on Digital Evidence, 2013). This covers all the best practices from seizing evidence, equipment preparation, forensics imaging, forensic analysis and examination and documentation and reporting.
- *Best Practices for Seizing Electronic Evidence, A Pocket Guide for First Responders* by the U.S. Department of Homeland Security (United States Secret Service, 2014). This is a document developed by a working team of various law enforcement agencies who convened to identify common issues encountered in today’s electronic crime scenes.
- *Searching and Seizing Computers and Obtaining Electronic Evidence in Criminal Investigations* by the U.S. Department of Justice (Jarrett, 2010). This document explains the constitutional limits of warrantless searches and seizures in cases involving computers, with the Fourth Amendment limiting the ability of government agents to search for and seize evidence without a warrant.
- *FBI Law Enforcement Bulletin*(The FBI, 2001). This is a good document that reviews some of the tools and methods an investigator can use to conduct investigative analysis and identify suspicious financial transactions.

- *Good Practice Guide for Computer-Based Electronic Evidence*(Association of Chief Police Officers, 2014).
- *Best Practices for Computer Forensics*(SWGDE, 2006) and *A Simplified Guide To Digital Evidence* (National Institute of Justice, 2008)are also very useful for teaching digital forensics online.

Conclusion

This paper describes UMUC's virtual lab for teaching digital forensics and cyber investigation online as well as feedback from distance education students enrolled in the master's degree program. Additionally, it investigates five open source toolkits and three remote virtual labs, which were initially funded by the National Science Foundation of the United States in response to the urgent need to have well-educated cybersecurity practitioners. Open source toolkits and remote virtual labs are becoming a viable option for effectively teaching digital forensics and cyber investigations online. They provide the previously missing opportunity for the growing number of online students to gain the same hands-on experiential education as delivered in a face-to-face classroom setting.

References:

- ACM, & IEEE. (2013, December). *Computer Science Curricular Guidelines 2013*. New York: Association for Computing Machinery. doi:10.1145/2534860
- Allen, I. E., & Seaman, J. (2007). *Online Nation: Five Years of Growth in Online Learning*. The Sloan Consortium. Retrieved from http://sloanconsortium.org/publications/survey/online_nation
- Association of Chief Police Officers. (2014, February). *Good Practice Guide for Computer-Based Electronic Evidence* . Retrieved from ACPO: http://www.7safe.com/electronic_evidence/ACPO_guidelines_computer_evidence.pdf
- Autopsy. (2014). Retrieved from www.sleuthkit.org/autopsy/
- Center for Systems Security and Information Assurance. (2013). *NSF ATE National Resource Center*. Retrieved from CSSIA: www.cssia.org
- CNCI Initiative 8. (2008, January). *National Security Council*. Retrieved from The Whitehouse: www.whitehouse.gov/cybersecurity/comprehensive-national-cybersecurity-initiative
- Davis, C., Cowen, D., & Philipp, A. (2005). *Hacking Exposed Computer Forensics*. New York: McGraw-Hill/Osborne.
- Digital Forensics Framework. (2014, May). *DDF*. Retrieved from www.digital-forensic.org
- Evans, K., & Reeder, F. (2010, November). *Human Capital Crisis in Cybersecurity: Technical Proficiency Matters*. CSIS Commission on Cybersecurity for the 44th Presidency. Retrieved from <http://dspace.cigilibrary.org/jspui/bitstream/123456789/30098/1/A%20Human%20Capital%20Crisis%20in%20Cybersecurity.pdf?1>
- Fratepietro, S., Rossetti, A., & Dal Checco, P. (2012). *DEFT and DART*. Retrieved from www.deflinux.net/doc/EN-def7.pdf
- Jarrett, H. M. (2010). *Searching and Seizing Computers and Obtaining Electronic Evidence in Criminal Investigation*. Washington D.C.: U.S. Department of Justice. Retrieved from <http://publicintelligence.net/u-s-doj-searching-and-seizing-computers-and-obtaining-electronic-evidence-in-criminal-investigations/>
- Nance, K. (2010, September 15). *Collaborative Research: Remote Access Virtualized Environments (RAVE): Piloting a National Infrastructure for Cybersecurity Education*. Retrieved from NCET:

http://center.ncet2.org/index.php?option=com_patents&controller=awards&tmpl=component&view=awards&layout=award&frame=awards&user=46028&id=1121_nsf

National Institute of Justice. (2008, April). *A Simplified Guide to Digital Evidence*. Retrieved from <http://www.crime-scene-investigator.net/SimplifiedGuideDigitalEvidence.pdf>

NYU-Poly. (2014). *About VLab*. Retrieved from CyFor at NYU-Poly: http://cyfor.isis.poly.edu/13-about_vlab.html

Obama, B. (2009, May 29). *Remarks by the President on securing our nation's cyber infrastructure*. Retrieved from The White House: www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Securing-Our-Nations-Cyber-Infrastructure

SANS. (2009, September). *Best Practices in Digital Evidence Collections*. Retrieved from SANS Digital Forensics and Incident Response Blog: <http://digital-forensics.sans.org/blog/2009/09/12/best-practices-in-digital-evidence-collection>

SANS Institute. (2014). *SIFT Workstation*. Retrieved from <http://computer-forensics.sans.org/community/downloads>

Scientific Working Group on Digital Evidence. (2013, September). *SWGDE Best Practices for Computer Forensics v. 3.0*. Retrieved from <https://www.swgde.org/documents/Current%20Documents/2013-09-14%20SWGDE%20Best%20Practices%20for%20Computer%20Forensics%20V3-0>

SecTools. (2014). *Helix*. Retrieved from Top 125 Network Security Tools: <http://sectools.org/tag/forensics/>

Sleuth Kit. (2014). Retrieved from <http://www.sleuthkit.org/sleuthkit/>

SWGDE. (2006, July). *Best Practices for Computer Forensics*. Retrieved from Scientific Working Group on Digital Evidence: http://www.oas.org/juridico/spanish/cyb_best_pract.pdf

The FBI. (2001). *FBI Law Enforcement Bulletin*. Retrieved from <http://leb.fbi.gov/>

U.S. Department of Homeland Security. (2007). *Best Practices For Seizing Electronic Evidence v.3: A Pocket Guide for First Responders*. United States Secret Service. Retrieved from <http://www.forwardedge2.com/pdf/bestPractices.pdf>

UMUC. (2014). *Articulation Agreements between The Graduate School and Undergraduate School*. Retrieved from www.umuc.edu/academic-programs/upload/articulation-agreements.pdf

UMUC graduate. (2014). *Master of science in digital forensics and cyber investigation*. Retrieved from UMUC: <http://www.umuc.edu/academic-programs/masters-degrees/digital-forensics-and-cyber-investigations.cfm>

UMUC undergraduate. (2014). *Bachelor's degree requirements for the cybersecurity major*. Retrieved from UMUC: www.umuc.edu/academic-programs/bachelors-degrees/cybersecurity-major.cfm

United States Secret Service. (2014). *Best Practices for Seizing Electronic Evidence: A Pocket Guide for First Responders*. Retrieved from <http://www.forwardedge2.com/pdf/bestpractices.pdf>

ENVIRONMENT ACCOUNTING: A CURRICULUM MODEL TO INDIAN ACADEMIA

Dr. M. Muninarayanappa, M.Com., M.Phil., Ph.D., M.L.I.Sc., MBA

Associate Professor, Department of Commerce,
Bangalore University, Central College Campus, India

Prof. L. Augustin Amaladas, M.Com., AICWA, PGDFM

Associate Professor, Dept. of Commerce, St. Joseph's College of Commerce, India.

Abstract

Business creates assets to self by using natural resources by creating social environmental liabilities by degradation of environment. Traditional double entry financial accounting is more concern about quantification of business transactions in terms of money. Traditional money measurement concept accounting is limited when it comes to measuring natural wealth degradation. We are behind the times... Jet pilots don't use rearview mirrors. If we want to account for the environment, it is necessary to look ahead. Developing future accountants who can measure quantitatively the environmental degradation depends on the present commerce and management teachers who have ability to understand and teach the methods to measure, costs related to environmental degradation. It is a pleasure, challenge and duty of the commerce and management faculty throughout the world in particular in India to understand the importance of implementation of environmental accounting as a part of university curriculum as a nation building exercise. The present paper aims to discuss the significance of environmental accounting in Indian university curriculum. The data required for the study have been collected from primary and various secondary sources. This research is descriptive in nature. Understanding reliable estimates of environmental damages, upstream/downstream costs of pollution, recovery from the market(carbon credit), cost of management activities, research and development costs, costs for social programs and costs for handling environmental damage will help commerce teachers to inculcate knowledge in commerce students and the government to implement the environmental accounting in the near future in India.

Keywords: Accounting, Degradation, Environment, University and Curriculum

Introduction

Global sustainability, Sustainability Operations, Sustainability Development (SD), Environmental Protection, Green Accounting (GA), Corporate Social Responsibility (CSR), Environmental Accounting (EV), Environmental Auditing (EA) etc., are some of the widely spoken topics of the current situation. Teachers are the pillars of a nation. Commerce and Business teachers have taught financial accounts in a well structured and conventional method. Three rules of accounting, concepts and conventions are taught at the undergraduate and post-graduate commerce related courses such as Bachelor of Commerce (B.Com), Bachelor of Management (BBM), Post-graduate in Commerce(M.Com), Master in Business administration (MBA) and other commerce related courses. The conventional method of teaching of accounts from Pre-University to Post Graduate Degree level and its relevance have its own advantages, but slowly its importance is reduced in the corporate world as there are packages such as Oracle, can handle volume of accounting transactions. It becomes need

of the hour to wake up and be aware of the changes in the corporate world and restructure Accounting curriculum in the wake of environmental degradation. The business world requires effective decision planners rather than data entry handlers. Decisions making abilities can be developed by integrating quantitative and qualitative accounting information rather studying those subjects in isolation. It is necessary to understand the importance of accounting of environmental degradation. University teachers in India have to understand the importance and incorporate environmental accounting as part of university syllabus. Various legislations on environment pollution, Accounting Standards on environment accounting, the Cost Accounting Standards on Pollution Control-14 (CAS-14) to measure and standardization of environmental degradation, Oracle Environmental Accounting and Reporting and green accounting awards, strict Pollution Control Boards' norms in measuring environmental degradation in quantitative terms will help to achieve the longstanding due of environmental accounting in India" (Muninarayanappa and Augustin Amaladas, 2013). It is a service to the nation by every commerce and management teachers to effectively to implement environmental accounting now so that the future accountants can effectively understand and use such knowledge at the working place.

Objective of the study

This paper mainly focuses on the following major objectives:

1. To study the present trend in teaching environmental accounting in India as a part of university curriculum under commerce stream.
2. To develop and understand broader area of Environmental Accounting
3. To study the ways and means to implement environmental accounting as a part of university curriculum.

Materials and Methods

Tools for data collection

The study mainly focuses on secondary sources such as research articles from journals, working papers, and industrial web sites. The necessary primary data also have been collected from field visits and personal observations with industry and academic experts.

The present descriptive paper is designed to accomplish on experiences detailing the environmental accounting in curriculum to Indian Academia.

Limitations

1. The paper focuses only on corporate environmental accounting disclosed in the financial statements.
2. The paper focuses on teaching of environmental accounting in colleges and universities in India.
3. The designed syllabus for environmental accounting is only a model. It can be modify according to the need of industry at the time frame.

Discussion and results

"Environmental accounting is taken to mean the identification and reporting of environment related cost such as liability cost and costs related to waste disposal. It is accounting for any costs and benefits that arise from change to a firm's products and processes where the change also involves a change in environmental impact" (The Chartered Accountant, November 2005).

The environmental liabilities are defined as "The legal obligation related to management use, handling or release of potentially harmful substances and owning such substances locations (The US Comprehensive Environmental Response Act). This act is also

known as “Superfund Act”. This Act was passed in 1989 in the USA which empowers the EPA to take initiative to clean up the environment by creating civil liability on the polluters, recover response costs and payment for the damages to flora, fauna, and wildlife environment.

The global Climate Treaty, Kyoto Protocol, the Biodiversity Treaty, the Law of the Sea, Carbon Credit, disclosure in Financial Accounting Statements the environmental degradation, The Confederation of Asian and Pacific Accountants (CAPA) established a temporary Task Force in June 2008 to conduct a Preliminary Survey on Environmental Accounting and Corporate Social Responsibility (EA/CSR) are favorable climates for environmental protection globally.

ICAI (The Institute of Chartered Accountants of India), ICMA (Institute of Management Accountants of India) have issued accounting standards (CAS-14) and cost accounting rules respectively with respect to environmental accounting. These standards and guidelines are mainly to disclose environmental liabilities in the financial statements.

It is necessary to value pollution and emissions by the damage they cause. In principle, it is vital to develop both appropriate accounting systems and reliable estimates of environmental damages. This subject reviews the analytical and accounting questions involved in designing and estimating environmental accounting.

Environmental accounting needs to work as a tool to measure the economic efficiency of environmental conservation activities and the environmental efficiency of the business activities of a company as a whole. One of the issues highlighted by the global financial crisis of 2008 was the failure of the traditional financial reporting as a tool to identify fundamental business risk.

Environmental Accounting and University Syllabi- Academic Faculty Observations

ICAI-University of Madras joint education program syllabus contains Financial Accounting, Corporate Accounting, Cost and Management Accounting and Practical Auditing subjects under B.Com course, however, Environmental Accounting is not a part of the syllabus. However, at the Post-graduate level in commerce(M.Com.) Social Responsibility Accounting chapter exists, but nothing is done constructively.

Department of Commerce under the University of Calcutta which was established in 1922 offers a subject called Advanced Corporate Accounting and Accounting Standards as a part of their specialization at the M.Com level. From the personal observation of Dr. (CA) Sanjib Kumar Basu, Calcutta University, “Environmental Accounting is not included in our undergraduate syllabus, but a topic on 'Recent developments in Accounting' includes environment accounting and reporting in our post graduation, which I used to teach earlier. The main reason is the subjectivity of the disclosure part. As such no objective assessment is developed till date”

The Pune University offers a subject called Advanced Accounting (Expert knowledge) at the postgraduate in commerce, however failed to include environmental accounting as a part of the syllabus. At St. Joseph’s College of Commerce (Autonomous), Bangalore, a well-known institution in the city of Bangalore, India does not incorporate Environmental Accounting either as a part of the subject or syllabus. “Accounting is maintained primarily for statutory reasons in India. Environmental Accounting is not implemented because it is not statutory” Prof.Ravi Richard, a senior faculty at St. Joseph’s College of Commerce, Bangalore. Even the Bangalore University, India insists on Environmental education at the undergraduate courses, but the syllabus of commerce curriculum does not contain Environmental Accounting. It becomes a national and international duty of all enterprises to fulfill the Kyoto Protocol international agreement requirements to protect environment. Environmental arguments come from the heart, but in

today's world based on economics, it's hard for arguments of the heart to win," said Pavan Sukhdev.

Observation by other researchers

1. There are no standards developed in environmental accounting. Different frameworks are proposed by different authors(Rees 1995). But now there are standard measurements of environmental pollutants in almost all polluting industries as per the Environment (Protection) Rules, 1986.
2. Some guidelines are issued by Ministry of Environment 2002, Japan.It is a guiding force and the foundation to improve the environmental and financial performance for certain organization(Deegan 2003).
3. Basic structure is agreed by most authors such as external environmental accounting, environmental management accounting and other environmental accounting(Lanen 1994, Bartolommeo, M. 1998, Jasech 2001 and Burritt et al 2002).
4. Environmental accounting has to record monetary units and physical units as well (UN CSD 2001 and Deegan 2003).
5. Traditional accounting had faced the challenge to improve materials efficiency (Horngren and Foster 1987).
6. The United States Environmental Protection Agency (EPA) provides a framework for identifying environmental costs. Environmental costs are divided into four categories.
 - a) Conventional company
 - b) potentially hidden
 - c) contingent
 - d) image/relationship costs.
7. The costs are divided into:
 - a) Regulatory costs(environmental law related costs)
 - b) Compliance cost(regulatory cost)
 - c) Compliance costs(Voluntary cost)
 - d) Contingency costs(Cost of remedying and accidental pollution costs)

Companies normally ignore contingent costs if the law is not imposed on such cost. Most of the governments try to reduce pollution by encouraging industries to purchase pollution prevention projects.
8. Past, present and future costs of environmental activities are important.
9. There are four basic environmental liabilities:
 - a) Soil contamination
 - b) Ground contamination
 - c) Surface water contamination
 - d) Air emissions.
10. Accrual concept of accounting is applied in cleanup liabilities:
 - a) Regulatory requirements
 - b) Legal requirements
 - c) Acquisition and divestiture proceedings
 - d) Good business practice
11. Due to ISO 14001 certification of companies Environmental Management System has been increased in 2009 as compared to 2007.
12. Negligible number of companies discloses environmental accounting information on project planning and management and social costs but there is no consistency in their reports which are reported quantitatively(financial figures).
13. There are positive correlation between:
 - a) Environmental Reporting And Profitability,
 - b) Environmental Reporting And High Debt To Equity(Dr. V.K Gupta, IIM, Indore),

- c) Environmental Reporting And Size Of The Company,
- d) Environmental Reporting And Most Polluting Industries
- e) Environmental Reporting and Environmental Performance(Dr. V.K. Gupta, IIM, Indore)

14. In India companies have to supply detailed information on:

- a) Emission of specific toxic chemicals
- b) Pollutants
- c) Effluents
- d) Damage to the environment
- e) The community health
- f) Ratios indicating environmental performance

Research Studies of Environmental Accounting - Industries

1. Chettinad Cement, Tamil Nadu: Tamil Nadu Pollution Control Board and Central Pollution Control Board have fixed standard norms for measuring environmental pollution in quantitative terms as per the Environment (protection) Rules, 1986. Online daily reports on emission, level of pollutants every hour is reported and monitored by the pollution control boards. Chettinad Cement has three units in and around Karur and Dindigal, Tamilnadu strictly follow norms prescribed and reported online to the respective Pollution Control Boards both to the Tamil Nadu and the Central Government. For Cement plants, including Grinding Units, located in critically polluted or urban areas with a population of one lakh and above(including 5 Km distance outside urban boundary): Particular matter is 100mg/Nm³. New Cement Kilns, including Grinding Units to be installed after the date: Particular Matter is 50mg/Nm³ in India. The table-1 explains pollution discharged to environment/unit of output break up details to arrive quantity of pollutants discharged by one of the Cement Industries in Karur district, Tamilnadu, India(Name of the industry is protected).

Refer: Appendix Table:1

2. Pepsoco's: Pepsoco purchased 1 billion kilowatt-hours of renewable energy in April 2007, offsetting 100% of its electricity use for the following year (Horovitz 2007).

3. News Corporation: The Chairman and Chief Executive Officer Mr. Rupert Murdoch made a statement that his company would be carbon neutral by 2010.

4. Quantas: Quantas is concerned about the issue of climate change. The customers can choose to fly carbon neutral by offsetting customers' share of flight emissions with just a small contribution. The carbon offset payment will go towards Australian-based abatement projects that have achieved greenhouse Friendly approval.

5. Toyota Industries regards environmental accounting, which evaluates the effectiveness of the company's environmental activities from the perspective of cost. It is a critical tool for corporate management and information disclosure. This Industry is continually striving to enhance its environmental accounting system. Until recently the main focus of this form of accounting had been application in information disclosure, through such media as the Social & Environmental Reports. In future the company will work to improve the system to allow its use in managerial decision-making by clarifying its compilation objectives and the target areas of environmental accounting.

6. Xerox Company: Industrial companies may cut costs and enhance environmental performance at the same time by redesigning inflexible or wasteful routines. For example take the case of Xerox Company, in late 1980s the Company's market share declined and its profit margin eroded substantially due to emergence of new entrants in the market. In 1990, the Company's management responded to the challenge with a new management initiative – the Environmental Leadership Programmed – that eventually included waste reduction

efforts, product “take-back” schemes, and environment-friendly design. By the mid-1990s, Xerox’s large manufacturing complexes environmental costs may be hidden, contingent and image building or such costs may be a part of allocated costs of the asset used for prevention of environmental degradation. The Chartered Accountant April 2006 in Webster and New York was sending only 2% of its hazardous waste to landfills. The Company then labeled the programme an unqualified success (Business & the Environment (2006), pp. 46-47.

7. John Craxford Plant Hire Ltd: John Craxford Plant Hire Ltd, had to not only pay £85,000 in costs and fines but also got £1.2m of its assets seized. This was because it had illegally buried waste and also breached its waste and pollution permits. All Officers including junior employees are facing criminal prosecution for knowingly breaching environmental regulation.

8. Thermal Power Generation in Andhra Pradesh: High efficiency Electro-static precipitators (ESPS) are installed to control Suspended Particulate Matter (SPM) in the fuel gas. All new plants are designed for the SPM level of 100mg/NM³ a limit set by the Andhra Pradesh Pollution Control Board (APPCB).

9. Oil Refinery Company in Victoria, Australia, was fined for three spills of fuel oil from a jetty. The chairman of the Victorian Protection Authority said “the company needs to meet their standards, but at the same time it has to meet the standards the community demands” (Toyota Industries on Social Environmental Report (2006).

10. FUJIFILM Holdings: The objectives of environmental accounting in Fujifilm holdings is that :

- i) ‘To provide accurate quantitative information on volumes and economic effects to interested parties within and outside the group
- ii) To provide numerical environment-related information useful for decision making by management and supervisors at the working level’ (FUJIFILM Holding, “Environmental Accounting” (2007).

11. Betabatim village, Goa, India: Take back your garbage home- The village assembly has passed resolution that ‘garbage brought and generated in Goa by tourists should be taken back by tourists to their home towns’ (IANS).

12. Talcum powder manufacturing company: ‘One of the companies producing talcum powder in Maharashtra, India has been using ethylene oxide in its skin powder for infants could turn into carcinogenic and cause permanent damage to skin’ (Business Line).

13. Thermal Power Generation in Andhra Pradesh: High efficiency Electro-static precipitators (ESPS) are installed to control Suspended Particulate Matter (SPM) in the fuel gas. All new plants are designed for the SPM level of 100mg/NM³ a limit set by the Andhra Pradesh Pollution Control Board (APPCB), India.

Research studies of Environmental Accounting- Organisations

The world bodies have developed disclosure schemes on environments. Some are voluntary in nature. The voluntary disclosure schemes are from Carbon Disclosure Project (CDP), Japan Voluntary ETS (JVETS) and California Climate Action Agency (CCAR). The regulatory disclosure scheme from the US State of New Mexico’s mandatory greenhouse gas reporting, the California Global Warming Solutions Act (2006), National greenhouse and Energy Reporting System (NGERS) and the Australian Government’s National Greenhouse and Energy Reporting Act 2007.

Research Studies of Environmental Accounting- Other agencies

SETAC (The Society of Environmental Toxicology and Chemistry)

Guidelines were issued by the Society of Environmental Toxicology and Chemistry (SETAC) in 1993, a multi-disciplinary, a code of practice and ethics requires that company

which manufactures are required to take back their products after consumers use. It is also known as Take-back Legislation. It is worth to note that German companies have to collect packaging materials. Some companies like Ciba-Geigy, Church & Dwight and Dow Chemical have adopted Life Cycle Costing technique in health care, pharmaceuticals, agricultural products and chemicals.

The Union Carbide corp.(UCC) has issued clear guidelines regarding environmental costs. This company demarcated between capital and revenue expenditures. Environmental expenses means all non-capitalized environmental costs charged to income statement (The Institute of Management Accountants 96317-1996). The Pollution Prevention Benefit Manual was issued by the U.S Global Environmental Management (GEMI) which has provided frame-works to identify environmental costs.

SAARC(The South Asian Association for Regional Co-operation)

The SAARC was established in 1985 with seven members' countries such as India, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka and Afghanistan. One of the charters of the SAARC is that regional cooperation among the eight nations for promoting the welfare and improving the quality of life of the people of the region. They have agreed to honor individuals and organizations for outstanding contributions and achievements in the fields of environment protection (Wikipedia).

ICMA, India

“The Cost Accounting Standards on pollution control-14 (CAS-14) was issued by the Cost Accountants of India. This standard gives broad outline on principles and methods of classification, measurement, assignment of costs to product or service and the presentation and more importantly disclosure in cost statements. It brings uniformity and consistency in the principles and methods of estimating the pollution control costs with reasonable accuracy.”

(Muninarayanappa and Augustin Amaladas(2013).

In the present environment in the educational sector, it is necessary to prescribe an appropriate syllabus on Environmental Accounting. The following syllabus is proposed at the undergraduate and postgraduate commerce and management university curriculum. It also covers reference section for the study.

Proposed Environmental Accounting Syllabus

[Syllabus For Commerce And Management Courses At The Undergraduate/Postgraduate Semester Scheme (Six Months)]

Objectives

To study world trend on environmental accounting

To understand the various pollutants and measurements

To account for environmental degradation and its disclosure in the financial statements.

Module 1: Introduction- Environmental Accounting:-General view - Objectives of Environmental accounting-Kyoto protocol and ISO 14001. **Types of Accounting:** Financial accounting, Non-Conventional accounting, Social responsibility accounting, Corporate social responsibility accounting, Environmental reporting, Triple bottom line Accounting, Sustainability accounting and Environmental Management Accounting.

Module 2: Environmental Accounting Practices: In developed and developing countries such as USA, Europe, Australia, Japan, Taiwan and Thailand and Guidelines issued by Ministry of Environment 2002, Japan regarding environmental accounting

Module 3: Understanding of terms and symbols and Types of Pollutants/Effluents: pH, Oil and Grease, Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand(COD), Suspended Solids, Phenols, Sulphides(S), Sulphates(SO₄²⁻), Ammonia, TKN, P, SO₂, NO_x, Particulate Matter(PM), Fluorides(F) Carbon Monoxide(CO), Nickel and Vanadium(Ni + V), Opacity %, VOC reduction, Cadmium(Cd), Nickel(Ni), Zinc(Zn), Hexavalent Chromium(Cr), Copper(Cu), Lead(Pb), Iron(Fe), Suspended Solids, Phenolic compounds(C₆H₅OH), Ammonium Nitrogen (N), Bio-assay Test(90% survival of fish after 96 hours), CER(Carbon Emission Reduction) and HFC23.[To be taught by Chemistry Professors]

Module 4: Standards for emission or Discharge of Environmental Pollutants:- The Environment (Protection) Rules, 1986 for Petroleum Oil Refinery, Sugar industry, Thermal Power Plants, Cement plants, Caustic soda industry, Manmade Fibers, and other industries.

Module 5: Environmental costs and estimation: Regulatory Costs, Hidden Costs(Upfront), Voluntary environmental costs, Conventional Company costs, Back end costs and Contingency Costs.

Module 6 : Methods to measure: Cost Benefit Analysis, Managing environmental costs, Capital budgeting decisions, Full cost accounting, Life cycle costing and Total quality Environmental management and measurement of Carbon Credit.

*** Proposed Syllabus Developed by Dr. M. Muninarayanappa, Bangalore University and Prof. L. Augustin Amaladas, St.Joseph's College of Commerce, Bangalore.

Further Reading

1. The environment (Protection) Rules, 1986.
2. *The IUP Journal of Accounting Research and Audit Practices*, 2011, vol. X, issue 2, pages 28-44
3. The Japan Machinery Federation “ Report on the survey and research into the standardization of environmental accounting and environmental reports,” “Guidelines on environmental accounting and environmental reports for machinery manufacturing companies” (July 2001)
4. Three construction organization mainly centering on the Japan Federation of Construction Contractors “ Environmental accounting guidelines in the construction industry” (Interim report).
5. The Japan Gas Association “ Guidelines on the introduction of environmental accounting in city gas companies” (FY 2000 version).
6. Guidelines are issued by Ministry of Environment 2002, Japan
7. Research Articles and working papers on Environmental Accounting
8. www.icaai.org
9. www.icma.org
10. www.icwai.org
11. www.energystar.gov
12. www.carbonfund.org/
13. www.pe-international.com/
14. www.leonardoacademy.org/
15. www.cettinad.com
16. www.toyota-industries.com/csr/library/pdf2006/63-64pdf
17. www.fujitsu.com/global/worldwide

It is widely accepted by researchers that there are not much trained professionals in India to understand and implement environmental degradation both quantitatively and monetarily. “Environmental issues have been incorporated in management curriculum in different forms. However environmental accounting, as a subject, is not yet present in MBA curriculum of a business school”(J K Pattanayak, Mitali Sen and Balram Choubey). The professional bodies such as ICAI and ICMA have come out with accounting and cost accounting standards but there must be trained personal in the industry to implement environmental accounting. The curriculum proposed above has covered different types of accounting both conventional accounting and environmental accounting, environmental

accounting practices in other countries, understanding of terms and symbols and types of pollutants/effluents, standards for emission or discharge of environmental Pollutants, environmental costs and estimation and methods to measure environmental degradation. Commerce and management students, by acquiring skills on environmental degradation quantitatively and monetarily it helps them when government enforcing the implementation of environmental accounting of polluting industries in India. Following are some of the important measurement techniques to calculate environmental degradation quantitatively and monetarily.

Measurement techniques

First of all it is difficult to define environmental cost. Having defined such costs are difficult to separate out and identify. Having done all of the above it is difficult to control such costs unless they are correctly identified. In 2003, the UNDSO came out with four management accounting techniques such as input/output analysis, ABC(Activity Based Costing), Lifecycle Costing and Flow Cost Accounting for the identification and allocation of environmental costs. These are referred to later under 'different methods of accounting for environmental costs'.

Input/outflow analysis

What comes in must go out. Input must be equal to output. Suppose for every 100 Kg of input, 80 Kg output and the remaining physical quantity either as scrap or waste. The waste material may have environmental impact either in the form of pollutants or add additional costs to treat effluents before being let into field or water resources or air. Here, we know the physical quantities and in monetary terms too.

Activity-based costing

The allocation of internal costs to cost centres and cost drivers is based on the activities cause to the costs under ABC. Environmental Accounting point of view, the environmental hidden costs on general overheads is appropriated based on environmental cost drivers (Student Accountant Issue 15/2010).

Life Cycle Costing

Every product has life from the time it is produced till it is thrown into the dust bin or reused and also has environmental effects at every level. Environmental consequences are studied and accounted for arising from production of product, environmental effects while on use by consumers, and at the time of disposal at the end of its life.

Flow cost Accounting

Costs of material, system and delivery and disposal are calculated mainly to reduce the quantity of materials having a positive effect on the environment but also to the business in reduction of total costs in the long run.

Shadow prices of pollutants

Using the estimated output function, the shadow price of a pollutant is estimated in terms of units of good output foregone for one unit reduction in pollution. Example: Thermal Power Generation in Andhra Pradesh sells a unit of electricity on the average of Rs. 3.60 per unit. Power generated is considered as good output where as NO_x, SO₂ and SPM are bad outputs as they are pollutants. Using this price, shadow prices of pollutants could be expressed in rupees for a representative plant of APGENCO as 1043, 5867 and 11539 respectively per ton reduction of SPM, NO_x SO₂.

How to measure Carbon credit?

“One CER(Carbon Emission Reduction) is equivalent to one tonne of carbon dioxide reduced. Each tonne of HFC23, a by-product of the refrigerant gases production process, is equivalent to 11,700 tonnes of carbon dioxide” (The Economic Times, July 31, 2007).

Conclusion

It is the time to look forward to understand the importance of environmental accounting practices. At the University curriculum plays a vital role in changing environment to teach to measure and costs of environmental degradation. Commerce fraternity has duty to fulfill Kyoto protocol vision of green global economy. Learning different polluting agents and their impacts on the environment is the need of the hour even though some are technical in nature but it is not impossible to understand. Without understanding the cause and cost of polluting agents it is difficult to train commerce students to face the challenges of reduction in pollution and environmental degradation. By training commerce students, we will be able to fulfill the dream of green environment. It is necessary to learn chemical components such as Sox, Nox, CO₂, VOC, air pollution, method to measure such pollutants, costs of polluting agents, industries involved in pollution, ways and means to reduce pollution and their costs to implement, costs incurred at the business site, environment damage prevention costs, global environmental protection costs, resource cycling costs, upstream/downstream costs, recovery from the market(Credit), cost of management activities, research and development costs, costs for social programs and costs for handling environmental damage. To understanding the above deliberations will help commerce teachers to inculcate and implement the environmental accounting in the near future. It is the right time and in the hands of the teachers to train the required commerce and management students to implement the present world's requirements through accounting

Reference:

- Alok Kumar, “ Environmental Accounting and Reporting with special reference to India” MPRA Munich Personal RePEc Archive (2008)
- Bhushan Bahree and Kyle Pope-Wall Street Journal, 7 July 1995.P.A.
- C. Fernando, “Business Environment”, Pearson Education in South Asia, Page-330).
- CA Mohammad Firoz and Prof.A.Aziz, Environmental Accounting and International financial Reporting Standards(IFRS)-International Journal of Business and Management vol.5,No.10;October 2010 Sumit K.
- Camelia Iuliana LUNGU, Cornelia DASCAL U, Daniela Nicoleta SAHLIAN, Corporate Social and Environment Reporting: Another Dimension for Accounting Information.
- Chirata CARAIANI, Camelia Iuliana LUNGU, Cornelia DASCAL U, “Green Accounting-A Helping Instrument in European Harmonisation of Environmental Standards”
- Cost Accounting Standard Board, “ CAS-14 Cost Accounting Standard on Pollution Control cost” ICWA.
- Dr. Bhabatosh Banerjee, “Corporate environmental Accounting and Reporting”*
- Dr.Muninarayanappa, Augustin Amaladas, “Environmental Accounting implementation: So Far so near” International Journal of Multidisciplinary Research Page: 9-12.(2013)
- Dr. Sureshramana Mayya, “Emerging Opportunities for Environmental Auditing: A Study of Large Scale Industries of Karnataka” ICAI (Sep.2009)
- Dr.V.K.Gupta, “Environmental Accounting and Reporting- An Analysis of Indian Corporate Sector.
- Environmental Accounting-Toshiba Group, “As a tool for environmental management” FUJIFILM Holding, “Environmental Accounting” (2007).
- Ministry of Environment, Japan, “Guidelines”(2002)

Institute of Management Accountants 96317-1996

Kseniya Lvovsky, "Economic costs of Air Pollution with special reference to India", South Asia Environment unit World Bank, The National Conference on Health and Environment Delhi, India(July 1998)

Lodhia, "Environment accounting in Fiji, An extended case study of the FIJI Sugar Corporation"

M.R.Mathew, "The Development and Social and Environmental Accounting Research" 1995-2000.

Noor Mohammad, "Need to implement the Environmental Accounting Education for sustainable Development: An overview", World Academy of science, Engineering Technology 63 2012

Richard Macve, "Accounting for environmental Cost"(working paper in Accounting and Finance), National Academy Press, Washington D.C. PP 185-199 (1997)

Sustainable Industrial Development News letter, SIDN, "Industrial Development Bureau, Ministry of Economic Affairs (September 2007)

The environment (Protection) Rules, 1986 .

The Environment Accounting Guidelines of Japan Manufacturing Industries (2000 version).

The Institute of Management accountant, " Tools and Techniques of Environmental Accounting for Business Decisions"(1996).

The Institute of Management Accountant, "The U.S Global Environmental Management (GEMI), The Pollution Prevention Benefit Manual.

The IUP Journal of Accounting Research and Audit Practices, 2011, vol. X, issue 2, pages 28-44

The Japan Gas Association "Guidelines on the introduction of environmental accounting in city gas companies" (FY 2000 version).

The Japan Machinery Federation "Report on the survey and research into the standardization of environmental accounting and environmental reports," "Guidelines on environmental accounting and environmental reports for machinery manufacturing companies" (July 2001)

The London School of Economics and Political Science department of Accounting and Finance, Social Environmental Report, "Environmental accounting" Page:63 (2006).

The United States Environmental Protection Agency(EPA)

Three construction organization mainly centering on the Japan Federation of Construction Contractors " Environmental accounting guidelines in the construction industry" (Interim report) (2000).

Timo Kaphengst, Samuela Bassi, Mckenna Davis, Sarah Gardner, "Taking into account opportunity costs when assessing costs of biodiversity and ecosystem action", Final report, Institute for European Environmental Policy (March 2011.)

University of Alberta School of Business Department of Accounting, Operations and Information systems Accounting: Accounting for Natural Resources, energy and the environment syllabus Winter 2012

V.Parameshwaran, "Environmental Accounting: Indian perspective", Social Statistical Division, Ministry of Statistics and Program Development, New Delhi (July 2011)

Tcslibrary.worldpress.com.../list

www.airnow.gov

www.carbonfund.org/

www.cettinad.com

[www.cra.co.uk/.../iso-1400/-revision-environmental-aspects and -business](http://www.cra.co.uk/.../iso-1400/-revision-environmental-aspects-and-business)

www.ecologic.eu

www.energystar.gov

www.env.go.jp/policy/kaikei/report00e.pdf

www.environmental-auditing.org
www.epa.gov/smokefree
www.epa.gov/woodstoves
www.fujitsu.com/global/worldwide
www.icaai.org
www.icaai.org
www.icma.org
www.icwai.org
www.icwai.org
www.ideunom.ac.in/SYLAB_ICAIA.pdf
www.imanet.org IMA Publication Number 96317 Copyright © 1996 in the United States of America by Institute of Management Accountants
www.ise.ac.uk/collections/accounting/facultyAndstaff/profiles/macve.htm
www.leonardoacademy.org/
www.mpra.ub.uni-muenchen.de/7712
www.papwers.ssrn.com/sol3/papers.cfm?abstract-id=1984410
www.pe-international.com/
www.proj.moeaidb.gov.tw/isdn/english/main.ohp
www.toyota-industries.com/csr/library/pdf2006/63-64pdf
www.unipune.ac.in/syllabi_pdf

Appendix

Table: 1

Pollution discharged to environment/unit of output break up details to arrive quantity of pollutants discharged by a Cement Industry in Tamilnadu, India(Name of the industry is protected).

Assessment year	Stock attached to	Ave.Temp Deg C	Ave.Vel (M/S)	Area (Sq.m)	Ave.SPM (mg/Ncum)	Ave.Flow Ncum/Hr	Average emission Discharged	
							(mg/day)	(Kgs/day)
2012-2013	VRM/KILN Bag house	126	15.53	6.472	24.1	335652	193738334	193.738
	Cooler vent ESP	265.4	9.1	9.625	23.5	173281	97855246	97.855
	Cement Mill-Bag house	92.2	10.9	7.071	29.9	223742	160557259	160.557
	Cement Mill-II Bag house	104.6	11.6	2.5423	28.08	80678	54370518	54.371
	Coal Mill Baghouse	77.67	11.32	1.54	27.2	53236	34790791	34.791
	CPP Boiler ESP	113	5.03	12.56	18.0	299586	129421152	129.421

Average gas flow per day : 27988200 Ncum/day
 Average dust emission per day : 670733300 mg/day
 Average dust concentration : 611934672/32813328 mg/Ncum
 : 23.96 mg/Ncum

TOWARDS A SHARED MEDITERRANEAN WATER INFORMATION SYSTEM

Jauad EL KHARRAZ, PhD

Euro-Mediterranean Information System on the know-how in the Water sector (EMWIS),
France

Abstract

This project aims at implementing “data, information and statistics on water, based on internationally agreed definitions and methods, structured within information systems, for analysis and decision making” as requested by the UfM Ministerial conference on Water (Jordan, December 2008). Information has been identified as a weak point for many Mediterranean countries regarding their national strategy, especially insufficient knowledge about water abstractions or economic data, or regarding transboundary water resources management. In order to address these issues and to be sure that the deliveries of the project will be used in a sustainable manner, the scope of the project includes all data required for Integrated Water Resources Management Planning and Water Regulation at a river basin or aquifer level or at national and regional level. The objective of project first step for the next 3 years is to create Shared National Water Data Management Systems in 4 pilot countries, to prepare tools for deploying such systems in all the Mediterranean Countries and to set in place an automated reporting mechanism to some regional organizations on a voluntary basis. The extension to other countries or to other topics will be considered in a second step or another project that could be defined on the basis of the results of the current project. Beyond the creation of national systems which will benefit mainly to the pilot countries, all the Mediterranean countries will have the opportunity to take part in regional activities and will benefit from the results of the project first step.

Keywords: Water information systems, transboundary water resources management, sustainable development

Introduction

Facing an increasingly scarcer freshwater resource and an increasing demand, the Mediterranean countries should initiate reforms and significant investment projects for mobilising the resource, transferring water, developing non-conventional resources, controlling pollution, rehabilitating networks, or even modernising irrigation and its management methods, safeguarding and restoring the aquatic ecosystems.

The success of water policies and related investments is conditioned by the implementation of good governance in each country, involving the various stakeholders concerned and being based on a quality follow-up/assessment system, mechanisms for sharing the necessary knowledge, and on increased training on water professions and strengthened research and development actions.

It is obvious that the adapted tools and means necessary for this good governance should be developed or reinforced in each country.

The development of these various national tools - data system, documentation centre, training, research programmes - in the South and Eastern Mediterranean countries attract interest because of the expected benefits in terms of better effectiveness and quality of

operational management, of support to planning and resource allocation, of participative management, follow-up-evaluation of international initiatives, etc.

Most of these countries wish to increase their means in this direction - harmonisation of data and indicators, modernisation of the data gathering systems and organisation of a shared data management, reinforcement of the national focal points of information and documentation, definition of a training strategy, etc.

Helping the national stakeholders concerned with these tools is advisable and most of the countries wish a support to and a harmonisation of the efforts and a consistency of the tools at the regional level.

This working paper deals with lines of thought and proposes to identify the potential contributions of the various existing stakeholders to a better synergy, in relation with the creation of the Mediterranean Union in particular:

□ at the level of the EU Mediterranean countries: France, Spain, Italy, Greece, Cyprus, Malta, Slovenia and Portugal;

□ at the level of the Mediterranean countries outside the EU: Maghreb, Machrek, Turkey and the Balkans;

at the Mediterranean regional level : EMWIS (Euro-Mediterranean Water Information and Documentation System), the Mediterranean Network of Basin Organisations (MENBO), the Mediterranean component of the European Water Initiative (Med – EUWI), the Mediterranean Water Institute (IME), the Mediterranean Action Plan, etc.

Several structuring « projects » can also provide significant contributions, such as the Monitoring of the transnational programme on local water management « Meda-Water » (RMSU), the SPI-Water project on the transferability of European know-how to Mediterranean third countries and various other tools that can be mobilised for co-operation.

It is quite obvious that the inventory of the Mediterranean resource centres should be pursued with an inclusive and partnership approach.

It is sure that there is, in the Mediterranean countries, a very high potential for organisations having developed abilities and projects that can contribute to the proposed Network, and that it is less a question of creating new bodies than having synergies and better collaboration on common objectives and programmes between these various existing institutions and developing the means they have for a coordinated and joint approach.

Mediterranean Water Information

The Mediterranean documentation exchange system is already made up thanks to the Euro-Mediterranean Water Information and Documentation System (EMWIS), created at the ministerial Conference of Marseilles. Since more than 10 years, EMWIS has become the main regional tool for the exchange of information and knowledge on water in the Mediterranean Area. It is also an operational tool for co-operation within the Barcelona Process. It aims to:

- Structure the National Focal Points of Information on water in all the Mediterranean Countries.
- Facilitate access to the existing information on know-how in the water field, prioritising the institutions, documentation, training, research and development programmes and data administration, technologies adapted to the Mediterranean characteristics.
- Develop the pooling of useful information and the coherence of the systems.
- Develop common products and to promote the co-operation programmes needed.

At the operational level, the national teams are mobilised in the 22 existing National Focal Points (NFPs) under the respective authority of the Water Directors of the 22 countries of the Partnership.

These National Focal Points work in a network with a Central Technical Unit (EMWIS CTU), which has been financed for 10 years in a tripartite way, by the three Governments of Spain, France and Italy.

Structuring co-operation agreements were signed with the European Environment Agency, the International Network of Basin Organisations, the Mediterranean Component of the European Union Water Initiative, etc.

EMWIS directs topical working groups, in co-ordination with the water departments of the Mediterranean countries, to promote the exchange of institutional and technical know-how and to validate it in pilot projects.

The Water Directors recognized EMWIS success many times and its exemplary approach inspires similar initiatives in other areas of the World: South America, Central America, Sub-Saharan Africa (AWIS).

This EMWIS management body is a good example of operating in a network, which mobilise and develop the stakeholders qualified in their field in each country.

The feasibility study of such a system has been carried out by EMWIS for 30 months, with the support of the International Office for Water, within the mandate given by the Euro-Mediterranean Water Directors at their conference in Rome in November 2005.

In the Mediterranean area, many stakeholders gather data and produce indicators related to this sector in order to follow-up global or regional objectives (Millennium Development Goals; national IWRM plans and efficiency plans, Mediterranean Strategy for Sustainable Development, Horizon 2020) or to orientate and support assistance or co-operation policies (FAO, UNEP, OECD/Eurostat, the World Bank). These stakeholders often act on the basis of sectoral agreements (health, agriculture, statistics, environment, etc) and are encountering problems of access to the water data at the national and local levels.

Great efforts are needed to harmonise the data and indicators, to develop data gathering systems and shared data management. Assistance to the national institutions managing water data is essential.

Significant progress can be made to:

more easily identify the existing data and information on the various topics related to water management and to obtain information on the methods used for producing these data;

establish common basic data, especially for the calculation of the indicators requested by the regional institutions;

solve organisational problems (insufficient or different definitions, lack of an organisation responsible for the production/regular dissemination of synthetic data) which often cause the difficulties of obtaining these indicators.

At country level, the creation or reinforcement of true National Integrated Water Data Systems (NWDS) is the main challenge for defining, implementing and evaluating the policy in this sector. This requires:

- gathering, validating and storing the necessary (physical and socio-economic) data on water resources, their uses and water quality,
- sharing these data between the concerned stakeholders,
- developing relevant and harmonised indicators, internationally accepted, to ensure a follow-up at various degrees of geographical aggregation,
- informing the civil society (users' associations) and allowing it to fully participate in the management of water and of its uses.

The project priority is initially to help the Southern and Eastern countries of the Mediterranean basin to develop their own National Water Data Systems. The development of a regional tool facilitating access to the quantified and harmonised data coming from the national and local levels would give access to reliable and relevant data, which cruelly lack

today at the regional level, to support any policy of integrated water resources management and of risk prevention. Using voluntary contributions of the countries, it would deal with (renewable, non-renewable, non-conventional) water resources; their uses (domestic: water and sanitation utilities; producers: agriculture and industry; and environmental) in terms of demand, loss and efficiency; pressures on the resources and the environment (abstraction, overexploitation, degradation) and with risks (drought, floods, silting of dam reservoirs, shortages). These data could be compared with those related to sustainable development in the Mediterranean area.

The development of such a tool, taking into account both the needs of the international initiatives and the field reality of IWRM, would allow:

- having quality basic data so that the national and international institutions can follow-up their strategy in the water sector,
- better coherence of the indicators produced by various organisations,
- greater effectiveness of the assistance to the implementation of harmonised national water information systems,
- promoting South/South transfers of good practices and stimulating the countries, thanks to the comparison of results,
- contributing to the consistency of regional policies (e.g. UNEP Mediterranean Action Plan and Euro-Mediterranean Partnership with the European Neighbourhood Policy),
- having an essential component both for a regional environmental information system and for a global information mechanism on water and sanitation.

EMWIS, which carried out this feasibility study on the development of a regional water information (observation) mechanism in the Mediterranean area, with IOWater's technical support, has all necessary competences to coordinate this mechanism. It already has, as reminded above, an adapted governance, a technical co-ordination body, agreements with various regional organisations (European Environment Agency, Med-EUWI, World Water Council, International and Mediterranean Networks of Basin Organisations, UNEP/MAP, International Office for Water, SOGESID, CEDEX, etc.) and a suited geographic coverage (Euro-Med countries, the Balkans and Libya).

This implies, in a first step, to officials the extension of EMWIS field of action to the management of data (quantified information) on water resources and their uses (the initially targeted field being that of information on know-how).

Conclusion

The importance of gathering water information based on reliable data is vital and this information should to be made available to the general public to be developed, where possible, upon existing national, regional and international initiatives.

The efforts aimed to improve the knowledge on water should be directed to:

- Assess and monitor water resources and demands for both human activities and the environment, taking into consideration all waters, including transboundary resources.
- Promote comparable water data collection and monitoring (indicators, data collection systems).
- Elaborate a water status diagnose in the each country
- Fostering the development of Shared National Water Information Systems based on internationally agreed definitions and methods to support Integrated Water Resources Management and to contribute to the definition, implementation and follow-up of the Strategy.

References:

EMWIS, the League of Arab States & the Lebanese Ministry of Energy and Water (2013), project proposal submitted to the UfM Secretariat.

Créative Technologies (2008) Maroc: étude de diagnostic sur la faisabilité d'un Mécanisme méditerranéen d'observation sur l'eau

<http://www.emwis.net/documents/emwis-main-studies/medwip/Maroc-FR-200801.pdf>

Paul Haener (2008), Feasibility study on the development of a regional water observation mechanism in the Mediterranean region

<http://www.emwis.net/documents/emwis-main-studies/medwip/MEDWIP2-final-EN.pdf>

InterSus Sustainability Services (2006) Regional/international level: Diagnostic study for the feasibility study on the development of a regional observation mechanism for water in the Mediterranean region

http://www.emwis.net/documents/emwis-main-studies/medwip/Rapport-Obs_Med-INT-final.pdf

A STUDY ON THE FINANCIAL GROWTH OF COMPANIES DUE TO GREEN PROJECTS - REFERRING TO BUILDERS: AN ENVIRONMENTAL APPROACH

Ms. Maria Josephine Swathi, M.com,
PGDFM Research Student

Prof. L. Augustin Amaladas, M.Com, AICWA, PGDFM
Associate Professor, Dept of Commerce, St. Joseph's College Of Commerce, India

Abstract

Today our planet is in peril. Due to negligence of people, their greediness and selfish attitude has put earth in great danger. To fulfill their wants and needs people cut down trees, lay concrete roads, dig bore-wells, and destroy forests which are the major reason for natural calamities happening these days leading to threat to life in this planet. To overcome these problems there are various measures taken up by individuals, corporate, government and society. "GREEN BUILDING" is one of the measures taken up mainly by the corporate sector. This paper brings out the importance of green building in the present scenario and explores the idea of green building/ green projects taken up by currently in the corporate field. This paper analyses the financial aspects of the companies taking up these projects and their growth and the companies backing out from these projects. Reason for choosing this topic is to highlight the financial growth of companies by taking these projects and motivating other companies to take up this challenge and change their negative attitude to make a choice in entering into such projects. This research also creates awareness in preservation of natural resources. Since green building is a live talk in the society made me to choose the topic, which will be tool in protecting the environment. The data required for the study have been collected from primary and various secondary sources. Green building concept in India is on the process of flourishment. Green building concept at present looks expensive but when compared the genies and benefits are higher. When green building concept flourishes the cost of the green building implementation will automatically reduce.

Keywords: Building, Company, Environmental, Eco-Friendly, Green, Finance

Introduction

Eco-friendly construction involves the use of various "green" materials from start to finish and building practices which are harmless to environment are implemented. "A design or system that efficiently and effectively uses natural resources like energy, water and building materials and other resources for sustainable development is called GREEN BUILDING." The building will be considered as eco-friendly or green building only if it is rated by these systems. Some of the rating systems are as follows:

- BREEAM- Building Research Establishment Environmental Assessment Method, which is used in UK.
- LEED- leadership in energy and environmental design,
- Green Star- the Green Building Council Of Australia
- CASBEE- Comprehensive Assessment System for Building Environment Efficiency,
- Green Mark

- NABERS-National Australian Built Environment Rating System
- These are the parameters on which a rating of a building as green is based on:
- Efficiency in building design and site planning.
 - Protection of top soil and soil conservation during construction.
 - Reduction in demand of conventional energy by optimizing building design and structure.
 - Incorporation of renewable energy resources to reduce the use of conventional energy.
 - Effective water and waste management for reducing wastage of water.
 - Enhancing indoor environment quality like indoor air and thermal quality.
 - Efficient selection of sustainable materials for construction.
 - Optimizing operation and maintenance.

Benefits of green building

- Rise in energy conservation and efficiency by optimizing building orientation and integrating natural daylight and ventilation.
- Healthier indoor environment
- Protects the eco-system
- Reduction of emissions
- Storm water management.
- Conservation of water and waste management
- Improve air and water quality and temperature control
- Reduce strain on local infrastructure
- Helps in temperature moderation
- Reduce pollution

Financial and economical benefits of green buildings are

- Lead to effective long-term solution for economic growth.
- Aid in the expansion of green market.
- Green buildings save energy and water through resources which leads to reduction in operating and maintenance cost.
- Low operating costs increases the value of the property or building, with lower vacancy rates.

Objectives of the study

There are four objectives of the study. They are as follows:

- To find whether green concept is supportive in the growth of the companies.
- To explore the ideas of green in the construction field.
- To highlight the factors determining the financial growth of the green companies.
- To analyze and interpret the data to give in suggestions and findings.

Materials and methods

Tools for data collection

The study mainly focuses on primary sources such as questionnaire and personal interviews. The necessary secondary data also have been collected from the journals, working papers and company websites.

This paper is descriptive paper which accomplishes the growth of companies due to green building projects.

Limitations

- The study was purely on the primary data where the information given by the companies are believed to be true and reliable.
- The entire population of the companies was not studied, only a sample number was surveyed.
- Conclusions and results were based on the assumptions that the responses given by the companies' employees were true and adequate.

Observation by other researchers

- 1) Mr. Kaushal Kishore, material engineers shows some of the measures which a building should possess to be green building, the main objective for the paper to be published, is to show a way for the civil engineers who are looking for green building information.
- 2) Mr. Debajit Palit in June 2004, explains what features an environment conscious design for construction and energy efficient building to be constructed and its impact on the energy consumption.
- 3) In the paper Assessing Green building performance by GSA, an evaluation is made by comparing GSA's sustainably design buildings and the commercial building in US using the performance data. From the analysis the paper concludes that the energy consumption level is reduced by 26%, 13% less maintenance cost, 27% of high occupant satisfaction and 33% reduction in emission in carbon dioxide.
- 4) In the white paper published by Building Design+ Construction team titling the paper as, "Green Building + Climate Change", explores the emissions in the surroundings which are leading to unpredictable climatic change in the world. This team has made an effort to highlight on green buildings which will be a preventive measure for the challenge of the earth.
- 5) Keith H. Hirokawa, Aurelia Marina Pohrib, J.D, high lights the need for green buildings as one for the measure to prevent the adverse climatic changes which is a threat to the life.
- 6) Centro Mario Molina: Brings out the ideas of green building in national planning of the country which explores the plans and programs for green building development, building codes on the features of sustainability.
- 7) A paper focusing on the government to construct green buildings on private sector in California, has made an effort to suggest that the government policies can create a force of diffusion of the environmental standards that require complementary investments by private adopters.
- 8) M S Suhaida, K L Tan and Y P Leong, speaks about the importance of green building rating systems. The authors also suggests that stakeholders support should be strong enough to nurture the green initiatives all over the world.
- 9) Mario Seneviratne, revealed that buildings worldwide make use 20% of fresh water, 25% of wood harvest, 40% of CO₂ emissions, 40% of energy use, 30% of raw materials, as a solution to reduce these impacts green buildings is been accepted as a solution for it.
- 10) Piet Eichholtz, Nils Kok and John M. Quigley, speaks about the economies of green buildings in investments in energy efficiency. They have suggested that investors attribute a lower risk premium for more sustainability and energy efficient buildings.
- 11) The Leonardo Academy has spoken about the economics of LEED in the year 2008. The objectives of this paper are to answer for certain questions like the costs of implementing LEED for existing buildings and comparing the operating costs between LEED certified builders and others..

12) Jeremy Gabe, has told the significance of the assessment tools of green building. The author tells that using these tools the companies are diverting their focus on increasing the LEED credits with less attention on environmental performance.

13) Harvey W. Berman revealed that green building are cost beneficial and costs differ due to the type of design and construction process opted by the builders.

14) Gregory H. Kats has revealed the cost and financial benefits of green buildings when compared to normal buildings.

15) GeofSyphers addresses the issues by providing general cost-saving strategies for green building and exploring the cost issues and describes how to control the costs of green building by summarizing other researches done on this topic. The area targeted by this paper is California.

16) Adam Berman, Evan Mills And Jeff Perlman, describes the financial benefits of buildings in California also speaks about the cost cutting in green building projects and financial benefits and also describes the problems in cost determination, technologies and methodologies of green projects and the insurance benefits of green building are described.

17) Melissa O'Mara and Shan Bates describe the reason for investing in green buildings and their business improvement and reveals that investments in green buildings can produce measureable financial values. The paper also gives out some attributes how green buildings improve business and also describes the present state of green building and their future promises.

18) The performance of the green building are been analyzed by the authors SinemKorkmaz, DuyguErten and Matt Syal and also presented the background of green building movements in the selected developed and developing countries like US, India and Turkey. The main purpose of this paper is to build a framework for developed and developing countries in adaptation of green building guidelines.

19) Judith H. Heerwagenspeaks about the inter-relation between green building and human resources performance and productivity and described green building as a driver to success of the company by increasing the productivity of the companies structured in green building design.

20) Dr. Thomas Tang describes three way of designing sustainable buildings- smart buildings, people-friendly developments and green building and also the issues and opportunities in designing the buildings.

21) Ramesh S P and Emran Khan M describes the role of energy efficiency in green buildings in India to reduce the energy consumption and environment degradation through green house gases and the schemes to harmonize government and private sector are also discussed.

22) Trivita Roy and AbhishekKiran Guptadescribes the cost efficiency of green buildings in India. It also discusses the state of green building adaptation in India and also about the green rating systems in India and their criteria of crediting the buildings.

23) D. Sandanasamy, S. Govindarajane And T.Sundararajan have brought out the guidelines in energy conservation in buildings in India in the form of Energy Conservation Building Codes (ECBC) which defines the norms and standards for energy performance of building and their components.

Discussion and results

This analysis is made to prove the objectives of the paper. This questionnaire was distributed to the members of the companies in practice of green concept and not in practice. From the data collected the analysis is carried on. Questionnaires were distributed to 10 companies and three members were selected from each company to fill in the questionnaire. Green companies data is been analyzed firstly.

Green companies’ analysis

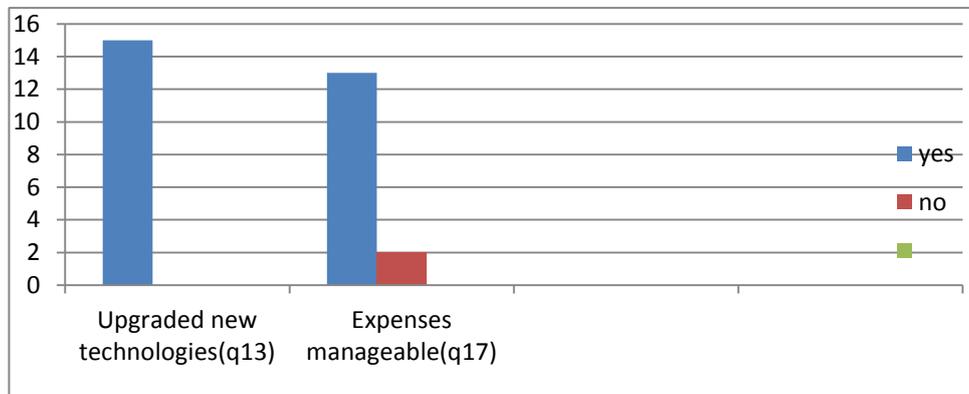
The companies were asked to elaborate their understanding about what is green building or eco-friendly buildings. Each of them had different ideas about green building.

Interpretation

From the analysis we find that many of them do not know the exact meaning of green building or eco-friendly buildings. From the survey it is known that the respondents think that green building or eco-friendly building is just an environmental friendly building bring on harm to the environment with building design including rain harvesting, use of solar panels etc. From this we come to know that the real meaning of green building is hidden. But the companies still agree themselves to be green builders with just some features of green building concept in their design.

Table 1: Showing Whether Companies Have Adopted New Technologies And Whether The Expenses Incurred Due To Green Concept Manageable.

Questions\options	yes	no
Upgraded new technologies(q13)	15	0
Expenses manageable(q17)	13	02



Analysis

The above table and graph shows that 15 respondents of green companies agree that the companies have upgraded new technologies in their project design. But there is no uniqueness in technology up gradation by companies. Many companies have taken up same technologies like sewage treatment plant.

Interpretation

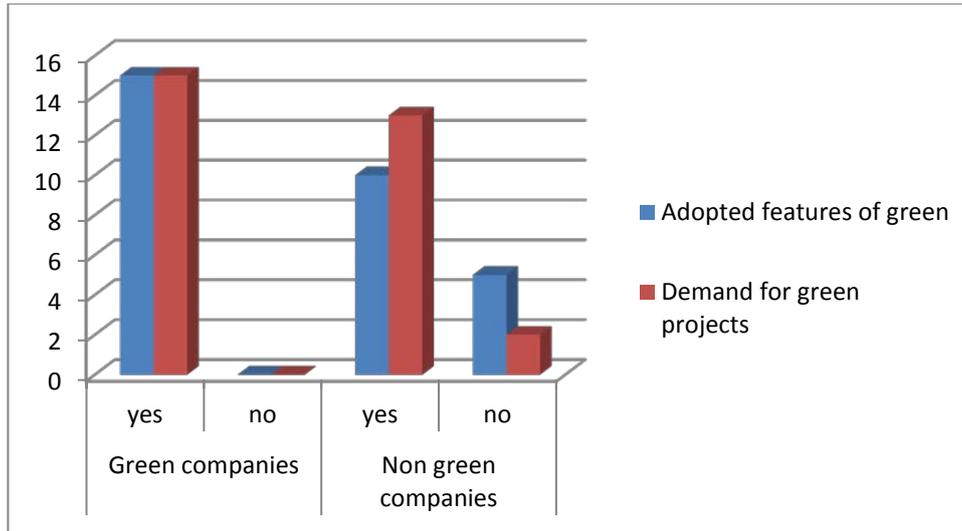
From the above analysis we come to know that companies certified as green or eco-friendly have adopted very less technologies which should be transformed. Companies must take up more active actions on the technologies as adopted by foreign companies which will give in more benefits and meaning in adopting green concept.

Data and analysis of both green and non green companies

Here the analysis is made considering data of both green companies and non green companies. Since the interpretation of these data is required to prove the objectives of the paper, the analysis is been made by considering both companies’ data together.

Table 2: Showing Whether Green Companies Have Adopted The Features Of Green And Whether There Is Demand For Green Projects.

Question\options	Green companies		Non green companies	
	Yes	No	yes	No
Adopted features of green	15	0	10	05
Demand for green projects	15	0	13	02



Analysis

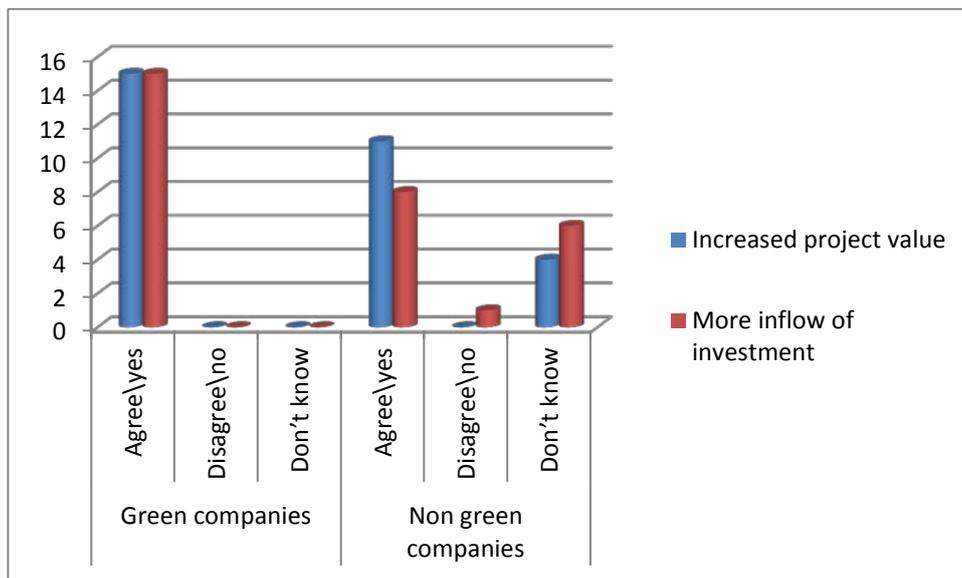
The above table shows the respondents of both green companies and non green companies replied for the question whether green building companies have adopted the features of green building in their building design and whether people demand for such projects. The table and graph clearly shows both companies respondents’ view on this aspect.

Interpretation

From the above table chart and analysis it known that all the respondents of companies taken up green concept agree that they’ve adopted to the features of the green building in their projects and there is demand for such projects too. For the same non green companies majority of them agree that green building features are been adopted and such project are preferred by the people. Among them only seven respondents disagree for it.

Table 3: Showing Whether Value of the Property Is Increased and More Inflow of Investment Due To Green Concept Adaptation.

Questions\options	Green companies			Non green companies		
	Agree\yes	Disagree\no	Don't know	Agree\yes	Disagree\no	Don't know
Increased project value	15	0	0	11	0	04
More inflow of investment	15	0	0	08	01	06



Analysis

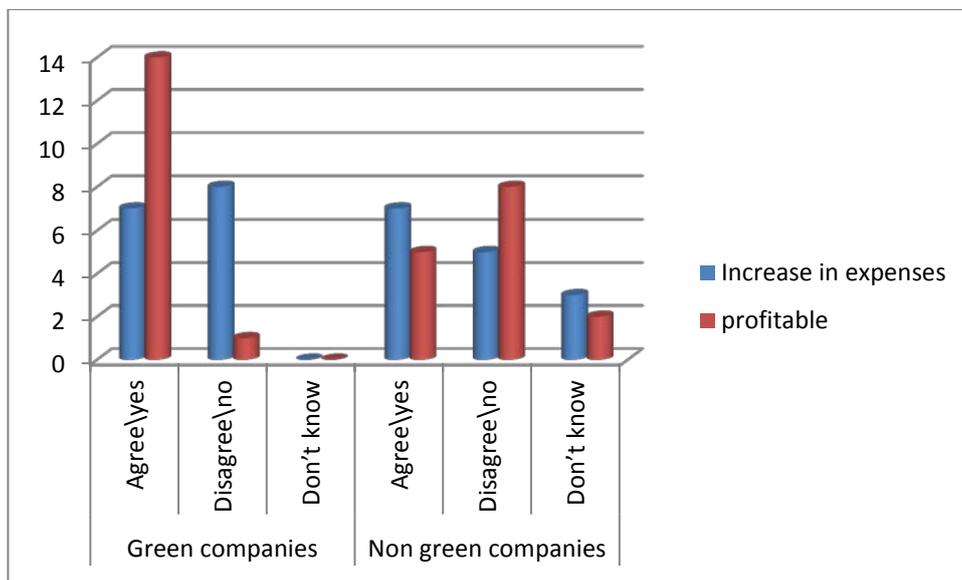
The table and the chart show the no. of respondents of both green and non green companies supporting whether by taking up green building concept increases project value and bring in more investments to the companies.

Interpretation

From the above data collected it reveals that taking up green building concept increases the project value of the companies adopted this concept and it also creates more cash inflow that is investments for the company as per the respondents.

Table 4: Showing Whether There Is Increase In Expenses Due To Green Projects And Whether It Is Profitable.

Questions\options	Green companies			Non green companies		
	Agree\yes	Disagree\no	Don't know	Agree\yes	Disagree\no	Don't know
Increase in expenses	07	08	0	07	05	03
profitable	14	01	0	05	08	02



Analysis

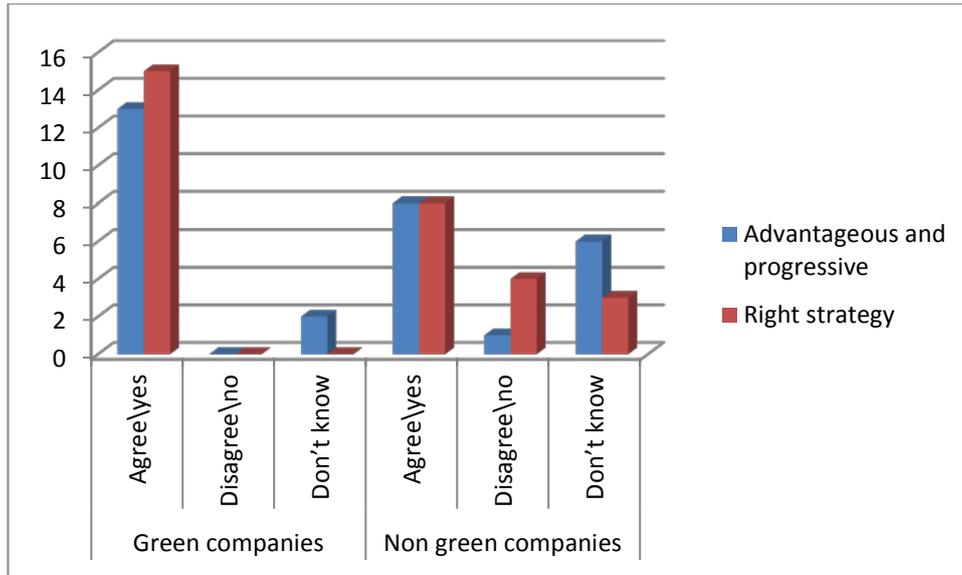
Above table and graph shows whether green building concept increases the expenses of the company and also increases profit simultaneously.

Interpretation

From the above table and chart we can say that since green building concept is a unique activity which involves more new things and implementations it increases the cost of the companies and their expenses for such projects which simultaneously brings in profit as there are many advantages due to this concept.

Table 5: Showing Whether Green Concept Is Advantageous In Progress Of Companies And Whether Green Concept Is Right Strategy.

Questions\options	Green companies			Non green companies		
	Agree\yes	Disagree\no	Don't know	Agree\yes	Disagree\no	Don't know
Advantageous and progressive	13	0	2	8	1	6
Right strategy	15	0	0	8	4	3



Analysis

The above table and chart gives out picture of the respondents of the companies supporting whether green concept is advantageous in progress of the company and whether it is a right strategy to take up green concept.

Interpretation

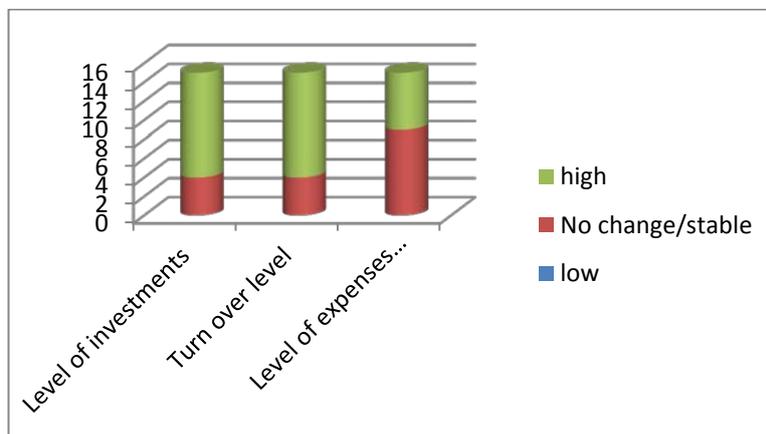
From the above analysis we know that green companies think that taking up green concept leads to the progress of the companies and also is a right strategy for the company to implement. But as per the non green companies, are not aware whether it is advantageous and a right strategy and only some of the non green companies think that it is advantageous to the company.

Non green companies’ data analysis

Here are some of the data which are been analyzed based on only non green companies’ data to show the ideas of non green companies on the green concept.

Table 6: Showing The Level Of Investments, Turn Over And Expenses Incurred By Companies Not Adopted Green Concept.

Questions\options	low	No change/stable	high
Level of investments(q3)	0	04	11
Turn over level(q4)	0	04	11
Level of expenses incurred(q6)	0	09	06



Analysis

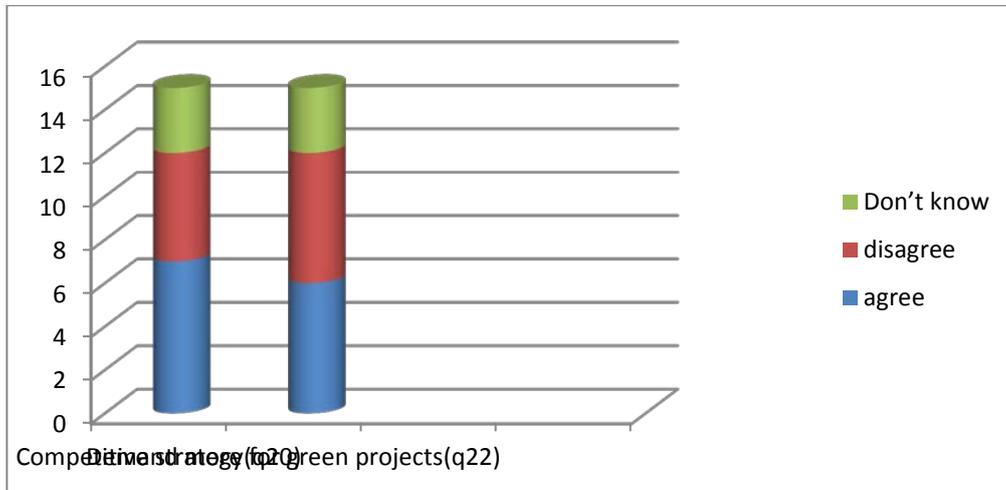
The above table and chart shows the non green companies level of investment, turn over level and the level of expenses incurred.

Interpretation

The above analysis shows the investment level, their turn over level and their expenses of the non green companies and their growth which will be compared with that of green companies.

Table 7: Showing Whether Green Concept A Competitive Strategy And Whether People Prefer More Of Green Projects.

Questions\options	agree	disagree	Don't know
Competitive strategy(q20)	07	05	03
Demand more for green projects(q22)	06	06	03



Analysis

The above chart and table shows the views of the non green companies on green concept whether it is competitive strategy and demand is more for green concept.

Interpretation

From the above analysis the views of non green companies on green concept is been analyzed. Here the respondents of the non green companies equally agree and disagree that green concept is a competitive strategy and there is more demand for such projects. And some of them do not have any idea on this concept.

Testing of hypothesis

The below mentioned concepts were used as variables to prove the determined hypothesis. For the analysis two types of statistical tools have been used- Chi square and Independent t test. The categorical variables were analyzed using chi square test and continuous variables were analyzed using t test. There are six variables used for the testing in which three were categorical and two were continuous

Chi-square test

Three variables are been chosen for this testing. They are:

- Value of the project
- Investments
- Expenses

1) Chi-square test was used to analyze the association between the value of the projects and the adaptation of green concept by the green building companies.

Table 8: Showing The Respondents About The Value Of The Projects

Companies\options	yes	no
Green companies	13(86.67%)	2(13.33%)
Non green companies	11(73.3%)	4(26.7%)

The above table represents the respondents of green and non green companies giving their opinion whether green concepts increase the value of the firm. From the above table it is known that thirteen respondents of green companies and eleven of non green companies agree that there is increase in value of the projects due to green concept and two respondents of green companies and four respondents of non green companies disagree that there is increase in value of projects. To prove this chi-square testing is used. As per the test it is found that there is no statistically significant association between the value of the projects and the adaptation of green concept, $p=0.360$. But as per the survey majority of the respondents agree that the value of the projects increased due to the green concept.

2) The chi-square test was used to analyze the association between increase in investments and the green projects.

Table 9: Showing The Respondents About The Increase In Investments

Companies\options	yes	no
Green companies	15(100%)	0
Non green companies	8(53.33%)	7(46.67%)

The above table represents the respondents of green and non green companies giving their view whether there is increase in investments due to green concept. From the data collected it is found that all the respondents of green companies and eight respondents of non green companies agree that there increase in investments in companies due to green concept adaptation. Since majority agrees for it and all respondents of green companies' views are constant testing did not give any results. Therefore according to the evaluation of the data collected, shows that majority gives a positive answer, it can be concluded that there is increase in inflow of investments in companies due to green concept adaptation.

Table 9a: Showing The Statistical Value Of The Chi-Square Test

Chi- Square

	value
Pearson Chi-square	
N of valid cases	15

No statistics were computed because there was only one response for one company.

3) The chi square test was used to find the association between the increase in expenses and the adaptation of green concept.

Table 10: Showing The Data Of Respondents For Increase In Expenses

Companies\options	yes	no
Green companies	9(60%)	6(40%)
Non green companies	7(46.67%)	8(53.33%)

The above table indicates the respondents of green and non green companies giving their views whether there is increase in expenses due to green projects. Six among green respondents and eight among non green respondent think that expenses do not increase due to green projects and nine respondents on green companies and seven of non green companies think that expenses increase due to green projects. From the chi-square test we conclude that:

Table 10a: Showing The Result Of The Chi-Square Test.

	p-value
Pearson chi-square	0.003

The calculated value is less than 0.05 which indicates that there is statistically significant association between the increase in expenses and the adaptation of green concept. There is increase in expenses in the companies in which green concept was adapted..

Independent t-test to compare the mean values between groups:

Two variables were chosen for the t-test. They are:

- Sales increase
- profits
- Return on investments

- 1) Independent t- test is been used to analyze whether there is increase in sales of green companies than that of non green companies

Table 11: Showing The Data For Sales Increase In Percentage

Green companies	Non green companies
25%	10%
22%	5%
24%	7%
23%	12%
18%	11%

The above table shows the increase in sales of green and non green companies which is used for analysis. From the t-test performed we conclude that:

Table 11a: Results For The t-Test

	p value
Sales increase	< 0.05

The probability is less than 0.05 which indicates that there is statistically significant difference in the sales increase of the two companies. We conclude that green buildings' sales have a higher % of increase than that of non green companies.

- 2) The second variable used for t-test is profits. The profits of the companies are given below (in million):

Table 12: Showing The Data For The Profits Of The Companies(In Million)

Green companies	Non green companies
6003	3886
5842	1260
7623	2619
8640	1991
5970	2306

From the independent t-test performed we conclude that:

Table 12a: Showing The Results Of T-Test

	p value
Profits	< 0.05

Since the probability value is less than 0.05 we can conclude that there is statistically significant difference among the profits of green and non green companies. We can say that the profits of green building companies are comparatively more than that of non green companies.

But the analysis on profits will not be able to give an accurate conclusion whether green building companies are high profitable than that of non green companies. So to get an accurate conclusion return on investments of both the companies were calculated and analyzed by applying independent t-test.

- 3) Return on investments (ROI) of both the companies are calculated by the below formula:

$$\text{ROI} = \frac{\text{Profits of the company}}{\text{Investment}} \times 100$$

Investments

Below tables show the ROI of both green and non green companies:

Table13: Showing The Data For ROI

Green companies	Non green companies
67.12%	36.16%
63.31%	25.56%
69.61%	-8.52%
65.23%	20.17%
64.11%	-10.23%

The above information is used for the independent t-test.

Table13a: Results For The t-Test

	P value
Return on investments	< 0.05

From the analysis we concluded that there is statistically significance difference between green and non green companies since the probability is less than 0.05. It is clear that the return on investments of green companies is higher than that of non green companies.

Therefore, from the above all analysis performed the hypothesis of the project has been proved, which supports the green building concept. It is concluded that there is financial growth of companies due to green projects under taken by the companies in considering the above variables, which in turn shows there is statistically significance difference between green and non green companies.

Conclusion

Buildings are one of the reasons in creating an adverse state in the environment by their wastes and emissions. To over come these, green building concept must be taken up the companies. Green buildings play a vital role in the protection of the environment. It has various attributes which acts as an helping hand for the companies, customers, people as well as environment. It is beneficial on all aspects around it. Green building is very benefited financially, economically, productivity and protection of environment. Green building concept in India is on the process of flourishing. If green buildings are developed as many in number, this will lead the company to a peace full living and also increase the standard of the builders. Tax concession on green building will encourage green builders to construct more such buildings which invariably contribute to the environment protection. Green building concept at present looks expensive but when compared the genis and benefits are higher. When green building concept flourishes the cost of the green building implementation will automatically reduce.

References:

- C. R. Kothari (Second Edition, 2004) Reprint, 2010, "Research Methodology Methods And Techniques", New Age International (P) Limited Publishers, Delhi.
- Dr. S. P. Gupta (Forty First Edition, 2011), "Statistical Methods", Sultan Chand & Sons, Educational Publishers, New Delhi
- D. K. Bhattacharya (2005), "Research Methodology", AnuragJain for Excel Books, New Delhi.
- Dr. S. L. Gupta And Hitesh Gupta (Second Edition, 2011), Reprint 2012, "Research Methodology, Text And Cases With SPSS Applications", International Book House Pvt. Ltd, New Delhi.
- Dr. S. L. Gupta And Hitesh Gupta (Second Edition 2011) Reprint 2012, "SPSS 17.0 For Researchers", International Book House Pvt. Ltd, New Delhi.

Eric R. Shamp, Aia LEED AP (2003), “Basic, No-Cost Green Building Strategies”, The American Institute Of Architects Bp 18.11.03 June 2003.

GeofSyphers, Mara Baum, Darren, Wesley Sullens (2003), “Managing The Costs Of Green Building” , Report By State And Consumer Service Agency Partnered With California State.

Peter Morris, Davis Langdon, “The Green Issue Features”, PREA Quarterly, Summer 2007.

Greg Kats, Capital E (2003), “The Cost And Financial Benefits Of Green Building” , Report To California’s Sustainable Building Task Force.

Melissa O’Mara, A White Paper, June 2012, “Why Invest In High-Performance Green Buildings?”

SinemKorkmaz, May 2009, Istanbul, Turkey, “A Review Og Green Building Movements Timelines In Developed And Developing Countries To Build An International Adoption Framework”

Ed Bartlett & Nigel Howard, October 2010, “Informing The Decision Makers On The Cost And Value Of Green Building”

Nicklaus Kohler, October 2010, “The Relevance Of Green Building Challenge: An Observer’s Perspective”

Joel Ann Todd, 2010, “Comparative Assessment Of Environment Performance Tools And The Role Of The Green Building Challenges”

Judith Heerwagen, 2010, “Green Building And Organizational Success”

Robert Riesa, February 2007, “The Economic Benefits Of Green Buildings: A Comprehensive Case Study”

Www.Ssrn.Com

Http://J-Gate.Informindia.Co.In/

Http://Iimkresearch.Blogspot.In/

Http://Www.Elibrary.Imf.Org/

Http://Www.Papersinvited.Com/

Www.Embassyindia.Com

Www.Prestigegroups.Com

Www.Adrashgroups.Com

Www.Dreamsinfra.Com

Www.Mahendragroups.Com

Www.Totalenvironment.Com

Www.A&Tconstructions.Com

Www.Aishwaryaconstructions.Com

FACTORS OF DEBRISFLOW ORIGINATION IN THE SOUTH-WEST AREA OF LAKE BAIKAL

Valerii Kirillovich Laperdin

Doctor of Geologo-Mineralogical Sciences, Institute of Earth Crust,
Siberian Branch of Russian Academy of Sciences

Abstract

The structure of mud-rock streams (debris flow) in the south of Baikal region, as well as the recurrence of events, depend on the seismic and tectonic activity, morphology and relief (difference in elevation in the small area between the Lake Baikal's brink and the watershed, diverse geological structure of solid rocks, their physical-mechanical and physical-chemical characteristics in relation to weathering agents, as well as the degree of rock crush; peculiarities of heat- and humidity conditions in the area (the rates and distribution of atmospheric precipitation, according to season, elevation zones and within the long-term cycle.

Keywords: Debris flow, water flooding, fluid soil creep, debris flow control dikes, earthquakes, log jam, clogging of river

Introduction

In the south-west of the Lake Baikal area, the settlements Sludyanka and Baikalsk, as well as numerous health resorts and outdoor recreation and sports facilities are located in the region of debris flow hazard, that presents the highest risk in summer periods. These conditions resemble those of Alma-Ata, the former capital of Kazakhstan. In the narrow area of Lake Baikal shore, numerous engineering structures such as railway, motor-roads, connection lines and the electric power transmission lines are situated, which are of vital importance for development of the economic ties of Russia and the Pacific countries. In addition, the lying of the Russia-China gas pipeline is projected here. The developing infrastructure of Baikal region will require the special measures for protection against hazardous geological processes such as rockfall, shore abrasion, fluid soil creep, snow and stone avalanche. The most hazardous phenomena are presented by mud-stone streams of the 1600-2500 kg/m³ rate, derived silt (1600 kg/m³) and water flows. The disastrous debris flow incidents occur generally in the areas of river channels: in the 20th century, for example, the debris flow were recorded in 1863, 1889, 1903, 1915, 1924, 1927, 1932, 1934, 1935, 1938, 1940, 1951, 1955, 1959, 1960, 1962 and 1971; however, no debris flow occurred in the region during the period of 1971-2013. Within the recent 43 years, the cases of clogging of river channels by rocks and fallen trees were recorded; breaking of these obstacles could provoke the disastrous debris flow. Because of the certain calm during the recent years, the planned construction of special dams for debris flow protection was suspended.

Seismic causes

Owing to high seismicity of the territory located in the Baikal rift zone, as well as the combined effect of tectonic deformation (extension and contraction) in the sedimentary cover and crystalline base, which caused the rise of Khamar-Daban ridge and settling of the Baikal basin, the block faulted mountains were formed in the southern area of the Baikal region; this

is one of factors determining the intensity of seismic incidents (Seismotectonics ...1968) which in some places exceed the 9 points magnitude (by Richter scale).

The strongest earthquakes were recorded in 1950, 1953, 1957, 1961, 1999 and 2008. Besides, the number of paleo- and seismic dislocations (known as Torskaya, Snezhnaya, Babkha, Khara-Murin etc.) as well as four nameless structures in the Khamar-Daban ridge's watershed area, are marked by high density of earthquakes (up to 11 points) magnitude in the past (Ruzhich 1972; Seismic zoning... 1977). Strong earth tremor in winter and spring periods provoke the massive stone, snow and fallen tree avalanche, which in some cases entrain up to 40% of stone and wood fragments. Clogging of the river channels can be the cause of arising debris streams. The occurrence of substantial caving forms of gravitation and seismic-gravitation origin in basins of rivers Pereyemnaya, Selenginka, Gromotukha, Babkha and others should speak to the truth of our opinion (Khromovskih1965). In this context, the specific role of seismic factor is bound up with the accumulation of the solid component of debris flow phenomenon and formation of dammed lakes in river channels as the consequence of earthquakes, rockfall, fluid soil slip, faults and avalanche. A number of rupture dislocations in the areas of Glavny Sayansky and Khamar-Daban faults which indicate the zones of crust stress, can be regarded as potential earthquake foci.

The seismic-tectonical conditions determine the high relief energy in the territory; the differential movements in the area of Khamar-Daban ridge and trough of Lake Baikal disturb the base level of erosion and lead to intense denudation. The river system is located in the zones of weakness, due to which the territory is marked by well-defined alternate arrangement of high-dipping and gently pitching thalweg areas and canyon-like valleys. These conditions induce the intensive stream. The extent of debris flow hazard is determined by the ruggedness of relief; the maximum height of Khamar-Daban ridge is 2100 m, with the elevation >1000 m a.s.l.; the mountain watershed is located at the 10-23 km distance from the Lake Baikal's shore. Considerable difference in elevation, short waterways and steep slopes determine the rates of flow and accumulation of precipitated water; these factors contribute to formation of rapid water streams of high erosion and carrying capacity. The structure of mountainous area is composed of Precambrian igneous (granitoides) and metamorphic (marble, gneiss) rocks, Cenozoic basalts confined to the ridge watershed area, and Quaternary deposits. The eluvial-deluvial sediments cover the ridge slopes, where the bedrocks intensely weather and displace downslope. The piedmont and high terraces of the Baikal area are composed of Neogene deposits overlain by 20-30 m-thick alluvial and glacial accumulations. The proluvial masses (gravel) accumulate in flattened areas of river channels. The dependence of debris flow initiation on the geological structure is determined by the dominating occurrence of metamorphic rocks (gneiss, shale, limestone, marble etc.). The products of weathering consist of small fractions which gradually increase up to 0.4 m and can be easily involved into the debris streams. At the heads of mountain rivers and streams, the glacial deposits presented by frontal and rarely marginal moraines of 25-30 m apparent thickness can be met. The products of rock weathering and moraine material can be easily washed-out and involved into the debris flow, contributing thus to its solid component.

Heavy rainfall events

The origination of debris flow is caused to a large extent by heavy rains (over 1.0 mm/min, the total amount of precipitation reaching 50-100 mm/day, and about 400 mm/day in the context of incessant rainfall). According to the data obtained by the Khamar-Daban Meteorological Service, the annual precipitation rate amounts to 1400 mm in the area of Khamar-Daban river heads, and about 550-600 mm in the coast zone. The major amount of atmospheric precipitation (70-75%) is recorded in July due to the cyclonic phenomena. Definite meteorological parameters inducing the origination of debris flow should be noted.

For example, in the southern part of the Baikal region the precipitation maximum of 195 mm/day was recorded in 1934 and 152 mm/day in 1960; in 1971 the Khamar-Daban Meteorological Service recorded the precipitation amount of 250 mm/day, 203 mm/day in the area of Utulik, and 197 mm/day in Baikalsk. The recorded maximum precipitation intensity was 0.62-0.72 mm/min (Arsentyev et al. 1972). The normal trend in the rainfall pattern in this region is that the intensity increases with the duration; this is one of the main factors taken into account in the short-term forecast of debris flow events. In 1971, a number of dams, bridges and pipelines were damaged by intensive floods and debris streams; the light-weight structures were washed-off and carried into the Lake Baikal, whereas the heavy ones clogged the river watercourses. These events have revealed the shortage of the existing protection measures in Baikalsk, and can be regarded as a sort of disaster typical of the Baikal region.

Debris flow mitigation measures

Before the Sludyanka-Baikalsk motor-road was constructed, the section of the railway which runs in parallel along the Lake Baikal shore was subject to repeating mud-rock streams from the mountain slopes; the debris masses could easily damage the railway and reach the Baikal shore. In the course of the laying of motor-road, the special dikes were constructed in the areas of debris flow active rivers. The efficiency of these protection measures is not yet proved to the necessary extent. In the case of damage or clogging of the dams, the recondition works would be as expensive as the dam construction itself. Besides, the accumulation of loose material on the slopes and in river channels can disturb the natural transport of weathered products to the lake shore and prevent the beach formation. In 1971, for example, the cases of flush flooding induced the transport of 30-100 thousands m³ of weak material by river water. The pecuniary loss of US \$ 200 millions. proved the urgent need for construction of the debris flow dams for protection of the settlements Sludyanka, Baikalsk, Sukhoi Ruchei and others. The present situation requires the up-dating of existing as well as development of more advanced measures; in the designing of debris flow control dikes, the clearance for free transport of debris mass to the Lake Baikal should be provided (as with the case of Sludyanka-river channel). In the area of Baikalsk, the 22 m-high scree-gravel dam at the Kharlakhta-river and the debris mass storage capacity (482000 m³), for the subsequent discharge by special dikes were designed. During 1990-1996, only 14% of the whole sum assigned for the Project (US \$ 20 millions) have been expended. The debris-flood control measures should be complex, since the settlement Baikalsk is confined to rivers Solzan and Babkha; besides, the Kharlakhta-river and the streams Krasny Kluch and Bolotny run across the settlement. Even the geographical location of Baikalsk makes the construction of debris control dams urgent. Peculiar consideration should be given to the study of fluid soil creep phenomenon (mud-rock streams containing the wood fragments), that are the cause of debris flow initiation and blocking of bridge apertures. The existing measures of debris flow control decrease to a certain extent the hazard to buildings and persons, as well as to linear structures, being however, not entirely reliable.

Conclusion

The problem of debris flow control is of vital importance not only for the areas of Sludyanka, Irkutsk and Baikalsk, but also for many other territories of Russia. At present, the foci of debris flow are recorded in numerous river channels. Therefore, the forecast of debris flow events should base on the consideration of the meteorological conditions. The permanent and comprehensive investigation of the debris flow phenomenon is required for the updating of the debris flow control measures, as well as assessment of the degree of vulnerability, hazard and risks

The disposition of civil and industrial structures close to the Lake Baikal is accounted for the relief character of the territory and the abundance of the freshwater resources. However, the natural conditions of the area restricting the economical development of the region, benefit to the certain protection against the unwarranted human impact upon the Lake Baikal's environment.

References :

- Arsentyev, G.I., Demina, G.I. Kara, E. 1972. The summer floods of 1971 in the Baikal region, and their consequences. *Flooding events in the Far East region and measures of their mitigation*. Vladivostok. 26-29 (in Russian).
- Khromovskih, V.S. 1965. *Seismogeology of the southern Baikal region*. Moscow: Nauka. 121 p. (in Russian).
- Ruzhich, V.V. 1972. On the dynamics of tectonical development of the Baikal region in Cenozoic. *Russian Geology and Geophysics* 4:122-126 (in Russian).
- Seismotectonics and seismicity of the rift system of Baikal region*. 1968. Ed. by V.P.Solonenko. Moscow: Nauka. 220 p. (in Russian).
- The seismic zoning in East Siberia and its geologic-geophysical Fundamentals*. 1977. Ed. by V.P.Solonenko. Novosibirsk: Nauka. 303 p. (in Russian).

ETYMOLOGY AND ECOLOGY : CAN ETYMOLOGY BE AN AID IN ECOLOGICAL EDUCATION? THE CASE OF THE SARDINIAN WORD *MITSA*.

Marinella Lörinczi, Prof.
University of Cagliari, Italy

Abstract

In Sardinia, hilly areas cover 67.9% of its land. Its climate is prevalently Mediterranean, with prolonged summer drought and mild winters. Of the more than thirty thousand springs found in Sardinia, most fall into the category of small. Anthropization of springs, which is common in settled areas and in their vicinity, has occurred even at the springs scattered over the countryside, in places known only to the experts. In the Sardinian language we find many different names for springs: *mitsa* is typical of the central southern area. I will reconsider the discussion of the etymology of *mitsa* (Guarnerio, Wagner, Mensching). Mensching rejects the prestigious etymology of Wagner who argued for a Punic origin of this word. His final hypothesis is that *mitsa* may derive from an endocentric Latin/Romance syntagm: TERRA MITIA. I will support this hypothesis on the basis of the cognitive motivation of the meaning. As direct knowledge of the object and its environment are in some cases of fundamental importance in understanding the origin of nouns and changes in their meanings, this kind of research can be embodied in the discipline that from the '90s onwards is referred to as ecolinguistics.

Keywords: Sardinian language, etymology, ecology

Introduction

QuickTime™ and a
decompressor
are needed to see this picture.

Italy

http://digilander.libero.it/spillo65/Regioni%20d'Italia/Mappa_Italia.html

Sardinia's mean altitude is 334 meters above sea level, with a prevalence of hilly areas covering 67.9% of its land; plains represent 13.6% and mountains 18.5% (Enne, Iannetta, Zucca 2006: 31). Although the climate is prevalently Mediterranean, with prolonged summer

drought and mild winters, some areas in the interior are considered similar to continental climates. Its insularity and position between the European and African continents with strong winds determine both its most important climatic features and great variability (<http://it.wikipedia.org/wiki/Sardegna#Clima>). This climatic variability causes a changing distribution of rain and snowfall. Following are the main features of the climate as classified in W. Köppen's method (<http://www.passiflora.it/zoneKoppen.htm>: green=temperate subcontinental, yellow=temperate sublittoral, orange=temperate hot, red=temperate subtropical).

QuickTime™ and a
decompressor
are needed to see this picture.

Sardinia

Main Text

Briefly stated, rainfall is scanty, with high rates of evaporation (Enne, Iannetta, Zucca 2006: 35). In such a geomorphological context, these data are significant if we consider that of the more than thirty thousand springs found in Sardinia, most fall into the category of small (less than 2 litres/second; Enne, Iannetta, Zucca 2006: 34). They are sometimes seasonal and disappear at the beginning of summer. These small springs, which are to be found everywhere, have, and especially have had, great importance for the survival of wild animals and strictly local human activities. Hence, the human efforts to protect, improve and stabilize the accumulation of water of these springs, up to the point of their becoming sacred places in the Bronze Age (*sacred wells* in Sardinia), that is, anthropization of springs occurred almost in all cases.

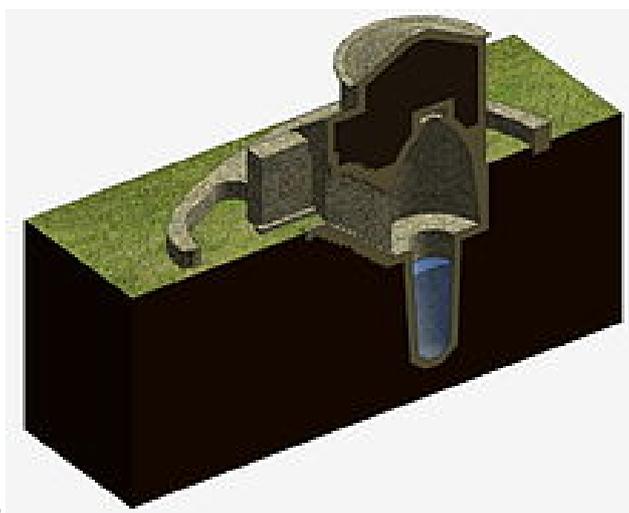


1



2

↑ 1 – 2 The *Funtana Coberta* “Covered Well”, nuragic sacred well, 1200 - 850 B.C., with a depth of over 5 meters; it is located on land belonging to the village of Ballao (province of Cagliari in the southeast centre of the island, altitude 90 m a.s.l., at the foot of a high hill); the second photo shows the interior with water (<https://www.flickr.com/photos/desmobts/4967624328/>



3

↑ while the third shows a reconstruction of it. (http://it.wikipedia.org/wiki/Pozzo_sacro_di_Funtana_Coberta).

QuickTime™ and a
decompressor
are needed to see this picture.

QuickTime™ and a
decompressor
are needed to see this picture.

4

4 *Mitsa Fanèuas*, a small spring with human works in the mountains of the Sulcis region in the southwest of the island; December 2013; photo by ML.

5 *Mitsa*, a spring with no human intervention, originating a puddle, a stream and small waterfall (Castiadas, CA, extreme southeast of Sardinia); <http://www.castiadasonline.it/natura/sorgenti.htm>.

5

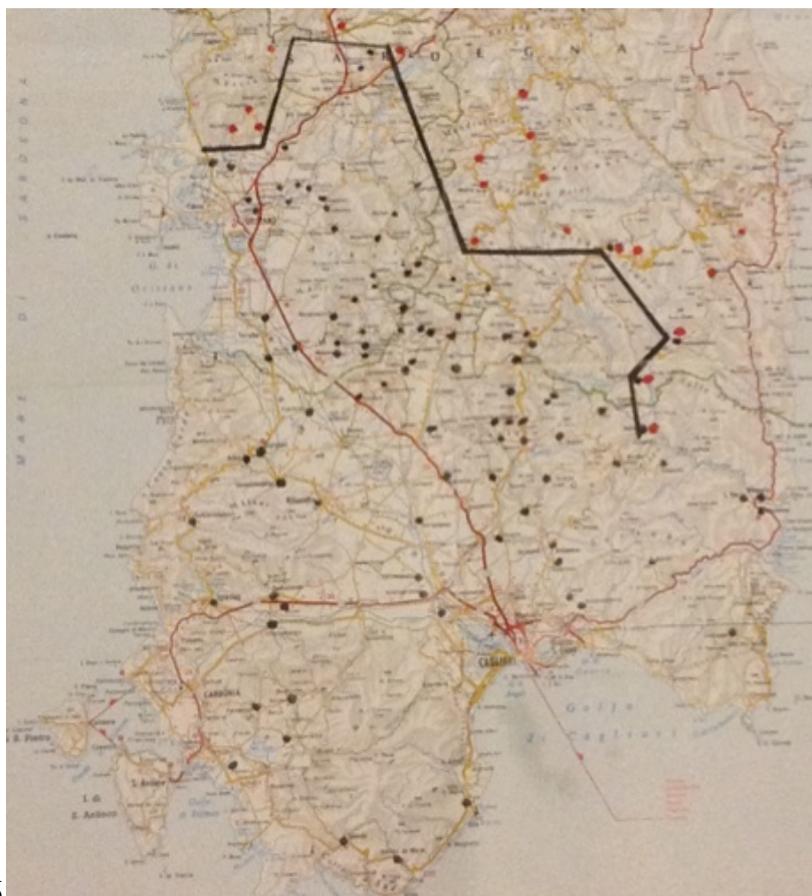
Anthropization of springs, which is common in settled areas and in their vicinity, has occurred even at the springs scattered over the countryside, in places known only to the experts (farmers, shepherds, hunters, forest rangers, but today even specialized tourist guides). With changes and improvements in the supply of water with the creation of artificial lakes starting from 1924, many of these springs (in Italian *fontanile* - fountain) excavated and cared for by humans continue to lose their importance and are no longer maintained. Traces of those that have disappeared for different reasons often remain in place names. But not every spontaneous leakage of water has a name; the smaller ones may disappear or be eliminated by human intervention, leaving nothing but a feeble recollection in the minds of those over sixty years of age, a memory destined to disappear over time. In the words of an inhabitant of the hilly central southern region of the island (<http://it.wikipedia.org/wiki/Trexenta>), Mr. Antonino Pusceddu (1937 - 2013) from Guamaggiore (CA): “And here the road certainly wasn't paved, it was a dirt road and sometimes there were little springs [...] the water even flowed in streams. I don't know why, but they don't flow anymore. In this part of the year there was always a trickle along the side of the road, but now [...] it's all dry.” (quoted in Pusceddu 2014). Or we can read this other description: “Bearing witness to the importance in the past of what is now a very slight presence of fresh water, near the canebrake is a well and a drinking trough, now almost entirely hidden by a large lentisk bush. When Cannesisa was a place with no settlements it was used for watering the sheep in a nearby sheepcote, which is indicated on the old maps.” (http://torredellestelle.blog.tiscali.it/2010/03/28/cannesisa-incendiato-il-canneto-e-le-tamerici-vicino-agli-scogli-nel-lato-sud-est/?doing_wp_cron;2010).

The springs mentioned in these two quotes are *risorgive* (in Italian, <http://it.wikipedia.org/wiki/Risorgiva>), whose equivalent in English, *karst spring*, is misleading. A better equivalent is the Spanish *resurgencia*. Generally speaking, “A spring is any natural situation where water flows to the surface of the earth from underground. Thus, a spring is a site where the aquifer surface meets the ground surface.”

([http://en.wikipedia.org/wiki/Spring_\(hydrology\)](http://en.wikipedia.org/wiki/Spring_(hydrology))) A *risorgiva/resurgencia* is created by groundwater that may come to the surface not only at a specific point, but on level ground with porous or grainy soil may also be diffuse and form a spring or puddle or a marshy area varying in size.

My intention is to deal with the origin of the Sardinian name for this kind of spring, which is the most mysterious kind and the least observable in its natural state with no anthropization. To find these, one needs the help of an experienced guide and must penetrate into areas not frequented by tourists but which are fascinating from the standpoint of nature and ecology as well as rich in human history. In such a way we can bring together the history of the object with the history of its name, thus arriving at an understanding of why such a name was given to it. The theme of this study is connected with that of previous studies in which I discussed the southern Sardinian word [akwa] meaning “water” and the names of birds that populate Sardinia's wetlands (Lörinczi 2002, 2008; see also 2013).

The *mítsa*. In the Sardinian language we find many different names for springs. *Mitsa*, with its local variations (*midza*, *miθθa*, *migia*, *mintsa*, *miltsa*), is typical of the central southern area roughly bounded by the black segmented line on the map. On this map (6), showing the central and southern parts of Sardinia, the black dots indicate the many findings of the noun *mitsa* present in proper nouns (hydronyms and micro-toponyms). The red dots mark the beginning of the area where, according to a survey, the word *mitsa* is no longer present. Along the final three southern segments we find the coexistence of *mitsa* and *funtana* “spring” (red and black dots side by side indicate a sort of transition zone from *mitsa* to other names for springs: *funtana* etc.). ↓



6

↑ The area with the black dots indicates the presence of proper names containing *mitsa* but not always the presence of actual springs, since some of them may have disappeared

owing to natural or human causes. It is also reasonable to believe that the area where *mitsa* is present in proper names coincides almost perfectly with the diffusion of the word *mitsa* as a common noun, although along the boundary there may be discrepancies caused also by the relative vagueness of the meaning of the word in question, about which we shall speak later on.

The documents in which I found proper nouns containing *mitsa* are 1. the geo-onomastic database of the Sardinian regional government (Sardegna Geoportale <http://www.sardegna-geoportale.it/index.html>) > Strumenti > Ricerca toponimi, with over 400 findings of all kinds: springs, roads and microplaces, streams etc.) and the list of microtoponyms compiled by the State Archives in Cagliari (

<http://www.archivio-statocagliari.it/archivio2/toponimi.pdf>, containing 761 sheets with over 100 presences of *mitsa*). On the map above are indicated roughly 75% of the places named in the second list, that is, those that are certainly villages, while others were found by consulting the internet. The areas delimited in the two databases show a good correspondence.

Other Sardinian names for "spring" are *funtana* (with its phonetic variations) and *bena* (with phonetic variations), both of Latin origin. *Funtana* and *bena* are to be found also in the *mitsa* area, not as a "spring" but the former as a "well, a spring dug by humans", and the latter as a "vein of water". Already from these data we can see that the words for "spring", if taken all together, can assume quite imprecise meanings that fade into one another. Overall, what we have is that from "spring" we come to "marshy area adjacent to the spring", to the "stream of water running off from a spring", then to the "well", to the "spring dug by humans". To the primary names we must add the derived ones with suffixes or compound nouns such as *mitsadroxu* "water puddle" (Wagner, *DES*); *mitzarxu* "puddle, spring" (Puddu); (*ab*)*benadroxu*, *venadroxu*, *benale*, *benardzu*, *benatzu*, *benàtile*, *benatinu* (Puddu) and other names for "spring puddle, where plants can grow, a sort of small marsh" (at this point the meanings of *mitsa* and *bena* encounter that of "marsh", which has specific names). The compounds *mits'e s'akua* (at Settimo San Pietro, CA), *Mitza Ena/Uena* (at Palmas Arborea and Burcei, OR, CA) would appear to be tautological ("spring of water", "spring spring"). The anonymous stream of spring water that may form along a road until the beginning of the dry season can be indicated as *abenadroxu* (<*bena*>) in the southern dialects of the island. (Note: Sardinian orthographic <x> should be read as the French <j>.)

Wagner's definition of *mitsa* is ambiguous or complex: "spring" but also "spring puddle". These meanings describe water that comes out of the earth spontaneously with no digging involved and which can immediately assume a roundish shape like a puddle.

A spring of this kind can be seen in the photo below (7); it was taken on a basaltic plateau (the Giara di Gesturi) in the southern central part of the island (mean altitude approximately 550 m a.s.l., 45 km²). On the Giara there are at least seven *mitsas* and several *funtanas*. Without an expert naturalist as a guide, in this case Mr Roberto Sanna, it would be impossible to find this *mitsa* and identify it.

7 - *Mitsa of spring water on the Giara di Gesturi*, 2 March 2014, after a period of abundant rainfall. Photo by ML. The *mitsa* is at the point where in the pond (formed by a mixture of rain and spring water) we can see a greyish extension of calm water at the base of the bushes (the colour is probably the result of the mud brought to the surface or created there by the spring water). Disregarding seasonal water characteristics, from a spring of this kind on flat land a puddle or pond forms immediately; to keep the water clean and clear and allow it to accumulate, some work by humans is called for. If the rainwater had evaporated we would see only muddy water. In muddy puddles of this kind the wild boar love to wallow and this makes them still muddier; for this reason the water is artificially channelled into protected drinking troughs for sheep and other animals. ↓

QuickTime™ and a
decompressor
are needed to see this picture.

7

8The basaltic plateau *Giara di Gesturi* seen from the south; 10 May 2014; photo by ML. ↓



Mr Efsio Giglio from Guasila (Trexenta, historical region at the centre of the southern half of the island) is a man with a great knowledge of the countryside since he is a breeder, farmer and also a water expert. From his viewpoint, in a spring at low altitude (like the one found more or less where the last panoramic photo was taken) first comes the *mitsadroxu* or *benarxu* “puddle formed by the spring” (two words deriving from *mitsa* and *bena*), that is, the spring in its natural state surrounded by plants and mud and so also turbid and even dangerous if the mud is deep, not yet worked by humans. Moreover, the *mitsadroxu* is not seasonal but perennial. For Mr Giglio, a *mitsa* is a spring that has been cleaned, furnished and made usable by and for humans, when the spring water is clear and able to be taken (the Italian word for it is *fontanile* = fountain). In this second exploration, in May 2014, the expert guide was necessary since the vegetation covers the springs, as can be seen in these photos: **9** - **10** (beyond this flat land a hill rises to a height of 360 meters a.s.l.); the water can reach a depth of two meters because the spring has been cleaned and reinforced with masonry walls); 10 May 2014; photos by ML. ↓

QuickTime™ and a
decompressor
are needed to see this picture.

9

QuickTime™ and a
decompressor
are needed to see this picture.

10

Other quite interesting springs can be seen in cavities in the rock, either natural or of human making. Here, not far from the spring shown in the previous photos, but on the other side of the hill, we see **(11)** *Sa forredda de akwa* (literally “a hearth dug in the ground, full of water; a basin full of water” which is quite cool even in summer; photo taken by Davide Giglio with his cell phone). Another is a seasonal *mitsa* **(12 - 14)**, a spring that up to June fills the lower part (excavated to a depth of about 20 cm) of a hypogeal grave dating from the 4th-3rd millennium BC, which is found in a hilly area at the foot of the mountains of Sinnai (a town in the south of the island, about 20 km from Cagliari).

QuickTime™ and a
decompressor
are needed to see this picture.

11

QuickTime™ and a
decompressor
are needed to see this picture.

QuickTime™ and a
decompressor
are needed to see this picture.

QuickTime™ and a
decompressor
are needed to see this picture.

12-13-14

↑**12 - 14** *S'akua de is dolus* “The water of pains” (that is, a pain remedy, according to the local legend). It is inside a hypogeal grave of the 4th-3rd millennium BC (in the countryside of Settimo San Pietro in the province of Cagliari, southern Sardinia), which is fed by seasonal/winter springs; photo by ML, December 2013.

(<http://www.monumentiaperti.com/it/default/2470/Domus-de-Janus-de-S-acqua-Is-Dolus.html>; http://it.wikipedia.org/wiki/S'acqua_'e_is_dolus
<http://www.traccedisardegna.it/archeologia/domus-de-janas-sacqua-dolus>
http://it.worldmapz.com/photo/312588_en.htm)

These two springs in the rock (**11** and **12 - 14**) are too different to be considered true *mitsas* even though they are in the technical sense; indeed, they have special names. *Mitsa*, taking into account the applications of the term, is used prevalently where the flow of water immediately creates a muddy puddle or the water becomes turbid if moved. And this brings us back to the question of the etymology of the Sardinian word.

Discussion of the etymology of *mitsa*. The first discussion was summarized by M. L.

Wagner in the entry of the *DES* and *La lingua sarda* (149-151). In the opinion of P. E. Guarnerio (in 1906), *mitsa* derives from the Latin *MÎTIA, feminine gender formed from the adjective MÎTIS “sweet, mature, calm, mild, courteous and so on” (N.B.: MITIA, MITIS etc., first I long). As the key to the phonetic and semantic vicissitudes of the Sardinian word, Guarnerio traces it to the Italian adjective *mézzo* [mettso] “said of [pulpy] fruit close to the
 W305a305g305n305e305r305,305 305h305o305w305e305v305e305r305,305
 305r305e305f305u305s305e305d305 305t305h305e305
 305d305e305r305i305v305a305t305i305o305n305 305o305f305 305mitsa305
 305f305r305o305m305 305*305MÎTIA ma305d305e305 305b305y305
 305G305u305a305r305n305e305r305i305o305 305(305"305y305o305u305
 305c305a305n305n305o305t305 305s305e305e305 305a305n305y305
 305i305d305e305o305l305o305g305i305c305a305l305 305l305i305n305k305
 305[305i305.e.305,305 305s305e305m305a305n305t305i305c305 305a305n305d305
 305m305o305t305i305v305a305t305i305o305n305a305l305]305
 305b305e305t305w305e305e305n305 305'305s305o305f305t305'305 305a305n305d305
 305'305s305o305u305r305c305e305'305"305)305 305a305n305d305
 305a305r305g305u305e305d305,305 305f305r305o305m305 305l305930553055305
 305o305n305w305a305r305d305s305,305 305t305h305e305 P305u305n305i305c305
 305(305S305e305m305i305t305i305c305) 305o305r305i305g305i305n305 305 305
 305o305f305 305t305h305e305 305w305o305r305d305.

However, we must also add the simple meaning of “soaked, full of water” of the Italian adjective *mézzo*, according to the entries in the most common Italian dictionaries and, if used as a nominative form, “the rotten part [soft and damp] of a fruit”, “swampy place, mud” (see *Vocabolario della Lingua Italiana* Treccani, 1989).

The Italian *mézzo*, according to Vittorio Pisani (Mensching, 297), comes from the Latin MÎTIUS (neuter comparative of the adjective MÎTIS “sweet, ripe, calm, mild, courteous and so on”). So the meanings of “soaked, full of water”, as well as “swampy place, mud” of the Italian *mézzo* may shed light on the origin and transmission from Latin to Sardinian of the word that has become *mitsa*. These meanings are to be found in Italian from Dante onwards. Dante says: “*Così girammo ... tra la riva secca e 'l mezzo*”, *DC, Inf. VII, 127 – 8; And so, between the dry shore and the swamp, / we circled much of that disgusting pond; transl.* by Henry Wadsworth Longfellow, 1867.)

As G. Mensching points out in the most recent work I have been able to consult, Dante's commentators have several times explained that in the cited verses the noun *mezzo* signifies “a soft and wet place, not hard”, “the opposite of dry”. Subsequently, we also find “drenched (with blood)” and so on. Mensching adds that through modern findings in the Italian dialects, words having the same etymon mean “soaked, impregnated with a liquid, drenched, wet, damp, dripping wet”, “very wet with rain or sweat”, “very ripe / very wet”. For the many other details that further strengthen the “watery” meaning, we refer readers to Mensching's article.

Returning to Guarnerio's hypothesis concerning the origin of the Sardinian *mitsa*, in Latin the adjective MÎTIS means “sweet, ripe (lat. *mollis, maceratus speciatim* [N.B.] *de fructibus maturando mollitis; maturus*, ThLL; Mensching: 297), tender, soft, calm, mild, courteous and so on”. For our discussion, perhaps more pertinent are some meanings of the Latin co-radical verb MÎTIGO, -ARE, that is, “weaken, soften” (besides the more important ones of “ripen, make tender”); these meanings may also have been those of the adjective MÎTIS, especially of the comparative (MÎTIUS) if absolute and intensive (* “softened, made soft by an excess of liquids”) but which are not found in Latin (Latin in the total sense, not only vulgar and/or late), while they (re)appear abundantly in Italian and Sardinian. Particularly interesting is the fact that as an adjective the Italian *mezzo* “too ripe, softened,

rotten, drenched, decomposed-putrefied and so on” is applied mostly to overripe fruit, drenched, dark in colour, rotten, but particularly to pears (which when overripe are soft and watery). How is a fruit when too ripe and rotten on the inside, or when it has fallen to the ground and rotted there? This is the inside of a rotten quince (photo **15**, by ML): ↓

QuickTime™ and a
decompressor
are needed to see this picture.

QuickTime™ and a
decompressor
are needed to see this picture.

15

The resemblance to the wet soil (**16**, part of a photo taken from the web) is evident. It is also evident that country folk, and in the past not only they, were more familiar with rotten fruit than we are today (cfr. Lakoff, Johnson 1980). We can thus hypothesize an analogy between rotting fruit, or more specifically with ground covered with rotten fruit and soil soaked with spring water. Both the fruit and the water are in reality important and significant for humans. Just as rotten fruit or rot in general attracts insects (and certain animals) as food (and for regeneration), the water from springs, especially when it is hard to come by, attracts insects, animals and humans to quench their thirst.

Also on the basis of such a demonstration, which indicates the so-called cognitive *motivation of meaning* (that is, why a word has assumed or developed a determined meaning, what is the conceptual connection in semantic evolution?), we can agree with G. Mensching's argument (*art. cit.*) which rejects, on the basis of the opinion of Semitists, the prestigious etymology of M. L. Wagner, who argued for a Semitic, Punic origin of *mitsa* (despite the etymology of Italian *mezzo* was already clear in the nineteenth century: Tommaseo, Bellini, 1865). Mensching returned to Guarnerio's original etymology and developed the theme in the Romance field and not only that of Sardinia. Thus, his final hypothesis is that the Sardinian *mitsa* may derive from an endocentric syntagm, TERRA MITIA, that is, “water-soaked soil” (*art. cit.*, note 40). With the later ellipsis of the first element, the noun (implicit in the frequent use of the endocentric syntagm; Pronin'ska 2011), we obtain the nominalization of *mitia*, that is, “the soaked, the wet, the drenched” thus “spring/spring water and adjacent ground“. Continuing this line of thought, I have tried to demonstrate the motivation, that is, the relationship between significatum and the extralinguistic object on the basis of the Italian occurrences, which are far more abundant than the Sardinian ones, thus indicating only parallel semantic changes starting from Latin and nothing more (there is absolutely no implication of Italian influence on Sardinian in the case of the word in question).

Conclusion

Etymology and Ecology. Here I shall try to respond to the question in the title. When we are dealing with the names of birds, plants, traditional local place names or the names of tools invented thousands of years ago (such as the knife, the ploughshare, the hammer, the

needle), in-the-field surveys and direct knowledge of the object and its environment are in some cases of fundamental importance in understanding the origin of nouns and changes in their meanings. Today, ethnoscience practices this kind of approach systematically, while linguists do so to a much lesser extent. While an environmental anthropology is now established and we know the histories of the classic linguistic atlases drawn up by "trekking" linguists and dialectologists, investigations in pure historical semantics can follow identical approaches, also in promoting ecological awareness. In the case of my searches as a "tourist" into the reasons behind the meaning of *mitsa*, what I have called "the search for springs" and which I have shared with friends and colleagues, the enthusiastic welcome received even from children during our visits to natural environments that are not visited, or cannot be visited without a guide, has strengthened the conviction of having available another empiric means for creating and spreading knowledge and understanding, both general and specialized: it can be embodied in the discipline that from the '90s onwards is referred to as **ecolinguistics**.

References:

- Battaglia, Salvatore. Grande dizionario della lingua italiana, vol. X (Mee - Moti). Torino: UTET, 1978.
- Enne, Giuseppe, Iannetta, Massimo, and Zucca, Claudio, eds. Caratterizzazione tipologica dei fenomeni di desertificazione nell'Italia meridionale ed insulare. Roma: ENEA, 2006. <http://eprints.uniss.it/2571/>
- Lakoff, George, Johnson, Mark. *Metaphors We Live By*. Chicago and London: The University of Chicago Press. 1980.
- Lörinczi, Marinella. Il libro del fenicottero. Immagini della "Gente rossa" nelle lingue e nelle arti. Cagliari: AM&D Edizioni, 2002.
- Lörinczi, Marinella. Ideologia linguistica e fondamenti di storia della lingua sarda. In Wright, R., ed., *Latin vulgaire - latin tardif VIII*. 8th International Conference on Late and Vulgar Latin, Oxford, 2006. Hildesheim - Zurich - New York: Olms-Weidmann, 2008, 548-559.
- Lörinczi, Marinella. Acque, sorgenti, fontane, paludi, polle, pozze, pozzi ... In quale contesto discutere del sardo-campidanese 'mitsa' ("sorgente, source, fuente/manantial, izvor, Quelle")? In Cefruga, D. O., Lupu, C., and Renzi, L. *Études romanes. Hommages offerts à Florica Dimitrescu et Alexandru Niculescu*. Editura Universitatii din Bucuresti, 2013, II, 485-495.
- Mensching, Guido. Campidanesisch mitza 'Quelle' - punisch oder lateinisch?, in Bollée, A., Kramer, J., eds. *Latinitas et Romanitas*. Festschrift fuer Hans Dieter Bork zum 65. Geburtstag, Bonn: Romanistischer Verlag, 1997, 293-305.
- Pronin'ska, Alexandra. Dall'ellissi anaforica alla riduzione all'interno del sintagma nominale terminologico, *Synergies Pologne* 8, 2011, 203-208. <http://gerflint.fr/Base/Pologne8/proninska.pdf>
- Puddu, Mario. *Dizionario de sa limba e de sa cultura sarda*. Cagliari: Condaghes, 2000. <http://www.dizionario.org/>
- Pusceddu, Antonio Maria. *Come una casa che non abita nessuno. Esperienze del paesaggio rurale nella Sardegna meridionale*. Forthcoming, 2014.
- Tommaseo, Nicoló, Bellini, Bernardo. *Dizionario della lingua italiana*, 1865. Nuova rist. dell'ed. integra. Torino: Unione tipografico-editrice torinese, vol. 4. M-Q, 1929.
- Wagner, Max Leopold. *La lingua sarda. Storia, spirito e forma*. Bern: Francke, 1950 (1997).
- Wagner, Max Leopold. *DES=Dizionario etimologico sardo*. Heidelberg: Winter, 1960-1964.

WETLANDS CONSERVATION: AN INTEGRATIVE APPROACH

Waleska V. Manyari, Dr.

Osmar A. Carvalho junior, Dr.

Department of Geography, University of Brasília, Brazil

Abstract

The emergence of an epistemology of complexity is a contemporary phenomenon strongly based upon technology that has claimed new research needs and revitalize old studied themes. The study of wetlands can be considered in this interdisciplinary context. The ability to respond in an organized manner to disturbances caused by seasonal flooding, a characteristic of wetlands ecosystems, define them as complex systems. The spatio-temporal heterogeneity of floodplain river systems is responsible for a diverse array of dynamic aquatic habitats. Thus, natural disturbances, represented by flooding and responsible for intensifying ecosystem heterogeneity, are the main factor in maintaining the ecological integrity. This requires knowledge of long-term patterns of inundation to preserve geomorphic formations, in other words, habitat diversity. Nevertheless, the processes that control water, sediment and nutrients transfer through the floodplain are not well understood. The maintenance of river-floodplain connectivity has been recognized as a central strategy in ecosystem management. In this sense, remote sensing technology for a broad-scale systematic focus is particularly relevant. Research studies in this area provide new approaches for models useful in management on a regional scale. This chapter aims therefore to illustrate this wide research field involving current concepts and methodologies in order to improve the comprehension of the wetlands ecosystems as well as establish conservation criteria.

Keywords: Wetlands, complexity, remote sensing, Amazon region

Introduction

Wetlands are actually a generic, fairly imprecise designation for quite singular ecosystems in waterlogged terrain, be it flooded or subject to flooding, generally situated between aquatic and terrestrial ecosystems. Indeed, adaptation to the strong presence of water on the surface or in the root zone is the prime hallmark shared by a wide variety of ecotones assembled under the one label (Mitsch & Gosselink, 1993). Despite this singular characteristic, criticism has been levelled at the idea of classifying these ecosystems as transition zones between land and water. This has serious implications for the management criteria and conservation strategies to be adopted. If that were the case, they should at least be recognised as unstable areas of tension that display unique patterns of variability, especially in the case of alluvial plains (Neff, 2008).

The wealth of communities and species occupying wetland areas is another characteristic trait. Thus, classifying associations encountered in discrete units across wetland areas is a tough, even arbitrary task, given that their limits are frequently hard to determine. Moreover, conservation and recovery of these ecosystems are strongly dependent on advances in knowledge regarding the dynamics and functional organisation of such communities (Krebs, 1996).

The dynamics of wetlands environment is extremely complex, given its variations in short intervals of space and time, when compared to other terrestrial environments. The spatial and temporal patterns of flood inundation have a crucial role in the wetland ecology. Thus, the need of mapping and monitoring the surface (intrinsic vegetation processes, fluvial or coastal dynamic, land-use changes and flood inundation patterns), over a range of spatial and temporal scales, is of paramount importance for assessing the status of wetland ecosystems. In this context, the remote sensing becomes a powerful tool for inventorying and monitoring those environments due to its capability of generating a large amount of information on surrounding land uses and their changes over time (vegetation phenology and wetland losses by human-induced changes).

Riparian wetlands as complex systems

According to systemic theory (Bertalanffy, 1975), flows of matter and energy mediate between community and non-living environment, maintaining an organised state of life. This elementary understanding is essential for grasping the way integral ecosystems in general work. In actual fact, these flows produce clearly defined biotic structures besides performing the cycling of matter among the living and non-living components. It is likewise acknowledged that abiotic structures are shaped by the importing of matter rich in energy (Odum, 1983). As a result, components, or rather physical subsystems (i.e. self-organised patterns) emerge. They establish environmental gradients directly proportional to the biodiversity encountered. In the case of wetlands, greater variation in such gradients can be interpreted by combining, for example, hydrometric levels, duration of surges, and so on, making for a diversity of landscapes and composition of species (Neiff, 2008). Ab'Saber (2002) provides a detailed description of Amazonian wetlands that highlights not only the biodiversity but especially the wealth of physical subsystems:

It is a highly diversified, labyrinthine patchwork of water and land: low-lying dykes along the flanks that were once covered by forest, immersed during the great floods, tall floodplain forests in some sectors where the plain backs up against the adjacent uplands, strands of biodiverse forest flanking dykes that run inland; meadows in scrolls of white sand following the meandering course of streams that have since run dry, herbaceous or meadowland vegetation in abandoned riverbeds, native grasses on the banks of floodplain lakes, exposed or submersed as the waters rise and fall. Finally, asymmetric ecosystems along the banks of side channels where *terra firma* forests cover uplands, steep banks or terraced embankments on the inner side of these discontinuous side channels, while on the other side a multifarious array of aquatic and sub-aquatic terrestrial ecosystems sprawls out across the alluvial plains. This veritable interspersed land-water patchwork supports a variety of ecosystems that are highly differentiated from each other although they all belong to a single family from the hydrogeomorphological standpoint.

As one type among a prolific classification (Mitsch & Gosselink, 1993), the riparian wetland ecosystems described above are a fine example of the interaction of various ecosystems producing a high degree of complexity. The description also draws attention to the fact that the evolution of living organisms is interconnected with the evolution of their habitat, there thus being a single process that could be described as co-evolution (Capra, 2006). Nevertheless, in a context of hierarchical relations between numerous subsystems, there is clearly a need for further knowledge about their basic properties and functions, for new and better data or new principles associated with abiotic factors.

It has thus been observed that hydrological characteristics fundamentally control such ecosystems. In these environments, specifically variations in discharge on time scales ranging

from minutes to months and the frequency of exceptional flooding determine a river's every biological, chemical and physical attribute. Hey (1997) points out that even in unpolluted rivers biodiversity will not grow richer if hydraulic and morphological variations are limited, although the quality of the water also affects biological response.

In his chapter on the geomorphic activity of water, Sternberg (1998) identifies the structure and functioning of floodplains as the key factor – one that correlates closely with riparian vegetation – when it comes to the genesis of floodplains and other fluvial aspects:

The importance of the waters is not confined to the fact that they periodically cover and uncover the land, nor can it be measured by the depth of the expanse of water lying above it. The river's geological activity must be taken into account. And the result of this activity, besides being subordinate to the nature of the terrain on which the water acts, depends on its properties, on the matter it carries with it and on the characteristics of its flow. Indeed, rivers that flow through alluvial plains are peculiar in that they themselves establish the discontinuous surfaces flanking and defining them. In the case under consideration, therefore, it is in the water, and in the water alone, that we should seek the key to the plains' morphology.

Indeed, fluvial hydrometric series can be acknowledged as a form of disturbance. By analysing them, one can detect recurrent phenomena (lymnophases and potamophases) whose characteristics (intensity, amplitude and seasonality) hinge on a tension peculiar to each river, section or even sector of the floodplain. Rocha *et al.* (2003) identify five components related to ecological processes in riparian ecosystems: magnitude, duration, periodicity, frequency and rate of alteration to the flux. As a result, fluctuations in the physical-chemical environment can be predicted on the basis of climatic and hydrosedimentological factors, without ignoring the fact that “The spatial and temporal patterns of the hydrology are in turn influenced by the topography, soils, and vegetation of the floodplain” (Mertes *et al.*, 1995).

Hence, the river system to which the riparian wetlands belong can be conceived as a complex unit, with non-linear connections and interconnections produced by the transference of matter and energy among its component parts. In this sense, two features of complex systems present in riparian wetlands become crucial to understanding their physical structure and the way they operate: self-regulation and interconnectivity. These can be viewed as deriving from complex patterns of fluvial aspects encountered in the riparian environment that provide the key to monitoring and recovering such ecosystems.

Self-regulation and adjustability

In response to the adaptive processes set in motion by the flux of matter and energy, river courses freely adjust their geometric variables, i.e., depth, declivity, and width, including the development of meanders and other planimetric configurations. Knighton (1998) assesses rates the adjustment of the channel to independent variables according to four degrees of freedom: declivity of the riverbed (longitudinal profile), shape of cross-sections (lateral profile), configuration of the riverbed (vertical profile) and the channel's planimetry. This adjustability plane refers to aerial perspectives shot from above the channel. This means that on the drawing board rivers display features and match types intrinsically associated with processes of erosion, transportation and depositing at work on the riverbed, on the banks and in the overflow areas (Amsler, 2004). The planform is thus one outcome of the adjustability of all the other planes, producing a great variety of standard forms that contribute to the evolution of riverine environments.

On the one hand, the channel pattern can be conceived as an amalgam of responses to alterations in dependent and independent variables and to those deriving from human intervention. At the same time, though, the pattern shapes the floodplain resulting from

sediments the channel deposits and from seasonal or continuous flooding by the flow of the river. The floodplain and its geomorphic features are relatively constant over time with major adjustment to hydrological surges. This differentiates them from the classical definition of ecotones as transition zones, as mentioned above.

Any natural modification to a river (e.g. climate changes) or alterations resulting from engineering work can destabilise the river system if the pattern of flow is disturbed. Profound changes to the characteristics of the channel and the floodplain will ensue and may adversely affect biodiversity and the potential economic exploration of existing resources. It should be added that flow characteristics are the most widely used and appropriate indicators for assessing the integrity of a riverine ecosystem on account of certain restrictions encountered.

Besides the fact that the morphology of the channel and the alluvial plain is shaped by fluvial processes governed by the flow of the river – high levels of flux in particular – many other abiotic characteristics are affected by flow conditions, including water temperature, distribution of the size of sediments suspended in the water and deposited on the riverbed. Likewise, contrasting with the scarcity of information available and the precarious resolution of temporal series for biological data, the availability of daily fluvimetric data can provide a clear picture of the natural variability and the recent history of anthropological disturbance in rivers (Richter *et al.*, 1997, *apud* Rocha *et al.*, 2005). Attention should thus be focused on data parameters for forces acting on the edges of the channel, represented by the flux of the current and the forces resisting the flow, already extensively reported on in the literature (Bordette *et al.*, 1998; Knighton, 1998; Leopold *et al.*, 1994; Thorne *et al.*, 2003). Similarly, analysis of the channel pattern (i.e. its planform) is based on measurements that help describe and quantify active processes in the light of variables such as discharge, transportation of sediment, and stability of the channel banks, all of which are crucial parameters for wetland management.

One way of approaching river channel processes and morphology is by employing the concept of stream power (Knighton, 1999). The energy moving the river system starts out as potential energy. As the flow moves downstream, the potential energy is progressively converted into kinetic energy, thus triggering erosion and transportation. Hence, if one is to understand the behaviour of the alluvial channel when intervention occurs, one must identify the factors directly controlling the balance or imbalance between force and resistance. Generally speaking, if force and resistance are balanced, the river current will neither erode nor deposit sediment, transporting the sediment brought from upstream and thus maintaining the existing pattern and its attendant features. Such balance indicates stability conditions in the dimensions of the channel and can be mathematically expressed as the stream power proportionality (Lane, 1995; Simon & Castro, 2003):

$$QS_b \propto Q_s D_{50}$$

Where Q is discharge, S_b declivity, Q_s the material deposited on the riverbed and D_{50} average size of the material on the riverbed, indicating that 50% of the material is comprised by sediment of a particular granulometric size. This equation suggests that if the energy of the flow is increased by added discharge Q or by the gradient in the channel S_b , an excess in the proportion of energy flow relative to the discharge of sediment Q_s from the riverbed will result, resistance being proportional to the diameter of particles D_{50} . In this case, an additional quantity of riverbed material will be eroded.

Similar response can be expected to a reduction in resistance to erosion on the edges of the channel or to a diminishment in the size of the particles encountered on the riverbed D_{50} (assuming, of course, it is not cohesive). Conversely, a reduction in flux energy brought about by an increase in the size or discharge of riverbed sediment will produce agradation of the channel's bed. This will depend on where forces are most effective: gravity, should the

channel walls be less resistant, or flux, should the bed be less resistant and lowering or incising of the thalweg take place.

Indeed, erosion of the banks plays a major role in controlling and shaping the migration of channels. This is especially true in sections where meanders predominate. Erosion likewise determines the way the alluvial plain develops and is maintained. Riverbank erosion poses a serious challenge for riparian environment management. Consequent loss of potential farmland and endemic species can be acute.

Stream power provenly affects many aspects of river systems, including riverbed shape, channel pattern, and processes like rate of sediment transportation and channel migration. It is also used as a criterion for explaining balance in the development of channel shapes (Knighton, 1999). It should, however, be stressed that, useful as it may be in working out geomorphic classifications, this concept is usually employed in studies dealing with smaller spatial scales, not with reference to the spatial resolution analysis of channel patterns requires.

Adjustments to the internal geometry of river systems produced by flow patterns and alterations to them actually involve a large number of variables. The interdependence of these variables is not very clear given the difficulty of isolating a single variable's effect on the remainder. In other words, flow geometry and channel geometry interact in space and time on the basis of circular feedback processes. It is these processes that account for the formation and maintenance of the floodplain and consequently of the riparian environment. Given the river system's self-regulation and mechanisms for adjusting its geomorphic features, our aim here is to acknowledge the planform as an analytical tool for monitoring riparian wetlands. Gradual evolution and sharp changes observed in the channel pattern can serve to diagnose the conditions under which the river system operates and thus to assist maintenance of its ecosystems.

Interconnection and stability

In view of the considerations made hitherto, it is equally important to establish the way the river system's self-adjustment and the degree of interconnection between the sub-units, main channel and floodplain interact. Alterations to the flux of matter and energy between these subsystems can make for disruptions in transmission and conservation of complex information affording a wealth of components and structures (Bayley, 1995; Capra, 2007; Ward & Stanford, 1985). Besides determining processes of erosion, transportation and depositing performed by the river current, the type of flow establishes the spatial pattern of flooding in riparian ecosystems. Like the river channel itself, the floodplain also contributes water and sediment from the basin. As a result, the flow between channel and floodplain is frequently reversed in riparian ecosystems during low-water or reflux phases and periods of drought. Both subsystems are inter-linked by tributaries and secondary channels, so proving the existence of two-directional flow of matter and energy (Mertes *et al.*, 1995; Sklar, 2000). There should thus be keen interest in observing alterations such as the lowering of the riverbed, emergence and incorporation of sandbars on the banks obstructing connecting channels that link the river to its floodplain, among others (Manyari, 2007).

Studies on the need to maintain lateral connectivity cover river systems from all continents across a wide range of biomes (Adams, 1985; Ligon, 1995; Makkaveyev, 1972). An illustrative example of a large hydrographic system in South America being examined can be found in Agostinho & Zalewski (1995), who studied the Paraná River, focussing on the importance of lateral migration of fish to the alluvial plains, essential for the reproduction of many species.

Regulation of hydrological surges caused by the installation of dams, which impairs the natural variability of discharge, similarly generates an interruption of the lateral

connectivity between river channel and floodplain, be it by erosion and silting of the channel modifying its internal geometry and pattern or by the elimination of major floods. These effects engender a state of instability and degradation in both the fluvial and riparian ecosystems. It is easy to perceive that the wealth of species is associated as much with variability of physical parameters and diversity of habitats pertaining to the floodplain environments as with the course of the river determined by hydrological fluctuations (Salo, 1986). Hence, if the flow geometry describes a spatial pattern of flooding that correlates in time and space with periods of drought, flooding, high water and reflux of the river course and floodplain (Lewin & Manton, 1975), monitoring of the area flooded deserves attention as a wetland conservation measure. In that case, the natural flow regime should be taken as a paradigm for conserving and restoring river systems, as demonstrated in Neiff (1990) and Poff *et al.* (1997), who relate ecological integrity to the dynamic nature of fluvial and, by extension, riparian ecosystems.

In these riparian environments, it is clear that the function of stability – a premise for conservation – is distinct from that which applies, for instance, to climax forests, as Neiff (2008) points out. He stresses the fact that in these highly variable ecosystems, stability is determined by the system's capacity not to maintain but to recover its balance. The high degree of variability (magnitude, duration and recurrence of hydrological surges) does not make wetlands unstable. Proof of this is that they maintain a standard landscape of biotic communities and dominant physiognomies for both low-water and high-water phases. This means that if, on the one hand, multiple basic states (i.e. various states of balance) are observable, on the other, macroscopic order tends to be robust and stable in the face of modifications to the system's internal order.

The variability river systems display in morphology and states of balance in time and space is thus abundantly clear. According to Knighton (1998), at best, rivers attain an approximate state of equilibrium on an intermediate time scale between short-term fluctuations and long-term evolutionary trends. This holds true for maintenance of the channel's geometric regularity adjusted to independent variables. Hence, maintenance of alluvial plains – understood as a morphological subsystem – depends on maintenance of the variability of hydrological surges: the more variable their spectrum, the more varied the gradients produced by gradual variations introduced in the physical and chemical environment.

In sum, as open systems, the river system's dynamics develop on the basis of a range of possible configurations not characterised by highly precise scales of time and space. This property is referred to as self-organised criticality, and the dynamics of the systems triggering it operate on the verge of chaos. It can equally be observed that "Although the standard is optimal global (a state of minimal energy), it is pointless expecting these systems to attain it."

Remote sensing for wetlands mapping

Remote sensing data offer as advantages: (a) synoptic estimation over large areas, appropriate to analyze the scaling of wetland ecosystems; (b) a rapid, non-destructive and cost-effective inventory of the wetland landscape over varied spatial and temporal scales; (c) estimation of wetlands properties in remote and inaccessible areas; and (d) multi-temporal data (winter/spring and summer) that shows seasonal variability in water regime and vegetation status. In the literature on satellite remote sensing of wetlands, studies have been conducted in different types of wetlands by using several satellites and classification techniques (Ozesmi and Bauer, 2002, Lulla, 1983).

Thus, satellite remote sensing has been used in order to map the following wetland environments: permanently flooded or intermittently exposed open water ponds (FGDC 1992), large wetland ecosystems (i.e. Chopra *et al.* 2001, Fuller *et al.* 1998); coastal wetlands

(i.e. Hardisky et al. 1986, Hinson et al., 1994, Jensen et al., 1993); forested wetlands (i.e. Hodgson et al., 1987, Townsend & Walsh, 1998); forested wetlands (Ernst and Hoffer 1979; Ernst-Dottavio et al. 1981; Llewellyn et al. 1996; Sader et al. 1995); and, inland freshwater marshes (i.e. Ernst-Dottavio et al. 1981).

Both optical and microwave sensors are applied in wetland studies, where each technology describes advantages and disadvantages. Amongst the types of optical sensors, it can be mentioned: Landsat MSS, Landsat TM, SPOT, AVHRR, Indian Remote Sensing Satellite (IRS-1B) and Linear Imaging Self-scanning Sensor (LISS-II) (Ozesmi and Bauer, 2002; Lulla, 1983; Hardisky et al., 1986). The optical sensor is suitable for vegetation and land-cover mapping, phenology and flooding study during leaf-off periods.

However, there are some disadvantages of optical remote sensing estimation, such as: (a) the apparent upwelling radiance remotely measured is not only a function of water and vegetation properties, but also a function of data acquisition geometry and atmospheric conditions; (b) the information is limited to the surface, what results in inability to detect flooding in forested wetlands because of the presence of dense canopies; (c) the spectral, temporal and radiometric resolution can be inadequate; and, (e) the occasional presence of cloud and smoke cover.

Radar data is more appropriate for flood inundation mapping than the optical data. Microwave sensor has proved to be an effective tool for identifying differences between flooded and non-flooded regions, including the detection of the flooding beneath forest canopies (Hess et al., 1990, Hess and Melack, 1994, Townsend & Walsh, 1998). Besides that, the radar has as advantages the data collection at any time of day and under almost any weather conditions (cloud cover).

Ozesmi & Bauer (2002) reviewed the different classification techniques that have been used to identify wetlands. Amongst those it can be mentioned: visual interpretation; unsupervised classification or clustering; principal component analysis; supervised classification; hybrid classifications; vegetation indexes; mixture estimation; spectral mixture analysis; sub-pixel classification and rule-based classifiers.

Amongst the remote sensing studies in wetlands, great progress has been reported for multi-temporal analysis. The high coverage repetition of the satellite data enables seasonal and yearly monitoring of the wetland systems. There are two types of temporal remote sensing data commonly employed in wetland vegetation studies: (a) discrete snapshots with annual data to analyze spatial changes in land cover and (b) seasonal data to infer trends and dynamics of vegetation phenology (growth cycles). The former, is described by Munyati (2000) that used multi-temporal data over a ten-year period to assess a spatial reduction in area of dense green vegetation in upstream sections of the Kafue Flats floodplain wetland system in southern Zambia. The latter, is described by Johnston and Barson (1993) that considered images throughout one year to describe seasonal variability of water dynamic and vegetation pattern.

The Amazon River and its large tributaries present a floodplain region of about 300,000 km² (Iron et al., 1997), which represents approximately 56% of floodplain areas on the globe (Mitsch & Gosselink, 2000). The floodplain is a determinant factor for fish habitat quality (Gomes et al., 2006), occurrence of economically significant tree species (Parolin, 2000), and agricultural potential (Barrios et al., 2004). These floodplains are built by the formation of bars and the accumulation of sediment carried in diffuse overbank flows and channelized flows (Dunne et al., 1998). The periodic oscillation between terrestrial and aquatic phases on floodplains causes a constant exchange of the sediments and waters between river channels and floodplains. Floodplains affect erosion, transport and sedimentation processes in the watershed system (Junk, 1997). During residence of water on floodplains, substantial biogeochemical modifications occur under the influence of sorption

and redox reactions and biotic processes (Melack et al., 2004; Richey et al., 1988, 1990; Seyler and Boaventura, 2003). The water storage in these wetlands and its outflow represent a significant part of the water balance in the basin (Alsdorf et al., 2001; Richey et al., 1989). **Figure 1** highlights the differences between high and low water stages by using remote sensing orbital products over large Amazonian floodplain.

Sedimentation rates in the Amazonian floodplains vary considerably, both temporally and spatially (Mousinho de Meis, 1971; Filizola, 1999; Bush et al., 2000). Moreira-Turcq et al., (2004) argue that probably the sedimentation rate is directly related to the geographic location, proximity to the Amazon River channel, and duration of connection between floodplain and river.

The Amazon floodplains can be divided into nutrient-rich whitewater (*várzea*) and nutrient-poor blackwater (*igapó*) ecosystems according to the water quality of the flooding rivers (Prance, 1979). Fertile soils and nutrient-rich waters characterize the *várzea*, which becomes into a productive region within the Amazon Basin (Fiore et al., 2005).

The Amazon floodplain monitoring at basin scale is only possible by using remote sensing data, due to the extent and inaccessibility of the inundation areas. **Figure 2** presents an optical remote sensing image of the diversity of landscape units with open lakes, bogs, large meadows, alluvial forests and land forests. Another example of the central Amazon flood plain is Jarauçu river near the city of Porto de Moz presented in **Figure 3**. This figure shows palisade-huts of the riverine people adapted to the local hydrological floodplain conditions.

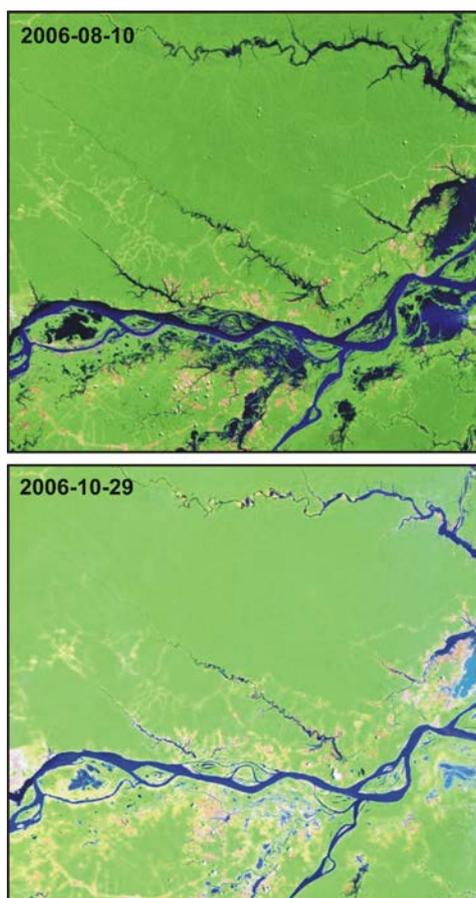


Figure 1 -TM-Landsat sensor image of the annual water level variations between high and low water stages in the Amazon river.

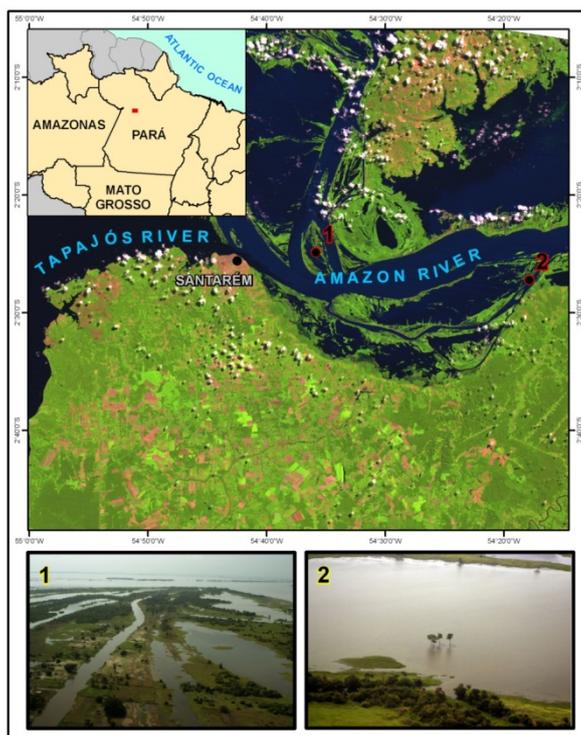


Figure 2 – Satellite image from TM-Landsat sensor depicting the floodplain during flooding period in the Amazon river near Santarém city.

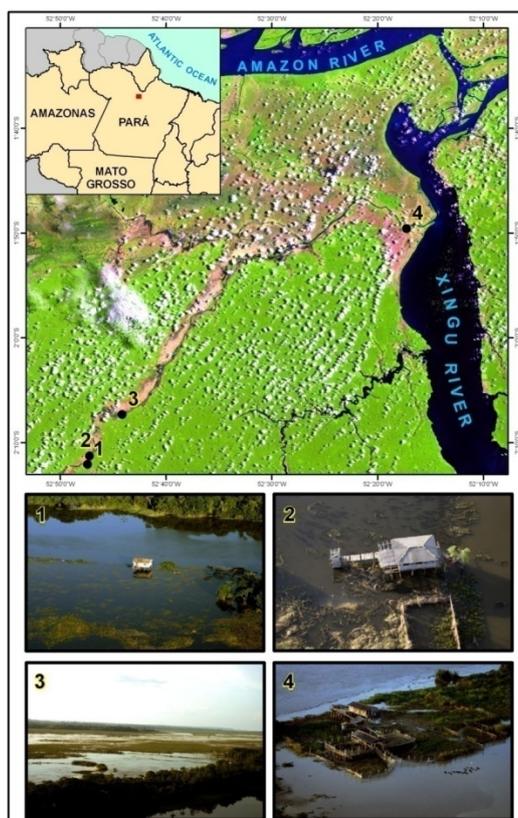


Figure 3 – Satellite image from TM-Landsat sensor of Jaraçu river near the city of Porto de Moz in Pará state. The pictures show floodplain (várzeas) areas with the presence of palisade-huts of the riverine people adapted to the local hydrological conditions.

However, in the Amazon region, the SAR systems are most used because the optical sensor images are strongly affected by cloud cover and cloudless scenes are sparse (De Costa et al. 1998). Thus, several studies using SAR provide a basis for improved estimates of the contribution of wetlands to biogeochemical and hydrological processes in the Amazon.

Wang et al. (1995) simulated the radar backscatter from a floodplain forest with a flooded or non-flooded ground condition at C-band (5.7 cm wavelength), L-band (24 cm wavelength) and P-band (68 cm wavelength). The flooded /non-flooded backscatter ratio was higher: (a) at HH polarization than at VV polarization; (b) at small incidence angles than at large incidence angles; and (c) at a long wavelength than at a short wavelength. The increase of the volumetric moisture from 10% to 50% in non-flooded caused the decrease of the flooded /non-flooded backscatter ratio (small at C- and L-band but large at P-band). The leaf area index (LAI) had a large effect on the simulated C-band (not L-band or P-band) flooded /non-flooded backscatter ratio.

Several studies have reported the classification of the radar images over the Amazon region to discriminate main land cover types and map flooded areas (Hess et al., 2003; Saatchi et al., 2000; Sippel, 1998; Siqueira et al., 2003). Thus, spatial variations in radar pulse amplitudes are accessed for characterization of the floodplain habitat and area of inundation (Hess et al. 1995; 2003). These studies presented the following patterns during Amazon recessional flow conditions: (a) open water yields the lowest radar returns; (b) flooded forest produces the strongest returns; and (c) flooded herbaceous vegetation and non-flooded forest produces intermediate L-band backscatter amplitudes.

Hess et al. (1995) used multi-frequency polarimetric synthetic aperture radar (SAR) data from SIR-C missions and a decision-tree classifier to map the floodplain inundation and vegetation along the Negro and Amazon rivers. Backscattering statistics indicate that both "C" and "L" band are necessary for accurate delineation of herbaceous versus woody and flooded vs. non-flooded cover types.

Hess et al. (2003) mapped wetlands in the Amazon region using L-band synthetic aperture radar (SAR) imagery from the Japanese Earth Resources Satellite-1 (JERS-1). The mapping included segmentation and clustering validated by high-resolution digital videography with an accuracy of 95%. Five cover classes: non-vegetated, herbaceous, shrub, woodland and forest combined with inundation state (flooded or non-flooded) resulted in 10 possible covers.

Remotely sensed observations of the water surface provide an alternative to permanent gauging, providing new observations of hydrologic exchange between tributaries, floodplains, and mainstem rivers. Recent work has shown that interferometric processing and analyses of spaceborne synthetic aperture radar (SAR) described stage centimeter-scale changes for vegetation covered floodplain lakes and tributaries in flooded forests (Alsdorf et al., 2000, 2001, 2003; Birkett et al., 2002).

Alsdorf et al. (2003) examine the spatial properties of these interferometric measurements and demonstrate that flow routes across the floodplain can be automatically extracted from SAR imagery by using a geographic information system (GIS). In central Amazon floodplain localities, these authors observed one-day decreases in water levels of eleven centimeters. The spatial distribution of the water level is not homogeneous, because the flow through the floodplains includes a maze of interconnected lakes, channelized and non-channelized overbank flow, pans, and swales. Thus, water-level changes are inversely related to lengths of flow paths connecting water bodies to the main channel; that is, long distances result in small water-level fluctuations compared to short paths (Alsdorf et al., 2003).

Recently, studies have evaluated time series of SAR images in Amazon floodplain. Frappart et al., (2005) estimated both flooded area and water levels and determined the water

volume stored in the floodplains of the Negro River, during the 1995–1996 seasonal cycle, by using combined observations from the Synthetic Aperture Radar (SAR) onboard the Japanese Earth Resources Satellite (JERS-1), the Topex/Poseidon (T/P) altimetry satellite, and in-situ hydrographic stations. Martinez & Toan (2007) used time series of SAR images (21 images acquired by JERS between 1993 and 1997) to map the flood temporal dynamics and the spatial distribution of landscape units (open lakes, bogs, large meadows, savannahs, alluvial forests and terra firma forest).

Conclusion

Given the foregoing, we trust it is now clear that riparian ecosystems should be interpreted on the basin-river-plain scale through long temporal series of data. On this space-time scale, it has stated that wetlands are peculiar, highly stable ecosystems. Likewise, in view of this interpretation scale, research, monitoring and conservation of these ecosystems require specific strategies, remote sensing figuring as an efficient technology for this purpose. Besides its capacity for covering large tracts of land and manipulating a large volume of data, channel planimetry combined with the prospect of taking satellite images is a significant dimension of analysis that allows fundamental properties of complex systems, self-regulation and interconnectivity to be highlighted.

References:

- AB'Saber, A. N. 2002, Bases para o estudo dos ecossistemas da Amazônia brasileira. *Estudos Avançados*. vol. 16 (45), 7-30.
- Adams, W. M. 1985, The downstream impacts of dam construction: a case study from Nigeria". *Transactions of the Institute of British Geographers*. New Series, vol. 10 (3), 292-302.
- Agostinho, A. A. & Zalewski, M. 1995, The dependence of fish community structure and dynamics on floodplain and riparian ecotone zone in Paraná Rivers, Brazil. *Hydrobiologia*, 303, 141-145.
- Amsler, M. L. 2004, Dinâmica de processos fluviais: processos e morfologias. Curso Internacional de Pós-Graduação. 15-25 de out de 2004. 64 f. Porto Rico, Paraná. Nupélia. Universidade Estadual de Maringá.
- Alsdorf, D. E. 2003, Water storage of the central Amazon floodplain measured with GIS and remote sensing imagery. *Annals of the Association of American Geographers*, 93(1), 55– 66.
- Alsdorf, D. E., Melack, J. M., Dunne, T., Mertes, L. A. K., Hess, L. L., & Smith, L. C. 2000, Interferometric radar measurements of water level changes on the Amazon floodplain. *Nature*, 404, 174– 177.
- Alsdorf, D. E., Smith, L. C., & Melack, J. M. 2001, Amazon floodplain water level changes measured with interferometric SIR-C radar. *IEEE Transactions on Geoscience and Remote Sensing*, 39(2), 423–431.
- Bak, P. *How nature works, The science of self organized criticality*. University of Oxford Press, 1995.
- Barrios; E.; Herrera, R. & Valles, J.L. 2004, Tropical floodplain agroforestry systems in mid-Orinoco River basin, Venezuela. *Agroforestry Systems*, 28(2): 143-157.
- Bayley, P. B. 1995, Understanding large river-floodplain ecosystems. *BioScience*, vol 45 (3), 153-158.
- Bertalanffy, K. L. von. *Teoria Geral dos Sistemas*. Petrópolis vozes. 1975.
- Birkett, C. M., Mertes, L. A. K., Dunne, T., Costa, M. H., & Jasinski, M. J. 2002 Surface water dynamics in the Amazon Basin: Application of satellite radar altimetry. *Journal of Geophysical Research*, 107(D20), 8059–8080.
- Bordette, G. et al. 1998, Ecological complexity of wetlands within a river landscape.

Biological Conservation, vol.85, 35-45.

Bush, M.B., Miller, M.C., Oliveira, P.E., Colinvaux, P.A., 2000, Two histories of environmental change and human disturbance in eastern lowland Amazon. *The Holocene* 10 (5), 543–553.

Capra, F. *A teia da vida: uma nova compreensão dos sistemas vivos*. São Paulo, Ed. Cultrix. 1996.

Chopra R., Verma V.K., and Sharma P.K. 2001, Mapping, monitoring and conservation of Harike wetland ecosystem, Punjab, India, through remote sensing. *International Journal of Remote Sensing* 22: 89–98.

Dos Santos, M. A. *Inventário de emissões de gases de efeito estufa derivadas de hidrelétricas*. Rio de Janeiro, Tese de Doutorado, COPPE / UFRJ, p. 147, 2000.

Dunne, T., Mertes, L.A., Meade, R.H., Richey, J.E., Forsberg, B.R. 1998, Exchanges of sediment between the floodplain and channel of the Amazon River in Brazil. *GSA Bulletin* 110 (4), 450–467.

Ernst-Dottavio C.L., Hoffer R.M. & Mroczynski R.P. 1981, Spectral characteristics of wetland habitats. *Photogrammetric Engineering and Remote Sensing* 47: 223–227.

Filizola, N. 1999, *O fluxo de sedimentos em suspensão nos rios da Bacia Amazônica brasileira*. Publ. ANEEL (Agencia Nacional de Energia Eletrica), Brasilia, Brazil. 63 pp.

Fiore, M.F., Neilan, B.A., Copp, J.N., Rodrigues, J.L.M., Tsai, S.M., Lee H., Trevors, J.T. 2005, Characterization of nitrogen-fixing cyanobacteria in the Brazilian Amazon floodplain. *Water Research* 39(20): 5017-5026.

Frappart, F.; Seyler, F.; Martinez, J.M.; León, J.G.; Cazenave, A. 2005, Floodplain water storage in the Negro River basin estimated from microwave remote sensing of inundation area and water levels. *Remote Sensing of Environment* 99, 387 – 399.

Fuller R.M., Groom G.B., Mugisha S., Ipulet P., Pomeroy D., Katende A. et al. 1998, The integration of field survey and remote sensing for biodiversity assessment: a case study in the tropical forests and wetlands of Sango Bay, Uganda. *Biological Conservation* 86: 379–391.

Gay-Lacaux, C., Delmas, R., Kouadio, J., Richard, S., Gosse, P. 1999, Long-term greenhouse gas emissions from hydroelectric reservoirs in tropical forest regions, *Global Biogeochem. Cycles* 13, 503–517.

Gomes, L.C., Chagas, E.C., Martins-Junior, H., Roubach, R., Ono, E.A., Lourenço, J.N.P. 2006, Cage culture of tambaqui (*Colossoma macropomum*) in a central Amazon floodplain lake. *Aquaculture* 253: 374-384.

Hardisky M.A., Gross M.F. & Klemas V. 1986, Remote sensing of coastal wetlands. *BioScience* 36: 453–460.

Hey, R. D. River engineering and management in the 21st Century. In Thorne, C. et al. (ed), *Applied fluvial geomorphology for river engineering and management*, West Sussex, England, Wiley. 1997. 3-11.

Hess, L. L., Melack, J. M., Filoso, S., & Wang, Y. 1995, Delineation of inundated area and vegetation along the Amazon floodplain with SIR-C synthetic aperture radar. *IEEE Transactions on Geoscience and Remote Sensing*, 33, 896– 904.

Hess, L. L., Melack, J. M., Novo, E.M.L.M., Barbosa, C. C. F., & Gastil, M. 2003, Dual-season mapping of wetland inundation and vegetation for the central Amazon basin. *Remote Sensing of Environment* 87(4), 404– 428.

Hess, L.L., Melack, J.M., 1994. Mapping wetland hydrology and vegetation with synthetic aperture radar. *Internacional Journal of Ecology Environmental Sciences* 20: 197-205.

Hess, L.L., Melack, J.M., Simonett, D.S., 1990, Radar detection of flooding beneath the forest canopy: a review. *International Journal of Remote Sensing* 11 (7), 1313-1325.

- Hinson J.M., German C.D. and Pulich W. Jr 1994, Accuracy assessment and validation of classified satellite imagery of Texas coastal wetlands. *Marine Technology Society Journal* 28: 4–9.
- Hodgson, M.E., Jensen, J.R., Mackey, H.E. Jr., Coulter, M.C., 1987, Remote sensing of wetland habitat: a wood stork example. *Photogrammetric Engineering and Remote Sensing* 53 (8), 1075-1080.
- Jensen, J. R., Cowen, D. J., Althausen, J. D., Narumalani, S. & Weatherbee, O. 1993, An evaluation of the Coast Watch change detection protocol in South Carolina. *Photogrammetric Engineering and Remote Sensing* 59 (6): 1039–1046.
- Johnston, R.M. and Barson, M.M. 1993, Remote sensing of Australian wetlands: An evaluation of Landsat TM data for inventory and classification. *Australian Journal of Marine and Freshwater Research* 44(2): 235 – 252.
- Kemenes, A., Forsberg, B., Melack, J. M. Methane release below a tropical hydroelectric dam. *Geophysical Research Letters*, 34, L12809, doi:10.1029/2007GL029479.2007.
- Knighton, D. *Fluvial forms & processes, a new perspective*. London, Arnold. 1998.
- Knighton, D. 1999, Downstream variation in stream power. *Geomorphology*, 29, 293-306.
- Krebs, C. J. *Ecology: The Experimental Analysis of Distribution and Abundance*. Haper Collins. 4th ed. 1994.
- Lane, E. W. 1995, Design of stable alluvial channels. *Transactions of the American Society of Civil Engineers*, vol. 120, n. 2776, 1234-1260.
- Leopold, L. B., Wolman, M. G., e Miller, J. P. *Fluvial Processes in Geomorphology*. New York, Dover Publications. 1994.
- Ligon, F. K., Dietrich, W. E., Trush, W. J. 1995, Downstream Ecological Effects of Dams, a Geomorphic Perspective. *BioSciense* vol. 45, n. 3, 183-192.
- Lulla K. 1983. The Landsat satellites and selected aspects of physical geography. *Progress in Physical Geography* 7: 1–45.
- Makkaveyev, N. I. 1972, The impact of large water engineering projects on geomorphic processes in stream valleys. *Soviet Geography: Review and Transactions*, n.13, 387-393.
- Manyari, W. V. *Impactos a jusante de hidrelétricas: o caso da Usina de Tucuruí, PA*, Rio de Janeiro, Tese de Doutorado, COPPE / UFRJ, 2007.
- Melack, J.M., Hess, L.L., Gastil, M., Forsberg, B.R., Hamilton, S.K., Lima, I.B.T., Novo, E.M.L.M., 2004, Regionalization of methane emissions in the Amazon basin with microwave remote sensing. *Global Change Biology* 10, 530–544.
- Mertes, L. A. K. et al. 1995, Spatial patterns of hydrology, geomorphology, and vegetation on floodplain of the Amazon River in Brazil from a remote sensing perspective. *Geomorphology*. 13, 215-232.
- Mitsch, W. J. & Gosselink, J. G. *Wetlands*. 2 ed. New York, Van Nostrand Reinhold.1993.
- Moreira-Turcq, P.; Jouanneau, J.M.; Turcq B.; Seyler, P.; Weber, O.; Guyot J.L. 2004, Carbon sedimentation at Lago Grande de Curuai, a floodplain lake in the low Amazon region: insights into sedimentation rates. *Palaeogeography, Palaeoclimatology, Palaeoecology* 214 (2004) 27– 40.
- Mousinho de Meis, M.R., 1971. Upper Quaternary process changes of the middle Amazon area. *Geological Society of America Bulletin* 82, 1073–1087.
- Munyati C. 2000. Wetland change detection on the Kafue Flats, Zambia, by classification of a multitemporal remote sensing image dataset. *International Journal of Remote Sensing*, 21(9):1787-1806.
- Neiff, J. J. 1990, Ideas para la interpretacion ecologica del Paraná. *Interciencia* 15 (6) 424-441.
- Neiff, J. J. 2008, Planícies de inundação são ecótonos? <http://ar.geocities.com/Mneiff/>

- Ozesmi, S.L. and Bauer, M. E. 2002, Satellite remote sensing of wetlands. *Wetlands Ecology and Management* 10: 381–402.
- Parolin, P., 2000. Seed mass in Amazonian floodplain forests with contrasting nutrient supplies. *J. Trop. Ecol.* 16, 417–428.
- Poff, N. L. et al. 1997, The natural flow regime: a paradigm for river conservation and restoration. *BioScience*, v. 47, n.3, 769-784.
- Prance, G.T., 1979, Notes on the vegetation of Amazonia. III. Terminology of Amazonian forest types subjected to inundation, Brittonia, New York. *Bot. Garden* 31 (1), 26–38.
- Rocha, P. C. et al. 2003, Considerações sobre a variabilidade hidrológica do alto rio Paraná. In: *X Simpósio Brasileiro de Geografia Física Aplicada, Revista GeoUERJ*, n. 1. .2022-2031, Rio de Janeiro.
- Richey, J.E., Devol, A.H., Wofsy, S.C., Victoria, R., Ribeiro, M.N.G., 1988, Biogenic gases and the oxidation and reduction of carbon in Amazon River and floodplain waters. *Limnol. Oceanogr.* 33 (4), 551–561.
- Richey, J.E., Hedges, J.I., Devol, A.H., Quay, P.D., Victoria, R., Martinelli, L., Forsberg, B.R., 1990, Biochemistry of carbon in the Amazon river. *Limnology Oceanography.* 35 (2), 352–371.
- Rosa, L. P., Santos, M. A., Matvienko, B., Santos, E. O., Sikar, E. 2004, Greenhouse gas emissions from hydroelectric reservoirs in tropical regions. *Climatic Change*, 66, 9-21.
- Rosa, L. P., Schaeffer, R., Santos, M. A.1996, Are hydroelectric dams in the Brazilian Amazon significant sources of greenhouse gases.*Environmental Conservation*, 66, n.1, 2-6.
- Saatchi, S. S., Nelson, B., Podest, E., & Holt, J. 2000, Mapping Land-cover types in the Amazon Basin using 1 km JERS-1 mosaic. *International Journal of Remote Sensing*, 21(6&7), 1201– 1234.
- Salo, J. et al. 1986, River dynamics and the diversity of Amazon lowland Forest. *Nature*, vol. 322, 254-258.
- Seyler, P., Boaventura, G.R. 2003, Distribution and partition of trace metals in the Amazon basin. *Hydrological Processes* 17, 1345–1361.
- Sippel, S. J., Hamilton, S. K., Melack, J. M., & Novo, E. M. M. 1998, Passive microwave observations of inundation area and the area/stage relation in the Amazon River floodplain. *International Journal of Remote Sensing*, 19, 3055–3074.
- Sklar, L. Report on Hydrological and geochemical processes in large scale river basins, 15-19 November 1999, Manaus, Brazil. Draft 1, 10 February, 2000.
- Sternberg, H.1998,*A água e o Homem na várzea do Careiro*. 2^a. ed. Belém, PA, Museu Emilio Goeldi, Coleção Friedrich Katzer. vol.1.
- Thorne, C. R. et al. *Applied fluvial Geomorphology for river engineering and management*. UK, John Wiley & Sons. 2003.
- Townsend, P. A. & Walsh, S. J. 1998, Modeling floodplain inundation using an integrated GIS with radar and optical remote sensing. *Geomorphology* 21 (3–4): 295–312.
- Townsend, P. A. & Walsh, S. J. 2001, Remote sensing of forested wetlands: application of multitemporal and multispectral satellite imagery to determine plant community composition and structure in southeastern USA. *Plant Ecology* 157: 129–149.
- Wang, Y., Hess, L. L., Filoso, S., & Melack, J. M. 1995, Understanding the radar backscattering from flooded and non-flooded Amazonian forests: Results from canopy backscatter modelling. *Remote Sensing of Environment*, 54, 324– 332.
- Ward, J. V. & Stanford, J. A. 1995, Ecological connectivity in alluvial river ecosystems and its disruption by flow regulation. *Regulated rivers research and management*, vol. 11, 105-119.
- Clancy, Tom, Carl Stiner, and Tony Koltz. *Shadow Warriors: Inside the Special Forces*. New York: Putnam, 2002.

Cohen, Andrew, and J.L. Granatstein, eds. *Trudeau's Shadow: The Life and Legacy of Pierre Elliott Trudeau*. Toronto: Random, 1998.

Meidenbauer, Jörg, ed. *Discoveries and Inventions: From Prehistoric to Modern Times*. Lisse: Rebo, 2004.

Puzo, Mario. *The Family: A Novel*. Completed by Carol Gino. New York: Harper, 2001.

Rowling, J.K. *Harry Potter and the Chamber of Secrets*. New York: Scholastic, 1999

ENVIRONMENTAL POLLUTION RISK ANALYSIS AND MANAGEMENT IN TEXTILE INDUSTRY: A PREVENTIVE MECHANISM

***Dr. Venkatesh Jaganathan, PhD, Mgt, PhD Int. Busi,
M.Phil Mgt, M.Phil Int. Busi) MBA***

Associate Professor, Anna University, Regional Centre Coimbatore, Tamilnadu. India.

Priyesh Cherurveetil, MBA, MS, PhD

Part Time Research Scholar, Anna University,
Regional Centre Coimbatore, Tamilnadu. India.

Aarthy Chellasamy, MBA, PhD

Full Time Research Scholar, Anna University,
Regional Centre Coimbatore, Tamilnadu. India.

Dr. M.S. Premapriya, MBA, M.Phil, PhD

Assistant Professor, Anna University, Regional Centre Coimbatore, Tamilnadu. India.

Abstract

The textile industry is major contributor in many nations in terms of economies and employment. The small and large scale operations in this textile sector though contribute much to the economy also cause hazardous effect to environment. The textile manufacturing processes involve large consumption of water, energy and various chemicals which will generate waste at the end or as a by-product. The major problem with regard to water usage is the untreated effluents which are discharged directly into nearby water bodies. Not only water bodies cause environmental damage other factors like gas emissions, excessive odors etc are also considered to be pollutants. Environmental pollution risk analysis and risk management in textile industry is vital in order to prevent chemical disaster which may lead to terrible results. It is also important to maintain production level at the same time. This paper aims to identify and analyze the pollution due to water and air in a textile industry and steps to reduce the risk which arises due to pollution.

Keywords: Air pollution, dyes, environmental hazard, risk analysis, textile industry, water pollution

Introduction

Textile industry not only comprises large quantity of water for the process but also need various chemicals and dyeing agents for the process. When a manufacturing process starts there arise large quantity of waste in terms of water, energy and other chemical substances which will readily or indirectly affects the environment to a greater extent. The pollution created by this textile processing may be in the form of air, water or noise which is considered to be hazardous to health for the surroundings. Each time the manufacturing process varies according to the requirement of the customer so the waste generated varies each time depending up on the type of chemicals and raw materials used (Parvathi.C et.al, 2009). Pollution is considered to be the unwanted material into the environment. These residues may be unwanted or unprocessed raw materials, or they may be by-products. Though these pollutants are unavoidable they can be reduced to some extent and can be discharged

which will reduce the effect on environment. The pollution in a textile mill can be air pollution or water pollution or noise pollution. Among the three types water pollution is considered to be more hazardous. Because of scarcity of land many textile industries are located nearby households. So any minor disaster will ultimately cause greater damage to large population near and far the unit. According to United Nations Environment Programme (UNEP, 2010) every year 400-500 million tons of deadly chemicals like cyanide, sulphur and other radioactive substances are discharged into water.

Many industries like oil refineries, textiles, and chemical industries in India create water pollution above the permissible level. These industries can't be separated from each other. One way or the other they are interdependent to each other so continues the process of environmental pollution. The industries aim at higher profit rate hence they withdrew the act of ethical behavior. When technology and science was lagging the textile industries used natural dyes which are no harm to living beings and surroundings, but gone are those days. In order to achieve target the industries stick on to the usage of synthetic fibers which are non biodegradable and ultimately spoil the water and land resources when discharged without proper treatment. Thus the rate of water pollution depends upon the amount of water and chemical substances used for the manufacturing process. According to WHO (2004) people in the universe irrespective of their status and societal conditions they have right to have sufficient quantity of water with high quality similar to their basic needs. In recent years the fatality of death endorsed because of water pollution everywhere and majority of the diseases are due to this pollution (Chikogu Vivien et.al, 2012). The water born diseases are not initially identified and it may get your hands on right from childhood and detected in later stage of criticality. The pollution due to untreated water causes major environmental pollution and becoming a threat in many industrialist areas of developing countries. These effluents may be infectious or radioactive some times.

Water Pollution

Water pollution is considered to be the biggest environmental threat all over the world. In India government is investing more to control water pollution but the results are below the satisfactory level (Chakraborty et.al, 2012). Water quality is usually measured in terms of rate of occurrence of a substance in aqueous solution. There are many tests like BOD (Bio chemical Oxygen Demand) test, pH test and dissolved solvent tests are available to test the purity of water. The consumption of water by different industrial sectors is shown in Fig.1. Among them thermal power plants is the thirstiest sector among others. The textile industry accounts for 2.07% of water consumption. The consumption for the textile industry includes various processes such as sizing, dyeing, and other end product processes. The major problem arises when these chemicals are directly discharged into water bodies thus causing water pollution. This water pollution not only affects human beings and house hold animals but also aquatic animals to the same extent. The textile fabric production consist of various stages, initially the cotton are mixed in various proportions to make fibers. The fibers now undergo the process of spinning and convert into yarn.

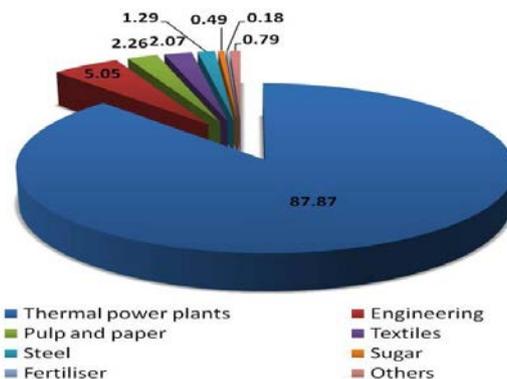


Fig.1 Consumption of Water by Various Industrial Sectors
Source: wordpress.com

Now the process of dyeing takes place where many chemical agents for coloring purpose is used. In order to avoid detaching the yarns undergo the process of sizing where they are washed with cellulose and amylase substances. Now the processed yarns are weaved into end product (Meral et.al, 2008) while undergoing these processes various pollutants are discharged as chemical waste which is depicted in Table.1. When these water are discharged without any proper treatment then it will lead to hazardous effects to living organisms, so before discharging they should be properly treated either biological or physical or chemical means.

Measures to Control Water Pollution

In order to reduce water pollution some measures should be taken for betterment of life. Before entering into major treatment it will be easy to carry over preliminary steps for removing hazards (Little. A. H) The preliminary process may be a removal of waste material or other solid materials followed by neutralization of acids or salts and other intermediate components can be achieved by proper pH test or chemical oxidation or aeration methods.

S.NO	PROCESS	CHEMICAL DISCHARGE	POLLUTANTS	HEALTH EFFECTS
1.	Sizing	Benzene	Resins, fats, waxes, starch and glucose	Carcinogenic, mutagenic and affects central nervous system,
2.	Bleaching	Cyanide	Wax, grease, soda ash, sodium silicate	Prolonged exposure will affect kidney and liver and leads to death
3.	Dyeing	Sulphate	Sulphides, acetic acid, mordant	Eye and respiratory problem
4.	Printing	Nitrate, phosphate	Starch, gums, mordant acids,	Harmful health hazards
5.	Finishing	Lead	Starch, salts, finishing agents.	Suppression of hematological system

Table.1 Effluent Discharge from Textile Industry

Following are the few recommended control mechanism which industries can carry out before discharging effluents into ground water. According to the IUPAC definition, flocculation is “a process of contact and adhesion whereby the particles of dispersion form larger-size clusters”. Ferric form of iron salts are considered to be good flocculating agents and are less sensitive to pH as like aluminum salts. Under suitable condition colloids come out of suspension in the form of floc or flake and remove most of floating particle. Ozonation is a major oxidizing agent which is helpful in the decomposition of organic pollutants of industrial waste. The major advantage of this process is it can be applied in the form of gas thus reducing the volume of waste water and other impurities like sludge. Ozone molecule is

an electron acceptor in which the hydroxide ions are catalyzed and decomposition of ozone to hydroxyl radicals which react with both organic and inorganic matters. Aerobic treatment is considered to be preliminary process particularly for decolorization of dyes. Photocatalysis is a biological means of removing waste from water in which has lesser retention time and little expensive (Zaharia et.al, 2012).

Air Pollution

As we all know air is a mixture of several gases like nitrogen (79%), oxygen (20%), and noble gases like argon, carbon-dioxide (1%). As air is a mixture the composition and proportion of the gases varies time to time depending upon the places. Air pollution is the state where air gets polluted with high concentration of chemicals which will usually harm living beings and cause serious damage to non-living beings. More recently, attention has been growing towards the control of emerging issues of hazardous air pollutants, which are mostly exposed in our homes or work places where majority of the life span is spent. In the household usage of burning fuels, solvents, glue, paints consist of Volatile Organic compounds like benzene, toluene, methylene chloride.

S.NO	TREATMENT NAME	TREATMENT TYPE	EFFECT
1	Coagulation/Precipitation/ Flocculation	Physio-chemical Treatment with alum and potash	Separates agglomerates
2	Ozonation	Physio-chemical Treatment	Removal of azo dyes
3	Wood saw dust	Adsorption treatment	Effective Removal of acid dyes
4	Aerobic Process	Biological Treatment	Decolorization of dyes
5	Photo catalysis	Biological Treatment	Mineralization with lesser confinement time

Table.2 Control Mechanism for Water Pollution

The Fig.2 shows the contribution of each industrial, household, commercial and agricultural sector for air pollution. It's clear from the chart that industrial sectors pollute more the environment at a rate of 52% percentage. When the industries are taken into account probably the textile sector account for 17-20% of the industrial air pollution with 72 chemicals being let out as waste out of these 30 of them are can't be removed.

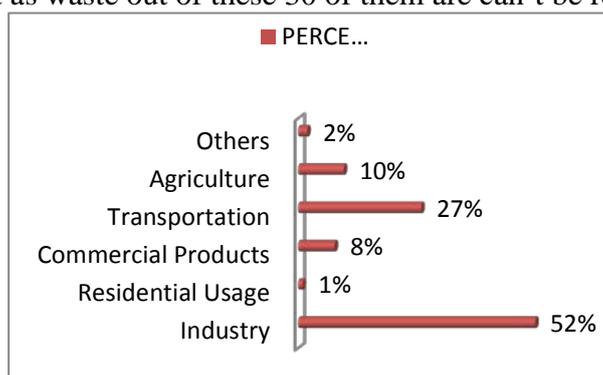


Fig.2 Sources of Air Pollution

Major Sources of Air Pollution

There are many sources of gases that pollute our atmosphere. The sources of such gases are broadly divided into Primary pollutants and Secondary pollutants. The primary pollutants are oxides of nitrogen and other sulphur and hydrocarbons emitted when the fuels are being burned. There are also secondary pollutants which are formed due to physical processes and chemical reactions, one such compound is the ozone. In a textile processing usually sulphur dioxide, sulphates, emanate from the poly-condensation, spinning the fibers and the fur generated during the weaving and spinning process. In the textile industry coal

and water are used which will generate steam comprising of carbon, carbon dioxide, carbon monoxide and sulphur polluting the air to greater extent. The following Table.3 explains about the major pollutants of air and their effect on environment.

S.NO	POLLUTANTS	EFFECTS
1	Carbon-mono-oxide	Reacts with blood and form carboxy-haemoglobin which will rest the blood transportation to other parts of body
2	Oxides of nitrogen (NO, NO ₂)	Acid rain, bronchitis, eye irritation
3	Sulphur-dioxide, sulphates	Eye irritation, breathing problem, acid rain
4	Methane	Lungs disorder
5	Carbon-dioxide	Head ache, nausea, increase in global temperature
6	Hydrocarbons (methane, ethylene, acetylene etc.,)	Carcinogenic effects

Table.3 Major Air Pollutants

Measures to Prevent Air Pollution

In order to prevent the hazards due to such emission from the industry the workers can be advised to use Material Safety Data Sheets to handle all the substances individually. This material data sheet can include physical properties, toxic rate, ill effects and first aid for effective handling of all the resources (Samiya et.al.). The manufacturer can provide the material data sheet while they deliver the goods so that the textile industry can make it visible to all the workers for their easy access. Staff members who regularly handle the chemicals can be given adequate training regarding the over usage of particular chemical and their ill effects on health and environment. The another way to control air pollution is placing chimneys to height not less than 30m so that all deadly gases are released out of the living organisms. The pollution can also be controlled with the help of settling chambers in which the polluted air is passed through chambers in which the solid particles with particular weight gets settled down. Filtration method can also be used for filtering the hazardous pollutants in which bed filter, fiber filters and fabric filters are widely used.

Results and discussions

Risk analysis

Risk is defined as uncertainty and in uncertainty lays opportunity, without uncertainty there is little chance to profit. Ignoring the risk will certainly affect the employee's health issues, lower the reputation of the company, and at last the environment also. So a better risk management technique should be adopted by each textile industry with which the organization can make a better decision considering the political, economical and social factors. The effect of risk depends on vulnerability of the factors involving risk and it may be either in terms of financial or non-financial terms.

Steps in Risk Management

In order to control the effect of risk there should be proper risk management technique adopted strictly by all the firms. So an agenda should be created such that all the actions should be carried over based upon the action plan devised. There are six steps in risk management process they are Identify, Analyze and Prioritize Evaluate, Track and Report, Monitor and Review. These steps are shown in Fig.3.

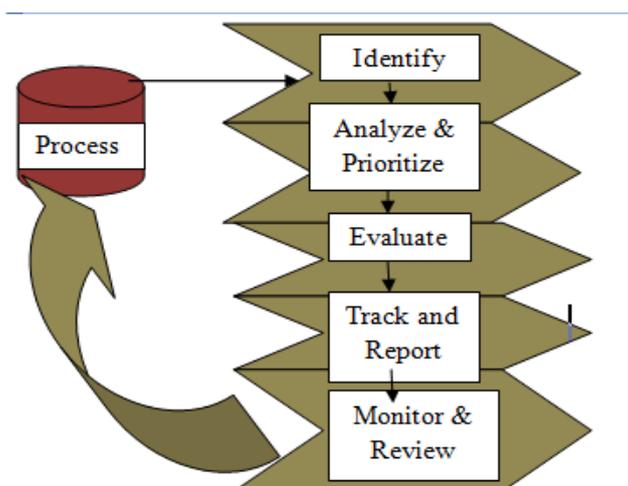


Fig. 3 Risk Management Process

Identify

This is the preliminary phase in the process of risk management. Identification of risk allows individuals to find out the potential risks so that the operation level employees will be aware of handling the problems. This identification step should not be a one step process it should be carried over frequently to avoid damage. The risk arises either due to internal or external sources of problem.

Analyze and prioritize

As soon as risk has been identified they must be assessed to their potentiality of loss and severity of occurrence. Analyzing the risk to health from hazardous substances created during the work process should be assessed well. Organization should take utmost care from preventing employees exposed to hazardous chemical substances. When the risk is identified and analyzed well then only it becomes possible to prioritize the risk. This prioritization of risk enables the employees to manage the most important risk.

Evaluate

The major problem with evaluation of risk is determining the rate of occurrence because the availability of information's regarding the past incidents may not be recorded. The evaluation of risk is concerned with how the people affected by risk perceive them and there should be trade-off between perceived risks and benefits.

Track and report

Risk tracking is the process of monitoring about specific risk and the progress in their devised actions plans. Tracking the risk is monitoring the prospects, impact and other measures of risk for changes that could change the precedence or risk plans and eventually the availability of the service. Risk reporting should give guarantee that the operations staff, service manager, and other stakeholders are responsive of the status of top risks and the plans to manage them. It should be ensured that control measures are used and maintained properly and the safety procedures are followed accordingly.

Monitor and review

Monitoring the risk is the process of implementing the action plan and their related tasks. Monitoring also involves the change initiatives and when changes in risk take place it could automatically affects the available service levels. Reviewing the risk involves learning the new technology, tools and reusable techniques that can be shared effectively with others.

Plans and procedures should be prepared to deal with accidents and other hazardous incidents wherever necessary.

Conclusion

In order to protect the environment every organization should regularly check and file the documents related to regulations concerning work place safety. The management must ensure that the organization has protocol to implement all the rules regarding the environmental and workers safety. Majority of the organization certainly will have the code of conduct like corporate social responsibility and environmental responsibility. The workers of the textile industry should ensure that the production area is distant from the place where they take food in order to avoid the consumption of chemicals through air. Thus the paper assess the hazardous substances that pollute water and air substantially, their sources and the steps to assess and control the risk in the textile industry is seen.

References:

- Parvathi, C, Maruthavanan, T and Prakash, C, Environmental Impacts of Textile Industries, The Indian Textile Journal, Nov, 2009.
- Chikogu Vivien, Adamu Ibrahim Caleb and Vivan Ezra Lekwot, Public Health Effects of Effluent Discharge of Kaduna Refinery into River Romi, General Journal of Medical Sciences, ISSN: 2276-7797, Vol. 2(3), pp. 064-069, June, 2012.
- Debesh Chakraborty and Kakali Mukhopadhyay, Water Pollution in India: An Input Output Analysis, IIOA Conference, June, pp.1-30, 2012.
- <http://www.eea.europa.eu/publications/GH-07-97-595-EN-C2/chapter8h.html>.
- Jones H.R, Pollution Control in Textile Industry, ISBN:0815504705, pp. 310-320, 1973.
- Little A.H, Measures Taken Against Water Pollution in the Textile Industries of Great Britain, Shirley Institute, Didsbury, Pollution Textile, pp.355-364.
- Meral Mungan, Ertugrul Alp, Ulku Yetis, Environmental Risk Analysis and Risk Management System of a Textile Mill in Turkey, pp.1-7, 2008
- Samiya Ahmed, Kelvin Tapley, Alexandra Clemett, Matthew Chadwick, "Health and Safety in the Textile Dyeing Industry", ISBN: 984-8121-08-0, Genesis (Pvt.) Ltd.
- United Nations Environment Programme (UNEP), Environmental Policy Implementation, www.unep.org/eou, 2010.
- WHO, www.who.int/water_sanitation_health/publications/facts2004/en/index.html, 2004.
- Zaharia Carmen and Suteu Daniela, Textile Organic Dyes-Characteristics, Polluting Effects and Separation/Elimination Procedures from Industrial Effluents-A Critical Overview, ISBN: 978-953-307-917-2, InTech Publishers, 2012.

“ENTREPRENEURSHIP & NEW VENTURE CREATION” KEY ELEMENTS OF THE ENTREPRENEURIAL ECOSYSTEM FACILITATING THE GROWTH OF ICT ENTREPRENEURS IN ITALY

Fabio Corno

Richa Lal

Stefano Colombo

Milano-Bicocca University, Dept. of Sociology, Milan, Italy

Abstract

This exploratory study examines the perceptions of Italian entrepreneurs about their experiences with their own new venture creations in Italy. The study utilizes the Ecosystem approach to examine the drivers of entrepreneurship. Integrating the theory from economics, sociology, and psychology, we argue that both the individual personality traits and the environment impact entrepreneurial activity. We used a mixed method approach with in-depth interviews and surveys, followed by interviews with the Control Group. The findings suggest entrepreneurial spirit in Italy is high, and the socio-cultural environment is perceived as encouraging entrepreneurship. The business environment challenges confronting ICT entrepreneurs are related to government policies and programs, access to finance, perceived need for support towards knowledge and skill building and, finally, to exploring International markets. Theoretical and practical implications are discussed along with directions for future research.

Keywords: Entrepreneurship, Italy, new venture creation, ICT

Introduction

Italy has a diversified industrial economy. The great strength of its economy lays in its vibrant small and medium firms, specializing both in high quality consumer goods and in high tech design and engineering products.

Unfortunately, the global crisis has highlighted Italy's long-standing weaknesses. Its economy is currently suffering from a combination of intertwined difficulties that are fuelling each other: a poor underlying growth rate, high public debt, and limited lending power of its financial institutions.

The average number of enterprises per thousand inhabitants is an important indicator of the degree of diffusion of private initiatives. It, however, is also an aspect of the fragmentation of economic system: in Italy there are about 64 companies per thousand inhabitants, among the highest value Europe, reflecting mainly a prevalence of small enterprises (ISTAT 2012).

The Italian economic system is characterized by the presence of a multitude of SME (95% of Italian Companies have less than 10 employees), many founded in the period of the “Economic Miracle”, when everything had to be rebuilt and many people had lost everything. Today this system, characterized by the claim “Small is Beautiful”, is facing many challenges: the economic crisis, globalization, credit crunch, changes in the world trade and

so on³¹⁸. All this requires a new class of entrepreneurs competent, able to meet customer's needs, willing to travel abroad, which will take over the family business or start your own.

Knowledge intensive entrepreneurship

The term "Knowledge Intensive Entrepreneur" lacks a very rigorous definition. For the purpose of the study, we have used the following working definition: "Knowledge Intensive Entrepreneur is defined in dynamic terms as the entrepreneur of normally small and medium sized enterprise (SME) that focus on the discovery, innovation or interpretation of knowledge. Such individuals typically maintain a business focus while continuously innovating."

Our focus on Knowledge-intensive ICT entrepreneurship is based on our understanding of its relevance: (i) as a major factor affecting innovation; (ii) as a core transformative mechanism for translating knowledge into growth, (iii) as a stock of capital or factor of wealth generation which can be used in the production of other goods; (iv) as important dynamic property of different systems of innovation and institutional setting.

Theoretical model

The development of entrepreneurship in a particular milieu depends not on a single over-riding factor but rather on a 'constellation of factors' at the individual, societal and national levels (Tripathy, Business Communities of India – a Historical Perspective, 1984). In order to understand the factors that support or hinder an entrepreneur, we have used the Entrepreneurial Ecosystem framework model in our research, instrumental in gaining insight into factors (individual, society, state) which enable growth performance among the entrepreneurs in the knowledge intensive ICT Sector.

The term "entrepreneurial ecosystem" (EE) refers to a combination of factors that play a role in the development of entrepreneurship.

INDIVIDUAL	SOCIO-CULTURAL	STATIEGIC/GOVT. PILICIES AND PROGRAMS	ACCESS TO FINANCE	KNOWLEDGE & SKILL BUILDING	INTERNATIONALIZATION
Education	Socialization	Infrastructure	Self finance	Business skills	International approach
Motivation	Risk-taking	Government policies	Bank credit	Training centers	International knowledge
Skill set	Family background	Incentives programs	Interest rates	Counseling services	Government agencies facilitations
Role models	Attitude	Taxation	Angel investors	Research & development	Access to financial resources
Opportunity	Support	Inflation	Venture capital	Business Incubators	Foreign languages abilities
Ability to manage		Min. entry barrier	Private equity	Networks	Intercultural skill
		Corruption			

Figure 1 – TheEntrepreneurial Ecosystem

³¹⁸2012 has been characterized by a very serious economic crisis: according to CERVED, bankruptcies have reached the highest level since 2006 (over 12.000 companies, especially SMEs), with an increase of 7,4%respectto 2010.According to Crivis D&B,the same trend has characterized 2012-IQ, with 3.001 bankruptcies.

In order to gain insight into the Entrepreneurial Ecosystem, the research group evolved the following six framework conditions that foster entrepreneurship, which have been found to be applicable in Italy and the BRICs.

- 1) *Individual Personality Traits*: refers to the personal qualities of an individual predisposing him/her to entrepreneurial activity. The development of these traits could arise from early socialization, parenting, socio-cultural norms, early education and familial care etc, which are the components of the general environment.
- 2) *Socio-cultural Context*: refers to the social and cultural norms that influence individual's behavior and attitude towards entrepreneurship.
- 3) *Government Policies and Programs*: refers to the extent to which government policies as reflected in tax or regulations are capable of facilitating new venture creation, and presence of adequate government programs in assisting firms in their startups, survival and growth
- 4) *Access to Finance*: refers to availability and affordability of various types of finance such as bank loans, equity, venture capital, angel funding, subsidies and grants.
- 5) *Access to Information, Opportunity for Knowledge and Skill-building*: refers to the availability of information on business opportunities and access to data required by entrepreneurs for managing their business. Also includes availability of opportunities for acquiring knowledge and learning that helps them in developing relevant skills required for managing their businesses.
- 6) *Internationalization*: refers to entry into the international market and meeting the challenges of existing players. For this an entrepreneur should have access to knowledge on international markets, procedures, have partners in the international markets for exports, imports, foreign direct investment, international subcontracting and international technical co-operation. They should also have access to appropriate training, and support services.

The model on Figure 1 comprises the various determinants as mentioned above which can facilitate and support the growth of an entrepreneur and thus influence entrepreneurial performance. Within each of the six main variables of this model, several sub-variables are identified to elaborate on the overall framework.

While the entrepreneurial ecosystem framework is presented here in a linear fashion, it is explicitly recognized that there are complex relationships among the different main variables and their sub-variables. They tend to reinforce each other, and weakness in one area often has a negative impact on other areas.

Research questions

The study is guided by the following three broad research questions:

‘What factors influence the support and development of ICT new venture creation in Italy?’

Methodology

The study utilizes an exploratory, theory building approach (Strauss & Corbin, 1998; Eisenhardt, 1989; Yin, 2003). A mixed method approach of data collection strengthens the study by providing both quantitative and qualitative perspectives on the phenomena being examined (Miles & Huberman, 1994).

Primary data collection was done through:

- 21 in-depth interviews with Entrepreneurs of small, medium and large scale enterprises;
- 65 on-line questionnaires sent out to the entrepreneurs of small, medium and large scale enterprises.

Interviews

The data collection involved conducting in-depth interviews with 21 small- to medium-large sized enterprises operating in the ICT sector in Italy. Each entrepreneur was responsible for founding and heading their organization. The interview questions were designed to examine the entrepreneurs' perceptions of the factors that influence the support and development of their entrepreneurial activities. The interview questions incorporated aspects of the six factors of the Entrepreneurial Ecosystem Framework in order to compare these factors across the BRIC countries and Italy.

Face-to-face, semi-structured, interviews were conducted with each participant in the language of the interviewees' preference (Italian/English). The focus of the interview was to identify the factors that facilitated or hindered startups as well as factors that supported the venture growth. Each interview took about 60-90 minutes. The findings shall follow.

Survey

The "survey" data was collected from 65 ICT entrepreneurs across small and medium enterprises (SMEs) in Italy. The selection of firms was based on the definition of ICT sector developed by OECD and includes the ICT sector industries based on products and services under these 4 branches- ICT manufacturing, ICT services, telecommunication and digital media.

A structural questionnaire composed mainly of closed-ended and rating questions was used as a data collection instrument. The questionnaire was pretested in order to ensure that the survey content and measurement scales were clear, valid, and appropriate. Based on the pretest responses, some demographic items were modified. The owner/founders of the firms were the target respondents of the survey to ensure the validity of the data collected since the study is based on personal experiences of the entrepreneurs affecting his/her growth potential.

We used the selective database of member ICT companies of Confindustria Monza-Brianza, Innovhub, Milan Chamber of Commerce and Fondazione Distretto Green High Tech Monza Brianza to send out the online questionnaire for the respondents to answer. Along with this, Social media was also used to reach out to the entrepreneurs.

To maximize the response, personalized cover letters were sent, with promise of feedback and confidentiality. In total, 400 ICT entrepreneurs across SMEs were randomly selected and identified as meeting the selection criteria. Questionnaire link was sent out to the entrepreneurs along with e-mail reminders and in some cases also telephonic reminders. Finally, we received 65 questionnaires which were relevant for the inclusion in the sample, resulting in a response rate of 16.25%.

For the selection of micro, small and medium enterprises for our research, we accept the definition of micro, small and medium enterprises – as stated by european commission, enterprise & industry

Revised SME definition as from 1 January 2005-

Enterprises qualify as micro, small and medium-sized enterprises (SMEs) if they fulfill the criteria laid down in the Recommendation which are summarized in the table below. In addition to the staff headcount ceiling, an enterprise qualifies as an SME if it meets either the turnover ceiling or the balance sheet ceiling, but not necessarily both.

Enterprise Category	Headcount	Turnover or	Balance Sheet Total
Medium-sized	< 250	≤ € 50 million	≤ € 43 million
Small	< 50	≤ € 10 million	≤ € 10 million
Micro	< 10	≤ € 2 million	≤ € 2 million

Research findings

Results of the findings are shared with respect to each variable. First the findings of the interviews are presented, followed by findings of the survey questionnaire. These findings are then co-related with the findings of the Control Group.

Interview Sample

The demographic details of the 21 entrepreneurs interviewed

Variable	Score
Age (20/35, 35/50, >50)	20 < 1 < 35 35 < 14 < 50 6 > 50
Sex (M/F)	100% M
Marital Status (Married/unmarried/divorced)	76% married 19 % unmarried 5 % divorced
Educational Background (Graduate - Master, PhD, MBA, Diploma, Engineer, Law)	47% Graduates Out of that - 0 Master 2 PhD 1 MBA 7 Engineers 2 Diploma 1 Law Degree
Prior work experience (Yes/No)	81 % Yes 19 % No
Family Background (family business)	89 % no family business
Scope of business (National, Europe, International)	57 % National 10 % Europe 33 % International
Business Turnover (< 2mln, < 10 mln, < 50 mln, > 50 mln)	10 %, < 2 mln 58 %, < 10 mln 19 %, < 50 mln 13 % >100mil

Interview Findings

Individual and personality traits

The motivating factors for starting a business, as indicated by the participants, include:

- **Personal Autonomy** – 80% of entrepreneurs interviewed shared that a chance to work independently and freedom to realize their ideas and dreams as a key driving factor for being an entrepreneur.
- **Prior Work experience** - Majority of the entrepreneurs shared that they have had the experience of 10-15 years in a similar sector, giving them an impetus to start their own business.
- **Desire to be self-employed** - Most entrepreneurs reported that they had reached a stage in life where had the desire to be self-employed rather than being an employee and that they felt more comfortable working on their own projects in their own way and by their own direction. 2 entrepreneurs identified dissatisfaction with their previous situation, which had influenced their decision to start up a business. Half the sample shared that their motivation to start the business was also to avoid uncertainties related to employment.
- **Being able to self-finance** - having worked for some years, most entrepreneurs felt that they could put in their personal savings to start the business
- **Better income prospects** - most entrepreneurs interviewed shared that although monetary reasons were not the prime motive to start a business, they definitely felt that becoming an entrepreneur could offer them better income prospects

- **Enjoyment** - About one-third of the entrepreneurs indicated that their business arose out of their enjoyment of IT-related products and industries.
- The broader picture seems to bring out personal motives as the main reason for choice. A strong individual attitude is indeed a common factor in explaining our sample's behavior.

Socio-cultural contexts (supporting/hindering)

Barring three, all entrepreneurs interviewed are first generation entrepreneurs. During the exploratory interviews with the entrepreneurs, it emerged that moral support received from their family was extremely valuable for them and it played a significant role in their decision to become an entrepreneur. Though, some entrepreneurs shared that their parents having worked as employees, they were initially very apprehensive about risk-taking and had the fear of failure, but were overall encouraging and supportive. Most entrepreneurs explicitly valued the support of their spouses. Thus, we see social and familiar scopes undoubtedly play a significant role in supporting entrepreneurship.

It has been seen that 80% entrepreneurs started their venture around when they were in the age range of 35-50 years. The argument can be interpreted to suggest that individuals are increasingly likely to become entrepreneurs in their mid-career life. Also, another component that can be co-related with the age is experience. It has been seen that most entrepreneurs started their venture only after gaining the required experience. Since experience explicitly embodies learning, greater experience promotes entrepreneurship by equipping the entrepreneur with skills needed to exploit opportunities.

It has been also observed that entrepreneurs often obtain idea for new ventures from their previous jobs. About more than 60% of the entrepreneurs interviewed reported that they had replicated or modified an idea they had identified in their previous employment.

Another important observation is that more than 50% of the entrepreneurs started in partnership with sometimes more than 2 partners, having diverse experiences. This is suggestive that diversity of experience might also facilitate entrepreneurship, by bringing together broader set of skills and experiences.

The interviews reveal that Networks in Italy are very important for entrepreneurs, especially in obtaining advice and feedback and for several other types of resources. New ventures formed by partners, instead of a single owner, thus provide access to a wider social and business network on which to draw, along with providing a diversified pool of competences.

In general, there is a diffuse feeling that culture in Italy supports entrepreneur.

Government policies and procedures

70% of the entrepreneurs interviewed shared that the administrative procedures and formalities that are to be fulfilled at the time of start-up are time-consuming and bureaucratic. To cope with this, they usually hire the services of a Consultant or rely on their personal contacts to get things done. In the absence of the two choices, it is burdensome to deal with the business registration procedures.

In order to reform the system, the European Commission has launched in 2008 the Small Business Act, asking its member states to speed up and reduce the costs of starting a company. It also asked that licenses, permits, authorizations required to start a business should be shortened to a maximum of 1 month.

Italy belongs to the Group-of-Eight (G8) industrial nations, the European Union (EU), and the Organization for Economic Cooperation and Development (OECD), and is working towards simplifying and reducing the time and costs involved to start up a business. Currently

in Italy there are many specific provisions (both national & regional) for fostering the creation of small firms and self-employment

Despite the Government efforts in improving the scenario, most entrepreneurs consider the current reality far from satisfactory. Appropriate tax measures can contribute to the development, growth and survival of firms. All entrepreneurs interviewed expressed that they face a high tax burden. Especially for a start-up, this burden is perceived as excessive. They are aware of the fact that some fiscal benefits are available for the first years of working; yet they are perceived as small and insignificant.

The structure of the tax system, including income and corporate tax, labor tax and VAT, influences the ability of firms to expand. The complexity of tax systems is in itself an administrative burden for entrepreneurs. Despite European commission recommendation, the tax burden in Italy continues to remain very high.

Access to finance

90% of entrepreneurs interviewed shared that they self-financed themselves. Some also took financial support from family and friends. Only one entrepreneur, out of the 10 interviewed, said that they took bank loan for running their day-to-day administrative expenses. This was possible only because the partner had a senior level contact with one of the leading banks in Italy so could access financial support from the bank. Another entrepreneur since he had acquired a company participated in public funding call and was fortunate to having received some small funding related to the development of a specific project

Others shared that access to finance remains a major barrier for start-ups in Italy. They have difficulties securing bank loans or finding risk-capital. Banks want a positive track record and collaterals – which new firms, particularly those in the knowledge intensive sector, generally do not have. Start-ups also experience serious difficulties in covering their working capital needs. Last 2 years there haven't been at all Venture Capital funds. One of the entrepreneur interviewed shared that he had the opportunity to present his business idea to VC and the technology innovation was really liked by them, but he was denied funds on the grounds of being too small and having a very small team. Another critical point in the relationship between entrepreneurs and the banking system is the difficulty for a new entrepreneur to keep up with the payment of suppliers, especially in the initial phase, when the cash-payment cycle is not yet up to speed.

Opportunity for knowledge and skill building

75% of entrepreneurs interviewed started their ventures after having worked 10-15 years in a technologically similar industry. After having gathered skill and experience, they felt the need to invest their time and energy in working for themselves. Only one entrepreneur started his company immediately after passing out of the University. He shared that the education did provide him the technical skill, but not the management skills because of which he made grave mistakes, which affected his business growth. Another entrepreneur, owner of medium sized company shared that he self-taught himself by reading extensively on management concepts, principles and practices and applying the learning to his business.

Majority of the entrepreneurs shared that they did not receive the desired support from the industry associations or university lead incubators, fulfilling their knowledge and skill building needs. One of the entrepreneur shared that he sought R&D support from one of the University lead incubators, but they took more than 2 years and finally he gave it up. Another entrepreneur shared his positive experience with the Italian industry association, who provided him an opportunity to present his business model at the United Nations and in association with French embassy, introduced him to some Venture Capitalists in France.

Overall, 20% of entrepreneurs shared that they received some minimal support from Italian Business Associations.

Most entrepreneurs feel that – also thanks to the European commission reforms aimed at promoting entrepreneurship - there are various professional bodies (technical institutes, incubators, international/national projects, government organizations, business association) who are working to provide information and technological support to the entrepreneurs, but unfortunately in reality, small entrepreneurs don't get the help and support that is desired.

To sum up the argument, setting up a business calls for drive, creativity and persistence, whereas developing a business gradually requires more managerial skills, such as efficiency, effectiveness and reliability. Considering that both personality and management skills are key elements for success, personal skills relevant to entrepreneurship should be taught from an early stage and be maintained up to university level, where the focus can concentrate on building management capacity. Italy, being part of European Commission is now committed to promoting the teaching of entrepreneurship in their education system.

Internationalization

60% of entrepreneurs interviewed shared that, despite understanding the advantages of embracing globalization and the risks of not doing so, they still remain focused on their national markets. The main reasons reported are lack of financial resources, language barrier, lack of knowledge to analyze foreign markets, but most of all lack of skills or skilled human resource to tackle internationalization.

30% of the entrepreneurs interviewed (the most well-established) are operating in the global markets and have an international orientation.

An important observation made highlights that the level of internationalization is closely related to the following factors: company size, the pro-active approach of the entrepreneur himself, and his readiness to expand to global markets.

In order to support the entrepreneurs in internationalization, there are local and regional networks in Italy supported by government and industry to advice entrepreneurs and help them develop new markets. There is focus on promotion of regional networks or clusters in order to help entrepreneurs mutually share their experiences and knowledge.

Survey Sample

The “primary survey” data was collected from 65 ICT entrepreneurs across small and medium enterprises (SMEs) in Italy (described in detail in the section METHODOLOGY)

Survey Findings

Individual and personality traits

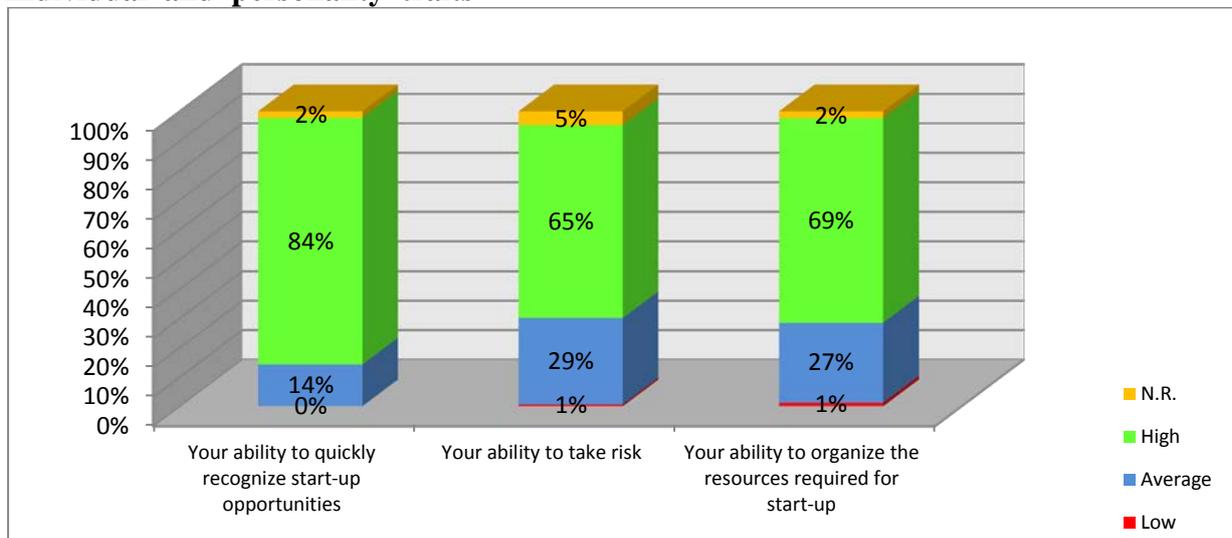


Figure 2: Explains individual & personality traits supporting entrepreneurship

Most favourable factors - Ability to recognize start-up opportunity, ability to take risk and ability to organize the resources for start-up

Least favourable factors - No specific

Conclusions - To sum up the argument, findings reveal that entrepreneurs in Italy possess individual and personality traits favoring entrepreneurship. The findings are in line with recent reviews and evaluations of entrepreneurship personality research suggesting that personality traits of entrepreneurs are important for entrepreneurship.

Socio-cultural context

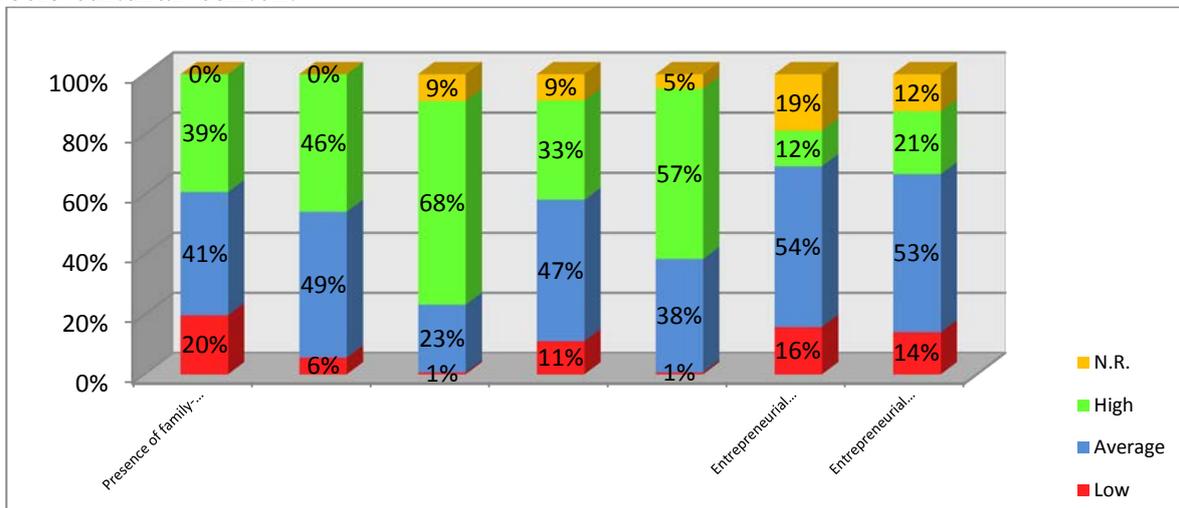


Figure 3: Explains the socio-cultural context encouraging entrepreneurship

Most favourable factors - Culture promotion venturing & risk taking, encouraging creativity & innovation, family support

Least favourable factors - Entrepreneurial opportunities for women and people in certain age categories

Conclusions - Findings reflect that in Italy - the 9th largest economy in the world, with 98% of the firms being small and medium enterprises - the socio-cultural environment seems to supporting entrepreneurship by encouraging risk taking, creativity and innovation.

The same has been reinforced in the *GEM 2008 Report for Italy*.

State/govt. Policies and programs

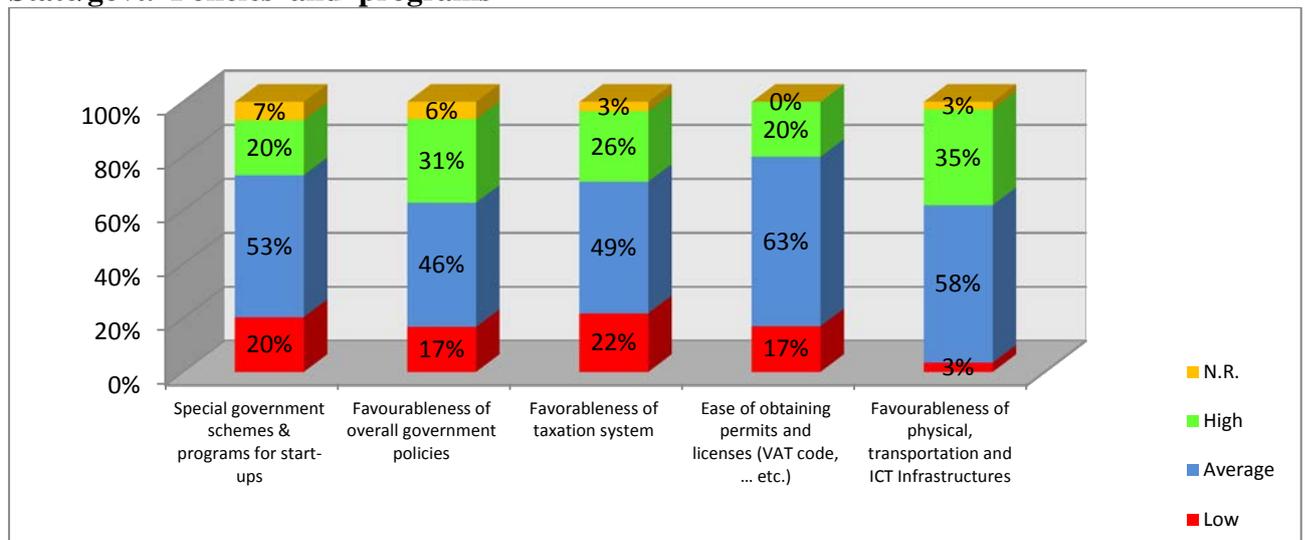


Figure 4: Explains policy and program support offered by State to new firms

Most favourable factors - Physical and ICT infrastructure

Least favourable factors - Special government programs and schemes for start-ups, tax system, ease of obtaining licences and permits

Conclusions: government has reinforced Italy's commitment towards further interventions aimed at rapidly simplifying and reducing time and costs involved to start up a business, as well as at eliminating present digital divide. Administrative procedures for enterprise creation are receiving substantial attention. Policy wise, in 2010, Italy has taken a number of policy measures aimed at improving the environment for SMEs and at reducing the administrative burden resulting from their interaction with the administration. Despite the Government efforts in improving the scenario, most entrepreneurs still consider the current reality far from satisfactory.

Access to finance

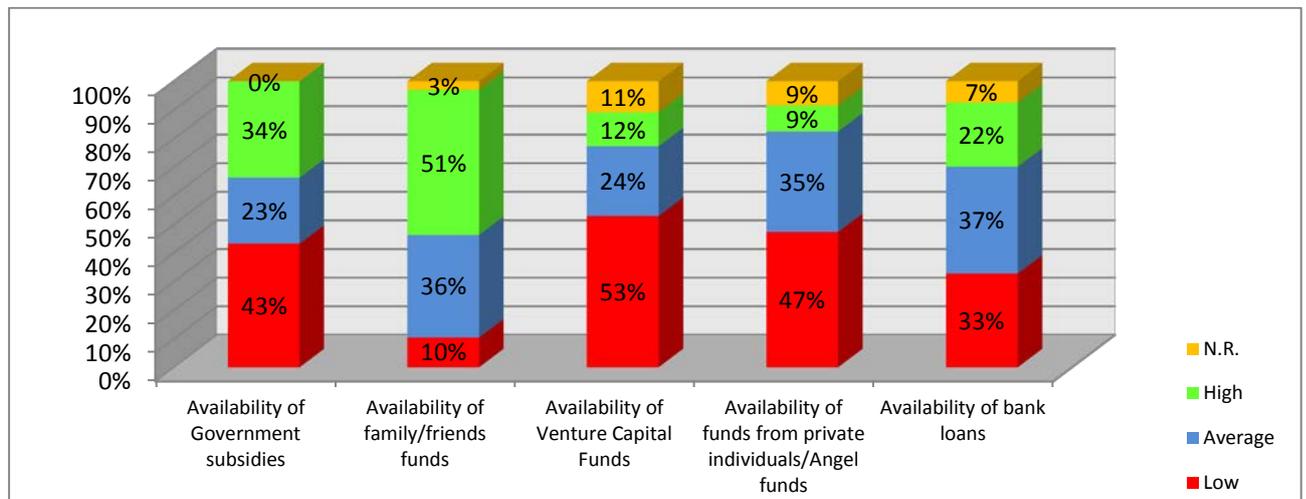


Figure 5: Explains the ease of Access to Finance

Most favourable factors - Availability of funds from family and friends, venture capital and angel investors

Least favourable factors - Availability of bank loans and government subsidies

Conclusions - As revealed by our findings, in Italy financial institutions (commercial banks in particular) generally do not develop specialized competencies and procedures to deal with the financial needs of this category of entrepreneurs.

Most high-tech ICT start-ups perceive that it is not easy to have access to funding from private equity, i.e. venture capital funds and angel investors. Presence of credit constraints from banks is very worrisome, due to the key role allegedly played by these SMEs in assuring innovation and growth in the economic system. Even though the findings should be interpreted with caution due to the relatively small size of the sample, nevertheless they provide an important insight into the existing financial scenario.

Access to information, opportunity for knowledge & skill building

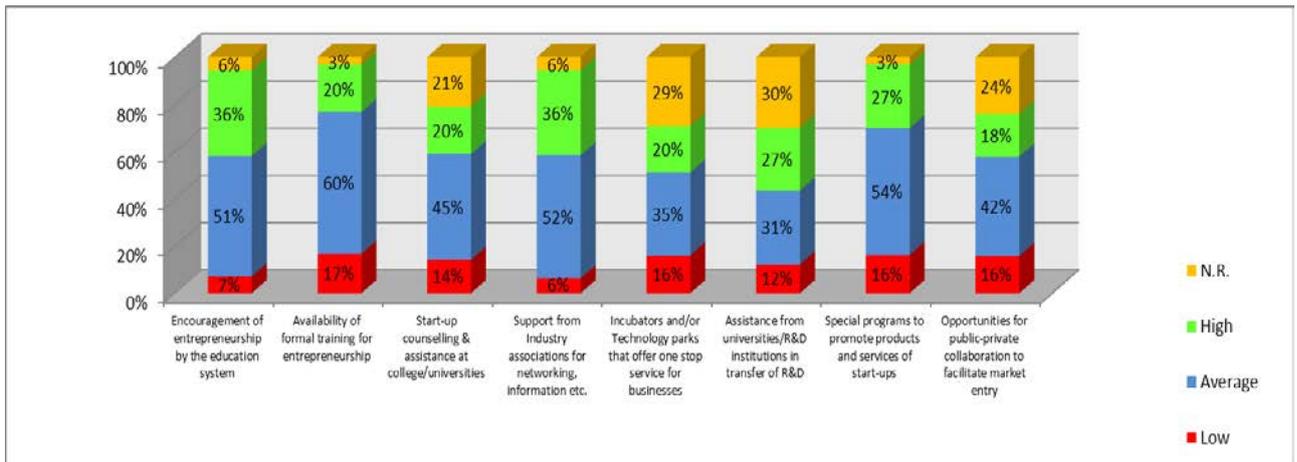


Figure 6: Explains access to information, opportunity for knowledge and skill building provided by different sources

Most favourable factors - Support from industry associations and to some extent education system encouraging entrepreneurship.

Least favourable factors - Availability of formal training on entrepreneurship, support from Universities, incubators and technology parks.

Conclusions - Development of scientific and entrepreneurship skills must be present in the curriculum at educational institutions, especially if Italy wants entrepreneurs driven by opportunity recognition, as opposed to necessity. Italy, being a EU member, is committed to promoting the teaching of entrepreneurship in their education system. However, there is a need of promoting these initiatives more systematically. Italy being an innovation-driven economy (according to the GEM classification of countries), successful SMEs entrepreneurship depends heavily on innovation and R&D. Young technology based SMEs need increased support and collaboration for R&D and innovation from Universities, technology parks, business incubators (OECD 2009, Science, Technology and Industry Scoreboard).

Internationalization of smes

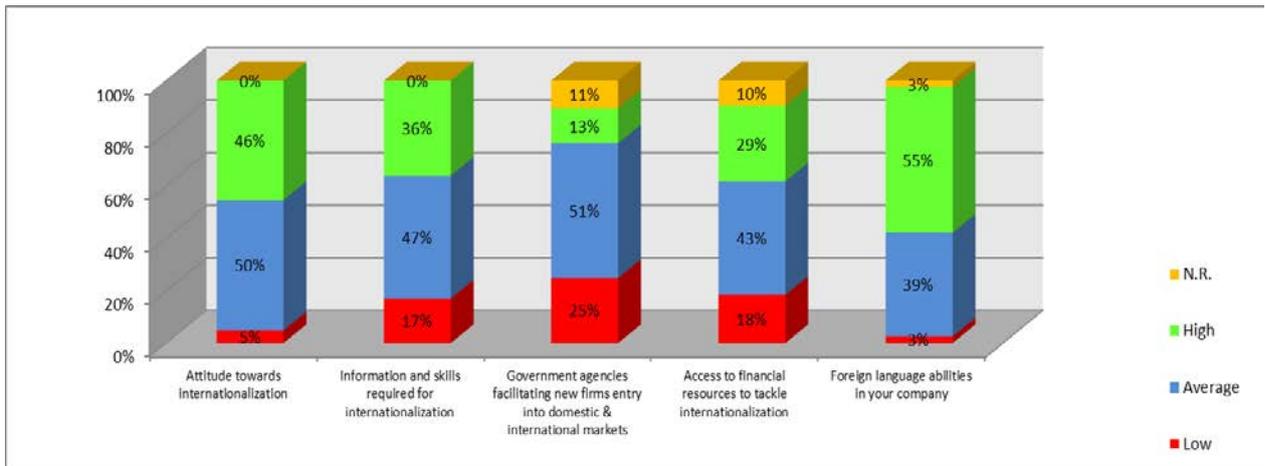


Figure 7: Explains factors supporting Internationalization

Most favourable factors - Personal attitude towards internationalization and knowledge of English language

Least favourable factors - Support from government agencies facilitating new firm entry and access to financial resources

Conclusions - SMEs encounter significant challenges in obtaining resources, foreign market knowledge, over-seas contacts and business opportunities and achieving organizational viability for developing foreign business (Zaheer 1995; Zaheer 2005; Crick 2007; Barnes 2006; Kneller & Pisu 2007). According to the European Commission Small Business Act factsheet 2010, as far as indicators measuring internationalization are concerned, Italian SMEs bear higher costs more and it takes them longer to export and import goods than for the average EU SME.

Reflecting the widespread recognition of the importance of internationally-active SMEs in subnational/regional, national and global economies, Italian government and business support organizations are taking policy measures to support and enable SMEs in the internationalization process.

Control Group Sample

The local experts were chosen to serve as the Control group in order to validate the findings from the interviews and survey held with the entrepreneurs. Control Group represented the following categories: Incubators, Venture Capitalists, Business Associations, Banks and University Professors.

Control Group Findings

Business support organizations (chambers of commerce, entrepreneurial associations)

The Italian Chambers of Commerce and other business support organizations carry out functions of general interest within the private business system. Most of them offer enterprises a full range of services to facilitate support for setting up a business, market intelligence, skill training, stimulate companies and businesses in innovative efforts and supporting businesses in Internationalization.

Interview findings with the senior staff of Business Support Associations reveal that their role is more important in small cities than in major cities. In the smaller cities entrepreneurs are more open in accessing the services offered by the associations. The relationship amongst the entrepreneurs is also mutually rewarding. They are active in organizing events, suggesting training courses and so on. In major cities this relationship is quite closed, entrepreneurs perceive it less important. Nonetheless business associations are far more networked in larger cities and have the resources to support entrepreneurs in a variety of ways.

Interviewees perceive entrepreneurs not willing to access services and open to advice for improving their competency and skills. Associations are widely networked not just in Europe, but also in growing BRIC economies to offer support and business acumen for internationalization. As far as credit is concerned, the scenario has been grim in the recent past, but the trend is improving and associations are playing an active role in assisting entrepreneurs in seeking public as well as venture capital funding.

Incubators

Interview findings with the senior managers of University Incubators in Italy are –

In Italy, there are mostly University based incubators. The PNI Cube Association is a network of all university based incubators in Italy. There are also Regional incubators, Private commercial incubators and Company-Internal incubators.

Reflecting on lack of support perceived by entrepreneurs in general, the interviewees responded that unfortunately the support necessary for the survival and growth of ICT firms is provided by only a few large and leading Incubators like I3P, whereas most of the Incubators function in the role of providing only the office space and logistic support.

Second, incubators are able to provide limited support for access to funding. Third, Regional incubators tend to have a geographical focus since their mission is to support new businesses locally. Fourth, many a times entrepreneurs are not competent and not clear on their business ideas.

All these factors need to be looked into by the policy makers to make the Incubation services reachable and be more relevant for the entrepreneurs.

Venture capitalists

Interview findings with the senior management of Italian Venture Capital Firms –

From the macro point of view is now no doubt that the scenario of venture capital in Italy is, in relative terms, one of the least developed in Europe. This does not mean that there are no interesting opportunities in Italy. There are a large number of VC firms investing in early stage entrepreneur ventures with a fairly good success rate.

Accordingly to the latest figures by Italian Venture Capital Association (AIFI) in the first half of 2012, the Italian private equity and venture capital funds registered investment activity characterized by 147 new operations for a total amount of 868 million euros, though down 43% compared to same period of 2011. So, venture capital has suffered due to the lack of funding available, translated into fewer investments. On an average we are able to invest in only 1% of the business plans we receive in a year.

Along with this, the problem lies at the end of entrepreneurs as well. A lot of projects we receive are not economically viable, entrepreneurs lack vision and ambition. Our focus is on helping talented entrepreneurs build remarkable companies and are not afraid of investing in pre-revenue companies - and often provide the companies first early stage funding support.

So, the venture capital industry needs more policy focus and fund support to be able to support early stage entrepreneurs.

Banks

Interview findings with the senior management of Italian primary banks are summarized below.

Unfortunately, the individual personality traits (that, they affirmed, are very important for the business success) have less and less relevance in granting of credit, as Basel 2 and Basel 3 regulations require only objective criteria for determining the rating, which in turn affects capital requirements and, lastly, the profitability of financial institutions. Some practitioners believe that their industry is characterized by “hyper-regulations”. Also with regard to the socio-cultural context the new regulations have strongly reduced the importance of “soft” characteristics.

Banks offer a range of standard products, and are able to tailor to the real needs of companies very minimally (only some financial institutions have specialized teams for looking into the specific needs of the companies and are able to offer a package of “tailored” services). Moreover banks don’t offer support in order to obtain governments aid.

Often Italian Banks have branch operations in other countries, but these do not serve Italian clients residing in Italy. Their operations abroad offer only networking services with professionals, consultants, lawyers but don’t offer any effective support for internationalization process, which is vital for the survival of Italian companies.

In order to meet companies’ new needs and accompany them in a growth path in this “new world”, financial institutions need to respond to a big challenge.

University professors

Interview with the University Professors reflect -

Strongly in agreement with the findings of the study - Resolving some structural weaknesses in the country's economy could give potential entrepreneurs an incentive to start creating jobs. For example, Italy's rigid labor regulations currently hinder the growth of new businesses' payroll, according to the latest Global Competitive Report, which ranked Italy 118th in the world for its labor market efficiency. Financial markets are not sufficiently developed to provide needed finance for business development (ranked 101st in the Global Competitive Index), and to make matters worse, Italian angel and venture capitalists prefer to invest in other countries. Italian entrepreneurs have also long suffered from the effects of a stifling and sometimes corrupt bureaucracy, high taxes and overregulation in general, all of which increase the costs of entrepreneurial activity. Probably in part reflecting these barriers, only a minority of respondents to the 2009 Eurobarometer Survey on Entrepreneurship in Italy (4%) said they were considering starting up a business.

Changes won't happen from one month to the next. Cultural capital for entrepreneurs will take a time to build, probably longer than the policy changes. For cultural changes to take place, education is key. Development of scientific and entrepreneurship skills must be present in the curriculum at educational institutions, especially if Italy wants entrepreneurs driven by opportunity recognition, as opposed to necessity. Finally, building a policy environment more conducive to entrepreneurship is an urgent task for Italy.

Conclusion

Discussion & limitations

This paper reports the findings of 21 in-depth interviews with entrepreneurs of small medium and large enterprises and a study on 65 entrepreneurs in the knowledge intensive ICT sector in Italy with respect to six framework conditions, based on the Ecosystem Model, which comprises of several determinants which influence entrepreneurial performance. Within each of the six framework conditions, several subcategories were identified to broaden the overall framework and make it more explicit for analysis. The overall aim was to analyze the interaction between the key factors which contribute to the success of Knowledge Intensive Entrepreneurs, with particular reference to the ICT sector in Italy.

The key findings of this study reveal that the entrepreneurial spirit in Italy is high, and the socio-cultural environment is perceived as encouraging entrepreneurship. The business environment challenges confronting ICT entrepreneurs are related to the government policies and programs, where entrepreneurs indicate administrative formalities towards new venture creation as bureaucratic, time consuming and expensive. Tax burden is felt as high. Access to finance is largely dependent on self-financing or using informal sources of funding. Banks refrain from funding SMEs. Entrepreneurs are aware of the possibilities connected with venture capital funding for SMEs in the knowledge intensive ICT sectors, yet few of them have direct access. ICT Entrepreneurs reflect a positive attitude towards internationalization, but face practical difficulties in having access to knowledge, relevant contacts, training, business support services etc. Last, the education system in Italy needs to stimulate the entrepreneurial mindsets amongst young people and provide knowledge and skill building support to young entrepreneurs through its universities, science parks and incubation centers.

The above findings are in line with recent studies by World Bank Ease of Doing Business Report 2011, Global Competitiveness Report 2010-2011 World Economic Forum, OECD Eurostat Entrepreneurship Indicators – performance for Italy or GEM Report 2008 for Italy.

Italy's economy is driven by a vast resource of micro and small firms. The share of micro and small firms in the overall number of firms is substantially higher in Italy than the EU average. In the light of the current economic challenges confronting Italy, it needs to decisively tackle the structural weaknesses and improve the business environment in order to

promote and support entrepreneurship. These reforms are essential for Italy to succeed in the immense challenge of simultaneously putting public finances on a sounder track, reviving and modernizing its economy, restoring competitiveness and finally promoting entrepreneurship.

Our findings have implications for both theory and practice. For researchers, the study provides empirical evidence on the determinants of entrepreneurship. For entrepreneurs, the findings provide an insight into various factors that play a role in sustenance and growth of their ventures. For policy makers, it proposes a vision of co-existence and inter-dependence of factors enabling and disabling entrepreneurship.

The study does have limitations. The sample size is small and is not representative of all regions across Italy. The sample has not been analyzed based on performance of ICT entrepreneurs backed by services like having access to Venture capital funding or in incubation as against those not backed by these services. The ecosystem model comprising of six framework conditions is not exhaustive to cover all aspects of the entrepreneurial environment. The study provides a macro view of the factors supporting ICT entrepreneurs, without giving a micro account of specific sub-variables. These are all dimensions that can be taken up in subsequent researches.

Despite the limitations, the study at this stage contributes to the understanding of the determinants of entrepreneurship which support and harness the growth on knowledge intensive ICT entrepreneurship in Italy.

Acknowledgement: The authors acknowledge the valuable support received from Confindustria (the entrepreneurial association) Monza-Brianza, Innovhub, a special agency for innovation of the Chambers of Commerce of Milan and Fondazione distretto green high tech Monza Brianza for their thoughtful suggestions regarding the research and support in data collection.

References:

- AA.VV, Measuring Entrepreneurship, SpringerLink, 2010
- Aghion P., Howitt P., The Economics of Growth, The MIT Press, 2009
- Alvarez C., Urbano D., Coduras A., Ruiz Navarro J., Environmental conditions and entrepreneurial activity: a regional comparison in Spain, Journal of small Business and Enterprise Development, Vol.18, n.1, 2011
- Aoyama Y., "Entrepreneurship and regional culture: the case of Hamamatsu and Kijoto", Regional Studies, 2009
- Bird B., "Implementing entrepreneurial ideas: the case for intention", Academy of Management Review, 1988
- Barringer B, Jones R, Neubaum DO. 2005. A quantitative content analysis of the characteristics of rapid-growth firms and their founders. Journal of Business Venturing 20 (5): 663-687.
- Campello M, Graham JR, Campbell RH. 2010. The real effects of financial constraints: evidence from a financial crisis. Journal of Financial Economics 97: 470-487.
- Carpenter RE, Petersen BC. 2002. Capital market imperfections, high-tech investment, and new equity financing. The Economic Journal 112(477): 54-72.
- Colombo M.G, Grilli L, "A capital partnership: how growth of venture capital affect the growth of high tech start-up" Strategic Change 18, 2009
- Colombo M.G, Grilli L, "On growth drivers of high tech start-ups: Explore the role of founder's human capital and venture capital", Journal of Business Venturing 25, 2010
- Colombo M.G, Grilli L., "On growth drivers of high tech start-ups: Explore the role of founder's human capital and venture capital", Journal of Business Venturing 25, 2010
- Corno F., Lo sviluppo del sapere imprenditoriale nel governo dell'impresa, The development of Entrepreneurial Knowledge in Corporate Governance, EGEA, Milano, 1989

- Cuervo A., “Individual and Environmental Determinants of Entrepreneurship”, *International Entrepreneurship and Management Journal* 1, 2005
- Greenfield S.M. – Strickon A., “A new paradigm for the study of entrepreneurship and social change”, *Economic Development and Cultural Change*, 1981
- Jennings J. – McDougald M.S., “Work-family interface experiences and coping strategies: implications for entrepreneurship research and practice”, *Academy of Management Review*, 2007
- Jiangyong L., Zhigang T., “Determinants of entrepreneurial activities in China”, *Journal of Business Venturing*, 25, 2010
- Lazear E., “Balanced skills and entrepreneurship”, *American Economic Review*, 2004
- Manimala, M. J., *Enterprise Support Systems: An International Perspective*, Editor with. Response Books, Jay Mitra and Varsha Singh New Delhi, 2009
- Minniti.M, Nardone.C, “Being in someone else’s shoes: gender and nascent entrepreneurship”, *Small Business Economics Journal* 28, 2007
- Minniti.M, Lévesqu.M, “Recent developments in the economics of Entrepreneurship”, *Journal of Business Venturing* 23, 2008
- Minniti. M., Lévesque. M., “Entrepreneurial types and economic growth”, *Journal of Business Venturing* 25, 2010
- Mueller S.L. – Thomas A.S., “Culture and entrepreneurial potential: a nine country study of locus of control and innovativeness”, *Journal of Business Venturing*, 2000
- Parker S.C, *The economics of self-employment and entrepreneurship*, Cambridge University Press, 2004
- Piva E., Quas, Rossi C., Colombo G., *Dynamic capabilities during the global crisis: Evidence from Italian new technology based firms*, Polytecnico di Milano, 2010
- Sluis J et al., “Education and entrepreneurship selection and performance: a review of the empirical literature”, *Journal of Economic Surveys*, 2008
- Wennekers S. et al., “Nascent Entrepreneurship and the Level of Economic development”, *Small Business Economics*, 24, 2005
- Williams L.K. – McGuire S., “Economic creativity and innovation implementation: the entrepreneurial drivers of growth? Evidence from 63 countries”, *Small Business Economics*, 2010
- Zacharakisa A.L. et al., “The development of venture-capital-backed internet companies. An ecosystem perspective”, *Journal of Business Venturing*, 18, 200
- REPORTS**
- Small Business Act “Support initiatives for Micro, Small & Medium Enterprises in Italy” Report 2011
- Assinform, Assinform Report, “Lo scenario del mercato ICT nel 2009”, 2009
- European Commission, *Effects and impact of entrepreneurship programmes in higher education*, Brussels, 2012
- European Commission, *Assessment of the 2011 national reform programme and stability programme for Italy*, Brussels, 2011
- European Commission, *Entrepreneurship in higher education, especially within non-business studies*, Brussels, 2008
- AIFI (Italian Venture Capital Association) Report 2012
- European Commission, *Entreprise and Industry, Small Business Act fact Sheet 2010/11 – Italy*, 2011
- Global Entrepreneurship Monitor, *Italy Report 2008*
- Venture Capital Monitor, “Early Stage in Italia – Rapporto 2012”
- World Bank, *World Bank Report 2011 - Doing business*, 2011
- World Business Forum, *The Global Competitiveness Report*, 2012
- World Economic Forum, *The Global Information Technology Report, 2010-11*, 2011
- World Economic Forum, *The Global Economic Impact of Private Equity – Report 2012*, 2012

LONG-LEGGED BUZZARD (AVES: BUTEO) BREEDING POPULATION FROM MOLDOVA REGION

Emanuel Ștefan Baltag, PhD

“Alexandru Ioan Cuza” University of Iasi , Romania
Sistemis Group Association

Lucian Eugen Bolboacă, PhD

“Vasile Goldiș” Western University of Arad, Romania
Sistemis Group Association

Constantin Ion, PhD

“Alexandru Ioan Cuza” University of Iasi , Romania
Sistemis Group Association

Abstract

Long-legged Buzzard (*Buteo rufinus*) is a medium size bird of prey which breeds in the southern Palearctic region. The known breeding area from Romania was limited to the south – eastern part (Dobrogea Region), but the available data on species distribution is very scarce. In the last 10 years, Long-legged Buzzard extended its breeding range north of this region. This northern expansion was also observed in other regions of the species' distribution. However, data on the new species range is almost absent.

During buzzard surveys from 2011 – 2012 in eastern Romania (Moldova Region) new data was recorded on species distribution. This surveys reveals 19 breeding pairs for our study area. All the nests from Moldova Region are built in trees from small patches of forests and with a high percentage of open habitats around. The breeding pairs are not concentrated in specific places, having a homogenous distribution on the entire range of the study area.

The reasons for the expansion are not yet known, but some potential factors driving it could be climate change, empty niche, habitat changing, intra- or interspecific pressure.

The Long-legged Buzzard is listed in Annex I of the Bird Directive as subject of special habitat conservation measures in order to ensure survival and reproduction.

(Max. 250 words)

Keywords: Long-legged Buzzard (*Buteo rufinus*), breeding, ecology, Moldova Region

Introduction

The Long-legged Buzzard (*Buteo rufinus*) is a medium size bird of prey which occurs mostly in warm and dry areas from south-eastern Europe, northern Africa, and Asia Minor to north-western China (Snow and Perrins, 1998). Its ecology is poorly studied, being one of Europe's least studied raptors (Vatev 1987). Inhabiting arid and semi-arid environments and prefers open habitat types for foraging (Shirihai, 1996), it feeds mainly on small mammals, but also reptiles birds or even insects, being an opportunistic raptor (Khaleghizadeh et al. 2005, Friedemann et al. 2010).

It had an unfavourable conservation status in Europe (SPEC Category 3, Species of European Conservation Concern) and Russia, where most of its population breeds (Munteanu 2012, Munteanu et al. 1997). The species density is variable across the distribution area, but overall it is declining. However, the species decline was not recorded in Eastern Europe, where it recorded an expansion in the last 10 years (Domashevsky et al. 2005, Baltag 2010).

In Romania the known breeding area until 2007, was limited to Dobrogea Region (South-Eastern part of Romania) with approximately 200 breeding pairs (Danko 2012). In the last years we saw an expansion of its breeding and wintering range in eastern (Baltag et al. 2012) and western Romania (Danko 2012). The first breeding pair for eastern Romania (Moldova Region), was recorded in 2007 (Baltag and Ion 2007). The Long-legged Buzzard expansion was recorded also in Republic of Moldova where it was recorded as a new breeding species (Baltag and Ajder 2011). The Long-legged Buzzard expansion in Europe starts at the mid of the 20th century (Danko 2012). In the last years the species covered most of the south-eastern territory (Baltag and Ajder 2011).

The aim of this study is to present the actual distribution of Long-legged Buzzard from Moldova Region and to analyse some ecological aspects of the new breeding locations.

Materials and Methods

The study area is located in Eastern part of Romania, between Siret and Prut River, at the Eastern border of the European Union. This area is a mosaic of agricultural land (56.81%), natural and artificial forests (14.18%), pastures and herbaceous vegetation associations (12.64%), artificial surfaces (9.07%), vineyards (3.85%), wetlands and water bodies (2.58%) and fruit trees plantations (0.86%, CORINE land cover 2006). The agriculture land is mainly cultivated with grains, potatoes and in the last years, rape, but still in an extensive way for the most part of it. The forest area is quite fragmented with few big forests in central and western part. Most of the pastures from this area are overgrazed by domestic animals.

From a geomorphologic point of view the study region consists of a large hilly plain in the north and a well fragmented plateau in the centre. Large floodplains with a very developed riverbed represent another main feature of the region. Most part of the region has an elevation varying between 50 and 200 m with heights over 500 m but not exceeding 700 m.

This area could be considered the coldest climatic region of Romania (at least for the winter period) with low mean temperatures, discontinuous snow cover and an appreciable atmospheric stability. All these features are enhanced by the high frequency of anticyclone conditions with short outbreaks of Mediterranean cyclones.

During 2011 – 2012 we developed a bird of prey monitoring programme which was specially designed for buzzard species. Using Hawth's Tools v.3.x extension in ESRI ArcGIS, v 9.3 software we randomly selected 80 squares of 5 X 5 km. These randomly selected squares cover 8.9 % of the study area (22 465.3 km²). During the selection process we aimed to have almost the same percentage of habitat types in our squares like in the entire study area (**Figure 1**). For each square we selected between 4 and 8 observation points, in order to cover all the possible habitats or locations (electric pylons) where buzzards could build their nests. The point selection was made, at first, in GIS software, but they were changed in field for a better visibility on the nesting or hunting habitats.

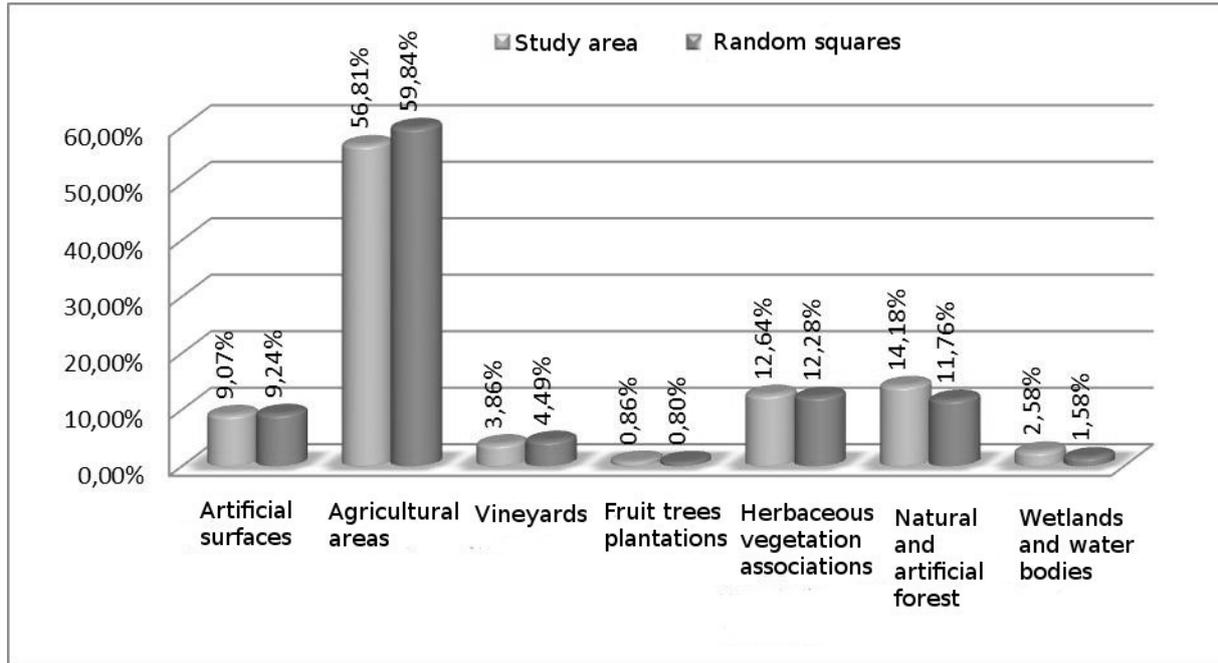


Figure 1: The percentage of habitats in the study area and in the random squares.

The observations were made from vantage points with binoculars 10 X 42 and telescopes 20 – 60 X 65. For each bird of prey observed we recorded the species, age, time of day, habitat where we saw the first time and behaviour. Only those individuals which had a territorial behaviour were recorded as breeding pairs. The other individuals were only mentioned in the field data form without including them in data analysis. To avoid double counting, the team members communicated the position of each individual, using phones or transceiver stations. Also, the bird's positions were recorded on maps. These maps were compared at the end of the day to exclude the possible double counting.

The observations were conducted between April 15th and June 15th. In this period, the adults are very active because of the nesting season and they have to hunt more than in other periods. The observations were made between 9 AM and 6 PM, time of day when birds of prey are active.

For each breeding pair we analysed the habitat composition around the nest (2 km). To detect if there are differences in habitat structure around the nest, we used Friedman's repeated-measures analysis of variance (F_r) in R v. 3.1 statistical software.

Results and Discussions

In the study period (2011 – 2012) we recorded 19 breeding pairs of Long-legged Buzzard in our study area. They are distributed on the entire study area. We did not find a concentration of breeding pairs in a certain area. Some pairs are breeding even in the northern part of our study area (Figure 2). This is the highest number of breeding pairs which was recorded in the eastern part of Moldova Region. Analysing the habitat structure and the breeding pair distribution we estimate an effective of 40 – 70 breeding pairs for the entire Moldova Region.

The breeding pairs of Long-legged Buzzard cover areas with elevation between 27 m and 361 m, with the average of 161.6 m. The elevation is lower than in the southern species territories (Greece, Bulgaria), but this could be influenced by lower temperature in our study area. A higher elevation brings a colder climate. There was an observation of Long-legged Buzzard in the Carpathian Mountains (Bicaz Gorges) but that individual was not breeding there.

The habitat types around the breeding sites are represented by natural and artificial forests (28.8%), agricultural land (24.7%), artificial surfaces (20.8%), pastures and herbaceous vegetation associations (14.8%), vineyards (7.6), wetlands and water bodies (1.8%) and fruit trees plantations (1.5%). However, the difference between the habitat composition around the nest (2 km) is significant ($F_r = 37.83$, $P < 0.05$). This data highlights a selectivity of Long-legged Buzzard for open habitats and not for forests as Common Buzzard.

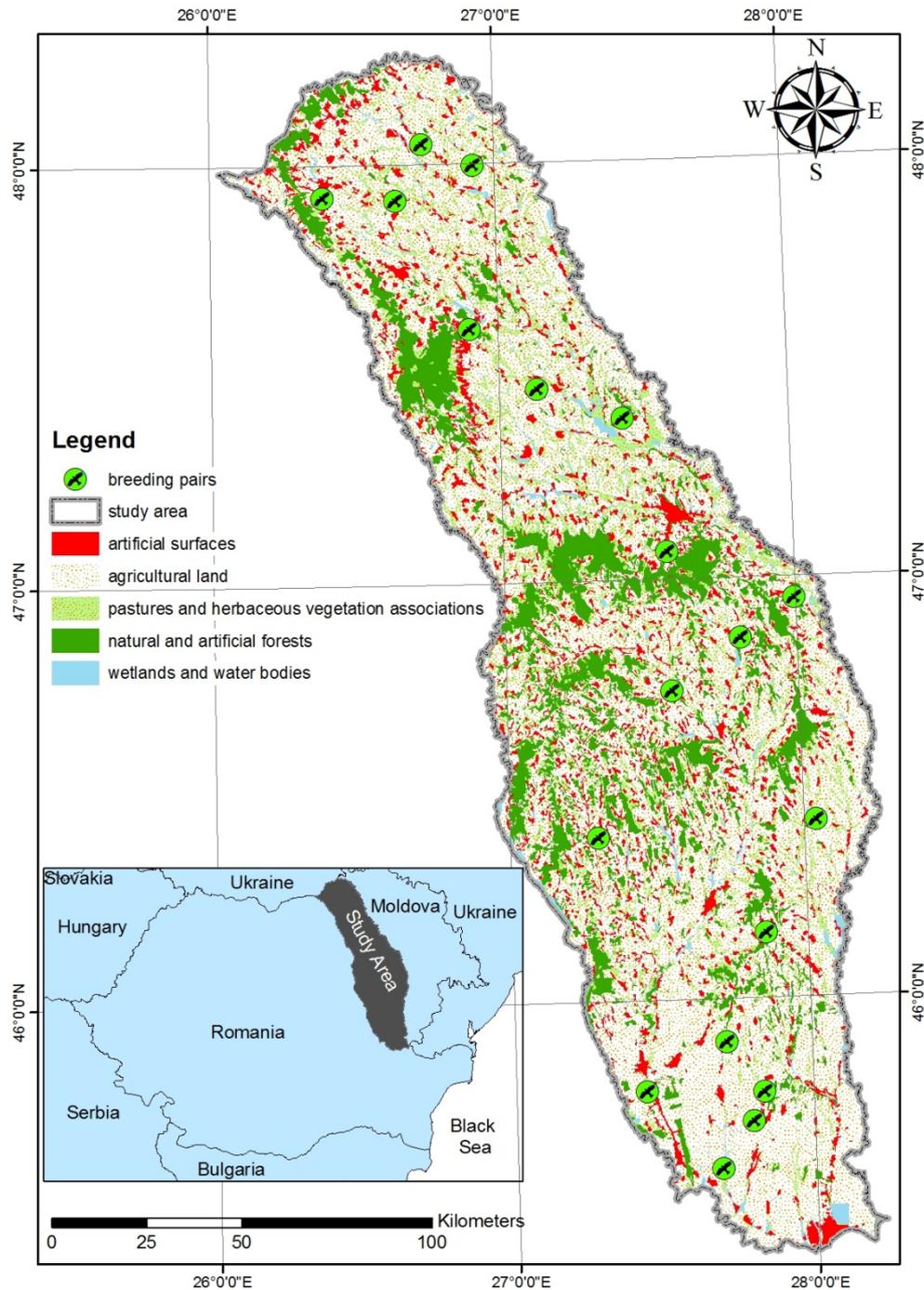


Figure 2: Distribution of long-legged Buzzard breeding pairs in Eastern Romania. Habitat structure according Corine Land Cover 2006. Vineyards and fruit trees plantation are included in agricultural land due to very small patches which are not visible on the map.

Long-legged Buzzard forages in open areas, avoiding dense vegetation where they are apparently unable to locate and pursue their prey (Friedman et al. 2010). The habitat composition around the nests, which we found in our study area, enrol in the species ecology.

Long-legged Buzzard are known to nest on cliffs (Alivizatos et al. 1998, Mullarney et al. 1999) and only accidentally on trees (Shirihai 1996). All the nests from our study area were built in trees. If the habitat is changing and they cannot find suitable breeding areas with cliffs, the Long-legged Buzzard can adapt a new style of nesting on trees (Friedman et al. 2010). In our study area the cliffs are very rare and are usually used for quarrying, which makes it almost impossible for the species to use this type of nest support. This ability to shift the nesting support was a great advantage in its expansion because it is easier to find large open areas with some patches of forest than with rocks.

The Long-legged Buzzard expansion could be influenced by the rise of average temperature in Eastern Romania over the last 30 years (Ion et al. 2013). This rising of the average temperature in March, by 1.4°C, could provide the necessary conditions for breeding (Baltag 2013). This expansion could be also influenced by prey availability. Moldova Region is a very important area for European Ground Squirrel due to high densities (Baltag et al. 2014). Another important factor could be the low coverage of large birds of prey which can compete with the Long-legged Buzzard. The Long-legged Buzzard expansion is still poorly studied and to find the factors which influenced this population movement, further studies are required.

Conclusion

Long-legged Buzzard is a medium size bird of prey which is in expansion for Eastern Europe. In 2011 – 2012 period we recorded 19 breeding pairs of Long-legged Buzzard during a buzzard survey which was conducted in eastern part of Moldova Region (Romania). The estimated breeding population from Moldova Region was estimated to 40 – 70 pairs. The nests were built in trees from forest patches with a high percentage of open habitats. The reasons for this expansion are not yet known, but some potential factors could be climate change, empty niche, habitat changing, intra- or interspecific pressure.

Acknowledgements:

We wish to thank Viorel Pocora, Laurențiu Petrencu and Lucian Fasolă for their help during the field work and also to Andrei Ștefan for suggestions in the early version of the manuscript. This work was supported by the strategic grant POSDRU/159/1.5/S/133391, Project “Doctoral and Post-doctoral programs of excellence for highly qualified human resources training for research in the field of Life sciences, Environment and Earth Science” cofinanced by the European Social Fund within the Sectorial Operational Program Human Resources Development 2007 – 2013. The study complies with the Romanian laws.

References:

- Alivizatos H., Goutner V. and Karandinos M. G. Reproduction and behaviour of the long-legged buzzard (*Buteo rufinus*) in north-eastern Greece. *Vogelwarte*, 39:176–182, 1998.
- Baltag E.Ș. and Ion C. Ecological aspects of birds of prey breeding in East of Romania. 6th Conference of European Ornithologist Union, 24 – 29 august 2007, Viena, Austria, 2007.
- Baltag E.Ș and Ajder V. Long-legged Buzzard (*Buteo rufinus*) expansion in the Historical Region of Moldavia. Annual Zoological Congress of “Grigore Antipa” Museum, 23-25 November 2011, Bucharest, Romania, 2011.
- Baltag E.Ș. Buzzards (Aves: *Buteo*) ecology from Eastern Moldova (Romania) [Ecologia șoarecarilor (Aves: *Buteo*) din partea de est a Moldovei (România)]. PhD thesis at „Alexandru Ioan Cuza” University of Iasi, Romania, 2013.

- Baltag E.Ș., Pocora V., Ion C. and Sfiică, L. Winter Presence Of Long-Legged Buzzard (*Buteo rufinus*) In Moldova (Romania), *Travaux du Muséum National d'Histoire Naturelle «Grigore Antipa»*, LV (2):285-290, 2012.
- Baltag E.Ș., Zaharia G., Fasolă L. and Ion C. European Ground Squirrel (Mammalia: Rodentia) population from Eastern Romania: density, distribution and threats. *European Scientific Journal*, ESJ/May/Special/Edition: 94-101, 2014.
- Danko Š. The long-legged buzzard (*Buteo rufinus*) in Slovakia in the past and present. *Slovak Raptor Journal*. 6:1-16, 2012.
- Friedemann G., Yom-Tov Y., Motro U. And Leshem Y. Shift in nesting ground of the long-legged buzzard (*Buteo rufinus*) in Judea, Israel – An effect of habitat change. *Biological Conservation*, 144(1):402-406, 2010.
- Ion C., Baltag E., Sfiică L. and Fasolă L. A new survey of the birds of Moldova Region (Romania). *International Journal of Osteoarchaeology*, DOI: 10.1002/oa.2363, 2013.
- Khaleghizadeh A., Sehhati-Sabet M.E., Javidkar M. and Adjami, A. On the diet of the Long-legged Buzzard, *Buteo rufinus*, in the Turan Biosphere Reserve, Semnan, Iran. *Zoology in the Middle East* 35:104–105, 2005.
- Mullarney K., Svensson L., Zetterström D. and Grant, P.J. *Birds of Europe*. Albert Bonniers Förlag, Stockholm, 1999.
- Munteanu D., Todorov R. and Vatev I. În *The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance*, edited by Hegemeijer J. M. W. and Blair M.J., T & A D Poyser, London, 1997.
- Munteanu D. *Conspectul sistematic al avifaunei clocitoare din România*. Editura Alma Mater, Cluj-Napoca, România, 2012.
- Shirihai H. *The Birds of Israel*. Academic Press, London, 1996.
- Snow, D.W. and Perrins, C.M. *The Birds of the Western Palearctic*, vol. I. Oxford University Press, Oxford, 1998.

FUTURE DEVELOPMENT OF COHORT LIFE EXPECTANCY IN SWEDEN

Petr Mazouch, Ph.D.

University of Economics, Prague, Czech Republic

Abstract

The aim of the paper is to analyze future development of cohort life expectancy in Sweden. Life expectancy from cohort perspective brings different information about mortality patterns than traditional period life expectancy. Analysis show that changes in life style and different mortality patterns could cause rapidly increase of life expectancy for current cohorts. Future development is based on simple alternative approach of mortality modeling (future estimates of mortality rates) which is based on cohort mortality patterns. The assumption of constant change of the force of mortality between two following ages across cohorts is the fundamental base of the proposed model. Estimation of cohort life expectancy based on presented model for already extinct cohorts is compared with empirical life expectancy which is already known and forecasting of cohort life expectancy for still living cohorts is done. (Max. 250 words)

Keywords: Cohort life expectancy, mortality, mortality modelling

Introduction

Mortality as one of the basic demographic field plays important role for a long time. Study of “mortality laws” (or general mortality patterns) is one of the fundamental demographic issues already from the beginnings of demography itself. It could be followed up to 17th century and John Grount’s study of Bills of mortality in London.

The need for accurate mortality analyses and forecast in the contemporary world is supported among others also by its connection to life insurance products or social policy and pension systems. In many spheres of life information about mortality development and its expected future changes become more and more crucial.

Main analysis of the mortality patterns in the history were based on period life tables (see Lee, Carter, 1992) but in the last years more studies focus on cohort perspective. We can find studies as Renshaw, Haberman, 2006 where traditional models are developed and extended to cohort factor. Importance of cohort influence are described as APC (age-period-cohort) models (Allai, Sherris, 2012) and are now used more often than before.

It is clear that cohort effect can be monitored only when data time series is long enough (for analyzing some cohort we need about 100 years – till the cohort is extincted). This fact could be reason why cohort perspective is taken into account now, when data series for many countries are available.

In this paper data for Sweden are used (Sweden has the longest time-series of mortality data) and extrapolation of the cohort life expectancy for still living cohort is done. For extrapolation model developed by Mazouch and Hulíková, Tesárková is used (see Mazouch, 2010, Mazouch, Hulíková, Tesárková, 2010 or Mazouch, Hulíková, Tesárková 2012).

Data

Data from the Human Mortality Database (www.mortality.org) were used. The longest time series in the Database is available for Sweden (starting in 1751, cohort data are available starting for the cohort 1676 to cohort 1981). For the analysis data for ages 60 and more were used.

Methodology

The proposed method is based on the relationship:

$$ar_{x,z} = \frac{m_{x,z}}{m_{x-1,z}},$$

where $ar_{x,z}$ is ratio of age-specific mortality rates defined for one particular cohort, x is completed age, z is the year of birth of the cohort (modeling of the ratio was used also in Haberman, Ranshaw, 2013). Because these ratios are highly time-variant (differs for particular cohorts, however, it was proved that its values do not follow any particular trend), it was necessary to estimate these ratios for individual ages in a particular modeled cohort by some average measure calculated for that age ($\overline{ar}_{x,z,n,s}$). This measure was calculated from n previous cohorts and these average measures are used for the estimation of future values of age-specific mortality rates. There are many possibilities how to estimate $\overline{ar}_{x,z,n,s}$. Among others it is possible to use the relation:

$$\overline{ar}_{x,z,n,s} = \frac{\sum_{k=1}^n \alpha^{k-1} * ar_{x,z-k-x+s}}{\sum_{k=0}^n \alpha^{k-1}}, \text{ for } x = s, \dots, \omega - 1$$

where $\overline{ar}_{x,z,n,s}$ is the average ratio of cohort-specific rates at age x , z is the year of birth of the modeled cohort, s is first age which is used for calculation (for example 60 years), α is weight used in the model having values from the interval (0;1). This weight could be selected subjectively according to needed "memory" of the model.

After all the average ratios are calculated for all ages (x) where mortality will be estimated, it is possible to calculate the first unknown mortality rate (for age $x + 1$):

$$\dot{m}_{x+1,z} = m_{x,z} * \overline{ar}_{x+1,z,n,s}$$

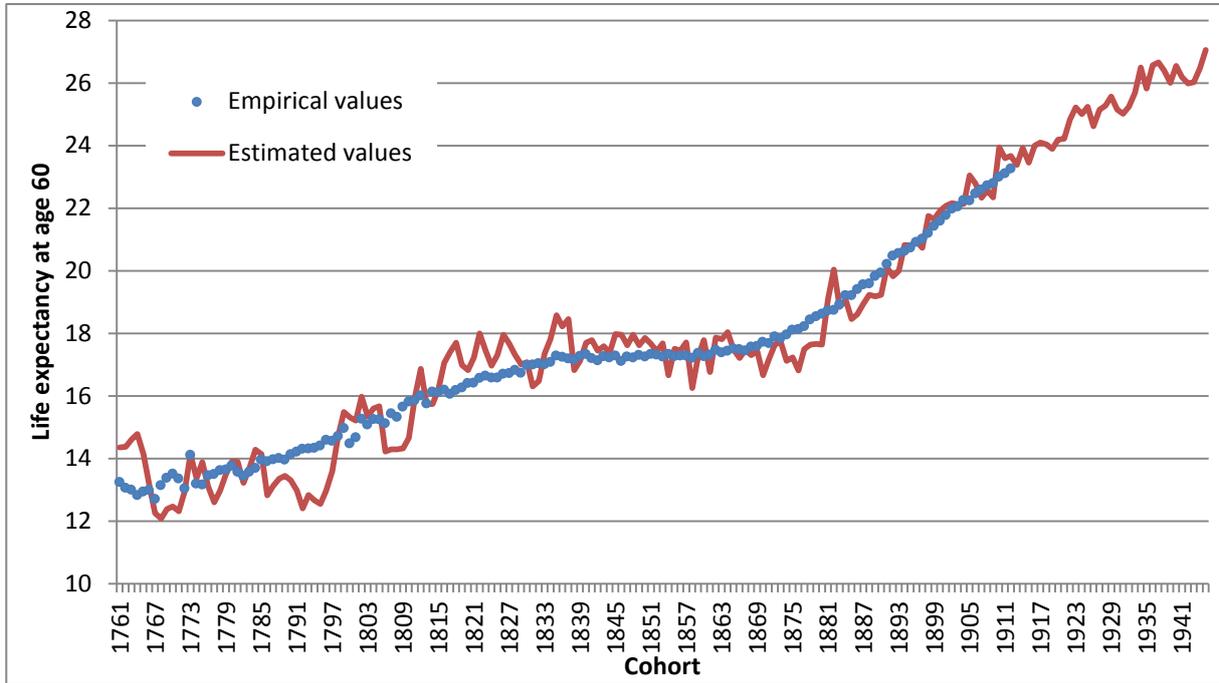
Results

To evaluate model quality it could be done comparison of empirical and modelled life expectancy at age 60 for already extinct cohorts in Sweden is shown in fig. 1 and 2. Cohort life expectancy at age 60 for Swedish females was equal to 13 years (one year higher than for males) at the beginning of the analyzed period, for cohort born in 1761. In next 150 cohorts the life expectancy for females grew to 23.3 for females and to 18.5 for males. The development of the life expectancy was not linear among analyzed cohorts, there were some periods of stagnation and periods of acceleration. It is evident that presented model described above respects all those changes in trend of life expectancy and estimated values are not dissimilar to the empirical ones. Differences between estimates and empirical values were decreasing in their values for younger cohorts. The biggest differences for males occurred for cohort born in 1818, modeled life expectancy at age 60 was overestimated for 1.5 years. For females the biggest difference was the overestimation for 1.9 years for cohort born in 1764. The variability of life expectancy of more historical cohorts, which also causes higher differences between empirical and estimated values, is dependent on many factors as war conflicts, epidemics and also poor data quality. If we focus just on later cohorts (younger) we can find that differences are much smaller than for older ones. If we compare just analyzed complete cohorts from 1850, differences are smaller. For males is the biggest difference equal to 1.0 year (for cohort 1882) and for females 1.3 years (for cohorts 1882 and 1876).

Those results show that model is good and respected all changes in life expectancy in the past and could be used for extrapolation of the future trend (for still living cohorts). For

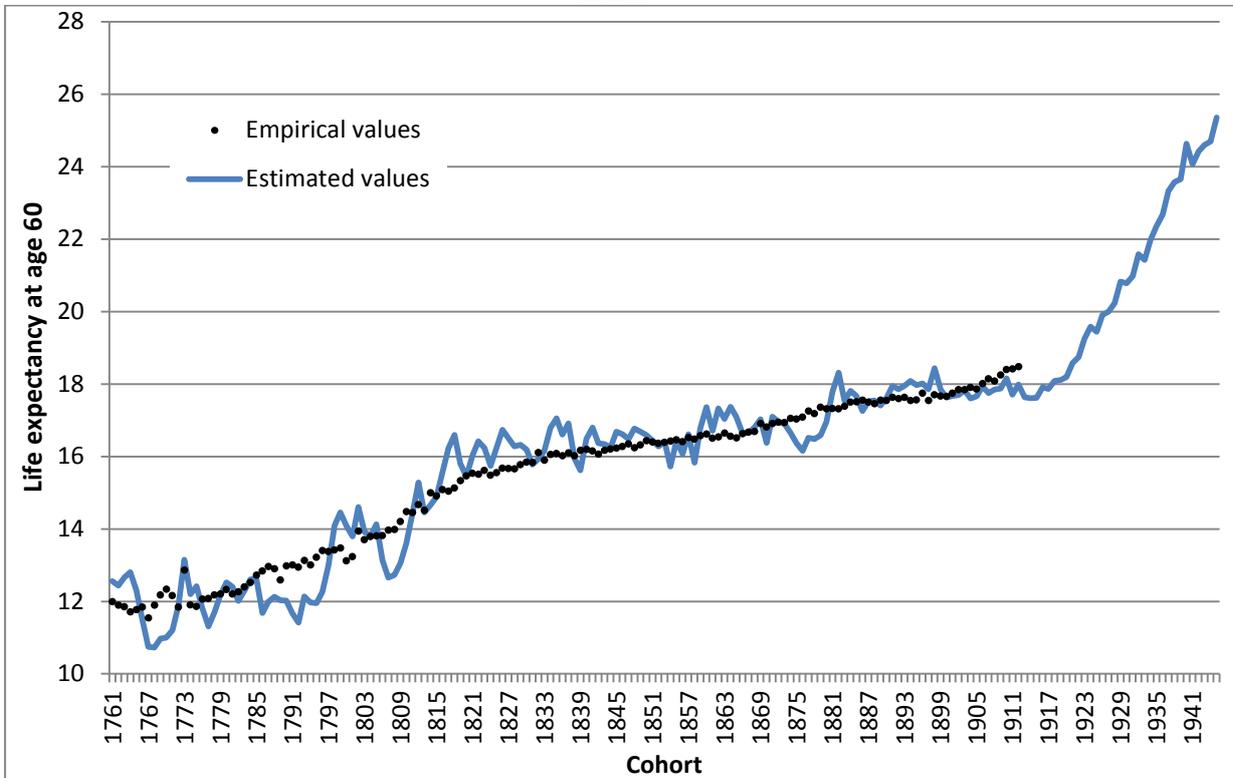
Sweden females the model respect past trend and for cohort born in 1945 is the life expectancy at age 60 around 27 years. Last complete (almost extinct cohort) cohort born in 1911 had life expectancy at age 60 only 23.5 years.

Fig. 1: Comparison of empirical and modeled life expectancy at age 60, cohorts born 1761–1945, Sweden, females



Source: Human Mortality Database (2012), author's calculation

Fig. 2: Comparison of empirical and modeled life expectancy at age 60, cohorts born 1761–1945, Sweden, males



Source: Human Mortality Database (2012), author's calculation

Estimates for males are different. As it is clear from fig. 2 there are many differences between males and females. Males' life expectancy in the past did not grow so fast as for females. Last complete (almost extinct cohort) cohort born in 1911 had life expectancy at age 60 only 18.5 years. Described model predicts that life expectancy for cohort born in 1945 would be around 25.5 years. That is a rapid increase about 7 years (for females 3.5 years only) of life expectancy at age 60.

Conclusion

Mortality patterns are very complex and depend on many other factors (cohort effect, period effect, age effect) and to find and describe all those relationships is almost impossible.

The model is very simple way how to estimate cohort mortality development in the future, it works with very simple presumptions and its application is not time-consuming in comparison to the other common models which are used.

Results show that in the next years there will be more changes in mortality patterns and problems with population aging, could become more important than before. Needs of the society when there is growing ratio of aging people are different than needs nowadays.

References:

ALAI, D., H.; SHERRIS, M. 2012. Rethinking age-period-cohort mortality trend models. Sydney. 2012. 29 s. Working paper 2012/11. CEPAR, Risk and Actuarial Studies, Australian School of Business.

HABERMAN, S.; RENSHAW, A. 2013. Modelling and projecting mortality improvement rates using a cohort perspective. *Insurance: Mathematics and Economics*, č. 53, s. 150–168.

LEE, R. D.; CARTER, L. R. 1992. Modelling and forecasting U.S. mortality. *Journal of the American Statistical Association*. 1992, roč. 87, č. 14, s. 659-675

MAZOUCH, P. 2010. Differences and ratios of mortality rates in Czech Republic. Demänovská Dolina 25.08.2010 – 28.08.2010. In: *AMSE 2010 [CD-ROM]*. Banská Bystrica : Občianske združenie Financ, 2010, s. 250–256. ISBN 978-80-89438-02-0.

MAZOUCH, P.; HULÍKOVÁ TESÁRKOVÁ, K. 2010. Different ways of mortality modelling. Vídeň 1.9.2010 – 4.9.2010. Conference poster. European population conference. Viena.

MAZOUCH, P.; HULÍKOVÁ TESÁRKOVÁ, K. 2012. Cohort mortality pattern modeling – model application to Swedish cohort data. Stockholm 13.6.2012 – 16.6.2012. Conference poster. European population conference. Stockholm.

RENSHAW, A.; HABERMAN, S. 2006. A Cohort-Based Extension to the Lee-Carter Model for Mortality Reduction Factors. *Insurance: Mathematics and Economics*, 38: 556–570.

THE NATURAL HERITAGE OF LIBRAZHD'S DISTRICT, IN FUNCTION OF THE STABLE DEVELOPMENT

Qamil Lirëza

University "A.Xhuvani" Elbasan, Department of History and Geography, Albania

Abstract

During the treatment of this paper it is aimed the accurate characterization of natural objects that constitute the natural heritage of this region, as well as the proposals for new monuments. In this article it is conducted a genuine scientific work for the analysis of these monuments and the values associated with them. The basic method that is used in the treatment of this paper has been the one of direct field observations, analyzing these aspects; their physical condition, size, prognosis and photography. The paper has scientific value to researchers in the field of geography and local authorities.

The main part in the paper is occupied by the results of the performed work in the following areas: The assessment of the natural conditions of this district, in function of the natural monuments. The classification of natural monuments; geomonuments, bio and hidromonuments. The physical analysis of the declared monuments, explaining their current situation and future trend. Their association with different views. Proposals for new natural monuments, for those objects that meet the criteria of being such. All these proposed monuments, are analyzed by the natural aspect, and accompanied by photos. At the end of this paper are given the conclusions, noting that the natural heritage of this district is a national asset. There are given some recommendations such as; their defence is responsibility of the state and of all the public opinion. Their good management requires strong legal measures in order to preserve these values.

Keywords: Heritage, Geomonumentes, Biomonuments, Hidromonumentes, Management

Introduction

The district of Librazhd lies in the South-eastern Region of Albania, between these geographical coordinates: 40° 54' 12'' and 41°15'07'' north latitude, 20°08'11'' and 20°35'03'' east longitude. The east side of this district is bordered with the state of Macedonia, the border passes in Jabllanicë-Belicë ridge. In the western part it is bordered with Elbasan's district, in the south with the districts of Gramshi and Pogradec, while in north with the districts of Mat and Tirana. It has a total area of 1013 km². In this important district pass important national automotive roads as; Elbasan-Librazhd-Qafë Thanë- Macedonia and Librazhd- Pogradec-Korçë- Kapshticë. These roads have created many connectivity possibilities regarding the southeast region such as with Greece and Macedonia, these show a favorable geographical position, which helps the economic development of this region.

From the perspective of the lithologic construction it has some types of depositions, which express the morphological and complex nature of this district. Magmatic rocks are found in the eastern and central part. A large extent have the flysch deposits that dominate in the province of Çermenika and in the south area. On these formations, there are carbonate deposits of Upper Cretaceous emerging in the form of spots in the east side of Shkumbin's valley. Molassic deposits are mainly represented by conglomerates, mixed with sandy, clay and alevrolite layers. They lie mainly along Shkumbin's valley, in the area of Mokra, they

have reddish tint. This district lies in the tectonic area of "Mirdita" and has a complex tectonic. There are several geological structures such as; The Shkumbin's syncline, the anticline ridge Jabllanica- Belica, many kueststhat are expressed in the hilly landscape. There are different tectonic discontinuity in the horizontal and vertical direction by conditioning the differentiation in the landscape.

In the region of Librazhd are distinguished some genetic types of landscape, conditioned by the lithology such as; the erosivo-denuding type of landscape, the lithological landscape, the river landscape, and the glacial one. It dominates the erosivo-denuding landscape that is related with the spread of terrigenous and river deposits, where it involves the upper basin of Shkumbin's river.

As a result of the great lithologic diversity, the tectonic evolution and present processes of the landscape's modeling, the district of Librazhd has a complex morphology. Here are distinguished the field of Domosdova in Prrerjas, the river valley of Shkumbin, highlands, ridges, hilly systems, etc.. The landscape is mostly hilly-mountainous. The lowest point is at the height of 173 m above sea level in the extension of Miraka and the highest 2,252 m in the mountain of Shebenik. The values of horizontal fragmentation varies from $1\text{km}/\text{km}^2$ to $5\text{km}/\text{km}^2$. The lowest values are found mostly in limestone formations, while the highest ones in molassic territories. The value of the landscape's energy have high values ranging from 100 to $500\text{m}/\text{km}^2$. The territories with the lowest energy are extended on both sides of Shkumbin's valley, while those with higher values are found in the mountains of Shebenik, Polis, Jabllanica, etc.

The climate is generally mediterranean-hilly in the low, pre-mountainous and mountainous areas with elements of the continental climate. The average annual temperature is 14°C , in January 4.4°C , while in July 23.2°C . The amount of precipitation goes up to 1300 mm per year. The above district is noted for a rich hydrography. The total length of water leakage is 2700 km, which is an average density of $6.5\text{km}/\text{km}^2$. The main river is the one of Shkumbin with its branches in both arms as the one of Rrapun, Zalli I Qarrishtes, Zalli I Gurakuqit, Bushtrica, Hotolishti, Gostimës etj. In this district are distinguished many lakes, as the ones of Shebenik's mountain with glacial origin, there are also karst springs and lakes.³¹⁹ (Qiriazhi P. Sala S. The monuments of Albania's nature, 2005)

The main morphological units of Librazhd's district are; The highland of Çërmenika, the highland of Golloborda. The Massive of Shebenik and Jabllanicë-Belice ridge, Polis-Guri I Zi ridge, the valley of Shkumbin and the hollow of Domosdova.

Methodology

During the drafting of this paper I am based on the method of direct observation of this region's nature in the following areas: The assessment of natural conditions, the soil's geology, the landscape, the climate, plant and waterfront resources. In this paper are explained and interpreted the major proclaimed natural monuments, and are also identified many other natural monuments eligible to be such. Various measurements are made and geomorphological schematic profiles are built. New natural monuments are accompanied by various photos. It is compiled the map of the natural monuments of this district.

Results

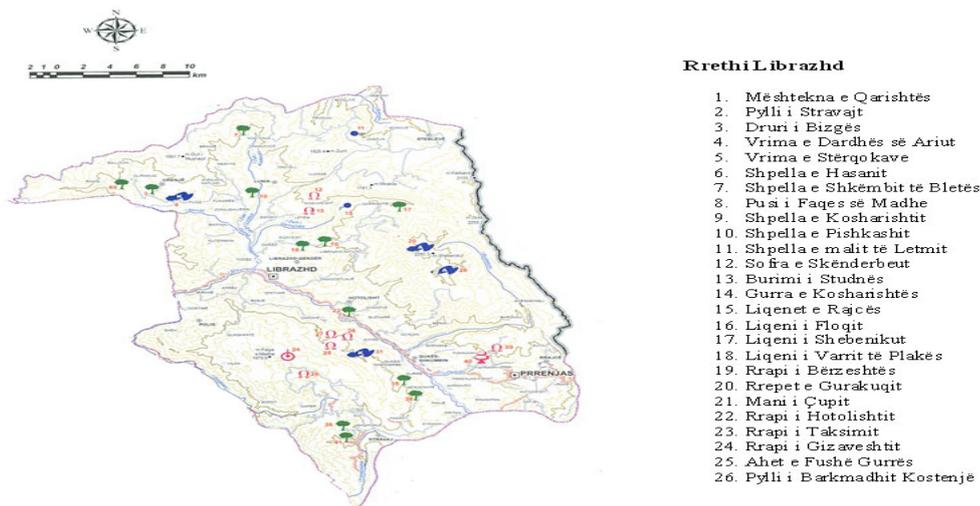
The heritage is a value forwarded generation after generation. It represents a value of the natural environment and, as such, it is natural, but also material and spiritual value of the society and, as such, it is cultural too. In this paper is dealt only with the natural heritage.

In the composition of the natural heritage there are also objects, landscapes, ecosystems, special, rare or unique habitats, relicts, endemic or endangered to extinct. As

³¹⁹ (Qiriazhi P. Sala S. The monumentes of Albania's nature, 2005)

such, they have great scientific, cultural, didactic, but also tourist importance. Therefore they are stored and protected with strict ways, clearly defined and précised in special laws. All these objects, landscapes, habitats and ecosystems are considered unique natural heritage, which is conditioned only by natural legality, while human activity is practised only to protect and identify their values, which are expressed in many rich biodiversity and in the particular landscape (Map 1).

HARTA E MONUMENTEVE NATYRORE TE RRETHIT TE LIBRAZHIDIT



Map 1. The natural monuments of the Librazhd's district of Librazhd

The monuments of nature are listed on the national heritage values, constituting the third category of protected areas, but according to our law for the protected areas, for their unique and irreplaceable importance, they benefit the protection of first category, in accordance with which are prohibited: the alienation of values for any kind of purpose of economic exploitation; works or activities that change the character of the monument or natural course of its evolution. (Qiriazhi P, Sala S. 2005)

A monument of nature is an object of nature with one or some unique values: scientific, ecological, cultural, historical, aesthetic, didactic, religious; a habitat of a rare, endemic, threatened or of special importance specie and surface up to 50 hectares. Their values are related to the specificity of action of the natural factors and legality, which has conditioned a clear distinction from other objects of nature. These values are numerous, mostly unique and irrevocable for the nature and our society:

Irreplaceable source of information for many sciences; resource for scientific researches;

Cultural resource for professionals and people of different ages; Irreplaceable didactic tools, pupils and students in these real natural labs take and materialize their scientific knowledge;

Considering and protecting the values of the monuments of nature, they become a source of ecological education of the citizens. We are concretizing this by giving an example of the catastrophic consequences of erosion. In our country, the forms created by it, are known as "bokërrima", in which lacks not only the plant cover, but also the one of soils, on the surface it has emerged the fundamental rock, which is sterile, barren. These areals are fairly regarded as "wet deserts". They serve as clear examples of nature's 'revenge' for the wild use of soil and vegetation from the human society. As such, they convince all visitors for the danger that accompanies the major human errors.

In the district of Gramsh until today are revealed 26 monuments of nature. Of which; 9 objects are geomonuments, 6 objects are hidromonuments and 11 other objects are biomonuments.

Geomonuments

Vrima e Dardhës së Ariut. It is located in the southwest of the peak of ‘Faqes së Madhe’ (Polis), 1550 m above sea level. It is a karst shadoof, formed in limestone rocks of the upper Crete, 20 m deep, with the bottom blocked by the clay. It is explored by the Speleologists of "Puglia Grotte-Dauno" of S. Sala. It has scientific geomorphological, biological, didactic values. It can be visited by the rural road Librazhd- Dardhe Mal-monument.

Vrima e Stërqokave. It is located in east of the peak of ‘Faqes së Madhe’ in Polis, 1640 m above sea level. It is a karst shadoof in limestone cliffs of Crete, 24 m deep with the bottom blocked by a mass of ice, perhaps fossil of Quaternary period. It is explored by the Speleologists of "Puglia Grotte-Dauno" S. Sala. It has scientific geomorphological, biological, didactic value. It can be visited by the rural road Librazhd- Dardhe Mal

Shpella e Hasanit. It is located near the village Dardhe Mal, 930 meters above sea level. It is formed in the limestone cliffs of the upper Crete, about 43 meters long, about 1 meter in wide and 4 meters high. It has stalactites and stalagmites, scientific, cultural, tourist and didactic values. It is explored by the Speleologists³²⁰ of "Puglia Grotte-Dauno" (1996) and S. Sala. It can be visited by the rural road Librazhd-Dardhë Mal.

Shpella Shkëmbi i Bletës. It is located in northwest of the village Dardhë Mal in ‘Shkëmbi i bletes’ with height of 100 m. It is explored by the Speleologists of "Puglia Grotte-Dauno" S. Sala. (1996). It is over 60 meters long, 20 meters wide, 25 meters high. It has scientific, didactic and tourist values. It can be visited by the rural road Librazhd-Dardhë Mali-monumenti.

Pusi i Faqes së Madhe It is located on the eastern slope of Polis, 1750 m above sea level. It is formed in the limestone of Crete, 62 m deep, with the blocked bottom. It was explored by the Speleologists (Qiriazhi P. Sala S. monuments of nature of Albania, 2005) It has scientific geomorphological, didactic, tourist value. It can be visited by the rural road Librazhd-Dardha e Malit.

Shpella e Kosharishtit. It is located near the village of Kosharisht, 350 m above sea level. It is formed in limestone of Crete, about 60 meters long, 10 meters wide and 5 meters high. It has stalactites and stalagmites of rare beauty, and scientific (geomorphological, hydrological, biological), didactic, tourist value. It can be visited by the rural road Librazhd-Kosharisht.

Shpella e Pishkashit. It is located near Pishkash village, 400 m above sea level. It is formed in the limestone of Crete, about 100 m long, 5-7 wide and 3-4 high. It is filled with stalagmites and stalactites, and it has scientific (geomorphological, hydrological, biological) didactic and tourist value. It can be visited by the rural road Librazhd-Pishkash.

Shpella e malit të Letmit. It is located near Letëm village, 800 m above sea level. It is up to 60 m length, while its width reaches 7-8 m. It is formed in the Trias-Jurasi limestone, it has stalactites and stalagmites, scientific (geomorphological, biological), didactic and tourist values. It can be visited by the rural road Librazhd-Letëm.

Sofra e Skënderbeut. It is located in the south of Shebenik, 1,376 m above sea level. It is a limestone block of the upper crete placed over the ultrabasics in table shaped, about 1 km in length and 800 m wide. In lithological contact the indication of the peneplain “Hello” (Mirdita) is the red crust of iron-nickel ore. The legend says that on this stone, Skanderbeg’s

³²⁰“S. Sala Puglia Grotte-Dauno” (1996)

army ate bread. It is studied by Prof. E. Pumo. The use of iron-nickel ore damaged the monument's values. It has geological, geomorphological, historical, tourist value. It can be visited by the road Përrenjas-Pishkash.³²¹ (Qiriaz P. Stud. Wildlife No. 13. 2002. Pp. 23)

Hidromonumentes

Burimi i Studnës. It is located in the east of Fushë Studnës (Gollobordë), 600 m above sea level. The karst source comes by the contact between the limestones and old flysches. With lavish, pure and cold water it creates a pleasant environment. It has hydrological scientific, didactic, tourist value. It can be visited by the rural road Librazhd-Studnë.

Gurra e Kosharrishtës It is located near the village of the same name, 600 m above sea level. It is a karst source that comes by the contact between the triassic limestones and tortonian molasse. With great flow, clean and cold water, it creates an attractive environment. It has hydrological scientific, didactic, tourist value. It can be visited by the rural road Librazhd-Kosharisht

Liqenet e Rajcës. They are found on the eastern slope of Shebenik, in the glacier circus, near Rajcë village, 2,200 m above sea level. There are four glacial lakes between moraine, with a length of 100-200 m, 80-100 m wide, several meters depth. They comprise alpine lake ecosystem. They have clean water and the surface freezes in winter. They have scientific (hydrological, biological), aesthetic, didactic, ecological value. It can be visited by the rural road:- Përrenjas-Rajcë-Skënderbej –the pedestrian path towards Shebenik.

Liqeni i Floqit. It is located near Floq village, 700 m above sea level. It is a karst lake formed at the exit of the karst source, in the contact between limestones and molasses. It has hydrological scientific, didactic, tourist value. It can be visited by the rural road Librazhd-Floq.

Liqeni i Shebenikut. It is located in the northern peak of Shebenik, 1800 m above sea level. It is located in a complex circus, it is a glacial lake with pure water, that freezes during winter on its surface. It is an alpine lake ecosystem with hydrological scientific, aesthetic, ecological values. It can be visited by the road Librazhd-Rajcë and on pedestrian way by Rajca and Qarrishta

Liqeni i Varrit të Plakës. It is located near the Xhyrë village, 600 m above sea level. It is a small karst lake, formed in the exit of the karst source, by the contact between limestone of crete and tortonian molasses. It has scientific (hydrological, biological), didactic and tourist values It can be visited by the road Librazhd-Xhyrë.

Bio

Mështekna e Qarishtës. It is located on the northern slope of Qarishta's valley, 850 m above sea level. There is a birch forest (*Betula alba*), wood endangered with extinction. It has biological ecological and scientific values. It can be visited by the rural road Librazhd-Qarishtë..

Pylli i Stravajt. It is located near Stravaj village, 800 m above sea level. It has beech trees (*Fagus silvatica*) accompanied with other broadleaved plants. It has scientific biological, ecological values. It can be visited by the rural road Librazhd-Stravaj.

Druri i Bizgës. It is found in the forest of Stravaj, about 1500 m above sea level. It is represented by two beech trees united in the height of 5 m, from where they continue as one trunk. With a diameter of 80 cm, 25 m height and 200 years old, it has scientific biological, ecological, didactic value. It can be visited by the rural road Librazhd-Stravaj.

³²¹Qiriaz P. The monuments of nature in Albania – Unrated values, Geog. Stud. no 13. 2002. pp 23-25

Rrapi i Bërzeshhtës. It is located in Bërzeshhtë village, in the municipality of Qukës. It represents a separated tree with a height of about 26 m, trunk diameter of 280 cm, 820 cm circumference and about 560 years old. The crown circumference reaches 110 m. It is saved by the residents, after serving as a venue for talks and conferences. It has scientific biological, historical, tourist values. It can be visited by the rural road Qukës-Bërzeshhtë.

Rrepet e Gurakuqit. It is located in the middle of the village with the same name, Orenja municipality, about 800 m above sea level. There are two trees with 15-16 m height, trunk diameter of 220-230 cm, age of 250-300 years. Under its shadow are developed many meetings and conferences. It has scientific biological, historical, tourist value. It can be visited by the rural road Librazhd-Gurakuq.

Mani i Çupit. It is located in the middle of Librazhdi's village, Orenja. It represents a separate wood, with 6 m height, trunk diameter of 120 cm, 400 cm circumference, and age of 220 years. The crown circumference is 40 m. Some branches have started to dry up. It has scientific biological, historical value. It can be visited by the rural road Librazhd-Orenjë.

Rrapi i Hotolishtit. It is located in Hotolisht village, about 700 m above sea level. It represents a separate tree, height of 25 m, trunk diameter of 300 cm, circumference of 600 cm, age of 500 years. The circumference of the regular crown reaches 94 m. Under the tree the villagers are gathered for assemblies. It has biological scientific, didactic, historical and tourist value. It can be visited by pedestrian street: Hotolisht municipal center -Hotolisht village.

Rrapi i Taksimit. It is located near the village Librazhd Katund, Qëndër municipality, about 1000 m above sea level. 'Rrapi i Taksimit' is 10 m high, with a trunk circumference around 180 cm and 65 cm diameter and age of 140 years. Its 17 branches form the crown with 16 m circumference. It has biological scientific, didactic value. It can be visited by the rural road Librazhd-Librazhd Katund.

Rrapi i Gizaveshit. It is located in the middle of the village with the same name, Qëndër municipality, about 900 m above sea level. It represents a 500 year old tree, with umbrella crown, 28 m height, 190 cm diameter trunk and 643 cm circumference. Its 19 branches form a crown of 85 m circumference. The inhabitants gather there for meetings and conferences, aforesaid to pay taxes. It has biological scientific, didactic, spiritual value. It can be visited by the road Librazhd-Dorëz-Gizavesh

Ahet e Fushë Gurrës. It can be found near the village Gurrë, 1300 m above sea level. It represents the 100 year old beech forest, about 50 hectares, 20-30 m height, trunk diameter of 50-80 cm, 150-200 cm circumference. It is still preserved in good condition. It has biological scientific value. It can be visited by the rural road shines Librazhd-Gurrë..

Pylli i Barkmadhit në Kostenjë. It is located near the village Kostenjë (Çermenikë), 1200 m above sea level. It represents the 90-year-old beech forest and other timber, while in the bottom appear the oak. The height of the tree is 15-30 m, it has trunk diameter of 50-60 cm and 70-90 cm circumference. It is still well preserved. It has biological scientific, didactic, aesthetic and tourist value. It can be visited by the rural road Librazhd-Kostenjë.

Proposed Monuments

From direct observations in the geographical area of this district, there have been some natural objects that may meet the criteria to be natural monuments. Geomonumentes bio and hidromonumentes have been proposed. The analysis of each of them is done in the following:

Geomonumentes

1. The Canyon of Rinas is located in the northeastern part of this district in Ostrovica Mountain. This canyon has a length of 1 km and height up to 80m. Its slopes are nearly

vertical and built from limestone deposits. Here are developed many surface karst shapes. The nature around is very relaxing with a rich vegetation. It is located about 26 km away from the town of Librazhd. It has specific scientific and tourist value.

2. The Rock of Gurakuq is about 25 km far from Librazhd, in the northern part of this region. It has an attractive view when approaching, its height is up to 400m. The massive is a limestone cliff, incredibly sharp and sculpted view. It resembles to a Olistolitic stone. You can take the rural road of Librazhd in the north direction if you want to visit it.

Bio

1 Rrapi i Shehut. It is an over 100 years old tree. It is located about 26 km far from Librazhd. It has a full crown and is over 70 m high and has 6 m diameter. It has a very attractive appearance,. Also it has special scientific, aesthetic and biological values.³²²(Lirëza Q, Sala S. Monograph "Tomorrica." Natural Heritage, Tirana 2013)

2. Pylli i Potlit is a forest massive with an area up to 150 ha, with different trees; maple ash, oak, hornbeam, etc. The massive is located on karstified rocks but is generally well maintained. The distance from Librazhd is about 15 km, and can be visited easily with high vehicles. This massive carries multiple tourist and didactic values.

Hidromonumentes

1. Liqeni i Floqit, has a total surface area up to 3.5 ha, it has karst origin, where is shown the surrounding environment with limestone rocks. During summer the surface filled with water is greatly reduced. It is located about 16 km away from the town of Librazhd.

2. Gurra e Malit, is a powerful karst resource with rare beauty, it makes very winding in the form of a white foam while it descends. Its average flowing goes up to 100 l of water per second. The distance from Librazhd is about 23 km. It has didactic and scientific value

Conclusion

During the treatment of this paper I have identified the natural monuments of Lidrazhd's district. I have emphasized on the multiple values of this natural heritage as an integral part of all our national heritage.

First in this paper are provided important dates to the nature, geology, climate and the morphology of the landscape, all these in view of this natural heritage.

The main part is occupied by the analysis and evaluation of the monuments of nature, classifying them in geomoumentes, bio and hidromonumentes. The innovation of this paper is the proposal of new natural monuments of this region based on the criterias that must be met to be a subject of natural monuments. In this paper are proposed 3 geomonumentes 2 biomonumentes and 2 hidromonumentes. The map of these monuments of nature has a major value.

³²²(Lirëza Q, Sala S. Monography "Tomorrica".The natural Heritage, Tirana 2013, pp 232-232

Reference:

- Bego F. Preliminary considerations about the chiropterologic values of some caves of Albania, International Speleological Conference, Tirana may 1998.
- The Institute of Geological Studies, The Geology of Albania, Tirana 1990
- The Cadastre of the Monumentes of Natyre of Albania, Tirana, 1999
- Lirëza Q, Sala S. Monography “Tomorrica”.The natural Heritage, Tirana 2013, pp 232-232
- Lirëza Q. The monumentes of nature of Tomorrica province, Paper International Conference Agricultural University Tirana, 2014 pp. 23-45
- Lirëza Q. The geomorphological risks in Tomorrica province. paper, International Conference. Faculty of Philology, Tirana, 2011
- The law for Protected Areas, no. 8906, Tirana, 2002
- Qiriaz P, Sala S. The monumentes of nature in Albania. Tirana, 2006 pp. 123-134
- Qiriaz P, Sala S, Shahu A, Xhaferi S, The monumentes of Skrapar, Tirana, 2005 pp. 103-104
- Qiriaz P. The monuments of nature in Albania – Unrated values, Geog. Stud. no 13. 2002. pp 23-25
- Sala S, Lirëza Q. The settlements in Tomorrica province. The nature and people. Tirana 2014
- The decision of the Council of Ministers of the Republic of Albania, no. 676, date 20.12.2002, for the annoucnment of protected areas, the monuments of nature.

FOREST COMPOSITION CHANGES WITH COMPETITION IN THE NORHERN PART OF TURKEY

Ibrahim Atalay

Department of Geography Buca Faculty of Education, Dokuz Eylul University Izmir, Turkey

Abstract

Turkey, having at least three main climatic types, various land forms and altitudes changing frequently due to mountainous topography, contains more than 10 thousands plant species. The study area on northern Turkey is rich in different forest vegetation types changing from broadleaf deciduous forests to Mediterranean shrublands, and pure or mixed *Pinus sylvestris* var. *sylvestris* forests which resembles taiga forest in northern Hemisphere. Here, under the humid-mild and cold-subhumid conditions, the composition of climax forests are subjected to changes by virtue of excessive forest harvesting, improper silvicultural applications, and abandonment of agricultural fields. This structure leads to the competition for light among trees and shrubs in the Black Sea Region and its southern parts.

In the humid mild climatic conditions prevailing along the coastal belt of Black Sea Region, for instance, abandoned agricultural fields and clear cut areas are occupied firstly by coniferous tree clusters such as *Pinus sylvestris* and *Pinus nigra*. Because the seeds of these conifer tree clusters germinate only when exposed to direct solar radiation on mineral soil as it happens on abandoned agricultural fields. So, the coniferous clusters form the initial succession in the broadleaf deciduous forests. But these clusters may well be converted into pure broadleaf deciduous forests after one rotation period because of the fact that the seeds of these conifer trees do not germinate in the shade of forest understory. The cold humid sunny areas, which are found on the mountainous areas of the northern Anatolia, are the natural occurrence areas of scots pine (*Pinus sylvestris*) forests. Here the seedlings of *Abies nordmanniana* growing underneath the *Pinus sylvestris* forest form a mixed forest of *Pinus sylvestris* and *Abies nordmanniana*. This forest is then converted into pure and/or mixed *Abies* forest in places where *Pinus sylvestris* has been completely removed.

In short, the light factor is the driving force especially in the competition between conifer and broadleaf trees in the cold-humid and cold and mild forest environments of northern Turkey.

Keywords: Competition, Forest, Succession, Human Impact

Introduction

One of the changes of native forests compositions is subjected to the destruction of forest in various ways. In this case, competition occurs between species (interspecific competition) and between individuals of the same species (intra-specific competition). Interspecific competition may occur when, for example, two species may potentially occupy the same habitat (e.g. under the forest canopy) but where one factor, or a combination of factors, may give one the edge over the other. Intra-specific competition occurs in plants, for example, in germination when the emerging seedlings, jostle for light, water and nutriment, with survival going to the most vigorous (Simmons 1982). The other factor of the competition is the excessive cutting of overstory trees growing under the direct solar radiation in a mixed forest. Competition between or among the species is an important factor not only for

reforestation and afforestation activities but also for the application of silvicultural procedures in a given area.

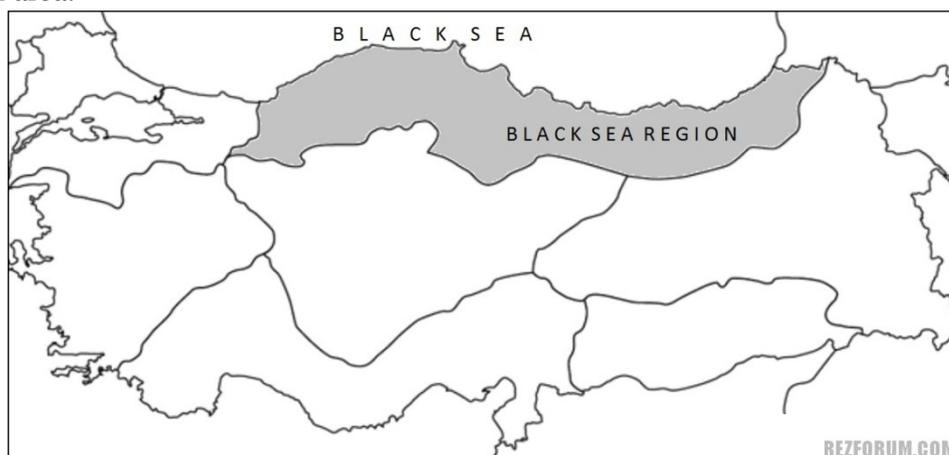


Fig.1. Location map of the study area.

Methods and Materials

This study considers only the distribution of native forest types and vegetation compositions as materials. Forest areas of northern part or Black Sea Geographical Region of Turkey were visited and examined during the period of 1970-2012. The ecological studies carried out by Atalay (1984, 1987b, 1992, and Atalay et al 1988, 2010 and 2012) on *Picea orientalis*, *Cedrus libani*, *Fagus orientalis*, *Pinus brutia*, *Pinus nigra*, *Pinus sylvestris* Forests and their seed transfer regioning and eco-regions and Mayer and Aksoy's studies on forest (1988) provided valuable information about Turkey's vegetation, forest classification and forest vegetation changes caused by human interferences.

During the field study, the relationship between forest areas and their natural environmental characteristics such as topographic factors (altitude, aspect, the direction of the mountain ranges), and climatic data (covering the period of 1975-2006 obtained from nearby meteorological stations), parent materials, soil and biotic factors were taken into consideration

The climatic data of mean annual temperature, precipitation, relative humidity and cloudiness, solar radiation intensity in the vegetation period were taken into account in order to study the relationships between the climatic properties and the distribution of native forests and their classification.

In addition, many topographic profiles and geological cross-sections were drawn in order to study the relationships among the distribution of forest vegetation and parent material, topographic properties and competition.

Findings and discussion

Ecological properties of black sea region

Black Sea Region including southern continental part of it, covers the northern part of Turkey and both of Anatolian and Thrace peninsulas. Based on topography, Black Sea region is divided into two main ecological regions: Black Sea Region and Southern Part of Black Sea Region.

Topography

The Northern Anatolian Mountain range, extending parallel to Black Sea coast in E-W direction, has three mountain ranges based on topography from north to the south. Coastal Belt Mountain ranging from west to east is composed of Akcakoca, Kure, Canik, Giresun, and Eastern Black Sea mountains. The highest summit, exceeding 3000 m, is found on the

Eastern Black Sea Mountains. The tectonic depressions lie in the southern section of Coastal Black Sea Mountain on which semiarid climatic conditions prevail. In the southern part of tectonic depression area the second belt of the Northern Anatolian Mountains extends. Here, the names of the main mountains are; Bolu, Ilgaz, Kose, Otlukbeli, Mescit and Yalnizcam. Their elevations are generally over 2000 m. Third chain called Koroglu Mountain is located on the western part of the study (Fig. 1, 2, 3; Atalay 1987).

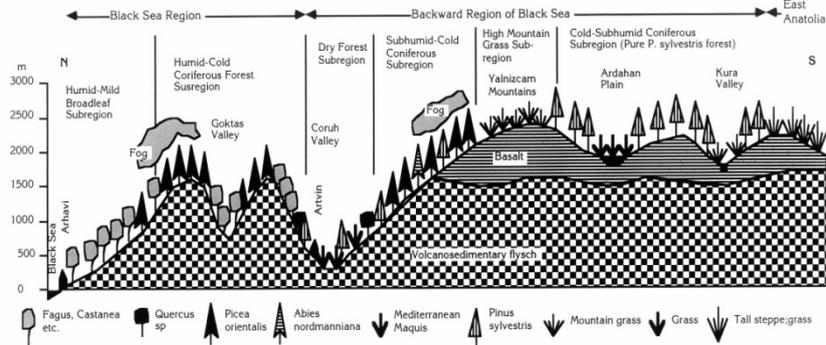


Fig. 2. Topographic and vegetation profile of the eastern part of Black Sea Region

Forest composition of the study area considerably changes depending upon altitude, aspect and continentality factors. Study area is divided into five subregions. Two subregions are established in Black Sea Region and two subregions are found in the backward or southern part of Black Sea Region. A subregion occurs on the upper part of the forest. The main vegetation types of these regions are summarized below.

1. Humid-mild broadleaf deciduous forest subregion. Humid mild broadleaf deciduous forest belt composed of *Fagus orientalis*, *Castanea sativa*, *Tilia rubra*, *T. tomentosa*, *Alnus glutinosa*, *A. barbata*, *Carpinus orientalis*, and many *Quercus* species begins at the Black Sea coast and rises up to 1000-1200 m on the north facing slopes of the mountains. Here, Black Sea humid-mild climate prevails on the northern slopes of the Northern Anatolian Mountains. The mean January temperature which is 5-6°C in the coast falls down to 0°C at an elevation of 1000 m. Average July temperature is about 22-24°C on the coast, down to 18-12°C at 1000 m elevation due to lapse rate is low due to high air humidity. The mean annual precipitation is over 1000 mm (Rize 2300 mm, Zonguldak 1300 mm), all seasons are rainy, and relative humidity is high. There is no water deficiency (Fig. 3).

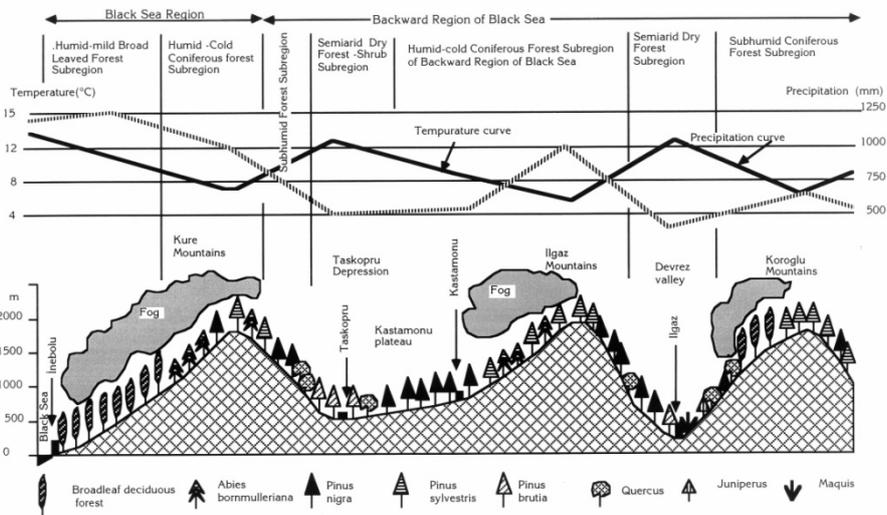


Fig. 3. Topographic, vegetation, temperature, precipitation and ecoregion profile of the middle part of Black Sea Region

2. Humid-cold coniferous forest subregion. This subregion is found on the north facing slopes of the Black Sea coastal mountains between 1000/1200 m and 2000 m elevations. In this belt, coniferous forests are composed of *Picea orientalis* and *Abies nordmanniana* in the eastern parts and *Abies bornmulleriana* dominates in the western parts. The mean annual temperature changing between 6°C and 8°C at an elevation of c. 1000 meters, drops down to 3-4°C at an elevation of c. 2000 m. Mean annual precipitation is over 1000 mm, all seasons or months are rainy and there is no water deficiency during vegetation period. During the summer periods the air mass coming from the Black Sea leads to the fog formation on the slopes facing north.

3. Semiarid dry forest and shrub vegetation subregion in the backward part (south facing slopes) of Black Sea Region. The major rivers, Yesilirmak (Green River), Kizilirmak (Red River) and Çoruh River, flowing through the tectonic depressions discharge from rain-shadow area into the Black Sea. For this reason, here the solar radiation is higher than the coastal belt of Black Sea, and the mean annual rainfall is less than 500 mm, in general. The lower and lower south facing slopes of depressions are the native areas for Mediterranean vegetation composed of red pine (*Pinus brutia*) and maquis vegetation. Toward the upper part of depressions *Quercus* and black pine (*Pinus nigra*) forests start to appear (Fig. 3).

4. Plateaus and High Mountain Coniferous subregion. Due to continentality, the upper parts of the plateau like Kastamonu (1000-1200 m elevation) are the natural occurrence areas of black pine and scots pine (*Pinus sylvestris*), whereas Erzurum-Kars and Ardahan Plateau (1800-2200 m elevation) and Koroglu Mountains in the W of Backward Region of Black Sea and Yalnizcam Mountains in the E of Backward Region of Black Sea Region are the native spreading areas of pure scots pine (*P. sylvestris*) forests. In this subregion fog receiving north facing slopes of the mountains, grow pure oriental spruce (*Picea orientalis*), or *Picea* and *Abies nordmanniana* mixed forests. In the western part of this region, the north facing slopes of the mountains are covered with *Abies bornmulleriana* and *Pinus sylvestris*.

5. Mountain Grass (Alpine and Subalpine) Subregion. The upper parts of the natural timberline where the altitude is over 2000 ms in the Black Sea coastal mountains and the areas over 2500 m in altitude belonging to backward mountains form this subregion. Here the alpine and subalpine grass vegetations are common.

Native forest composition changes via competition

Native forest composition has been subjected to changes depending on both native competition and excessive cutting down some trees especially scots pine trees in the humid and subhumid areas.

Composition changes in the forests can be divided into two main regions.

1. Forest composition change in the broad leaved deciduous forests in the coastal belt of Black Sea Region

As mentioned before, the broad leaved deciduous forests composed of mainly *Fagus orientalis*, *Tilia rubra*, *T. tomentosa*, many *Quercus* species, *Castanea sativa*, *Alnus barbata*, *A. glutinosa* and so on are widespread between the elevations of 0 and 1000 m. The shrub layers of these forests associated with *Buxus sempervirens*, *Ostrya carpinifolia*, *Prunus laurocerasus*, *Rhododendron ponticum*, and many herbaceous species grow under the forest canopy. Forests on backward mountains grow better under foggy conditions during the vegetation period. There are many agricultural fields, for example, tea and hazelnut gardens and cereals fields. When the agricultural fields neighbouring broad leaf forests are abandoned and when these forests are clear cut or excessively cut down are firstly occupied by *Pinus nigra* and *Pinus sylvestris* seedlings; because the seeds of these two pine species germinate on mineral soil or on soft parent material under direct solar radiation. As these seedlings grow

up, the pure *Pinus nigra* or *Pinus sylvestris* clusters are formed in the broad leaved deciduous forest belt. But with the shading of these forest lowerstory, the broad leaf seedlings begin to grow. After a few decades the mixed forest composed of *Pinus sylvestris* and mostly *Fagus orientalis* trees is emerged. In this stage, the regeneration of *Pinus sylvestris* and *Pinus nigra* do not occur in the shaded forest floor. Finally, after a rotation period or felling cycle the number of conifer trees gradually decreases in the mixed forest. So, the climax forest becomes again the dominant forest type in the coastal belt of Black Sea (Fig. 4).

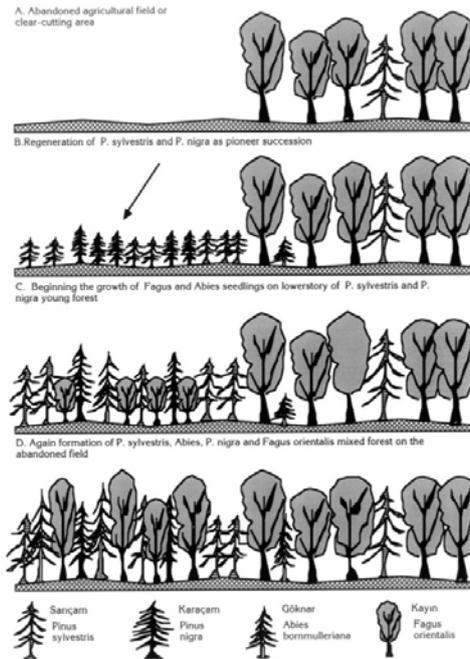


Fig. 4. In the broadleaf forest the growing of pine seedlings on the abandoned agricultural land and formation of mixed forest

2. Forest composition change in pure *Pinus sylvestris* forests

As a general rule, shaded pure *Pinus sylvestris* forest lowerstory is the main regeneration places of *Abies nordmanniana*, *A. bornmulleriana*, *Picea orientalis* and *Fagus orientalis* according to ecological subregions in the Black Sea Region. In other words, diffuse radiation occurring in the ground of pure *Pinus sylvestris* supports the germination of *Abies*, *Picea* and *Fagus* seeds. With the growing of above mentioned seedling mixed coniferous forest and broadleaf and coniferous forest come into scene. The formation of the forest via competition against the light condition can be grouped three forest forms.

a. Pure *Pinus sylvestris* forest change into mixed *Pinus sylvestris*, *Abies nordmanniana* and *Picea orientalis* forest

The orbiomes of the Black Sea coastal mountains, southern mountain ranges and high plateaus are the main occurrence areas of *Pinus sylvestris* forests which receive direct solar radiation. The shady floor of *Pinus sylvestris* forest is suitable for the regeneration of *Abies* and *Picea* in the humid and subhumid areas of Black Sea coastal mountains and backward part of Black Sea Region. Because, their seeds naturally germinate under foggy and/or diffuse radiation conditions. For this reason, almost all *Pinus sylvestris* forests support the germination of the *Picea* and *Abies* in the Eastern Black Sea geographical subregion of Anatolia. As the *Abies* and *Picea* seedlings grow, a few decades later, the mixed forest composed of *Pinus sylvestris* and *Abies* is formed in the Eastern part of Black Sea subregion; whereas the forest composed of *Pinus sylvestris* and *Abies bornmulleriana* is formed in the western part of the Black Sea Region. When *Pinus sylvestris* trees are excessively cut down in the eastern part of the Black Sea region, *Picea orientalis* forest becomes dominant. In this

case, the regeneration of *Pinus sylvestris* can not occur in the shade of *Picea orientalis* forest. Thus, *Pinus sylvestris* forest is replaced by *Picea orientalis* and/or *Picea orientalis* and *Abies nordmanniana*. But *Picea* and *Abies* forests under direct solar radiation may not sustain long time because ecological conditions are not suitable for the growth of this forest.

For example, the regeneration of *Picea orientalis* and *Abies nordmanniana* occurs under the canopy of *Pinus sylvestris* in the direct solar radiation areas of the Şavşat and Ardanuç basins on which subhumid and humid-cold climatic conditions prevail in the backward region of Black Sea. As the *Abies bornmulleriana* and *Picea orientalis* seedlings grow, the forest composed of *Abies*, *Picea* and *P. sylvestris* is formed. When *Pinus sylvestris* trees are excessively cut down for commercial purposes, the mixed forest associated with *Picea* and *Abies* with rarely occurring *P. sylvestris* is formed. Best example is given in the Peynirli forest district in Ardanuc basin. Here 35 years ago, a mixed forest composed of *P. orientalis*, *Abies nordmanniana* and *Pinus sylvestris* was existing. But in 2012 this forest had been converted into a *P. orientalis* and *Abies nordmanniana* forest due to the fact that *P. sylvestris* trees were excessively cut down (Fig. 5).

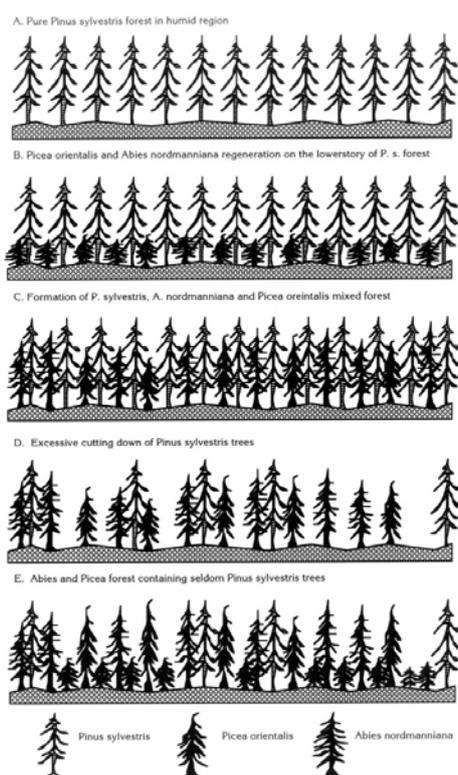


Fig. 5. Pure *Pinus sylvestris* forest changing into coniferous mixed forest associated with *P. sylvestris*, *A. nordmanniana* and *P. orientalis* in the humid/subhumid cold conditions

b. Pure *Pinus sylvestris* forest change into mixed *Pinus sylvestris* and *Abies bornmulleriana* forest

As to the western part of the southern Black Sea Region, there are two main forest types: Pure *Abies bornmulleriana* forests and Pure *Pinus sylvestris* forests. Pure *Abies bornmulleriana* forests grow on fog receiving north facing slopes, and *Pinus sylvestris* forests grow either on sunny north facing slopes which rarely receives fog or undulating area of mountains. As mentioned before, the lowerstory of *P. sylvestris* forests support the growth of *Abies bornmulleriana* seedlings because of high humidity and shade. As *Abies* seedlings grow, the pure *Pinus sylvestris* forest is changed into a mixed *P. sylvestris* and *A. bornmulleriana* forest. The dominance of *Abies* forest is seen where *P. sylvestris* trees have been cut down. Thus, pure *Pinus sylvestris* forest is replaced by *Abies* forest. Shrinking

examples are found in Uluova, Ballidag and Eğriova localities on the western part of backward subregion of Black Sea Region. Here one can observe *Abies* forest having rarely scattered *P. sylvestris* individuals. But in open lands near or within the forest, pure *P. sylvestris* juveniles are seen. This clearly shows that open sunny areas are suitable for climax forests of *Pinus sylvestris* or *Pinus sylvestris* seems to have climax forest on sunny areas. The main growing reason of *Abies* is related to the diffuse radiation under the forest canopy where humidity condition is better for the growth of fir regeneration (Fig. 5).

c. *Pinus sylvestris* forest change into mixed *Fagus orientalis* and *Abies bornmulleriana* forest

The mixed forests associated with *P. sylvestris*, *Fagus orientalis* and *Abies bornmulleriana* are seen on the north facing slopes of the mountains receiving fog and abundant rainfall on the northwestern part of Black Sea Region. The climatic conditions support the growth of abovementioned trees. In these forests *P. sylvestris* is high to reach the direct solar radiation. In other words, *P. sylvestris* competes with *Abies* and *Fagus* trees to receive adequate light. Here with the excessive cut down of *P. sylvestris*, the mixed forests is changed into *Abies bornmulleriana* and *Fagus orientalis* forest. For example, 30 years ago the mixed forests composed of *P. sylvestris*, *A. bornmulleriana* and *Fagus orientalis* in Buyukduz locality, N of Karabuk city were changed into *Abies* and *Fagus* forests as a result of removing *P. sylvestris* trees by excessive cuttings (Fig. 6).

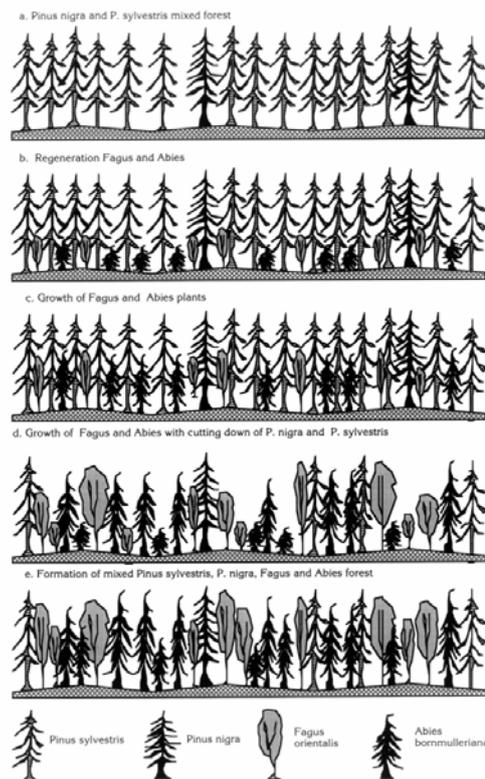


Fig. 6. Successional stage changes of *Pinus sylvestris* forest into mixed coniferous and broadleaf forest.

Conclusion

We have reached at some conclusions about the forest composition changes based on the ecological conditions of forests:

1. Forest composition change in the broadleaf deciduous forest is related to the abandonment of agricultural fields and the clear cutting of the forests. Here, within the broadleaf forest in the humid-mild subregion of Black Sea Coast, the pioneer succession is the coniferous forest formation.

2. Pure *Pinus sylvestris* forests in the humid and subhumid areas are changed into *Pinus sylvestris*, *Picea orientalis* and *Abies nordmanniana* mixed forests through natural processes. With the excessive cut down *Pinus sylvestris* trees, this mixed forest is changed into *Picea orientalis* and *Abies nordmanniana* in the eastern backward region of Black Sea.

3. Pure *Pinus sylvestris* forest in the backward part of Black Sea are converted into *Abies bornmulleriana* forest containing rarely scattered *P. sylvestris* trees as a result of excessive cutting of *P. sylvestris* trees.

4. The main reason of the compositional change for *Pinus sylvestris* in the humid and subhumid areas is the growth of *Abies* and *Picea* seedlings on the lowerstory of *Pinus sylvestris* forest.

5. Light factor in the open area and on the lowerstory of forest is responsible for the mixed forest formation in the humid and subhumid areas.

6. With the application of proper silvicultural activities the mixed forests can be converted into climax forest in the abovementioned areas.

References:

- Atalay, İ., M. Tetik and O., Yılmaz, 1985, Kuzeydoğu Anadolu'nun Ekosistemleri (Ecosystems of NE Anatolia). Ormancılık Araştırma Enst. Teknik Bul. Nu. 154, Ankara
- Atalay, İ. 1984, Ecological properties of Oriental Spruce (*Picea orientalis* L.) Forests And Seed transfer regionning. Forest Tree Seeds and Tree Breeding Research Directorate Inst. Pub. No. 2, Ankara.
- Atalay, I. 1987, Türkiye Jeomorfolojisine Giriş (Introduction to Geomorphology of Turkey). Aegean Univ. Fac. Of Letters Pub. Nu: 9, Izmir.
- Atalay, İ. 1992, The forest of Oriental Beech (*Fagus orientalis* Lipsky) and Regionning in Terms of Seed Transfer. Forest Ministry Forest Tree Seeds and Tree Breeding Research Inst. Directorate Pub. Nu. 4, Ankara.
- Atalay, İ. 1994, Türkiye Vegetasyon Coğrafyası (Vegetation Geography of Turkey). Aegean Univ. Press, İzmir.
- Atalay, İ., L. I. Sezer and H. Çukur, 1998, The Ecological Properties of Red Pine (*Pinus brutia* Ten.) Forests and Their Regionning in Terms of Seed Transfer). Forest Ministry Forest Tree Seeds and Tree Breeding Research Inst. Directorate Pub. No 6, Ankara,
- Atalay, İ. 2001. Ecology of Forests in Turkey. *Silva Balcanica*, 1/2001: 25-34.
- Atalay, İ. 2002. Türkiye'nin Ekolojik Bölgeleri (Ecoregions of Turkey). Forest Ministry Pub. Nu 163.
- Atalay, İ. And R. Efe, 2010, Ecology of the Anatolian Black Pine (*Pinus nigra* Arnold subsp. *pallasiana* (Lamb.) Holmboe) and Its Dividing Into Regions in Terms of Seed Transfer. Forest Tree Seeds and Tree Breeding Research Directorate Inst. Pub. Nu. 37, Ankara
- Atalay, I. 2011. Toprak Oluşumu, Sınıflandırılması ve Coğrafyası (Soil Formation, Classification and Geography, 4th Press). Meta Press, Izmir. 584 s.
- Atalay, İ., 2008, Ekosistem Ekolojisi ve Coğrafyası (Ecosystem Ecology and Geography). Meta Press, İzmir.
- Atalay, İ., 2010. Uygulamalı Klimatoloji (Applied climatology). Meta Press, Izmir.
- Atalay, İ. And R. Efe, Ecology of Scots Pine (*Pinus sylvestris* var. *Sylvestris*) Forests and Their Dividing Into Regions In Terms of Seed Transfer. Forest Tree Seeds and Tree Breeding Research Directorate Inst. Pub. Nu. 45, Ankara.
- Mayer, H. and H. Aksoy, 1998, Türkiye Ormanları (Walder der Turkei). Western Black Sea Forestry Research Inst. Pub. Nu. 1.
- Simmons, I., 1982, Biogeographical Processes. George and Unvin, UK.
- Walter, H.,1983, Vegetation of the Earth and Ecological Systems of the Geo-biosphere. Springer-Verlag, Berlin, Heidelberg, New York, Tokyo.

DYEING POTENTIAL OF THE IRIS SIBIRICA L. FLOWERS

Pavol Kaššák, Ing

Mendel University in Brno, Czech republic

Magdalena Kuli, Dr. Ing

Univeristy of Agriculture in Krakow, Poland

Abstract

This article put together results from several experiments which led to the measuring of the color of *Iris sibirica* L. flowers and using them as dye for coloring cloth. In first phase of our experiments we use the RHS color chart to measure the color of the flowers on the plant, the HPLC DAD to compare presence of six anthocyanin colorants with the methanolic extract from the flowers. We also did several tests to prove presence of basic plant metabolites groups in the iris flowers. In second phase we used the iris flowers to dye cotton cloth. We measured the cloth color by the RHS color chart and by the Konica Minolta Spectrophotometer the day after dyeing and the RHS color chart to measure it again after 6 months. Our results show high potential for the usage of the *Iris sibirica* L. flowers as a source for cloth dyeing.

Keywords: *Iris sibirica* L., cloth dyeing, Konica Minolta Spectrophotometer, RHS color chart

Introduction

Genus *Iris* contains around 300 species and is divided into six subgenera with 12 sections, one of which being *Limniris* (Wilson, 2004). Plants which belong to this section can be found growing throughout the Northern Hemisphere; in forests, on the sides of mountains, along coast lines, in swamps and wet meadows, and in dry, scrubby regions (Austin, 2005).

Nowadays, about eighty species belong to the *Limniris* group which don't have the same evolutionary history. The presence of the rhizomes and absence of the „beard“ are just the signs within the genus *Iris* and are not defined as an monophyletic signs of the group (Wilson, 2004).

Iris sibirica L. is the first and most typical plant from the group of Siberian irises which contain eleven species in total (Speichert and Speichert, 2004). Siberian irises can be divided into two groups according to the number of chromosomes. The first group has 28 chromosomes, the second 40 chromosomes. All used plants belong to the first group which consists of the most common and easiest-to-grow species, including the traditional blue-flowered types that are derived from *Iris sanguinea* Donn ex Hornem and *I. sibirica* L. (Austin, 2005). Siberian iris cultivars are excellent for a bog garden, for the edge of a stream, or for a seasonal wet spot in the backyard. In colder climates, they prefer wet soils in the spring and summer, but generally require drier conditions in the fall and winter. If they are placed in a pond in the spring, they should be removed before winter frost arrives, and mulched in the perennial border. In warmer climates, where the temperatures do not drop below -7 °C, they do not need mulch. When first offered Siberian irises were limited in color to blue and white. Now, the range has been greatly expanded to include deep purple-reds to light lavender-pinks. Flowers are anywhere from 5 to 10 cm wide, depending upon the selection. Since 1970, hybridizers have been cross-pollinating the various species in the Siberian group with *I. sibirica* L., creating hybrids whose parentage is now so complicated that the cultivars

are no longer listed with a species name. Several hundred Siberian iris cultivars are registered with the American Iris Society (Speichert and Speichert, 2004).

Materials and Method

Plants from which the flowers were obtained were grown by the 6th year in the grounds of the Horticulture Faculty in Lednice. Plants grown in the free soil, in a sunny spot, in rows oriented in an east-west direction. Plants grow in the conditions of loamy soils, in direct sunlight in rows with spacing of 70cm between plants and 50cm between rows. Spring irrigation is introduced on the experimental ground and it runs every 3 days in summer to provide enough water (3l per plant) for the plants to grow. In summer the plants also get 50 grams amount of classical NPK (15-15-15) fertilizer on each square meter of the experimental field.

Together we used 17 cultivars of *Iris sibirica* L. mostly with blue and sometimes purple flowers.

Table 1. Brief characterization of the used cultivars of *I. sibirica* L.

Cultivar name	Parents	Year of registration
Ann Dasch	'Gatineau' x 'Dreaming Spires' X unknown seedling	1977
Cambridge	'White Swirl' X 'Gatineau'	1964
Dark Desire	'White Swirl' X 'Tealwood'	1974
Dreaming Spires	'White Swirl' X 'Tycoon'	1964
Elfelde	unknown	unknown
Friendly Welcome	'Dreaming Spires' X 'Dark Desire'	1977
Grand Junction	'Tunkhannock' X 'Tycoon'	1968
Harpwell Haze	'Blue Brilliant' x unknown X 'Fourfold White'	1977
Harpwell Velvet	Hybrid between 'Blue Brilliant', 'White Swirl', 'Violet Flare', 'Pirouette', 'Polly Dodge', 'Tealwood'	1990
Marcus Perry	unknown	1997
Navy Brass	'Orville Fay' X 'White Swirl' x 'Violet Flare'	1973
Orville Fay	'Violet Flare' x unknown X 'Pirouette' x unknown	1969
Pansy Purple	'Pirouette' X unknown	1969
Sea Shadows	'White Swirl' X 'Tycoon'	1964
Supernatural	unknown	1994
Wiltrud Giessel	unknown	1978
Zweiters Hundred	'Breiter Start' X SSTT101	1984

The colours of the flowers were measured with the RHS colour chart, 5th edition from year 2007 with 203 pages (812 colours). Colours were measured under the conditions of full sun light and we measured the most common (covering the largest area) colour in falls and standards of 10 flowers. The colour that was most common was then determined as the colour of standards and falls. Results from this measurement are in the Tab 2.

Then we take from each taxon 80 grams of standards and falls. They were lyophilized, homogenized and used for the preparation of the extract. Extraction was conducted in the following manner: 3 grams of the dry sample were put into the methanol, acidified by the hydrochloric acid (1:50, Penta, Czech Republic) and homogenized for 5 minutes (VORTEX Genius 3, IKA, Deutschland). The obtained homogenized mass was centrifuged (10 min, 16.000 g, Eppendorf 5430R, Czech Republic). For the measurement itself was used optimized HPLC with DAD detector, detection goes on by $\lambda=520$ nm. Retention time of the measured samples together with the spectra was compared to the spectra and retention times of the six most common anthocyanin in the flowers (cyanidin-3- galaktoside, cyanidin-3-glukoside,

peonidin-3-glukoside, pelargonidin-3-glukoside, malvidin-3-glukoside, and delphinidin-3-glukoside). According to the wave length 520 nm, which is specific for anthocyanin we tried to detect these colorants. Although we measured several peaks for each examined sample, the positive reaction for the concrete six anthocyanin colours was weak. The only sample with a positive reaction was *I. sibirica* 'Elfelde' in which we surely prove presence of delphinidin-3-glykozide and maybe of malvidin-3-glykozide. All the results from this measurement are in Tab 4.

For the dyeing process we used common water soaking. Pieces of 100% cotton fabrics were soaked in bleach and one sample in bleach and vinegar (8%). Dyeing was performed at 22 ± 1 °C for different time periods (24 hours, 48 hours and 72 hours) using a fixed amount (50g or 100g) of *Iris* perianth leaves. Dyed samples were extensively washed with cold and hot water to remove any unfixed dyed material and finally dried at an ambient temperature. After drying the colour of the dyed cloth was measured by the RHS colour chart. The results from this measurement are in Tab 5.

Today, the most commonly used instruments for measuring colour are spectrophotometers. Spectro-technology measures reflected or transmitted light at many points on the visual spectrum, which results in a curve. Since the curve of each colour is as unique as a signature or fingerprint, the curve is an excellent tool for identifying, specifying and matching colour. We used a Konica Minolta Spectrophotometer to measure the exact colours of the dyed cloth samples. This machine works with the reflected light and is primarily used to check the maturity of fruits, vegetables or to identify the colours of flowers of *Azalea* hybrids. Output of this measuring was colour defined on a so-called LAB colour scale based on the opposing-colours theory of colour vision, which states that two colours cannot be both green and red at the same time, nor blue and yellow at the same time. As a result, single values can be used to describe the red/green, the yellow/blue and lightness attributes. Measured results can be seen in Tab 6. in which L* defines results for lightness, a* denotes the red/green value and b* the yellow/blue value.

After six months the cloth samples were measured again by RHS colour chart. During this time the clothes were stored in a dark, dry environment at room temperature. Results from this measurement are in Tab 5.

Several tests were performed on the mixed flowers of *Iris sibirica* to confirm the presence of the chosen chemical compounds. The plant material, flowers, was dried at room temperature (22–24 °C). The dried material was homogenized on mechanical mill IKA MF10 basic (sieve 2 mm, speed 500 rpm). The homogenized dry material was soaked by 75% methanol, and left unattended for 24 hours. The solution was filtered and stored in fridge by -4°C. This basic solution was then used in all the tests.

For the testing, we used so-called "drop tests". Their benefits are that just a small amount of used solution and chemicals are used, the facility for quick evaluation, the use of common chemicals, easy preparation and the use of the same solution for all tests. A disadvantage is inaccurate assessment; one never knows the exact content of the compound. Qualitative determination of phytochemical components was carried out as per the standard procedure from (Ganthra et al., 2012, Divya Lekshmi, 2013). The tested compounds were:

Flavonoids – 1ml of extract with a few drops of dilute sodium hydroxide (NaOH) added. An intense yellow colour was produced in the plant extract which becomes colourless with the addition of few drops of dilute acid, indicating the presence of flavonoid.

Phenols – 1ml of extract and 2 ml of distilled water were added followed by few drops of 10% ferric chloride (FeCl₃). Appearance of blue or green colour indicates presence of phenols.

Quinones – 1ml of extract and 1ml of concentrated sulphuric acid (H₂SO₄) was added. Formation of red colour shows the presence of quinones.

Tannins – 2ml of 5% ferric chloride added to solvent free extract. The presence of tannin is indicated by the formation of bluish black or greenish black precipitate.

Saponins – 2ml of extract, 20 ml of distilled water was added and shaken vigorously at warm conditions. The formation of honey comb like foam indicates the presence of saponins.

Cardiac glycosides – 5ml of extract was treated with 2 ml of glacial acetic acid containing a drop of ferric chloride (FeCl₃) solution. Afterwards it was underplayed with 1 ml concentrated sulphuric acid (H₂SO₄). A brown ring of the interface indicates a de-oxy sugar characteristic of cardenolites.

Terpenoids – 5ml of each extract was mixed with 2 ml of chloroform. 3ml of concentrated sulphuric acid (H₂SO₄) was then added to form a layer. A reddish brown precipitate colouration at the interface formed indicated the presence of terpenoids.

Alkaloids – 3ml of the extract, 3 ml of 1 % HCl was added with continuous stirring in a steam bath. To the mixture Mayer's reagent and Wagner's reagent were added. Formation of turbidity in the resulting precipitate indicates the presence of alkaloids.

Glycoside – 2ml of extract was dissolved in 2 ml of chloroform, where 2 ml of acetic acid was added carefully. A colour change from violet blue to green indicates the presence of steroidal ring (i.e. a glycine portion of glycoside).

Results from all this measurements are in Tab 7.

Results

In the following tables are summarized results from all measurements as described in the material and method section.

Table 2. Main standards and falls colour

Cultivar name	Main falls colour (RHS code)	Main standards colour (RHS code)
Ann Dasch	93 C Violet-blue group	94 A Violet-blue group
Cambridge	91 A Violet-blue group	93 B Violet-blue group
Dark Desire	N 89 D Violet-blue group	N 89 A Violet-blue group
Dreaming Spires	N 89 C Violet-blue group	N 89 A Violet-blue group
Elfelde	N 89 A Violet-blue group	N 89 A Violet-blue group
Friendly Welcome	91 A Violet-blue group	N 89 A Violet-blue group
Grand Junction	N 88 B Violet group	N 89 D Violet-blue group
Harpwell Haze	N 89 D Violet-blue group	N 89 C Violet-blue group
Harpwell Velvet	90 A Violet-blue group	90 A Violet-blue group
Marcus Perry	92 A Violet-blue group	92 B Violet-blue group
Navy Brass	92 A Violet-blue group	N 89 D Violet-blue group
Orville Fay	91 A Violet-blue group	92 A Violet-blue group
Pansy Purple	N 87 Violet group	N 87 Violet group
Sea Shadows	91 A Violet-blue group	94 B Violet-blue group
Supernatural	N 81 A Purple-violet group	N 79 B Purple group
Wiltrud Giessel	N 88 B Violet group	N 89 B Violet-blue group
Zweifers Hundred	93 C Violet-blue group	N 89 C Violet-blue group

Table two contains the list of the main falls and standards colours measured by the RHS colour chart. All the used *Iris sibirica* cultivars have flowers in shades of violet or violet-blue colour, only 'Supernatural' have purple flowers.

Table 3. Retent time and peak area for the used anthocyanins

Sample	Retent time [minutes]	Peak area
cyanidin-3-glykozide	9,596	13053,2
peonidin-3-glykozide	10,287	81,8
pelargonidin -3-glykozide	10,443	14058,6
malvidin-3-glykozide	11,455	618,4
delfinidin-3-glykozide	12,332	122,5
cyanidin-3-galaktozide	14,01	274,4

Table 4. Results for the HPLC measurement

Sample	Retent time [minutes]	Peak area
Ann Dasch	11,721	318,7
Ann Dasch	12,148	1508,3
Ann Dasch	13,103	1154,8
Cambridge	11,725	194,3
Cambridge	12,167	728,5
Cambridge	13,12	241,3
Dark Desire	11,061	1350,7
Dark Desire	11,68	636,3
Dark Desire	12,106	2393,4
Dark Desire	12,767	368,7
Dark Desire	13,076	901,9
Dreaming Spires	11,126	412,1
Dreaming Spires	11,743	740
Dreaming Spires	12,181	2216,6
Dreaming Spires	12,834	182,3
Dreaming Spires	13,149	437,2
Elfelde	11,49	127,6
Elfelde	11,918	1109,3
Elfelde	12,334	3712
Elfelde	12,999	286,5
Elfelde	13,286	794,1
Friendly Welcome	11,276	704,8
Friendly Welcome	11,899	131,1
Friendly Welcome	12,308	828,3
Grand Junction	11,725	223,9
Grand Junction	12,164	1011,4
Grand Junction	13,123	285,9
Harpswell Haze	11,714	453,5
Harpswell Haze	12,154	1658,9
Harpswell Velvet	11,708	413,1
Harpswell Velvet	12,151	1510,3
Marcus Perry	11,873	122,7
Marcus Perry	12,298	537,4
Navy Brass	11,719	252,7
Navy Brass	12,165	971,6
Navy Brass	13,115	674
Orville Fay	11,638	288,9
Orville Fay	12,059	1098,6
Orville Fay	12,984	336
Pansy Purple	11,244	823,6
Pansy Purple	11,879	462,4
Pansy Purple	12,287	1742,7
Pansy Purple	13,234	850,1
Sea Shadows	11,277	525,4
Sea Shadows	11,914	364,8
Sea Shadows	12,328	1131,9
Sea Shadows	13,268	446,5
Supernatural	11,119	534,3
Supernatural	11,721	1324,8
Supernatural	12,157	3522,6
Supernatural	12,806	580,7
Supernatural	13,114	1415,4
Wiltrud Gissel	11,083	292,1
Wiltrud Gissel	11,705	1261,7
Wiltrud Gissel	12,135	3810,7
Wiltrud Gissel	12,799	506,5

Wiltrud Gissel	13,092	1165
Zweiteurs Hundred	11,245	617,9
Zweiteurs Hundred	11,869	869,6
Zweiteurs Hundred	12,288	2328,8
Zweiteurs Hundred	12,957	214
Zweiteurs Hundred	13,24	495,1

In tables three and four are the outputs from the HPLC DAD measurements. In table three are the six used anthocyanins ordered by the retention time. In table four are all the used *Iris sibirica* cultivars, ordered alphabetically and by the retention time. Two samples that have some similarity in retention time to the anthocyanins are highlighted in bold.

Table 5. Results from the measuring dyed cloths by RHS colour chart

Sample	RHS color chart number (freshly dyed)	RHS color chart number (after 6 months)
Soaking 24 h / boiled	N 88 C	97 C
Soaking 24 h / vinegar	92 C	N 170 C
Soaking 24 h	92 C	92 D
Soaking 48 h	108 A	97 C
Soaking 72 h	92 A	N 170 D
Soaking 72 h / 100g	92 B	N 170 D

Table 6. Results from measuring dyed cloths by Konica Minolta Spectrophotometer

Sample	Lightness (L)	Red/green (a)	Yellow/blue (b)
Soaking 24 h / boiled	80	1	-9
Soaking 24 h / vinegar	74	4	-7
Soaking 24 h	76	3	-7
Soaking 48 h	82	1	-8
Soaking 72 h	79	3	-7
Soaking 72 h / 100g	83	3	-5

In tables five and six are the results from the measuring of the freshly dyed cloths. In table five by the RHS colour chart and in table six by the Konica Minolta spectrophotometer.

Table 7. Results from drop tests

Tested group of chemicals	Result
Alkaloids	- Weak reaction
Phenols	++ very strong reaction
Flavonoids	- - No reaction
Quinones	++ very strong reaction
Saponins	- Weak reaction
Cardiac glycosides	++ very strong reaction
Glycosides	- Weak reaction
Tannins	- Weak reaction
Terpenoids	++ very strong reaction

In table seven are summarized the results from drop tests. For the valuation of the reaction strength we use a five point scale in which ++ was the strongest reaction, + was some reaction, 0 was inconclusive result, - was weak reaction and - - was no reaction at all.

Discussion

Yabuya et al. (1994b) strongly suggested that the bluing effect on flower colour of bluish purple cultivars of *Iris ensata* Thunb. was dependent on the co-pigmentation of anthocyanins with flavones. Asen et al. (1970) mentioned that flavone C-glycosides act as co-pigments in blue flowers of several species, including *Iris*. If the blue colour is transportable from flowers to cloths is not clear, but water soluble flavonoids, responsible for the red and blue colours of flowers and fruits, can be used as watercolours (Melo, 2008). We did not

attempt to examine the content of anthocyanins and flavones, but we have weak reaction for flavonoids.

Tannins are chemicals whose name was introduced by Seguin in 1790 to describe plant extractions that can convert raw hide to leather (Haslam, 1966). They have the propensity to give a greenish or bluish-black hue in the presence of iron salts (Cardon, 2007). At times they serve the dual purpose of mordant and colorant due to their close association with some of the other colouring groups such as flavonoids and quinones (Haslam, 1966). In our experiment the tannins have just a weak reaction so they will not be the chemicals responsible for the cloth dyeing.

Anthocyanins are important for successful attainment of flower colour breeding. Research of Yabuta et al. (2000), proved presence of 16 types of major anthocyanins in *Iris ensata* Thunb. Among these types, delphinidin 3RGac5G was useful for the breeding of blue flower colour and cyanidin 3RGac5G and peonidin 3RGac5G for the breeding of magenta flower colour.

The most famous colorant from *Iridaceae* is *Crocus sativus* L. which gives a rich yellow-golden colour (Attokaran, 2011). But there are also some Iris species which are mentioned in literature as a source of dye colours. For example the rhizomes of *Iris pseudacorus* L. are mentioned as source of black colour for cloth dyeing. The final colour was called as „Sabbath black“ due to sulphur used as stabilizer (Komarnicki, 1993, Allen and Hatfield, 2004). Ozturk et al. (2013) among the dye plants of Turkey with medicinal uses mentioned *Iris germanica* L., *Iris paradoxa* Steven and *Iris iberica* Hoffm. ssp, *elegantissima* (Sosn.)Takht. & Fedorov whose flowers are used as dyes and medicinal plants.

Historically there are four pigments which were made from irises (Eaustaugh et al., 2008). First is Catasol (green pigment).Nunes (1615) mentioned preparation of this colour from crushed iris parts, most likely from leaves. Green pigment achieved from iris leaves is also mentioned by Komarnicki (1993).

The second pigment is Iris Blue (Blue pigment). Due to different descriptions in three medieval manuscripts we can assume that this pigment was made from iris flowers after the pollen was taken from them (Eaustaugh et al., 2008).

The third is Iris Green (Green pigment) which was made from perianth leaves of various plants. The pigment was prepared by simply squeezing the juice from the flowers and mixing with an aluminium hydroxide (alum) base (Eaustaugh et al., 2008). Schweppe (1993) lists several plants that can be used to obtain this pigment, but the best is *Iris germanica* L. *Iris germanica* L. is mentioned as a source of green colour also by Dogan et al., (2002). Thompson (1956) in his book also mentioned irises as source for green colour. The green colour was made from the perianth leaves of the purple iris. The dye was initially purple, adding alum will mordant it to blue, and adding calcium will turn it green.

The last one is Mangiferin (Yellow pigment) sometimes called as iris yellow. The generic compound the xanthone mangiferin, 2--D-glucosidyl-1,3,6,7-tetrahydroxy- 9H-xanthen-9-one, is the principal colouring matter derived from the leaves of *Iris germanica* L. (Schweppe, 1993).

Better colour strength results are dependent on the metal salt used (Kamel et al., 2009), because we did not use any metal salts as fixatives the colour degradation was very quick.

Iris flowers meet several requirements for the natural dyes, which are, according to Bechtold (2003): Reasonable requirements for production and harvesting of the plant materials, easy handling and storage of the raw materials, easy extraction with water, simple and rapid dyeing process, no intermediate drying steps, etc., one-bath dyeing, biodegradability of dyes in waste water treatment plants, non-toxic properties of dyes and non-allergic potential of dyed material, consumption of chemicals and energy comparable or

lower than the current state-of-the-art systems based upon synthetic dyestuffs (Bechtold et al., 2003).

Conclusion

Results of our research show that the plants of *Iris sibirica* L. have good dyeing potential. Although our results were not promising in the cotton cloth test, the results from all the other experiment show that the chemical possibilities and basics for the next research are present. Usage of different mordant will make the colors more sustainable and will lead to other promising results. So this study opens wide range of possibilities for the next experiments and testing in the future.

Acknowledgements

This research was financed by project DS 3500/KDiAK

This work was supported by grant OPVK CZ.1.07/2.4.00/31.0089 of the Ministry of Education of the Czech Republic

References:

- Allen, D. E. and G. Hatfield. Medicinal plants in folk tradition: an ethnobotany of Britain. Portland, [OR]: Timber Press, 2004.
- Asen, S., R. N. Stewart, K. H. Norris and D. R. Massie. A stable blue non-metallic complex of delphinidin and C-glycosylflavones in Prof. Blaauw Iris. *Phytochemistry*. 1970, 9 (3), 619-627. DOI: 10.1016/S0031-9422(00)85702-7.
- Attokaran, M. Natural food flavors and colorants. Hoboken: Wiley-Blackwell, 2011.
- Bechtold, T., A. Turcanu, E. Ganglberger and S. Geissler. Natural dyes in modern textile dyehouses — how to combine experiences of two centuries to meet the demands of the future? *Journal of Cleaner Production*. 2003, 11 (5), 499-509. DOI: 10.1016/S0959-6526(02)00077-X.
- Cardon, D. Natural dyes: sources, tradition, technology and science. London: Archetype, 2007.
- Divya Lekshmi, R. B. and D. Ravi. Extraction of natural dyes from selected plant sources and its application in fabrics. *International Journal of Textile and Fashion Technology*. 2013, 3 (2), 53-60.
- Doğan, Y., S. Başlar, H. H. Mert and G. Ay. Plants Used as Natural Dye Sources in Turkey. *Economic Botany*. 2003, 57 (4), 442-453. DOI: 10.1663/0013-0001(2003)057[0442:PUANDS]2.0.CO;2.
- Eastaugh, N., V. Walsh, T. Chaplin and R. Siddall. *Pigment compendium: a dictionary and optical microscopy of historical pigments*. Oxford: Butterworth-Heinemann, 2008.
- Ganatra, S.H., S.P. Durge and S.U. Patil. Preliminary Phytochemicals Investigation and TLC Analysis of *Ficus racemosa* leaves. *Journal of Chemical and Pharmaceutical Research*. 2012, 4 (5), 2380-2384.
- Haslam, E. *Chemistry of Vegetable Tannins*. Academic Press, 1966. ISBN 0123309506.
- Kamel, M. M., H. M. Helmy and N. S. El Hawary. Some Studies on Dyeing Properties of Cotton Fabrics with *Crocus sativus* (Saffron flowers) Using an Ultrasonic Method. *Journal of Natural Fibers*. 2009, 6 (2), 151-170. DOI: 10.1080/15440470902958041.
- Komarnicki, L. *Irysy*. Warszawa: Państwowe Wydawnictwo Rolnicze i Lesne, 1993.
- Melo, M.J. Missal Blue: Anthocyanins in Nature and Art. *Dyes in history and archaeology: Meeting; 21st, Dyes in history and archaeology*. 2008, 21, 65-74.
- Nunes, F. *Arte poetica, e da pintura e symetria, com principios da perspectiva*. Lisabon: Pedro Crasbeeck, 1615.

- Ozturk, M., I. Uysal, E. Gucl, Y. Altundag, S. Dogan and Baslar. Medicinal Uses of Natural Dye-Yielding Plants in Turkey. *Research Journal of Textile and Apparel*. 2013, 17 (2), 69-80.
- Schwepe, H. *Handbuch der Naturfarbstoffe: Vorkommen, Verwendung, Nachweis*. Landsberg: Ecomed, 1993.
- Thompson, D. V. *The materials and techniques of medieval painting*. New York: Dover Publications, 1956.
- Yabuya, T., M. Nakamura, T. Iwashina, M. Yamaguchi and T. Takehara. Anthocyanin-flavone copigmentation in bluish purple flowers of Japanese garden iris (*Iris ensata* Thunb.). *Euphytica*. 1997, 98, 163–167.
- Yabuya, T., T. Imayama, T. Shimomura, R. Urushihara and M. Yamaguchi. New types of major anthocyanins detected in Japanese garden iris and its wild forms. *Euphytica*. 2001, 118 (3), 253-256. DOI: 10.1023/A:1017562518106.

PHILOSOPHICAL AND SOCIO-PHILOSOPHICAL BASE OF HISTORICAL GARDEN TYPES DEVELOPMENT – FROM CONTINENTAL FRENCH FORMAL GARDEN OF THE 17TH CENTURY TO INSULAR ENGLISH LANDSCAPE GARDEN OF THE 18TH CENTURY

Marie Zgarbová, Ing.

Mendel University in Brno, Faculty of Horticulture, Czech Republic

Abstract

This paper would like to enrich the common analyses of the historical changes of the garden and landscape space composition with the deeper philosophical and social context of these changes. The very aim of the presented interdisciplinary research is to point out at rather neglected but very important connection of the aesthetics, composition and creation of garden with the dominant way of thinking of a specific era, i.e. with the main philosophy of the period. Specifically, the research focuses on the period of founding and the authentic existence of the two main types of garden space within the history of garden design and landscape architecture of the west civilisation (French formal garden and English landscape garden). This period, the 17th and the 18th century, is also the era of founding and climax of the modern-day philosophy and social philosophy in Europe. The attention is paid both to the mainland of Europe – represented by the modern-day Rationalism that, as it will be shown below, had an impact on the composition of the gardens of French formal type, and England – represented by the modern-day Empiricism that influenced the inclination to less formal, more landscape-friendly composition of the English landscape school. Both of these philosophical schools raised the thoughts of the Enlightenment and especially Empiricism in England anticipated the Romantic era in which the development of English landscape garden culminates.

Keywords: French formal garden, English landscape garden, theory and development of garden and landscape architecture, modern Rationalism, modern Empiricism

Introduction

The development of the garden and landscape architecture has been an inseparable part of the rich European cultural heritage. Exploring the tangible manifestations of this development - of the monuments of garden art - informs us about the cultural level, especially about an intellectual and creative maturity while pointing at many local particularities and individualism of the creation, which seem to defy a series of general characteristic of the particular cultural epoch. The present text somehow disregards the above mentioned, otherwise very reputable and attention deserving particularities, whereas the emphasis is here being put on the generally valid features and elements of the garden arts monuments which are closely related to the general culturally conditioned preferences of the given society, especially with the philosophy of the given period and geographical area. Exploring the general does not mean superficiality in this case but rather a way how to deeply understand what mindset and what social bonds stand behind the refined composition of the landscape art monuments.

After all, not a single person familiar with the garden and landscape composition can maintain that a fine garden and architectural work such as the French formal garden of the 17th century or the English landscape garden of the 18th century is only a result of more or less random impulses and motives of the author independent of the tradition.

Present society considers itself to be freer, more open and independent of the tradition and authorities of various kinds. In the interest of the emancipation of the rational entity the contemporary Western society resorted to the condemnation of the integrating traditions - (narrative) stories and determinisms. The heterogeneity and veracity in the sense of the veritable values of logical operations thus acquired is redeemed by demoralisation and loss of the sense of traditional justice and responsibility thus disintegration of the foundations upon which the legitimacy of the social ties stands. Also today it is more about abandoning the traditions and authorities unmasked and shift towards the new yet unexamined; see e.g. Lyotard (1993), Kuhn (1997).

It is undeniable that every high quality garden-architectural work, be it historical or contemporary, is to a certain extent "subject to" some preferences widespread in the society and there is no need to hide it or be ashamed of it. Therefore only then, when there is a deeper understanding of the general cultural prerequisites of the creation, it is possible to state with relative satisfaction that the work itself is understood, that the ability to learn from it and to draw inspiration from it is acquired and at last that there is the ability to also establish one's own creation on more solid foundations.

Material and method

The study of cultural-historical changes of the composition of garden space is an inseparable part of the professional examination of the garden and landscape architecture, it is, however, considerably limited methodologically and by its own subject. Its descriptive and comparative practices are almost exclusively oriented on a description and comparison of the composition of the garden space, description and comparison of the compositional changes of the garden space in time alternatively on the vague discussion on the impact of the garden composition and its partial elements on the onlooker. The garden space is here preserved especially physically (quantitatively), only in better case, and this rather exceptionally, also relationally (qualitatively). In any case the study covers one mere level of the garden space - the visually exposed, material and moreover methodologically very limited ; for details see Kostrhun et Zgarbová (2013, p. 6 - 11).

Even the majority of attempts to qualitatively analyse the cultural-historical changes of the garden space do not exceed these narrow limitations and respond only the question "How is the garden space composed and how does it look like?" not the question "Why is the garden space composed in this particular manner and why does it look like this?" (Kostrhun et Zgarbová, 2013).

The research briefly presented on the following pages shows one of the possibilities of how to extend the professional examination of the changes of the garden space in the course of the past so, that even the other above mentioned question was included or at least partially answered. It focuses on the intellectual and philosophical context of the changes of the garden space composition. In terms of the method it involves an interdisciplinary research of the philosophical and social prerequisites of the garden-architectural creation.

Two historical types of gardens of a great importance - the French formal garden of the 17th century and the English landscape garden of the 18th century were selected as the "researched material". Although for greater clarity also the concrete examples are being used in the text, these are theoretical examination of the representative sample of the general characteristics defining the given type of the garden rather as its ideal picture and not as the concrete works. Although the interpretation is systematically not focusing on presentation of

any concrete garden but on deeper understanding of the general type, the conclusions of this analysis are more less valid for any concrete garden classified as this type.

Relation to previous research

The presented research is a sub-part of the author's wider research dealing with the Phenomenology of the garden and landscape; for details see e.g. Zgarbová (2010, 2012), Kostrhun et Zgarbová (2013). This extensive research follows the ideas and extends the ideas of the philosopher and architectural historian Christian Norberg-Schulz summarized in the work *Genius loci, k fenomenologii architektury/Genius loci, towards phenomenology of architecture* (Norberg-Schulz, 1994). The centre of the extensive research is the articulation and rehabilitation of the natural and to certain extent traditional need of every human, that is the need to anchor his/her existence in some essential, authentic and unifying principle to really belong somewhere. This need is demonstrably connected with the inhabited environment - with the familiar home, garden and its typical landscape as defined by Norberg-Schulz (1994).

Person and the environment inhabited by them are from the perspective of phenomenology of the garden and the landscape essentially intertwined and their existence is the mutual existence determining them both. The unifying concept denoting the various nuances of the specific unity of a person and the environment is so called sense of belonging; see e.g. Barbaras (2005). The sense of belonging regulates the widespread and quite simplified images of a person as of the only or at least main active element in the environment. It rejects the idea of an autonomous human being and heteronymous environment, where the activity is one-sided from a person toward the environment. Against the unilateral scheme of the dependence the scheme of mutual contingent relation on both levels - the epistemological level (cognitive level) and on the ontological level (level of existence); for details see Zgarbová (2010, 2012), Kostrhun et Zgarbová (2013).

Only then, if there is an effort at the scientific level to understand how the various landscapes or gardens influence the thinking and the creation of a person and at the same time how the human ideas and their application in turn stimulate the transformations of the landscape and the garden, only then the deeply meaningful and coherent complex of the knowledge can be reached in the field of garden and landscape architecture and related fields. The part of the Phenomenology of the garden and landscape is also the study of the philosophical and philosophical and social basis of the development of the historical and contemporary types of the gardens and composition of the landscapes from the ancient time till today. Essential is the grasping of the influence of the prevailing philosophical concept and related philosophical social mood of the given period for garden and landscape compositions.

Results and discussion

Differences and similarities - brief comparison of French formal garden and English landscape garden

The development of the garden and landscape architecture in the modern period in Europe is dominated by two historical types of gardens - on one side it is the French formal garden with the peak of its development in the 17th century and on the other side it is the English landscape garden which culminated in the development in the 18th century. It is logical that these two types of gardens, which are today evaluated as *Loci classici* of the garden architectural creation have originated -as their names suggest- in the territory of the formerly by power, socially, culturally and intellectually advanced powers - France and England. Although both types later spread around Europe and beyond the place of its origin (the type of French formal garden penetrates from the place of its origin- France- into another

European countries including Great Britain; similarly the English landscape garden appears beside the British territory also on the continent including France one century later), they retain their essential characteristics, especially the compositional patterns in the authentic or not too modified form. It is so because the both types of gardens have reached a certain grade of perfection of its kind that had simply not been overcome but copied and imitated. They are a manifestation of perfection that is strictly speaking only one, albeit in diverse forms portrayed; for more details about idealistic conception of perfection see e.g. Plato (2003) – his Middle dialogues. The unifying link of the both garden types is their perfection.

When taking into account not the ideal perfection of human creation but purely the formal compositional patterns and principles the two examined types of gardens are on the contrary very often put in contrast to each other. They stand against each other almost diametrical opposites, whereas we can hardly find more distinct opposites in the history of the garden and landscape architecture. Their differences are evident especially due to differences on one hand a very strictly formal and on other hand relatively loose natural composition. Entirely different compositional patterns are used on many levels and in many scales of the garden space. Furthermore these differences are amplified also by force and urgency with which the composition of these two garden types at that time and today affects and captivates the soul of the onlooker and also the surrounding while awakening *Genius loci* in unprecedented force.

Today these significant forms of the French formal and English landscape garden in form of different composition and visual effects can be perceived as based on a different taste of the society in the 17th and the 18th century in France and on British Islands, the majority of the informed is, however, aware that with this approach we would make an improper simplification that neither the French formal garden or English landscape garden deserve. Not by far the sovereign garden types are only the expression of the different superficial aesthetic preferences. On the contrary the different social structure and different prevailing mindset of modern France on one side and modern England on the other side speaks authentically through their artistic forms. It is amazing, how clearly and significantly the philosophical-social context of the epoch has imprinted into the both types of gardens.



Fig. 1: Versailles - French formal garden (photo author 2010)

Fig. 2: Stourhead - English landscape garden (photo author 2011)

Society and politics

Let's consider briefly the philosophy of the society, the society and the politics of France and England of that time and their influence on the formation of the typical garden space. From about the mid-17th century there are different views of influential theorists on suitable social and political arrangements that oscillate between the authoritarian, absolutistic

and liberal the society democratizing concept. The real state of the political system or the effort to establish it goes in hand with this theory - whereas in France a strong monarch Luis XIV. maintains the absolute reign, the English society sympathises with the early liberalistic ideas, that despite all the power twists and turns is taking roots here; for details see Holzbachová (2006).

Socio-political situation in France of the 17th century gave rise to a new concept of the garden space in form of generous spatial compositions that serve as representative, perfectly geometrically structured space, where a spectacular residence is nestled (Hendrych, 2004, p. 67).

Louis XIV. was in many respects a perfectionist and he was very careful not to limit or to destroy the French nobility. It would have otherwise had ambitions to break out of the king's influence which was neither in harmony with his personality nor with his political ambitions. Everything, and even the garden has to represent the absolute power of the monarch, who was even the "King of Sun" in France from the second half of the 17th century. As far as a huge, the landscape captivating, perfectly designed, with hundreds of fountains abundant and with gold and marble gleaming garden is concerned, the money is not the issue. Whereas in its whole the French formal garden is, e.g. the greatest in *Versailles* an example of disciplined authoritative approach, and, as it will be explained later, not only of a monarch toward the society but also of a human toward the nature, the partial garden spaces are the stage and the scenery of the royal capricious games and people in his favour.

In any case the French formal garden is a symbol of absolute power. A meaningful example showing the significance of the garden in France of that time is a story about the fate of Nicolas Fouquet, the king's finance minister, who is connected with the garden *Vaux-le-Vicomte*. This magnificent formal garden that has become a prototype for the creation of similar garden spaces in the whole Europe was founded not by the king but this minister of his even before the establishing of the garden in *Versailles*. The garden raised the king's ruthless jealousy. The king Louis XIV was said to be totally hit by the visit of *Vaux-le-Vicomte* - firstly he could not bear to look at the perfection of the garden he did not own himself and secondly he finally found the unique way of how to materialize his absolute power. In *Vaux-le-Vicomte* he saw a garden space in certain way composed and gaining an unlimited overlap transcending the concrete place toward the whole universe - similarly it should be with the monarch's power. So, after the visit of *Vaux-le-Vicomte*, he knew already how to make the "centre of the world" out of his own residence in *Versailles*. To Fouquet himself, his influence, ambitions and extravagance planted in the garden *Vaux-le-Vicomte* have brought him a life imprisonment. More on Fouquet's story, on the garden *Vaux-le-Vicomte* and other significant French gardens is to be found e.g. in the valuable work of Ivar Otruba *Krásy francouzských zahrad/Beauties of French Gardens* (Otruba, 2010).

While strictly straight lines and axes of formal composition of French garden persuasively symbolise the absolute power of the monarch over the subjects and also the power of a human over the nature, the relatively more liberal society and its responsive approach toward the natural matter is reflected in the freer and relatively looser shapes of the English landscape gardens. The development of the capitalist economic form connected with a somewhat disputable measures - so called enclosing of the formerly community and peasant land have caused the disintegration of the traditional farming structure and almost complete disappearance of the small farmers in England. At the same time enclosing gave rise to the great landscape sections and to future development of the landscape school. The vast enclosed units serving primarily for sheep farming guarantee the unity of ownership and at the same time anticipate and suggest the future compositional and aesthetical principals of the creation of the landscape gardens. Already in the 16th century Thomas More (1950) criticizes the state of English countryside, which is called by the motto "the sheep are eating people";

see also Uryč-Gazda (2010, p. 1.) Also the emerging constitutional arrangement of the power in England at the end of the 17th century favours the nobility and other privileged wealthy who owned the land. These owners are not perceived as threat to the sovereign, but as a positive manifestation of growing economic and social level; for details see Holzbachová (2006).

The establishment of the new compositional principles of English landscape school is also helped by the practical consequence of the socio-political situation. The enclosed landscape sections should primarily not serve for demonstration of wealth and political power, but should be a background for a new way of life - so called "country living" and the production of the valued commodities such as wool or wood. Maintaining of the strictly regular compositions of the French type gardens is not economically viable for the owners and at the same time it is not compatible with their lifestyle including a new "more natural" aesthetics of gardens (Hendrych, 2004, p. 6 - 11).

Therefore we can better understand now, from where the urgent desire to own a garden came, the garden that resembles more to heroic and bucolic landscapes in from the paintings of Classical painters than to the formal compositions of Le Nôtre. The logical consequence of the socio-political situation in England is the publicly declared opposition from the ranks of artists (essays of Joseph Addison, Richard Steel and Alexander Pope) toward the continental formally designed gardens of Baroque and Classical period and their copying in the environment of English countryside; see Hendrych (2004, p. 96).

Philosophy

Many philosophers have defended and sometimes even anticipated the differing views on the "ideal" socio-political structure of the society, which, as earlier explained, affects the appearance of landscapes and gardens. The philosopher Thomas Hobbes (1588 - 1679) was not a Frenchman by origin, yet he spent most of his life time in France and openly expressed the sympathies with the ideal of royal absolutism. Probably under the influence of horrific events, when England had executed their monarch (Charles I. in 1649) and the successor to the throne (future Charles II.) he emigrated to France and stood against the poor masses and against nobility limited in number and he did not recognize any form of their independence from the sovereign (Röd, 2001).

Hobbes (2010) has thus become one of the most influential theorists of absolute power till today. According to Hobbes' vision the ideal state should be controlled by the unlimited will of the monarch who reigns over both the human goods including decisions about human life and death and also the nature goods. The state is thus a strictly organized unit consisting of subordinate individuals similarly as the French formal garden is a strictly organized unit consisting of tamed natural elements.

A very different view of Hobbes' was held by the English philosopher and influential theorist of liberalism John Locke (1632 - 1704); for details see Locke (1992, 2000). His far more moderate, liberal social theory admits the human many liberties. A right to protection of life and private property are some of them. Heading towards a freer position of the individual in the society, explicitly expressed in Lock's work in the field of political theory and in real terms forming in England of that time preceded a relatively free and considerate manipulation of a human with the natural elements that in the 18th century was applied by the English landscape school at its climax.

On the purely philosophical and above all epistemological (theory of knowledge) grounds, the views of the philosophers of that time oscillate between two main modern schools of thought - the rationalism establishing itself rather on the continent and the Empiricism prevailing on the British Islands. Especially new age Rationalism is the cornerstone of this type of thinking that supports the bold idea that the human is the lord and

master of nature. The French philosopher René Descartes (1596 - 1650), fairly considered to be the founder of modern Rationalism, has brought this idea in his epistemological concept to the theoretical peak; for details see Descartes (2010).

Modern Rationalism combines well with the socio-politically oriented ideas about the absolute power that, as we have learnt already, are related to the aesthetics of the French formal garden. The philosophical movement of Rationalism in the 17th century strived to achieve the unquestionable foundations of the knowledge, through which a person gains a perfect knowledge about the social and natural reality thus also supremacy over the social conditions and the nature, thus de facto over the whole world. The aesthetics and architectural works of that time are also based on the same theoretical concept. Compositional principles of the French formal garden get hold of almost all natural elements included in the garden and even the surrounding landscape. The architect does not hesitate to use all the mathematical regularities, rules of perspective illusion and sometimes significant interventions into the landscape done by them; see e.g. Hendrych (2004, p. 68 - 74). This all is about a "magnificent space calculated to impress" (Hendrych, 2004, p. 70).

In connection with emerging modern Rationalism the human thinking started to concentrate primarily on the secular tasks for the first time after long centuries and it deviates from the contemplative life in favour of the active life. Person will not have to be responsible for their earthly deeds to some transcendental entity (God) but on the contrary, they will and should do whatever their intellectual capabilities and capacities allow them. The thinkers of that time on the continent believe under the influence of rationalism, that while pursuing their goal (supremacy over the nature) the intellect will provide the ideal science - science on the model of mathematics, the findings of which are undisputable, obvious and unambiguous; for details see e.g. Röd (2001). Should we seek a perfect knowledge of nature that can be used when creating the garden spaces it will be provided by kind of a mathematized natural science.

From the perspective of today it is, however, clear that the variability, ambiguity and intangibility of nature or landscape is very hard to be combined with the ideal of security and clarity of the mathematized natural science. Where does then such given mathematized natural science take its legitimacy, when not in natural matter? The modern Rationalism had already in the 17th century an apparently sufficient answer for this question. Unlike the modern Empiricism it is not searching for unquestionable basis of the cognition in the experience with the surrounding world, but it is looking for it directly in a person and their intellect. For this reason the modern Rationalists believe in principle that if the intellect (it is capable to think) contains whatever undisputable (mathematical) principles, and they will apply it consequently in the surrounding world, they will not commit any misconduct. Should we realize that during the formation period of the French formal garden the above mentioned school of thought prevailed, then we can also understand that this type of garden is able to defend its almost exaggerated, extreme regularity and precision that goes in many ways against the nature.

English modern philosophers led by the already mentioned John Lock were opposing the modern continental Rationalism with their empirically (experience) oriented philosophy; for details see Röd (2004). Whereas the sensory experience is a source of volatile and therefore mostly deceptive cognition for Descartes, for the representatives of Empiricism it represents on the contrary something, in which a person is naturally rooted and what gives them a possibility of genuine understanding of the world. Valuable knowledge must on the contrary be based on the world existing everywhere around everyone, not only on purely speculative processes of human mind.

According to Lock (1984) the nature is an infinite set of hypotheses about the reality that cannot be fully rationally explained. Also the knowledge is from the perspective of his

Empiricism is "merely" a hypothetical explanation of the reality, without the right to achieve absolute validity; for more details about epistemology of Locke see e.g. Krüger (1973, 1981), Bennett (1971). The measure of all human doing, thus also creating of gardens and interventions into the landscape is nature itself, not the ratio. All the human thoughts must be firstly found in nature itself and firstly then used. The ideas of modern Empiricism on British Islands are very aptly complemented with former more liberal society-wide situation and together they form a convenient mental context for the development of the aesthetics of the English landscape school inspired by free nature, culminating in the 18th century in form of English landscape garden.

It should be noted here, how elegantly the modern Empiricism anticipates the end of the rationalistic ideal of indisputable cognition, the place of which can be taken by an entirely different ideal - the ideal of authenticity in sense of open and tolerant relation toward the world, thus also to the surrounding nature matter. This ideal is then considered in connection with the environmental crisis and crisis of social relations in the society especially during the whole 20th and at the beginning of the 21st century till today.

Conclusion

We have tried to look at the historic changes of the composition of the garden space from other than commonly held point of view on the lines above. This deeper examination showed that the garden space is by no means a trivial object that could be easily described and fully understood by a narrowly focused study of the material compositional side of the matter. The intangible, philosophical and social context of the time plays a very important role in the formation of the various garden types throughout the history. Therefore, its understanding is strived for in the field of the garden design and landscape architecture.

Acknowledgements

The research was supported by grant OPVK CZ.1.07/2.4.00/31.0089 of the Ministry of Education of the Czech Republic.

References:

- Anthony, J. (2009). *Discovering Period Gardens*. Oxford: Shire classics, 2009.
- Bacon, F. (1625). *The Essays or Counsels, Civil and Moral, of Francis Ld. Verulam Viscount St. Albans*. [online], No.1, [cit. 2014-01-05]. <<http://www.authorama.com/essays-of-francis-bacon-46.html>>. 2014.
- Barbaras, R. (2005). *Touha a odstup. Úvod do fenomenologie vnímání*. Praha: OIKOYMENH, 2005.
- Bennett, J. (1971). *Locke, Berkeley, Hume. Central Themes*. Oxford: 1971.
- Descartes, R. (2010). *Meditace o první filosofii*. Praha: OIKOYMENH, 2010.
- Hendrych, J. (2004). *Tvorba krajiny a zahrad III. Historické zahrady, parky a krajina, jejich proměny, kulturně historické hodnoty, význam a ochrana*. Praha: ČVUT, 2004.
- Hobbes, T. (2010). *Leviathan*. Praha: OIKOYMENH, 2010.
- Holzbachová, I. (2006). *Dějiny společenských teorií*. [online], No.1, [cit. 2014-01-08]. <<http://www.phil.muni.cz/fil/texty/dst/1.html>>. 2014.
- Jellicoe, G., Jellicoe, S. (1995). *The Landscape of Man*. London: Thames & Hudson, 1995.
- Kostrhun, P. et Zgarbová, M. (2013). *Městská Krajina z pohledu fenomenologa – možnosti analýzy veřejného městského prostoru fenomenologickou metodou*. Brno: Mendelova univerzita v Brně, 2013.
- Krüger, L. (1973). *Der Begriff des Empiricismus. Erkenntnistheoretische Studien am Beispiel John Lockes*. Berlin – New York 1973.

- Krüger, L. (1981). The Concept of Experience in John Locke. in: R. Brandt (vyd.). *John Locke. Symposium Volfenbüttel 1979*. Berlin – New York 1981.
- Kuhn, T. S. (1997). *Struktura vědeckých revolucí*. Praha: OIKOYMENH, 1997.
- Locke, J. (1984). *Esej o lidském rozumu*. Praha: Svoboda, 1984.
- Locke, J. (1992). *Druhé pojednání o vládě*. Praha: Svoboda, 1992.
- Locke, J. (2000). *Dopisy o toleranci*. Praha: Atlantis, 2000.
- Liotard, J.-F. (1993). *O postmodernismu*. Praha: Filosofia, 1993.
- More, T. (1950). *Utopia*. Praha: Orbis, 1950.
- Norberg-Schulz, Ch. (1994). *Genius loci, k fenomenologii architektury*. Praha: Odeon, 1994.
- Otruba, I. (2005). *Krásy anglických zahrad*. Brno: ERA, 2005.
- Otruba, I. (2010). *Krásy francouzských zahrad*. Brno: Masarykova univerzita, 2010.
- Platón. (2003). *Platónovy spisy. Svazek I, II, III, IV, V*. Praha: OIKOYMENH, 2003.
- Röd, W. (2001). *Novověká filosofie I*. Praha: OIKOYMENH, 2001.
- Röd, W. (2004). *Novověká filosofie II*. Praha: OIKOYMENH, 2004.
- Špelda, D. (2009). *Renesanční a novověká filosofie*. Plzeň: Západočeská univerzita v Plzni, 2009.
- Zgarbová, M. (2010). *Fenomenologie krajiny, diplomová práce*. Brno: Mendelova univerzita v Brně, 2010.
- Zgarbová, M. (2012). *Fundamental phenomenological categories of garden and landscape – introduction to garden and landscape critical speculation with special stress on phenomenology and hermeneutics*. In: *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis. Volume LX*. Brno: Mendelova univerzita v Brně, 2012.
- Uryč-Gazda, M. (2010). *Měření ekonomické svobody*. [online], No.1, [cit. 2013-05-08]. <http://libinst.cz/Files/KqLFy4r2/profile/2463/uryc_ekonomicka_svoboda.pdf>. 2010.

A BUILDING AS A GARDEN - A GARDEN AS A HOUSE

Viktor Filipi, Ing.

Mendel University in Brno, Czech Republic

Abstract

This paper discusses the issue of urban development in the near future from the perspective of garden design and landscape architecture. It is a response to the deteriorating situation related to the population growth and the human separation from nature. Attention is mainly devoted to a detail - a building. The author suggests a solution in the form of a house and a garden being combined. This paper describes the positive impacts of such a combination from the environmental, ecological, hygienic, and economic perspectives. Further, garden forms appropriate for this vision are presented. The solution is documented using a study created in cooperation of Filipi and Damec.

Keywords: a building as a garden, futurist visions, sustainable development, roof garden, vertical garden

Introduction

As described in the book of Genesis, Adam and Eve lived in the Garden of Eden from their creation until their expulsion. With some exaggeration, one could say that a human being actually comes from the garden. Nowadays, the situation is dramatically different. People do not go naked any more, most people live in an urban apartment without a garden. They know what an apple looks like, but they cannot tell an apple tree.

I.

The data of the World Bank (2014) confirm the tendency to move to urban areas and leave the countryside. Researchers have observed the trend of increasing populations in the vast majority of the world's cities. According to the data of the World Health Organization (2014), the majority of the world population lives in cities and this proportion is still increasing. In 2050 it is expected that 7 out of 10 people will be living in the city.

As catastrophic prognoses predict, large building complexes will become a regular part of the urban area so that the cities could absorb large numbers of people. The human scale will be suppressed. Green areas in lucrative positions will have to give way to the new development. The boundaries of the urban area will move ever further into the surrounding suburban landscape until they reach boundaries of another city. The journey from urban centers to the countryside will become difficult and time-consuming. This will result in a complete separation of humans from nature.

Naturally, architects and urban planners respond to the situation outlined. The visions which are provided in the form of perfect visualizations and simulations appear almost daily in various media, professional journals and architectural competitions. In many cases they show futurological plans implementation of which would depend on the development of new energy sources and new materials. It is not a problem "to plant and make greener" any place or building using computer technology. So we can see endless green towers, levitating vegetation or artificial floating islands that are full of happy people and children. However, the reality is still different. The time when humanity will live in mushroom- or seaweed-shaped buildings rising from the sea is still far away. In spite of this, these ideas are very

important. They give us the opportunity to realize what makes these images so attractive - even for an average layman. It is the vegetation that helps architects to document these green visions. As a green thread, vegetation connects almost all emerging futurological plans.

It is difficult to describe vegetation as a technical term. Many people perceive it as a green colour in the described visualizations. Unfortunately, this is practically way some architects use it in their projects. Only after the vegetation is composed in a particular shape and the spirit of the garden is implanted can people identify with the place and imagine its future practical use.

A garden already represents a specific place filled not only with vegetation but also functions. In itself it is a process of life and the cycle of substances. In connection with the described futurological visions, we can see a possible solution – interconnection of buildings and gardens into a complex. In this context, Professor Damec (2014) defines the phrase "building as a garden" as the ideal relationship between a building and a garden.

Until recently we met with studies that have shown the negative effects of vegetation on the building and its construction. Impacts of vegetation on buildings are divided by Blanc (2008) to hazardous and destructive. We have to admit that vegetation can have these negative impacts. However, in most cases, error is caused by improper foundation or choice of unsuitable plant species. Roots or other parts of plants which penetrate the building structure have a major impact on functions or stability. These problems can be prevented only by close cooperation of specialists in the design and implementation.

Modern technologies allow for a creation of projects where the garden becomes a natural part of the building. Computer simulations specify the parameters necessary for the design load. Quality materials resistant to weathering and decomposition ensure durability and functionality. Under these conditions projects that represent the concept of the building as a garden can be implemented.

The basic prerequisite of this connection is the balance of the two components - buildings and gardens. The building provides the carrier matrix, basic social functions and facilities for residents. The garden is a natural component of this connection, extending the living space with extra areas with additional functions. The building provides support and necessary technological background for the garden. The garden in turn creates an outdoor covering or facade of the building. Individual components should not impede existence of the other, on the contrary, they should complement each other.

A comprehensively designed building that uses the principles of "a building as a garden" enables the designer to bring ecological and environmental aspects into the urban space. Primarily, it provides conditions for the life and development of animal and plant communities. Many species from the wild disappear fast and gardens can provide a potential living space, which essentially they will share with human beings. Related to the sustainable development of the life on the planet Earth, the idea "a building as a garden" is a big step forward. A new link between a garden and a building allows input of natural substances directly into the city center from where they have disappeared or have only survived in fragments. It will naturally relate to the green spaces of parks and streets and together they will create a united complex. Garden areas as parts of new buildings help to compensate for the lands lost in consequence of the building development. They make up for the built-up areas and allow growing crops or creating relaxing spaces. This trend is evident in contemporary cities but in most cases only on a small scale. First of all, on balconies and terraces many tenants attempt to use each centimetre of free space. Large amounts of crops or ornamental plants spread over the railings. If it works on a small scale, why not try further develop this concept?

A potential introduction of "a building as a garden" principles in the standard building development is also justified from the economic point of view. A green area provides a place

for human self-realization and at the same time is capable of producing crops. Vegetation in the form of a garden enhances the exclusivity of the place. Experienced developers should realize the great potential of such buildings. From the economic point of view, the positive impact of gardens and vegetation on the building itself is the most important. Conclusions of many models and studies show the positive influence of vegetation on the thermal environment of buildings. This fact is measurable even if the walls are just covered with climbing plants. If we add more technological layers required for the establishment of gardens to the vegetation cover, energy saving effect will significantly increase. As reported by Perini et al. (2011), the heating up savings climbed to 6.3% and air-conditioning savings reached 43%. The internal space of the building is protected from the heat loss in winter. Conversely, the presence of gardens and vegetation prevents overheating of the interior in summer. As evidenced by the aforementioned research, savings can reach nearly half the costs. It is an amazing number for the sustainable development of the world population.

Implementation of a garden instead of a usual roof or wall eliminates the costs of traditional architectural design, which uses expensive materials, technology and maintenance. The initial cost of these buildings may be the same or even lower than when traditional methods are used. The final price depends on the form of the garden, purpose and use. In the case of a public space, the corresponding costs of maintenance need to be taken into account. However, a large part of the maintenance costs of a classical building are only moved to the maintenance of gardens.

The "a building as a garden" concept assumes a comprehensive approach. A garden in this case is not simply a decoration stuck to the building, but they create a full cycle together. The difference from a classical garden is mainly the fact that these gardens are created on an artificial structure and there is no connection with the ground. However, it is also an advantage. It is possible to regulate and control all inputs, such as rainwater. Important and relatively easy is to capture rainwater and reuse it for watering. Water can be collected into a tank hidden in the building structure or into a reservoir which is a natural part of the garden. Moreover, the wastewater system may also be involved in the water cycle. Instead of discharging the wastewater into the sewer system, it can be collected in a special container based on biological treatment by plant roots. After the treatment, this water can be reused for watering or for the needs of the residents. The cycle closes and the building becomes partially self-sufficient.

Vegetation planted in the garden can also perform other hygiene functions. It assists in removing air pollution caused by the building operation. Plant leaves absorb small particles such as dust and other substances released from various materials. At the same time, vegetation muffles noise caused by the building operation, such as air-conditioning and ventilation. The purifying power is mainly exercised by large vegetation areas and appropriate plant species need to be selected.

In a broader view, the ideal connection of a building and a garden assumes a close link between the people using the building and the garden, especially on the environmental level. A garden, based on its type, provides various products and performs various roles. These are mainly recreation, food, water, building material, biomass, etc. In return, it demands maintenance and a supply of energy in the form of nutrients. These need not come from artificial fertilizers; they can be supplied by composting organic remains after human usage. The system of the building as a garden is then not only a connection of a garden and architecture but the inhabitants themselves are involved. Together, they create systems that are presented in the architects' plans mentioned above.

The idea of the building-garden connection into one unit is not new - we would surely find parallels in distant history. For example, the Hanging Gardens of Semiramis are in fact roof gardens. However, the topic is current now as the search for new possibilities of town

and city development with respect to the landscape and nature is topical. The search for a new path of an urban being to nature. The nature will be increasingly suppressed with the growing population. A garden that is a part of a building should not be understood as a specific area with a specific role; rather, it is a system of areas. These can differ by character and role. Still, they should form a unit, a complex, where natural relations and substance cycles will exist in dependence on the building.

The easiest and most common example, which however cannot work as a full-fledged garden itself, is a wall with climbing plants. This is the cheapest method and the easiest to implement with a great effect. It is fast and does not demand large expenses. The area - especially its height - which can be used is limited by the plant growth. The maximum height of the tallest species is 24 m (Pejchal, 2006). To reach further, it is necessary to modify the architecture so that plants can be planted in higher floors. The attempts to disrupt the wall's monotonous character by climbing plants and provide the sensation of a classical garden appeared at the end of the 20th century. In this period, house facades were newly designed as green gardens. Vertical gardens, connected with the name of Patric Blanc, first appeared in France. An example would be Musée du quai Branly. The area that a vertical garden can use is unlimited. It is only dependent on the technology used. However, with a growing area the implementation requirements increase. The connection of a building and a garden is very close in vertical gardens, similarly to walls with climbing plants. However, due to the vertical orientation, its impact on human beings is aesthetic. Vertical gardens are dependent on a continual water cycle. Also a short-term failure can cause irreversible damage.

The crucial form usable when designing buildings in the sense of "a building as a garden" is typical roof gardens. Their implementation is conditioned by the building stability and it is almost unlimited with the proper dimensions. These gardens can bring both material benefits and recreation. A building as a garden can use all the mentioned forms of vegetation application. Together with the inseparable non-living garden parts, they create a complex whole.

Nowadays, there are a number of projects around the world that satisfy the vision of "a building as a garden". The successful examples include Bad Blumau by Friedensreich Hundertwasser from 1993-1997, organically shaped buildings are based on the local landscape and they form its parts. The shopping street Namba Park, in Osaka, by Architect Jon Jerde from 2003. Nasher Sculpture Center in Dallas from the architect Renzo Piano, opened in 2003, which draws the surrounding garden into its interior.

The first practical experiments by the author of this paper to create a complex corresponding to the mentioned principals include the design of a part of Plzeň. The design was created in cooperation with Professor Damec. All the required functions of the area, such as parking, shopping, entertainment, administration, spiritual uplifting, etc., are housed by a 4-floored large underground building. It is based on a simple modulus of columns. The garden covers most of its roof area and enters the underground floors by skylights. The garden thus becomes an imminent part of the interior. Rainwater from the area is collected in several tanks located below the ground substrate and is used for watering. The city structure thus gains two different areas of the same size and at the same place - a building performing all the required roles and a garden. The place is used twice. The design contrasts with the prevailing architects' and urban planners' views who build up the allotted areas with overground structures.



Image 1 - visualization of multi-functional building in Plzeň, (Filipi, Damec, 2014).

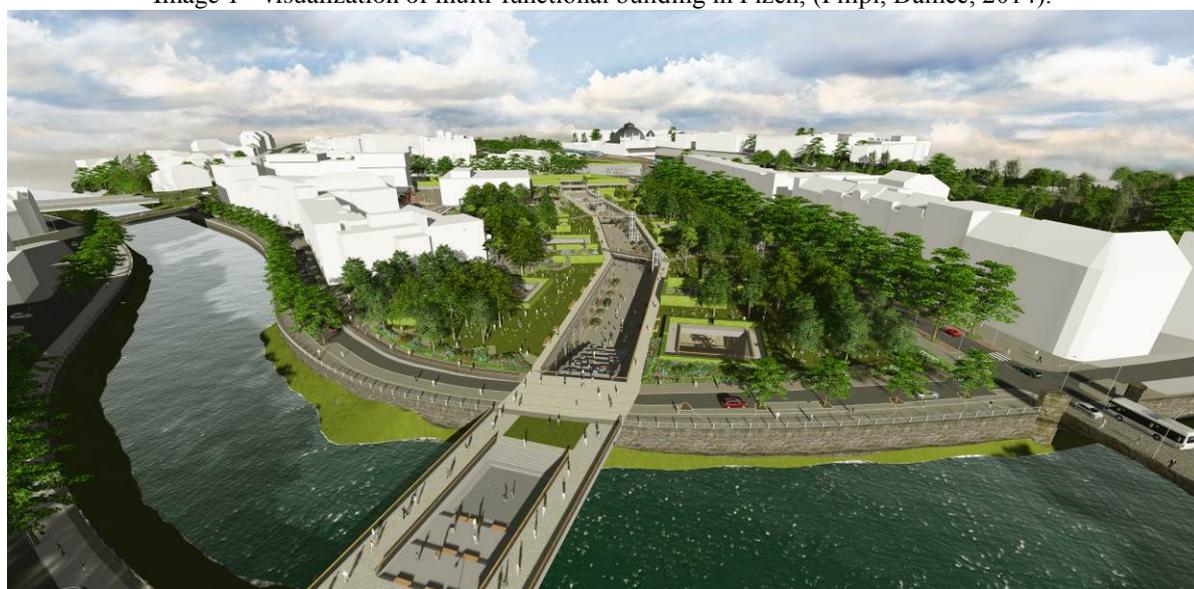


Image 2 - visualization of multi-functional building in Plzeň, (Filipi, Damec, 2014).



Image 3 - visualization of multi-functional building in Plzeň, (Filipi, Damec, 2014).



Image 4 - visualization of multi-functional building in Plzeň, (Filipi, Damec, 2014).



Image 5 - visualization of multi-functional building in Plzeň, (Filipi, Damec, 2014).



Image 6 - visualization of multi-functional building in Plzeň, (Filipi, Damec, 2014).

Conclusion

Currently, it is possible to realize architectonic visions of green buildings and towns that correspond to the requirements of the sustainable development. However, a substantial factor is interdisciplinary cooperation, especially between architects, garden designers and landscape architects. Their joint efforts may design buildings with parameters that can

provide grounds for a garden. Suitably selected plant species are as important house elements as its stability.

A well-working connection of a building, garden, and town inhabitants represents an imaginary path of human beings back to the Garden of Eden. Thanks to this idea, towns can become greener, more compact, and more open to the landscape and nature.

This work was supported by grant OPVK CZ.1.07/2.4.00/31.0089 of the Ministry of Education of the Czech Republic

References:

Blanc, Patrick, and Lalot, Veronique. *The Vertical Garden: From Nature to the City*. New York: W.W. Norton, 2008.

Damec, Jiří. *Garden Architectural Design*. Lednice: Mendel University in Brno, Department of Garden and Landscape Architecture, 2014.

Pejchal, Miloš. *Using Climbing Plants in Garden and Landscape Design*. Lednice: Mendel University in Brno, Department of Planting Design and Maintenance, 2006.

Perini, Katia, Ottelé, Marc, Haas, E. M., and Raiteri, Rossana. *Greening the Building Envelope, Facade Greening and Living Wall Systems*. *Open Journal of Ecology*, 1-8. doi: 10.4236/oje.2011.11001, 2011.

Urban opulation. *The World Bank* [online]. 2014 [cit. 2014-06-05]. Retrieved from: <http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>

Urban population growth. *World Health Organization* [online]. 2014 [cit. 2014-06-05]. Retrieved from:

http://www.who.int/gho/urban_health/situation_trends/urban_population_growth_text/en/

LANDSCAPE INFOGRAPHIC DESIGN

Markéta Krejčí, PhD

Iva Hradilová

Mendel University of Brno, Czech Republic

Abstract

This lack of understanding is caused by the urban environment complexity as cities and towns cannot adapt to the current situation in which people overcome larger distances more easily and faster. The public space becomes hard to live in because individuals' abilities to identify the surrounding environment are a basic factor of their involvement in social relationships.

The landscape infographics is to focus on the objects in the space that help orientation in the complicated urban environment and that are presented in the form of garden design and landscape architecture features. An orientation system does not necessarily mean information boards only. The main feature of an orientation system concept can be elements of landscape infographics, which can help find the right direction or place. Landscape infographics with its means forms natural orientation aids that are easily discernible without complicated cognitive processes due to their temporal and spatial convergence. As regards the present requirement of polyfunctional structure, landscape infographics uses orientation entities that use a clear form to define the location and segment the path.

Spatial orientation necessitates the ability to read the complicated layered urban environment. The human need to identify with the surroundings in its everyday form and the ability to create an imaginary diagram of places in the surroundings is a primary feature that affects the individual's involvement in social relationships. The project of landscape infographic design with the current graphic design methods and means in the public space; they are processed in relation to potential of landscaping methods applicable to the creation of good readability of urban places.

Keywords: Wayfinding, spatial orientation, landscape infographic design, urban space

Introduction

Urban environment has become complicated for its inhabitants, who are often unable to comprehend the spatial links and the internal relations within the city interior. This lack of understanding is caused by the urban environment complexity as cities and towns cannot adapt to the current situation in which people overcome larger distances more easily and faster. The space between the departure and arrival points thus becomes an anonymous transit tunnel without interaction with the surroundings. This isolates people from their surroundings and their mutual relations are hard to understand. The public space becomes hard to live in because individuals' abilities to identify the surrounding environment are a basic factor of their involvement in social relationships.

The comprehensibility of the urban environment is the factor affecting its habitability. The comprehensibility issue was mentioned by K. Lynch (1960), who sees it as the basic indicator of the place quality. It is not enough to observe the city; it has to be understood because an appropriate idea of the living environment provides people with the valuable experience of emotional security and helps create a harmonic relation between individuals

and their environment. (LYNCH, 1960) The author further deals with the idea of finding the right way through the built-up area of the city and defines this term as *wayfinding* (*way – finding*). This term is commonly used at present.

The issue of wayfinding was discussed by P. Artur and R. Passini in their book *Wayfinding: people, signs and architecture* (1992); in the book they provided a basis for the formulation of wayfinding basic principles in the context of information design and human behaviour. Their work has become a basis for the origination of the Environmental Graphic Design (EGD). The EGD concentrates on the graphic design that accompanies our every step - graphic design in the public space. The EGD objective is to make urban environment comprehensible for its users - it takes complicated information and makes it simple and easily understandable. Wayfinding becomes a communication mediator between the city and its inhabitants; it teaches the visitor to identify the boundaries, targets, and key elements. By this it brings the human dimension in the city material environment.

The field of wayfinding comprises many areas, from graphics, design, architecture, and interior to garden design. It extends to fields of sociology, psychology, cartography and geography. The principle of wayfinding is to make the urban environment readable, create places with their own identity, and offer a clear spatial orientation. Wayfinding thus also includes objects of the landscape infographics, which are a symbiosis of elements of garden design and graphic design; they support orientation in the public space and help create places with their own identity.

I.

Spatial orientation necessitates the ability to read the complicated layered urban environment. The human need to identify with the surroundings in its everyday form and the ability to create an imaginary diagram of places in the surroundings is a primary feature that affects the individual's involvement in social relationships. The project of landscape infographic design with the current graphic design methods and means in the public space; they are processed in relation to potential of landscaping methods applicable to the creation of good readability of urban places. The work has generated a division of landscape design methods increasing the space readability; the space thus becomes more attractive and more pleasant to live in; the quality of the place is enhanced.

An orientation system does not necessarily mean information boards only. The main feature of an orientation system concept can be elements of landscape infographics, which can help find the right direction or place. The principle of navigation is to define the lines pervading the city and determining the direction and the points that are essential for a place finding. Showing the right direction is the primary basis of right navigation - using objects in the public space we can navigate a visitor to the destination demanded. To show the right place by spatial navigation it is necessary to define points of orientation. Should points of orientation specify the way or a place on the way, we need to make use of a difference, the principle of a solitary figure in the background. We need to meet the rule of uniqueness - a place has an inimitable, easily identifiable feature. In the case of path orientation, we use unique features that thus become orientation aids. They define the way and segment it; they ensure the visitor that the path is right. Orientation entities make the path or the places on the way easy to remember within the map structure of the urban environment, which has expanded its scale, the number of layers, and the usage dynamics. By navigating a visitor in the right direction using orientation elements, a structured path is formed. We navigate and give direction with respect to them.

The landscape infographics is to focus on the objects in the space that help orientation in the complicated urban environment and that are presented in the form of garden design and landscape architecture features. Landscape infographics is a synthesis of *wayfinding* &

signage. *Wayfinding* is an approach that concentrates on orientation in the city, finding the right way in the urban space. Besides, *signage* is understood as a detail helping location identification, improvement of spatial orientation and information. It is a graphical entity but can also be artistic.

This project presents the division of examples, including the description of solution concepts that facilitate orientation in the urban space. The principles that directly cooperate in the formation of good quality urban environment with clearly comprehensible structure have been generated, as concerns methods, materials, and landscape architecture principles. Primarily, the research focused on details, i.e. content and form of identification elements, the overall concept of orientation systems and possible application of landscape infographics as a part of orientation systems. These elements have to be clearly comprehensible and easily identifiable. They can be the essential form of the orientation system concept, or only a detail forming the specific character of key points within the navigation.

Landscape architecture deals with space, terrain, plants, and architecture of small structures, not only in open landscapes or gardens but also within a city. From the perspective of garden design, objects of landscape infographics are the elements of the public space that are formed from natural elements cooperating with technical and artistic architectural objects. The specification and systemization is presented in a form of catalogue sorting which is the information basis for urban planning and designing of urban structure. The categorization is done in relation to the significance, the scale, the form and the role of the orientation entities studied.

Typologically, the landscape architecture objects can be divided based on their position in the navigation concept as follows (fig. 1):

- at the path - unique objects of landscape infographics appearing at the path as basic identification points
- along the path - objects of landscape infographics repeated along the path
- outside the path - unique objects of landscape infographics appearing outside the path as dominant features
- on the path - linear elements of landscape infographics that form the path

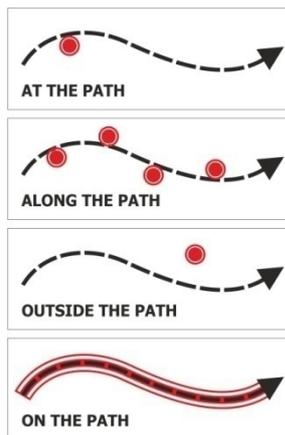


Fig. 1 - The typology of elements infographic design according to location on the path (authors, 2014)

The general classification feature in relation to the path is the proportion of the path fixation in the city map and the support for its good comprehensibility. It concerns scenarios and activities linked to everyday movement of an individual in the urban environment.

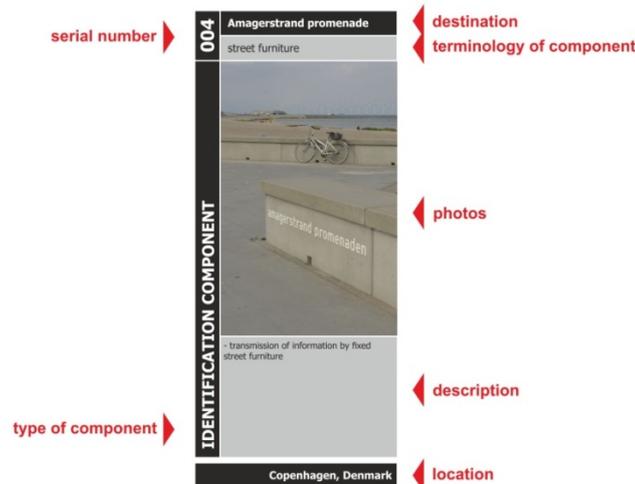


Fig. 2 - The diagram of orientation entities used in the multiple layers of the urban structure (authors, 2014)

The main catalogue method is based on the sign typology for wayfinding systems, according to D. Gibson, 2009

- IDENTIFICATION - elements helping identification of a place
- DIRECTION - elements helping to find the right direction
- ORIENTATION - elements helping specification of surrounding elements and their relations
- REGULATION - elements defining activities in the space

This typology has been elaborated in relation to the material basis of garden design and landscape architecture. Cases of good practice have been studied in situ and classified based on the adopted and modified typology. The characteristics of elements have been supplemented by the definition of the form and the significance. Elements and their features of uniqueness have been described. They were also described using the local information and the official name of the entity or the place. In this way, a complex typological overview of landscape infographics has been created in the form of catalogue sheets; this can serve as the base for urban planning and work with complicated dynamic patterns of city planning (Fig.3). By this categorization, the project aims to present a natural way to create a comprehensible and hence good quality urban environment; to create a counterweight to the complex typographic navigation systems with a plethora of information.

Fig. 3 - The card catalogue - description (authors, 2014)

Conclusion

The linking, comprehensibility and easy identification of the path and the movement on the path in the urban space is the basic framework to increase sustainable transport forms at the expense of individual car transport. Landscape infographics with its means forms natural orientation aids that are easily discernible without complicated cognitive processes due to their temporal and spatial convergence. As regards the present requirement of polyfunctional structure, landscape infographics uses orientation entities that use a clear form to define the location and segment the path. This aspect enhances the good feeling in the urban environment and is based on the assumption that movement through space with small presence of information feels longer than an interesting way with distinctive entities, which is

perceived shorter than it really is. It invites the people to make a way with their social contacts rather than choose a separate way by car.

The basis of good spatial orientation is understanding the space by its users; the basis for understanding is sufficient space for pedestrians. By enhancing the habitability, preferring pedestrian transport and providing security for pedestrians in safe distance from car transport, inhabitants are given opportunity to help form the public space; these users leave the anonymity and more easily identify with the surrounding environment. This gives them personal experience with the urban environment and they are able to read the spatial relations more easily.

Acknowledgement

This work was supported by grant OPVK CZ.1.07/2.4.00/31.0089 of the Ministry of Education of the Czech Republic

References:

- Ahern, Jack. Greenways as a Planning Strategy. *Landscape and Urban Planning*, Special Greenways Issue. 33:1-3, 131-155. 1995
- Arthur, Paul, Passini, Romedi. *Wayfinding: People, Signs and Architecture*. Ontario: McGraw-Hill Ryerson Ltd., 1992.
- Gibson, David. *The Wayfinding Handbook: Information Design for Public Space*. New York: Princeton Architectural Press, 2009.
- Lynch, Kevin. *The Image of the City*. Cambridge: M.I.T. Press, 1960

EVALUATION OF INTRAVARIETAL HOMOGENEITY WITHIN GRAPEVINE ROOTSTOCK CULTIVARS AS REVEALED BY SSR FINGERPRINTING

Ing. Katerina Barankova Ph.D.
Mendel University, Czech Republic

Abstract

Traditional rootstock cultivars of importance for the Mid European viticulture originate mainly from Zsigmond Teleki's material developed at the end of the 19-th century. Nowadays most widespread varieties derived from Teleki's primary vine population could be denoted SO4, Kober 5BB, Teleki 5C and Kober 125AA. Recently SSR markers became one of the most suitable and reliable tools for cultivar identification, but some problems can appear if results obtained from two independent laboratories are compared. In order to overcome this problem, the system based on reference alleles was utilised in this work. Nine rootstock genotypes from 4 varieties collected in Czech Republic were genotyped by using 9 SSR loci and compared with published genotypes from Austria, Australia, France, Italy, Hungary and USA. The major SSR profile for all rootstocks was found by comparing obtained results of different laboratories. SO4 and 125AA with almost identical SSR profile for all genotypes appears as very stable. Contrarily, the analysis of T5C and Kober 5BB revealed a higher level of heterogeneity within genotypes belonging to these cultivars.

Keywords: SSR, *Vitis*, rootstock, variability, identification

Introduction

Grapevine (*Vitis vinifera* L.) is one of the most important perennial crops in the world, widely cultivated in subtropical and temperate climate. The necessity to use rootstocks for grapevine cultivation was caused by the phylloxera, *Dactulosphaira vitifoliae* (Fitch) invasion occurred in European vineyards in the 60ies of the 19th century. Between 1885 and 1900, a significant effort to develop rootstock cultivars was made by European investigators after the discovery of the resistance of native American *Vitis* species to this insect (MILLARDET, 1885). These phylloxera-resistant species include *V. riparia*, *V. berlandieri*, and *V. rupestris*.

Due to the unsatisfying performance of the available phylloxera-resistant rootstocks on high lime content soil, the Hungarian farmer Zsigmond Teleki decided to breed his own suitable genotypes. He ordered seeds of rootstocks from Mr. Resseguier in France. In 1896 he obtained the material and sowed 10 kg of seeds originating from an open pollinated *Vitis berlandieri*. From 40.000 obtained seedlings, which demonstrated widely assorted morphological characters corresponding to different species of *Vitis* genus, Z. Teleki selected all seedlings resistant to fungal diseases, tolerant to high lime content and mainly with *V. berlandieri* x *V. riparia* morphological characters. Finally he divided the seedlings into 10 groups. Two of his groups, 8B and 5A, were marketed for quick propagation, but these were not the progeny of single plants. Later he selected T5C and T8B as single plants with defined traits from these pools. Further selection with Teleki's material was necessary and was performed by other breeders, as Fuhr and Rodrian for SO4 and Kober for K5BB and K125AA (BAKONYI and KOCSIS, 2004; MANTY 2005).

Ampelography based on morphological differences between the varieties is a traditional method for grape cultivar identification. However, the ampelographical description depends on environmental conditions, nutritional state and health status of the plant. Further, in case of grafted rootstocks only the lignified part and the roots remain for ampelographic evaluation.

In last 20 years a new alternative for cultivar identification based on genetic markers has arisen. Among them microsatellite markers have become the most suitable and reliable tool for cultivar identification. The main advantage of SSR markers is the high level of polymorphism in case of comparisons between different cultivars (THIS *et al.* 2004), and conversely, its high stability if different clones of one cultivar were analysed (REGNER *et al.* 2000, IMAZIO *et al.* 2002). Thus, SSRs have been extensively exploited in a number of countries for identification of cultivars, characterization of grape genetic resources (FATAHI *et al.* 2003, HVARLEVA *et al.* 2004, GRANDO *et al.* 1998, MORAVCOVA *et al.* 2006), verification of synonyms or homonyms (FOSSATI *et al.* 2001; LABRA *et al.* 2001), parentage analysis (BOWERS *et al.* 1999, SEFC *et al.* 1998b) or mapping (ADAM-BLONDON *et al.* 2004, FISHER *et al.*, 2004; RIAZ *et al.* 2004).

Mainly traditional cultivars belonging to the *V. vinifera* were genotyped by SSR markers. Data about rootstock genotyping are rare. Together with 47 *V. vinifera* cultivars SEFC *et al.* (1998a) genotyped 19 grape rootstock cultivars using 10 microsatellite markers. Four rootstocks included in an Iranian grapevine collection were characterized by SSR (FATAHI *et al.* 2003). Twenty rootstock accessions from Bulgaria and Cyprus were characterized by 14 microsatellite markers (DZHAMBAZOVA *et al.* 2007). Twenty-one rootstock accessions from Indian gene pools were analyzed at seven grape SSR loci (UPADHYAY *et al.* 2007). However, no report analysing degree of polymorphism within clones of rootstock cultivars has been published yet. MORAVCOVA *et al.* (2006) suggest on the base of their results that Czech clones of Teleki 5C strongly differ at analysed loci from clones used within a project named „European Network for Grapevine Genetic Resources Conservation and Characterization” (<http://www.genres.de/vitis/>). This fact initialized our interest about variability of rootstocks used in different countries.

Material and methods

Plant material: Clones originating from Czech Republic were acquired from the Research Institute for Grapevine Breeding in Polesovice and by Ampelos, a breeding station for grapevine in Vrbovec. Each genotype was analysed twice using DNA originating from two different collections. In total 9 genotypes of Teleki 5C, SO4, Kober 5BB and Kober 125AA were analysed.

DNA extraction: DNA extractions were performed from 0.2 g of leaves by DNeasy Plant Mini Kit (Qiagen), according to manufacturer's instructions. The quality of the isolates was confirmed by electrophoresis on the 0.8 % agarose gel, quantity of DNA was measured on the base of fluorometric measurement with PicoGreen dye (Invitrogen/Molecular Microsatellite loci: 9 microsatellite loci were analysed for all 9 genotypes. Six of them (VVS2, VVMD5, VVMD7, VVMD27, VrZag62 and VrZag 79) were used and recommended for the cultivar identification task by the Genres 081 project (THIS *et al.* 2004). In the meanwhile these SSR markers have been defined as genetic descriptors by the OIV (no. 801- 806). Other loci VVS4, VVMD31 and VVMD 28 were utilised and recommended for cultivar differentiation purposes by other authors (HINRICHSNET *et al.* 2001, UPADHYAY *et al.* 2007, FOSSATI *et al.* 2001).

PCR protocol: Amplification was performed in reaction volume 25 µl containing 20 ng of genomic DNA, 1 x buffer (10 mM Tris-HCl, pH8.8; 15 mM MgCl₂; 150 mM KCl and 0.1 % Triton X-100), 0.2 mM of each dNTP (Promega, USA), 0.2 µM both primers and

0.5 U of Dynazyme II DNA polymerase (Finnzymes). Amplification was performed on T-gradient thermocycler (Biometra). After initial denaturation at 94 °C for 3 min., 40 cycles, consisting of : denaturing (30 sec. at 94 °C), annealing (45 sec. at 45- 55 °C, temperature varied for individual locus on the base of the thawing temperature proved by used primers), and extension (45 sec. at 72 °C), followed. The last cycle of the extension was prolonged to 9 minutes and the amplification products were then stored at 4 °C. Amplification was confirmed by running 20 µl of the PCR product on the 1.5% agarose gel stained with ethidium bromide.

Allele sizing: DNA amplicons were analysed by the ABI PRISM 310 genetic analyser running Gene Scan Software (version 3.7, Applied Biosystems). Separation was performed in POP-4, a pre-formulated liquid polymer matrix, heated to 60°C. 0.5 – 2 µl of amplified samples (according to signal intensity on control gel) were pooled together on the base of different fluorescence labels of primers (6-FAM, NED, JOE) to fully exercise detection labels on ABI 310. 1 µl of the blended sample was mixed with 12 µl of deionised formamide and 0.5 µl DNA size standard (GeneScan 400 HD ROX, Applied Biosystems). The mixture was denaturated at 95 °C for 4 minutes and then immediately cooled on ice before loaded to the machine for separation.

Results and discussion

Comparison of absolute allele sizes: As mentioned by GRANDO and FRISINGHELLI (1998) and THIS *et al.* (2004), results differ in case of untreated allele sizes measured by different laboratories (Tab. 1). These discrepancies are caused by different laboratory equipment, individually adapted protocols and different technique of allele sizing at compared institutes. In general raw data could not be compared between different labs without correction and adaptations. Finally, a strategy for data comparison by means of reference to the selected alleles was used.

Transforming numerical data to reference codes: The system of reference alleles as genetic descriptors OIV 801- OIV 806 was utilised for evaluation of VVS2, VVMD5, VVMD7, VVMD27, VRZAG62 and VRZAG79 analysis results (http://www.eu-vitis.de/docs/descriptors/mcpd/OIV801_OIV806_5Juli2012.pdf). For the other 3 loci no common standard was defined up to the present time. Thus, for the loci VVS 4 and VVMD28 as well as VVMD 31 Dr. Regner have developed such a basepair ladder (personal communication, not published).

Small discrepancies within VVS2 and VVMD5 descriptor should be re-adjusted to evaluate the results logically. In case of K5BB is stated one more (false – n+22) allele for VVS2 descriptors. The situation is worse with T5C. This review shows that the sample of T5C used for GENRES project 081 was probably not true to type T5C. Evident differences of allele size of loci VVS2 and VVMD5 were found compared with results of other T5C genotypes. This genotype should be thus discarded from the set of reference cultivars.

Allele sizes increments were not evaluated as 2 bp, thus in contrast with dinucleotide nature of used SSR markers rarely happens. This variance can be the cause of many factors including different shape of stutter bands, extrabase additions that occur with some Taq polymerases (Brownstein *et al.* 1996) and different conditions for electrophoresis (used size marker, polymer and so on). Thus, 1bp shifts, which can be caused by above mentioned reasons in conjunction with typing discrepancies of individual evaluators, point mutations in the sequence outside the repeats or within irregular repeats, however, were ignored. Results in basepair lengths and neutral codes are available in Table 1.

Comparison of the SSR profiles

T5C : It is evident that the allelic profiles of Czech clones strongly differ from a group of genotypes from other countries. Czech analysed clones Po3/7 and 9/7 originate from selections carried out in Czech Republic long time ago. It is then possible to question the origin of material used already on the start of selection process.

SO4 : From a total of 9 genotypes all showed almost identical allelic profiles within all analysed loci. It is possible to find small differences in samples from Hungary (Jahnke *et al.*, 2011 and Vitis database) and Italy: smaller allele of VVS2. The question is whether allele “n+22” is a real allele, or “stutter” band of allele “n+24”. Based on this speculation, the results of analyses may have been the same within laboratories, but with different assessment of allelic profile. Sample from the USA also shows small (only one microsatellite repetition) variation within 3 alleles. Thus, intravarietal variability of SO4 rootstock is low and there is a high probability that the majority profile obtained by this comparison of data from different countries could be credible as a standard profile for this cultivar.

Kober 5BB: Group of 7 genotypes with identical SSR profile makes idea about majority profile which can be most probable for similar analysis of other clones registered under this cultivar. The K5BB clone137-Wu maintained in Czech institute differs slightly within three alleles, while the clone Po1/60 differs significantly from the majority profile for this cultivar.

Kober-125-AA: The distribution of alleles within compared genotypes of this cultivar is simply visible: all of them have the same SSR profiles, only the Hungarian clone GK49 is quite different.

Comparing of the results with data from the Vitis International Variety Catalogue (<http://www.vivc.bafz.de>) is not possible in the case of Teleki 5C and Kober 5BB rootstocks due to lack of their SSR profiles. Major SSR profiles obtained within this review for cultivars 125AA and SO4 are identical with allelic profile in international Vitis database, and so is the major profile of presented review.

Thus, it can be concluded that it is possible to define major SSR profiles for all compared cultivars, among which the SO4 and 125 AA cultivars with rare differences between genotypes appeared as the very stable.

The observed intravarietal variability could be based on several circumstances. First, the origin of individual cultivars is based on the selection by morphological traits which do not always allow a very precise definition. It was especially a problem in the case of first marketed population such as 8B or 5A, where different genotypes on the base of their morphological character were observed (BAKONYI and KOCSIS 2004). Further, there is the possibility of discrepancies within selection processes carried out by individual breeders. Possible misidentification during selection of clones could be a reason for further variations. Especially in the case of rootstocks, which are intensively propagated annually, it is possible to mention the danger of rapid spread of recently created mutations. The different SSR profile is only one indicator for such variation in the propagation material (HOCQUIGNY *et al.* 2004).

Conclusion

Reflecting all above mentioned facts it is strictly recommended to keep precise register of maintained rootstock cultivars with special emphasis on the name of the clone. Mistakes could easily be overlooked due to the narrow morphological character. Importance of the recommendation for accurate audit of clones strongly growing up in the light of recently observed decreasing of resistance against phylloxera in case of some T5C clones.

Acknowledgment

This work was supported by grant OPVK CZ.1.07/2.4.00/31.0089 of the Ministry of Education of the Czech Republic

Tab.1: Comparison of the results obtained in different laboratories. Numbers represent sizes of the alleles in base pairs (Czech clones and already published results from other countries). Relative allele sizes are expressed at code ("n+ number"). Transformation of the data was performed using methodology for OIV descriptors (European Vitis Database) when the Kober 5BB was used like reference cultivar. Green color marks major profile, orange marks differences

Teleki 5 C																			
samples from	clone ↓ / locus→	VVS2	VVS4	VVMD5	VVMD7	VVMD27	VVMD28	VVMD31	VrZag 62	VrZag 79									
Czech rep. Baránková	Po 3/7-1	139 n+18	145 n+24	172 n+8	182 n+18	234 n+14	264 n+44	230 n+2	248 n+20	200 n+28	208 n+36	218 n	254 n+36	198 n+2	204 n+8	191 n+18	213 n+40	248 n+14	256 n+22
	9.7	139 n+18	147 n+26	175 n+10	183 n+18	234 n+14	264 n+44	228 n	262 n+34	200 n+28	204 n+32	218 n+2	254 n+38	199 n+2	205 n+8	191 n+18	209 n+36	249 n+14	253 n+18
USA LIN <i>et al.</i> , 1998		147 n+22	151 n+26			237 n+14	267 n+44	233 n	269 n+36				218 n	252 n+34	200 n+2	204 n+6			
Australia THOMAS <i>et al.</i> , 1994		145 n+22	149 n+26	177 n+10	187 n+20														
France THIS <i>et al.</i> , 2004		133 n+10	143 n+20			252 n+30	266 n+44	232 n	266 n+34	203 n+28	211 n+36					200 n+26	210 n+36	252 n+14	260 n+22
Austria SEFC <i>et al.</i> , 1998		144 n+22	148 n+26	176 n+10	186 n+20	234 n+14	264 n+44	228 n	262 n+34			216 n	252 n+36						
Hungary JAHNKE <i>et al.</i> , 2011	GK40, 42, E20 G46(64), WED(103)	143 n+22	147 n+26					229 n	263 n+34			215 n	251 n+36						
	G41(74)	147 n+26	149 n+28					231 n+2	231 n+2			217 n+2	217 n+2						
Italy CRESPAN <i>et al.</i> , 2009		145 n+22	149 n+26			236 n+14	266 n+44	231 n	265 n+34	203 n+28	211 n+36					199 n+26	209 n+36	250 n+14	258 n+22
Major profile		n+22	n+26	n+10	n+20	n+14	n+44	n	n+34	n+28	n+36	n	n+36	n+2		n+26	n+36	n+14	n+22
SO 4																			
samples from	clone ↓ / locus→	VVS2	VVS4	VVMD5	VVMD7	VVMD27	VVMD28	VVMD31	VrZag 62	VrZag 79									
Czech rep. Baránková	2 Wu	145 n+24	145 n+24	172 n+8	182 n+18	234 n+14	264 n+44	230 n+2	262 n+34	200 n+28	208 n+36	216 n	236 n+20	198 n+2	204 n+8	199 n+26	213 n+40	248 n+14	252 n+18
	Po/7-1	145 n+24	145 n+24	172 n+8	182 n+18	234 n+14	264 n+44	230 n+2	262 n+34	200 n+28	208 n+36	216 n	236 n+20	198 n+2	204 n+8	199 n+26	213 n+40	248 n+14	252 n+18
	Gm47	145 n+24	145 n+24	172 n+8	182 n+18	234 n+14	264 n+44	230 n+2	262 n+34	200 n+28	208 n+36	216 n	236 n+20	198 n+2	204 n+8	199 n+26	213 n+40	248 n+14	252 n+18
USA LIN <i>et al.</i> , 1998		147 n+22	147 n+22			237 n+14	267 n+44	235 n+2	269 n+36			218 n	238 n+20	200 n+2	206 n+8				
Australia THOMAS <i>et al.</i> , 1994		147 n+24	147 n+24	175 n+8	185 n+18														
Austria SEFC <i>et al.</i> , 1998		146 n+24	146 n+24	174 n+8	184 n+18	234 n+14	264 n+44	230 n+2	262 n+34			216 n	236 n+20						
Hungary JAHNKE <i>et al.</i> , 2011	(133)	143 n+22	145 n+24					231 n+2	263 n+34			215 n	235 n+20						
Italy CRESPAN <i>et al.</i> , 2009		145 n+22	147 n+24			236 n+14	266 n+44	233 n+2	265 n+34	203 n+28	211 n+36					199 n+26	213 n+40	250 n+14	254 n+18
Bulgaria Dzhambazova <i>et al.</i> , 2007		146 n+24	146 n+24			234 n+14	264 n+44	230 n+2	262 n+34	203 n+28	211 n+36					199 n+26	213 n+40		
Hungary Vitis database		121 n+22	124 n+24			218 n+14	224 n+44	229 n+2	235 n+34	171 n+28	175 n+36	215 n	219 n+20			172 n+26	178 n+40	234 n+14	238 n+18
Major profile		n+24	n+24	n+8	n+18	n+14	n+44	n+2	n+34	n+28	n+36	n	n+20	n+2	n+8	n+26	n+40	n+14	n+18
Kober 5 BB																			
samples from	clone ↓ / locus→	VVS2	VVS4	VVMD5	VVMD7	VVMD27	VVMD28	VVMD31	VrZag 62	VrZag 79									
Czech rep. Baránková	137 Wu	139 n+18	147 n+26	174 n+10	182 n+18	234 n+14	264 n+44	230 n+2	262 n+34	188 n+16	208 n+36	216 n	254 n+38	198 n+2	204 n+8	199 n+26	213 n+40	248 n+14	252 n+18
	PO1/60	139 n+18	147 n+26	174 n+10	182 n+18	234 n+14	264 n+44	228 n	262 n+34	200 n+28	204 n+32	216 n	254 n+38	198 n+2	204 n+8	191 n+18	209 n+36	248 n+14	256 n+22
USA LIN <i>et al.</i> , 1998		143 n+18	151 n+26			237 n+14	267 n+44	235 n+2	269 n+36			218 n	252 n+34	200 n+2	206 n+8				
Australia THOMAS <i>et al.</i> , 1994		141 n+18	149 n+26	177 n+10	185 n+18														
France THIS <i>et al.</i> , 2004		141 n+18	149 n+26			236 n+14	264 n+44	234 n+2	266 n+34	191 n+16	211 n+36					200 n+26	214 n+40	252 n+14	260 n+22
Austria SEFC <i>et al.</i> , 1998		140 n+18	148 n+26	176 n+10	184 n+18	234 n+14	266 n+44	230 n+2	262 n+34			216 n	252 n+36						
Hungary JAHNKE <i>et al.</i> , 2011	GK14	139 n+18	147 n+26					231 n+2	263 n+34			215 n	251 n+36						
	GK13	143 n+22	147 n+26					229 n	263 n+34			215 n	251 n+36						
	CR2(18)	139 n+18	147 n+26					229 n	263 n+34			215 n	251 n+36						
Italy CRESPAN <i>et al.</i> , 2009		141 n+18	149 n+26			236 n+14	266 n+44	233 n+2	265 n+34	191 n+16	211 n+36					199 n+26	213 n+40	250 n+14	258 n+22
Bulgaria Dzhambazova <i>et al.</i> , 2007		140 n+18	148 n+26			234 n+14	264 n+44	230 n+2	262 n+34	191 n+16	211 n+36					199 n+26	213 n+40		
Major profile		n+18	n+26	n+10	n+18	n+14	n+44	n+2	n+34	n+16	n+36	n	n+36	n+2	n+8	n+26	n+40	n+14	n+22

125 AA																			
samples from	clone ↓ / locus→	VVS2		VVS4		VVMD5		VVMD7		VVMD27		VVMD28		VVMD31		VrZag 62		VrZag 79	
Czech rep. Baránková	3 Gm	139 n+18	145 n+24	174 n+10	182 n+18	224 n+4	264 n+44	228 n	248 n+20	200 n+28	208 n+36	216 n	254 n+38	198 n+2	202 n+6	191 n+18	209 n+36	248 n+14	256 n+22
	Po/3	139 n+18	145 n+24	174 n+10	182 n+18	224 n+4	264 n+44	228 n	248 n+20	200 n+28	208 n+36	216 n	254 n+38	198 n+2	202 n+6	191 n+18	209 n+36	248 n+14	256 n+22
USA LIN <i>et al.</i> , 1998		143 n+18	149 n+24			227 n+4	267 n+44	233 n	253 n+20			218 n	252 n+34	200 n+2	204 n+6				
Austria SEFC <i>et al.</i> , 1998		140 n+18	146 n+24	176 n+10	184 n+18	224 n+4	264 n+44	228 n	248 n+20			216 n	252 n+36						
Hungary JAHNKE <i>et al.</i> , 2011	GK46, (147)	139 n+18	145 n+24					229 n	249 n+20			215 n	251 n+36						
	GK49	149 n+28	149 n+28					229 n	229 n			215 n	269 n+54						
Hungary Vitis database		121 n+18	124 n+24			218 n+4	224 n+44	229 n	235 n+20	171 n+28	175 n+36	215 n	219 n+36			172 n+18	178 n+36	234 n+14	238 n+22
Major profile		n+18	n+24	n+10	n+18	n+4	n+44	n	n+20	n+28	n+36	n	n+36	n+2	n+6	n+18	n+36	n+14	n+22

References:

- Adam-Blondon, A. F.; Roux, C.; Claux, D.; Butterlin, G.; Merdinoglu, D.; This, P.: Mapping 245 SSR markers on the *Vitis vinifera* genome: a tool for grape genetics. *Theor. Appl. Genet.* **109**, 1448-1458, 2004
- Bakonyi, K.; Kocsis L.: Teleki Zsigmond élete és munkássága. VE GMK Kozponti könyvtár és Levéltár Nyomdája, Késthely, Hungary, 9-12, 2004
- Bowers, J.; Boursiquot, J.M.; This, P., Chu, K.; Johansson, H.; Meredith, C.: Historical genetics: The parentage of Chardonnay, Gamay, and other wine grapes of northeastern France. *Science* **285**, 1562-1565, 1999
- Dzhambazova, T.; Hvarleva, T.; Hadjinicoli, A.; Tsvetkov, I.; Atanassov A.; Atanassov I.: Characterization of grapevine rootstocks using microsatellite markers. *Biotechnol. and Biotechnol.* **21**, 58-62, 2007
- Fatahi, R.; Ebadi, A.; Bassil, N.; Mehlenbacher, S.A.; Zamani, Z.: Characterization of Iranian grapevine cultivars using microsatellite markers. *Vitis* **42**, 185-192, 2003
- Fisher, B. M.; Salakhutdinov, I.; Akkurt, M.; Eibach, R.; Edwards, K.J.; Topfer, R.; Zyprian E.M.: Quantitative trait locus analysis of fungal disease resistance factors on a molecular map of grapevine. *Theor. Appl. Genet.* **108**, 501-515, 2004
- Fossati, T.; Labra, M.; Castiglione, S.; Failla O.; Scienza, A.; Sala, F.: The use of AFLP and SSR molecular markers to decipher homonyms and synonyms in grapevine cultivars: the case of the varietal group known as 'Schiave'. *Theor. Appl. Genet.* **102**, 200-205, 2001
- Grando, M. S.; Frisinghelli, C.: Grape microsatellite markers: Sizing of DNA alleles and genotype analysis of some grapevine cultivars. *Vitis* **37**, 79-82, 1998
- Hocquigny, S.; Pelsy, F.; Dumas, V.; Kindt, S.; Heloir, M.C.; Merdinoglu, D.: Diversification within grapevine cultivars goes through chimeric states *Genome* **47**, 579-589, 2004
- Hvarleva, T.; Rusanov, K.; Lefort, F.; Tsvetkov, I.; Atanassov, A.; Atanassov, I.: Genotyping of Bulgarian *Vitis vinifera* L. cultivars by microsatellite analysis. *Vitis* **43**, 27-34, 2004
- Hinrichsen, P.; Narvaez, C.; Bowers, J.E.; Boursiquot, J.M.; Valenzuela, J.; Munoz, C.; Meredith, C.P.: Distinguishing Carmenère from similar cultivars by DNA typing. *Am. J. Enol. Vitic.* **52**, 396-399, 2001
- Imazio, S.; Labra, M.; Grassi, F.; Winfield, M.; Bardini, M.; Scienza, A.: Molecular tools for clone identification: the case of the grapevine cultivar 'Traminer'. *Plant Breeding* **121**, 531-535, 2002
- Jahnke, G.; Molnár, K. G.; Májer, J.; Szoke, B.; Tarczal, E.; Varga, P.; Kocsis, L.: Analysis of Grape Rootstocks by SSR Markers. *J.Int. Sci. Vigne Vin* **45** (3), 2011
- Labra, M.; Winfield, M.; Ghiani, A.; Grassi, F.; Sala, F.; Scienza, A.; Failla, O.: Genetic studies on Trebbiano and morphologically related varieties by SSR and AFLP markers. *Vitis* **40**, 187-190, 2001

- Manty, F.: Hintergründe zur Entstehung der Bezeichnungen der Unterlagenselektionen von Zigmund Teleki and Franz Kober. Deutsches Weinbaujahrbuch, 159-164, 2006
- Millardet, A.: Histoire des principales varietes et especes de vignes d'origine americaine qui resistant au phylloxera. G. Masson , Paris, France, 1885
- Moravcová, K.; Baránek, M.; Pidra, M.: Use of SSR markers to identify grapevine cultivars registered in the Czech Republic. Journal International des Sciences de la Vigne et du Vin**40**, 71-80., 2006
- Moravcová, K.; Baránek, M.; Pidra, M.: The use of RAPD markers for differentiation of grapevine varieties registered in the Czech Republic. Horticultural Science (Prague)**31**, 96-101, 2004
- Regner, F.; Wiedeck. E.; Stadlbauer, A.: Differentiation and identification of White Riesling clones by genetic markers. Vitis **39**, 103-107, 2000
- Riaz, S. ; Dangl, G. S. ; Edwards, K. J. ; Meredith C.P.: A microsatellite marker based framework linkage map of *Vitis vinifera* L. Theor. Appl. Genet. **108**, 864-872, 2004
- Sefc KM, Regner F, Glossl J, Steinkellner, H.: Genotyping of grapevine and rootstock cultivars using microsatellite markers. Vitis **37**, 15-20, 1998a
- Sefc, K. M.; Steinkellner, H.; Glöbl, J.; Kampfer, S.; Regner, F.: Reconstruction of grapevine pedigree by microsatellite analysis. Theor. Appl. Genet. **97**, 227-231, 1998b
- This, P.; Jung, A.; Boccacci, P.; Borrego, J.; Botta, R.; Costantini, L.; Crespan, M.; Dangl, G.S.; Eisenheld, C.; Ferreira-Monteiro, F.; Grandó, S.; Ibáñez, J.; Lacombe, T.; Laucou, V.; Magalhães, R.; Meredith, C.P.; Milani, N.; Peterlunger, E.; Regner, F.; Zulini, L.; Maul, E.: Development of standard set of microsatellite reference alleles for identification of grape cultivars. Theor. Appl. Genet. **109**, 1448-1458, 2004
- Upadhyay, A.; Saboji, M.D.; Reddy, S.; Deokar, K.; Karibasappa, G.S.: AFLP and SSR marker analysis of grape rootstocks in Indian grape germplasm. Scientia Horticulturae **112**, 176-183, 2007

LANDSCAPE IN THE HOUSING ESTATES OF THE CZECH REPUBLIC IN 1960s-1980s

Ing. Anna Magni

Department of Garden and Landscape Architecture, Faculty of Horticulture, Mendel University in Brno, Czech Republic

Abstract

Mass housing estates of the second half of the 20th century represent a poorly described and appraised topic of recent history. Mainly professionals overlook their garden design related aspect. It seems unbuilt areas within them were neglected by their authors; still, they represent an essential change in the urban structure in the 20th century and the rising significance of elements representing nature in urbanized environments. The present text focuses on housing estates in the Czech Republic that were built between the 1960s and 1989, especially their garden design related and landscape related aspects. First, circumstances of post-war building of mass housing and the role of modernist theories are introduced. Second, the development of forms of public areas in specific conditions of socialist central planning is observed. Our exploration concentrates on significant projects presented in the press of the time as well as housing estates that did not stand out from the average. The results, which we are presenting, are an overview of particular types of public spaces within mass housing estates with their basic characteristics and a definition of the roles of vegetation and other garden design means related to housing. In conclusion, we formulate a general development direction which the relation between landscape and housing took, as we can observe it in the example of housing estates of the second half of the 20th century.

Keywords: Housing estates, landscape architecture, urbanism, landscape

Introduction

After World War II, Europe witnessed an exponential growth in building of mass housing in response to the urgent housing crisis. Due to the developing industrialization, rationalization, and standardization, vast monofunctional estates were built as a result of interwar architectonic and urban theories, summarized in the Athens Charter (1943)³²³, being applied. Most changes were reflected in the field of housing for which the essential significance of free space, greenery, sun, and fresh airs, as well as possible recreation under the sky was emphasized. After a significant period of avant-garde interwar architecture, Czechoslovakia diverted from Western Europe in 1948 and became a part of the Eastern Bloc. Provision of flats was a part of the state policy; from the 1960s development was planned within the socialist central planning and its system of norms, which strictly controlled housing until 1989. The limited technical and economic conditions as well as the production of standardized elements impacted urban planners' and architects' work; many housing estates from that period are monotonous and uniform, with a low quality of outside areas. On the other hand, the fact that the state promoted production of mass housing estates

³²³However, their origin is much older, reaching to the period of essential social changes related to the industrial revolution. Forerunners of housing estates were the workers' colonies built from the 19th century as well as utopian ideas on the ideal society.

provided opportunities for experimentation in the fields of garden design and landscape architecture and gave rise to several unique projects.

I.

The following text explores the significance attached to vegetation and landscape in relation to housing and observes how the ideas of functionalism on healthy dwelling were satisfied. Our analysis³²⁴ of free area forms in housing estates is based on town urbanism as was applied until the onset of interwar modernism. The measure used will be the traditional forms, such as streets, squares, and parks. We are going to search for their parallels and modifications, or completely new forms, in housing estates. Our exploration will not be limited to purely public spaces; it will start on the boundary of the private sphere.³²⁵

The smallest spatial unit that can be identified for the garden design related discussion on housing estates is a **balcony** or an **enclosed balcony** (loggia). These are private spaces lying on the boundary of the public space and their arrangement is the inhabitants' responsibility. At the time of their origin, they were not designed for plants or other elements mediating the contact with the environment. Their limited size does not offer sufficient space for comfortable use; in spite of this, they have a high importance for dwelling. First, they can serve as a modest technical area (laundry drying, storage, minor works), second, they provide sunshine and fresh air, view of and contact with the outside. For these reasons, they were a very progressive convenience in comparison to the estates of the 19th century. They are often present in even very small flats. They dramatically increase the dwelling standard.

Another form is the **terrace** of terrace houses. However, terrace houses appeared only exceptionally in the period under observation so this form is only peripheral for our observation. A specific type is the **roof terrace**, which appeared in the projects of interwar functionalist architects, or more often in their visions. The roof terrace represented the occasion to provide the inhabitants with the beneficial sun rays and fresh air, views of the outside; however, roof terraces were a technical complication and financial burden in the postwar housing so they did not find their place in the mass housing. Very rarely, there were **terraces-gardens** with a clear definition (by a fence, wall, terrain step, etc.) linked to ground-floor flats.

Although no private ownership of land was possible in the 1960s to 1980s, we can often find areas with specific features in the housing estates. These most often resemble **front gardens**. They are bands along houses linked to entrances that were originally designed not different from the remaining public space or were only fitted with simple elevated flower beds, flower boxes, benches, or marked with overhanging roofs. More often, the inhabitants appropriated these areas by their spontaneous work and planting.

An **inter-house space** (space between large houses, a green courtyard) is a transition between private and public space. It was a rare element of the housing estates in the period observed. In spite of this, we can find examples - houses were arranged close to each other (although very loosely) so that the difference between the spaces outside and inside the house "circle" was indicated. Under the persisting influence of postmodernism, the 1980s saw various experiments with the way to arrange the houses so that the free areas became more structured. This trend peaked in the return to a nearly closed bloc structure as we can see it in the final stages of some large housing estates in Prague or Zlín.

³²⁴The information on the configurations within the housing estates provided in literature and maps has been supplemented and specified based on interviews with some of the authors. Moreover, field surveys of the housing estates have been done.

³²⁵We derive the polarity between private and public from the human perception of a built-up area and the behaviour within because mainly spaces on the boundary are of high significance for habitability, as many theoreticians on psychology and sociology of architecture have proved: e.g. J. Gehl., K. Schmeidler and others.

A **square** in the traditional sense of the word (as a multipurpose central space defined by buildings) can be found only to a limited amount at the end of the 1980s. The Athens Charter completely suppressed this type of public space. Its role was performed by **centres of community facilities** in housing estates. These were often arranged around an internal atrium. They are characterized by a variety of garden design means used, detailed working, and respect for the human scale. Besides the most frequent concrete paving or tar, there are also other materials, such as elevated flower beds, potted plants, minor architecture (walled pergolas and roofs, structures with roles of poster boards) as well as elements with water. Usually, they also house some works of art (as solitary pieces as well as parts of the architecture), which make the centres more attractive and closer to traditional complex urban spaces.

A **street**, one of the basic compositional elements of a traditional town, disappeared from the space of housing estates. In compliance with functionalist rules, walking paths were separated from the traffic, extracted from their original corridors defined by house façades, and they became rather functional links of targets than multipurpose urban spaces. Other multipurpose spaces disappeared when shops and services were driven out of house ground-floors. While the street significance was rehabilitated in Western Europe in line with the first critical responses to functionalist urbanism, no considerable development could be seen in the Czechoslovakia. However, typically for the observed period, we can find single cases predicting future trends. As early as in the 1960s, for the first time in Prague, **shopping streets** appeared as an early but natural response to the modernist loose housing arrangements. They are not unique in the context of European housing estates - shopping streets were built also at other places. Another specific form of a linear space (street) that developed in housing estates was **promenades elevated over the surrounding terrain**. They appeared close to shopping centres or were used to overcome transport “streets” so that collisions between traffic and walkers were prevented. With respect to their location in social centres of housing estates, they were designed with artistic and garden design details. These were unfortunately limited by the available series-produced prefabricated elements. They were devoted more attention at the end of the 1980s in the effort to imitate the attractiveness and liveliness of public spaces in historic towns - they were abundantly equipped with artistic objects or designed to provide attractive vantage points.

Parks were designed beyond the framework of the housing estate greenery. They were differentiated based on their size, significance, and catchment area. A specific garden design form, which deserves special attention, was **central parks** with areas over 100 ha and capacity for over 100,000 inhabitants, where recreation, sports, education and other facilities concentrated (Rothbauer 1985, p. 429). However, they were infrequent and, if designed, they were often left unfinished. Separately, we want to point out central parks designed for a phenomenon called “new towns” in Prague³²⁶. They all had a different fate so they defy generalization. The first of them, the central park of the Northern City (Severní Město) - Friendship Park - is a full-fledged work of garden design. It is based on Otakar Kuča’s design that won a competition in 1968. The establishment of the second one, the central park of the Southern City (Jižní Město), proceeded in two stages: the first architects’ idea visualized by a plastic model was followed-up by the sculptor Magdalena Jetelová and her design of a stylized Czech landscape, supplemented by other functions and facilities (underground gardening centre). Neither of these stages was fully finished; only terrain modelling took place and the park is today a non-functional torso of the original idea. The last central park,

³²⁶The largest housing estates in the Czech Republic, each with dimensions of independent towns: Severní Město (Northern City) with about 100 thousand inhabitants; Jižní Město (Southern City) was planned for about 70–80 thousand inhabitants, later expanded to house 31 thousand more; Jihozápadní Město (Southwestern City) for 130 thousand after the expansion of the original intention.

the central park of the Southwestern City (Jihozápadní Město), is being finished at the present day and there is a chance of the original concept being realized.

A park is the largest spatial unit; but we cannot end the list of public spaces here. Most often, we find a new type of a **flowing free area** in housing estates (figure 1). It represents the landscape and it pervades the entire urban unit. It is modified differently in different housing estates: it is omnipresent, concentrated in internal enclaves or a green belt; it enters the surroundings of the estate or is scattered into smaller remaining areas. In each of the cases, it totally reflects modernist principles based on a specific relationship between the landscape and the built-up areas and is in contrast to their traditional relationship in historic towns. At the time when the mass housing was developed, there was no reason to separate from the landscape and the countryside; by contrast, elements representing the landscape are desirable in close vicinity of houses. The boundaries between a town or city as an organized cultural form and the free landscape are blurred; the town expands into the landscape and blends with it.

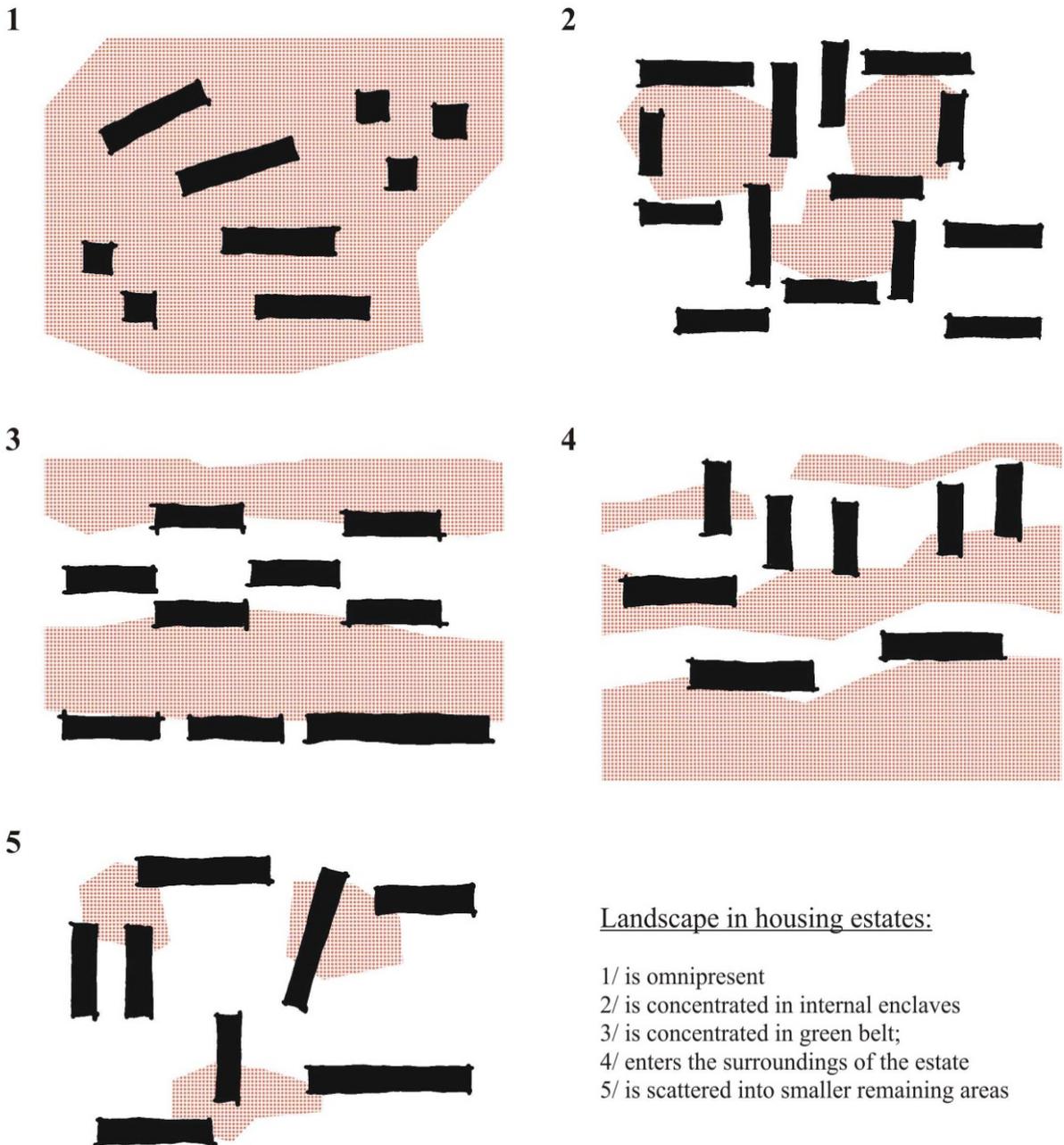


Figure 1: Schemes of landscape present in the housing estates (author's sketches).

Conclusion

At the end of the 19th century, the term **urban landscape** (Chenet-Faugeras 1994) appears in literature for the first time in relation to intensive urbanization. This term would have been absurd until that time; today, it is commonly used³²⁷ to denote “a combination of the town tissue with landscape fragments” (Versteegh 2005). Mass housing estates can be considered the peak of the changes described in the town-landscape relationship as well as urban landscape in the true sense of the word. They combine previously incompatible elements into one organic whole: **Town**, which is represented in the housing estate by the urban manner of dwelling in multistorey houses and other buildings and facilities, and the **landscape**, represented by the green area pervading the estate without strict boundaries. The result of this combination of opposites is twofold. First, the scale of the spaces is enlarged and it eludes a human being - the inhabited outside areas are worse comprehensible for their users as regards both space structure and meaning. Second, by contrast, functionalist ideas on dwelling in healthy and safe environment with leisure activities available are realized in housing estates. While the development of housing estates has been abandoned since the 1970s due to the first problems that appeared, the countries of the Eastern Bloc preserved and applied this system until 1989. The large proportion of natural elements in the close vicinity of housing means a great potential for the present and the future.

This work was supported by grant OPVK CZ.1.07/2.4.00/31.0089 of the Ministry of Education of the Czech Republic.

References:

- Chenet-Faugeras, Françoise. L'invention du paysage urbain. *Romantisme*, revue du XIX^e siècle. 83(24), 27–38. 1994. [online]: <http://www.persee.fr/web/revues/home/prescript/article/roman_0048-8593_1994_num_24_83_5932>.
- Gehl, Jan. *Život mezi budovami. Užívání veřejných prostranství*. Brno: Nadace Partnerství - Program Partnerství pro veřejná prostranství a Jan Gehl. 2000.
- Jannière, Hélène and Frédéric Pousin. *Paysage urbain: d'une thématique à un objet de recherche*. *Strates*. 2007. [online]: <<http://strates.revues.org/4953>>.
- Rothbauer, Zdeněk. Územní plánování zeleně v Ústí nad Labem. *Architektura ČSSR*. 29(9), 427–430. 1985.
- Schmeidler, Karel. *Sociologie v architektonické a urbanistické tvorbě*. Brno: Zdeněk Novotný. 2001.
- Versteegh, Pieter, ed. *Méandres: penser le paysage urbain*. Geneve: Presses polytechniques universitaires romandes, 2005.

³²⁷A review about the urban landscape as the central topic of variously focused studies has been published by e.g. H. Jannière and F. Pousin (2007).

THE POTENTIAL OF RIVER IN URBAN SPACES

Tereza Havránková, Ing.

Mendel university in Brno, The Czech Republic

Abstract

This article, "The potential of river in urban space " is the theme about changes embankment zones and rivers. Article is based on author's scientific research which aimed to the theoretical part and practical part. The origin theoretical part is an outline of possible uses and waterfront concepts, their problems and inspiring examples of solutions. On the basis of information obtained are systematised the basic problems of the waterfront and rivers and principles of their solutions. The paper on the practical part presents the concept of ideological solutions waterfront area at the northern periphery of Prostějov, the river Hloučela. Design concept precedes the analysis of literary sources and evaluation of selected objects waterside areas. The concept design is also based on the results of the analyzes, analyzes and investigations. The principles are identified as working in the design model object. The solution tries to understand and reproduce the natural essence of the river and its landscape and capitalize on potential Hloučela mainly within the natural corridor on the outskirts of town.

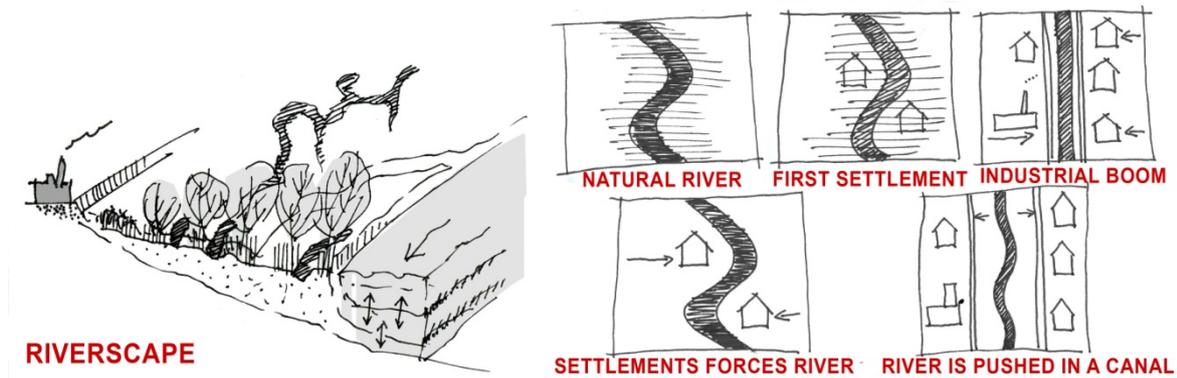
Keywords: River, riverfront, riverscapes, natural park, public space

Introduction

First of all some historical relation is needed to be set. In almost every industrial city, many rivers flowed. The city and river always belonged to each other. Settlement wouldn't exist without a source of water of course. Rivers shaped the city – forming borough boundaries, transport network and so on. Rivers eventually gave way to railways, roads and sewers. But as cities grew rivers become undesirable. Solution two centuries ago, in some cases, was to bury rivers underground and merge them with sewer networks. River surrounding was wet and swampy obviously. And that's the reason why some places were determined to become parks – according to adverse conditions for settlements. And that's fortunately why unsettled places are running along rivers. But there were another way of course, which were settled places.

I.

Due to flood danger by splitting water from river, the river surrounding was obviously unsettled. We have to keep in our mind that riverscape has its own morphology. It is important to think about morphology while using these piece of land. To go into deep knowledge we have to discuss every part of origin unsettled riverscape. There is a river terrace, flooding area (glay), sparse vegetation, periodical pools, flooding plain forest, periodical shoulder of river, alluvium, side arm of river, aggregate rampart. It is obviously beneficial, if riverscape is led to be unsettled. Ideal use for such a landscape is let's say park, urban park in a case of city. These unsettled places are obviously very precious in the city and is need to be used as a public spaces.



According to theoretical part of a origin author's scientific research, it would be usefull to mention some very important topology concerning riverscapes:

Types of processes in riverbed and riverside:

- A. temporary flow fluctuations
 - sub-process 1: vertical water level fluctuation
 - sub-process 2: lateral spread of the water
- B. morhopodynamic proces
 - sub-process 1: sedimentation shift within the river
 - sub-process 2: self-dynamic river channel development

Limits in designing riverscapes:

- environs network in general
- flood limit
- limit of self-dynamic river channel development
- limit of controllability of river processes
- structural and vegetational diversity on riversides

Basic potential of rivers in urban spaces

- to offer some meeting point in natural close environment
- place to observe natural processes
- negative barrier in permeability in city
- veins for transport
- creator of microclima in city
- substance that brings smell and voice to the environment

We have to relalize, that water is the main attractor in such a environment as city is. It is important to allow citizens to go as closer to the water, as it's possible.

Principles of approach in creating riversides— how to allow people to go closer to to river

- a broader intermediate level of bankside offers spaces for lingering by the waterside and temporary uses
- a staged transition to the water over several broad terraces permits several uses to coexist
- broad riverbank steps create public space beside the water, offering direct contact with the river at various water levels
- where the riverbank wall is breached at a single point a place to linger at the waterside can be created
- an opening to the watercourse at right angles to the bank is the spatial counter – concept to parallel access

- opening in flood protection walls can create direct access to areas which are subject to flooding
- by installing removable flood barriers or windows flaps, sightlines and visual connections to river can be retained
- balconies jut out at specific places into the river space and invite people to linger by the river
- boulders and stepping stones which rise above the mean water level enhance the experience of flowing water by making direct contact possible
- on riverbank promenades that are often flooded, stable foundation and the choice of exceptionally heavy or flood-resistance material for the furniture and fittings are important
- planting in a river's flood area at the foot of the riverbank wall can enhance the space considerably
- floating islands open up spaces that were previously inaccessible

The aim of this contribution is to show how to apply theoretical knowledge in a case study. For this reason a concrete place was chosen. It is exactly Hloučela river in the city Prostějov. Design concept precedes the analysis of literary sources and evaluation of selected objects waterside areas. The concept design is also based on the results of the analyzes and investigations. The principles are identified as working in the design model object. The solution tries to understand and reproduce the natural essence of the river and its landscape and capitalize on potential Hloučela mainly within the natural corridor on the outskirts of town.

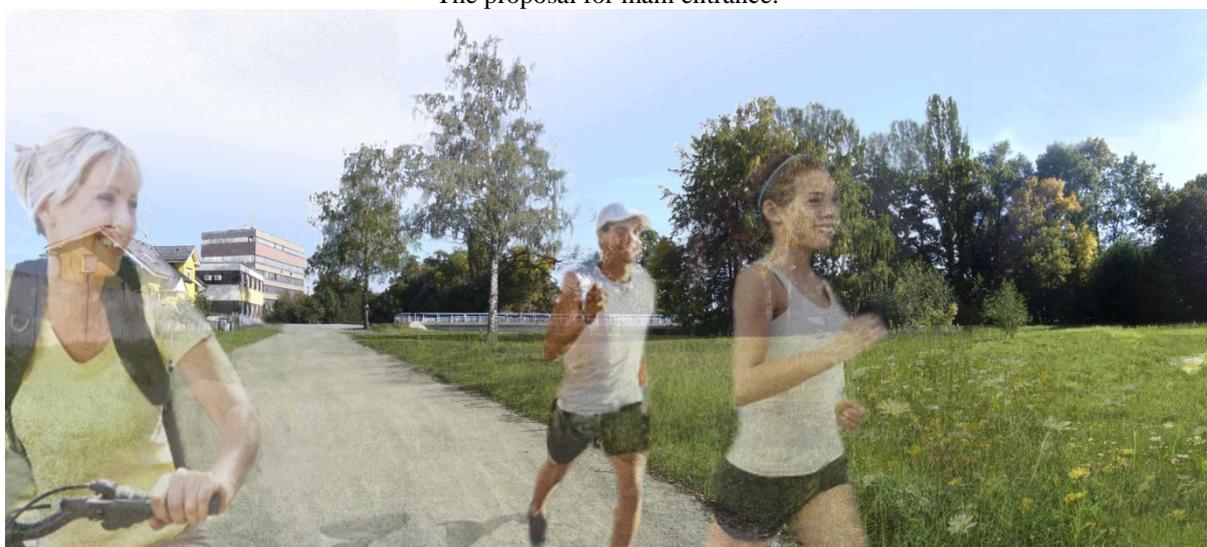
Original concept was to allow river as much space as possible due to river liberation. Following maps and visualisations are there to see more details about this model project.

Legend for map

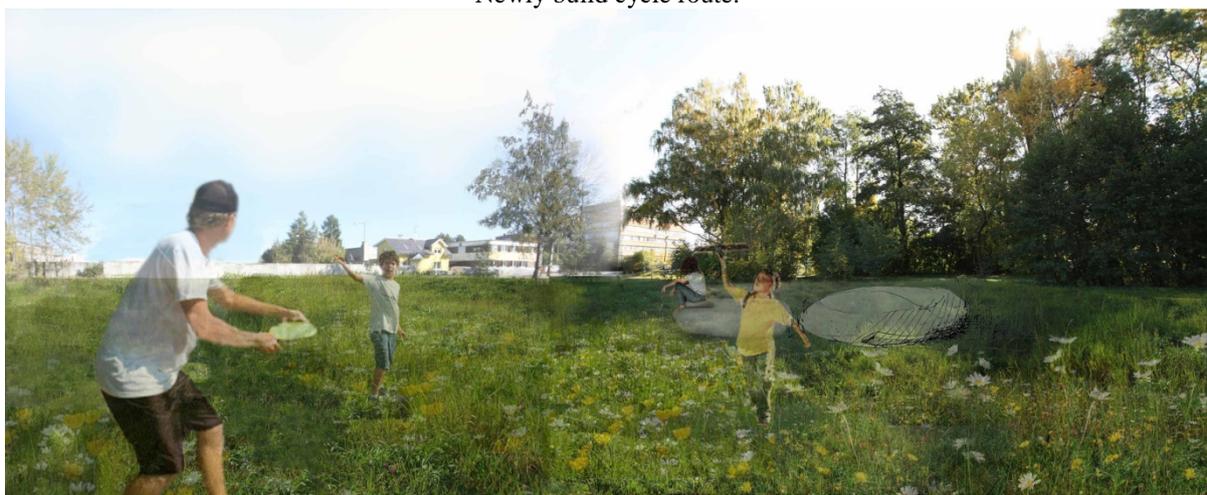
1 the main entrance **2** the beginning of promenade **3** pedestrian zone **4** meadow for games **5** ford over the river **6** playground by the buildings **7** relax place in the meander **8** parking **9** pedestrian corridor to street **10** outdoor furniture shaped in river Hloučela shape **11** newly build pedestrian access **12** promenade **13** parking **14** footbridge **15** rest corner **16** natural children playground **17** observatory of the river flow **18** hornbeam wood **19** café **20** relax place with furniture in shape of leaves **21** natural trail **22** route for cycles **23** sunny meadow **24** meadow for dogs **25** shadow part **26** transition **27** periphery route



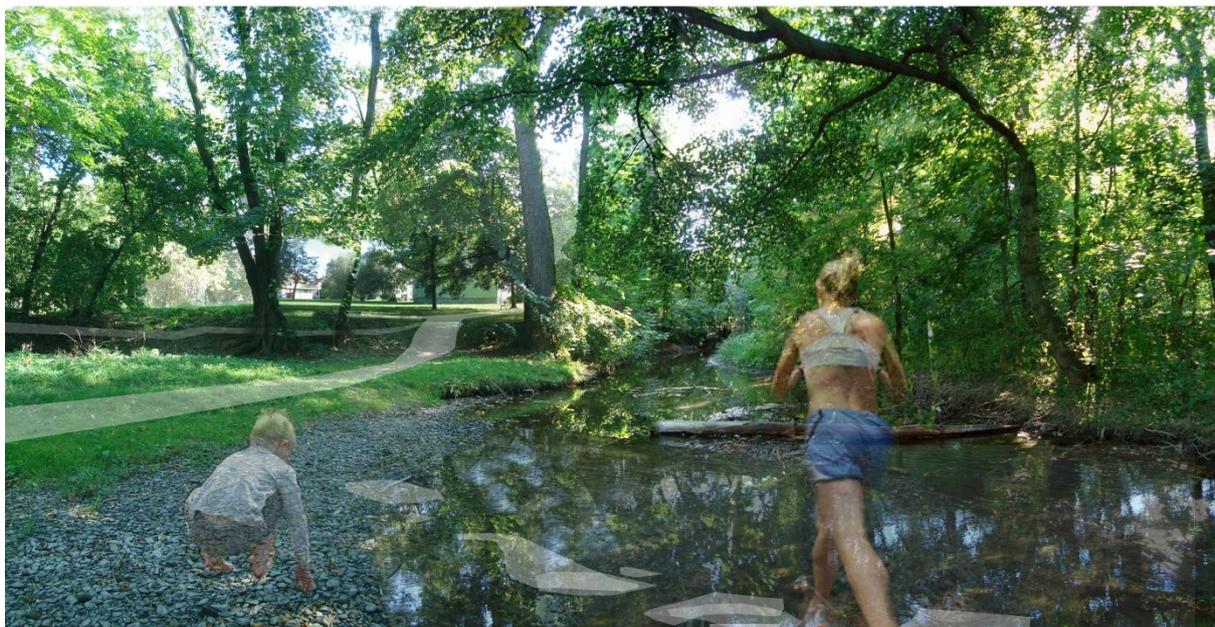
The proposal for main entrance.



Newly build cycle route.



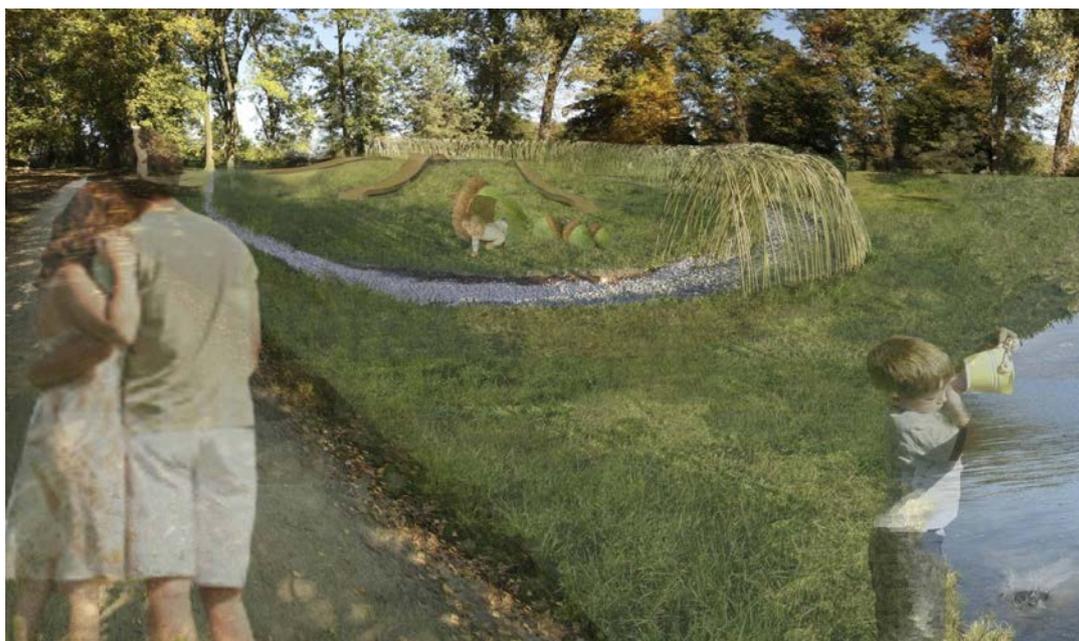
Meadow for games.



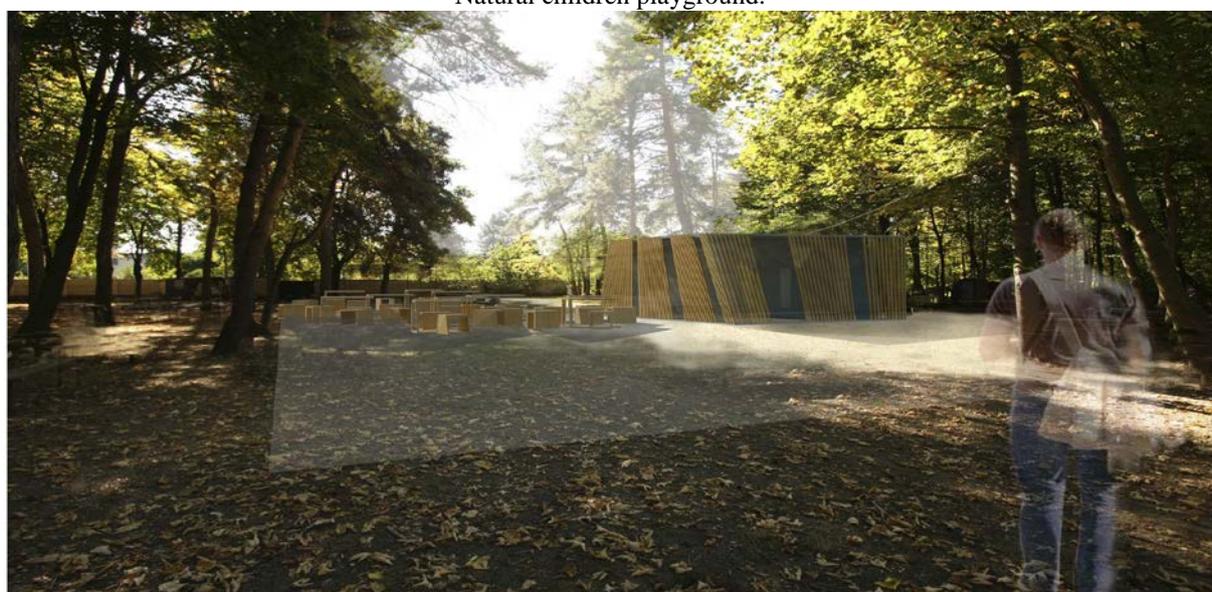
Newly build ford.



Original bench in a shape of river Hloučela.



Natural children playground.



Proposal for café.



Outdoor furniture.



Situation in the meander of the river.

Conclusion

Urban rivers and their environs have undergone a dramatic metamorphosis: having been long neglected, they are currently being developed into the most prestigious sites in town. This in its turn places a multitude of new requirements upon them, making their design disproportionately more demanding. If we talk in general, the ideal way how to use riverbanks is public spaces. The practice from modern cities all over the world tells us, that riverbanks wouldn't be designed in a complicated way. Very basic architectonic elements should be used, such as steps, balconies, floating island, transitions and so on. The waterside is naturally a point of meeting peoples who spends there their free time, so the design must be people friendly.

References:

- HÖLZER, Christoph. A KOL. Riverscapes: Designing Urban Embankments. 1.vyd. Basel-Boston-Berlin: Birkhäuser, 2008. ISBN 978-3-7643-8829-4.
- KRÁLOVÁ, Helena. Řeky pro život: Revitalizace řek a péče i nivní biotopy. 1. Brno: Veronika, 2001. ISBN 8023889397.
- ŠTĚRBA, Otakar. A KOLEKTIV. Říční krajina a její ekosystémy. 1. Olomouc: Univerzita Palackého v Olomouci, 2008. ISBN 9788024422039.
- KOLÁŘ, Petr. A KOL. Reuris: příklady dobré praxe revitalizace vodních toků v urbanizovaném prostředí na území ČR. Hrubá voda: Unie pro řeku Moravu, 2009.

GARDEN ARCHITECTONIC CHARACTERISTICS OF THE CITY IDENTITY

Lucie Poláčková, Ing. PhD

Mendel University in Brno, Czech Republic

Abstract

The research is focused on the relation between the city identity as a whole and its physical components with regard to the cultural-historical context of the relevant place. The individual components and their interactions have been defined and analyzed due to the place and on the basis of a thorough survey of the physiognomy of the urban open spaces. Set into a wider context of the Central European culture, the comparative results from the surveys of the examined cities could be understood as a conclusive and inspirational source for the future development of the urban open space.

Keywords: Identity, public open space, landscape architecture

Introduction

Human identification with a particular place, the ability to perceive it, is influenced by a number of factors and its physical structure is just one of them. An important role is also played by a sort of collective cultural experience and awareness of the cultural-historical context. In order to be able to identify with a place, i.e. to create a personal connection to it and declare the place as "our", we have to find there either stimuli that are familiar to us, thanks to which we feel "at home". Or, on the contrary, stimuli that show striking exclusiveness. Both types of urban open spaces represent the city and physically express its identity. When examining the essential character of the places that constitute the city, we distinguish between two basic categories: ordinary and extraordinary spaces. It is the unique mosaic of the two categories that makes a city specific and distinctive. Basically, the commonness or uniqueness depends on the physical components of the space and their specific composition.

The means of landscape architecture and their relation to the identity of the city

Terrain

The terrain configuration is one of the essential substances of each place, strongly related to its identity. Terrain configuration in urban public spaces the local relief has a great effect on their physical and mental perception. Terrain variability allows for the creation of dominant features of the urban scenery, brings height gradation and plasticity, peaks provide views of the city and are often very popular with inhabitants and users of the urban public space. The terrain differences are then spanned by staircases and steps, ramps, terraces and slopes. It is the most comfortable and natural to move on a flat terrain, so a human being creates flat terrains both in the interior and the exterior.

The terrain configuration of Prague has the essential role in the perception of the image of the city – the unique panorama is highly important for a person's identification with the place. The most important within the panorama is Hradčany with green hill Petřín and Letná terrace, which are vantage points for views of the valley as well as unique frames for views from right-bank waterfronts and bridges. Important routes are connecting the city

dominant of Prague Castle with the downtown: steep sloping Nerudova Street and New and Old Castle Stairs.

A typical feature of Paris is its local relief, or rather its 'nonexistence'. The city is located in a broad shallow valley of the Seine and its areas are characterized by their flatness, except for artificial terrain modifications such as Place Georges Pompidou or Buttes Chaumont Park. Natural peaks of Montmartre at one river bank and Montparnasse on the other are accented by the Sacré-Cœur and Pantheon buildings. But the real height dominant was erected by the construction of the Eiffel Tower building, which is one of the most significant symbols of the city of Paris identity.

The terrain situation of Rome is in stark contrast: the very origin of the city is related to seven Roman hills and most of its public spaces are at least gently sloping, such as Piazza della Rotonda, Piazza di Montecitorio or Piazza Barberini. Sometimes the terrain has been levelled using terraces, as in Piazza del Campidoglio, Piazza del Quirinale or Piazza Dante. One of forms overcoming the different elevations is steps, for example the famous Spanish Steps.

May the local relief be variable or flat, the essential role in its perception is the form its surface takes as one of the most important components of landscape architectural composition. Paving (or other solid surface) provides the surface, the matrix, the basic platform for events. Landscape architectural composition can be based on the paving, its pattern and colors. On the other hand, paving can be nearly "invisible" in the interaction with other compositional elements.

The form of the public space surface can be one of the powerful means to create or help create its image. Paving can have a dominant role in a street, mainly a street designed for walking, such as a pedestrian area and a promenade. The conditions for other landscape architecture means are considerably limited here and the compositional idea is expressed in the surface. Paving, solid running surface is the interconnecting element of urban areas that supports the perceptions of the complexity of a city organism, if used properly. It is (often without people being even aware) a strong identification factor of each city. In the past, public areas were paved with easily available material, often from local provenance. The material that proved reliable was then used for most surfaced areas. While in Prague streets are paved with granite cubes or marble mosaic, Paris has had grey porphyry tiles since the Haussmann's renovation and Rome's typical surface of public areas is pavement from basalt cubes.

As regards surfaces of public spaces, the highest variability has been found in Prague. The paving tradition was disrupted during the Socialist era and besides the granite cubes and mosaics other materials were used, mainly concrete and asphalt. After the change in the system of government, there was the elation coming from suddenly available new forms of paving. And finally, the high variability of the traditional paving was discovered, especially the Prague mosaic, to which the public space of Prague has been coming back recently. An example of a novel usage of traditional material is the renovation of Svatojiřské square. By contrast, Paris and Rome manifest continuity in their public space surfacing. At the same time, these cities, mainly Rome, are able to avoid false 'historicism' – traditional material used in modern forms. Examples of public spaces representing this approach are the pedestrian area Trevi – Pantheon, Viale della Piramide Cestia or Piazza di San Cosimato.



Fig. 1 Prague terrain and paving: Old Castle Stairs, Nerudova Street and Svatojiřské Square

Water

Strong factor of the city identity is the water element. Water is a source of life, essential for all living organisms. Its relation to the origins of our very existence is contained within and perceived unconsciously, but strongly. A spring, a stream, a river or a lake as its natural forms, as well as human-made reservoirs, canals, fountains and wells - water, either in its dynamic or static forms, natural or artificial, always stands as a central compositional element in urban scenery. It is unique for its “otherness”. Water has always fascinated people: it brings reflections, movement, and glitter to cities; views of water relieve human minds from everyday worries. Water carries the mysterious, elusive and volatile. It invites us to see and touch or brings calming sounds to the space. Presence of water has aesthetic effects but also changes the microclimate and thus affects physical feelings. Thanks to its ability to lead a human mind from practicalities and elevate it towards the heaven it reflects, it is an important element of mental hygiene within the urban space. Its exceptional potential to gain dominant position in the composition of an urban space is realized in large spaces of squares or parks where it can impress us by the great scope of a static water surface or astounding dynamics of flowing water, as well as in limited interiors of streets or piazzettas where it can have a refreshing effect of smaller scope. The direct proportion of the space and the water element located within is not dogmatic. A small space can be ‘filled’ with water, such as in Piazza di Trevi, Rome. The effect of such a space, which does not allow any distance from the water element and forces us into contact, is great. The element of water is present in the Roman public space considerably. Roman marble fountains and watering places belong to the image of the city and many of them are its unmistakable symbols of the place, materializing their spirits.

Talking about water and water element within a city organism, first of all we have to mention a river as the initiating factor of settlement and a spine of a city. Its exclusive position within the urban landscape of Prague is dictated by its terrain configuration as well as the location of the main city spaces, such the Hradčanské square with the view to the river stream. Prague fountains unfortunately nearly disappeared from public spaces during the 20th century and new designs are usually limited to small watering places at most.

The position of the river in Rome is a bit suppressed. As if it could not get free from the ancient history of the city when it’s swampy waters were a source of malaria and Cloaca Maxima emptied here. The position of the Seine within Paris is also powerful and could be compared to a role of Grand Canal – water mirror – within the composition of French classicist garden – it leads the view to infinity. The water mirror, a typical phenomenon of classicist garden or city, brings heaven to the ground in the Tuileries Garden, Trocadero, André Citroën Park or in the composition of the pyramid in the Louvre court.

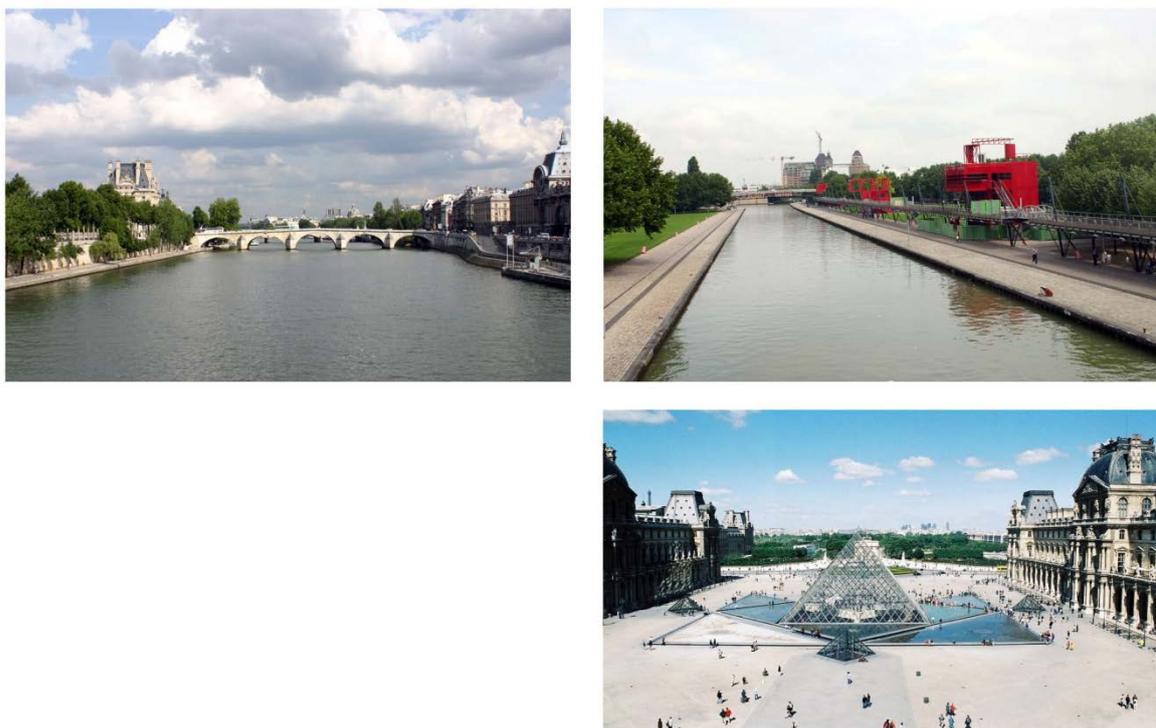


Fig. 2 Water element in Paris: Seine, canal de l'Ourcq in Parc de la Villette and the Louvre Pyramid

Works of art

*A work of art is not an accessory, decoration or a detail of a garden design. It is the bearing full-fledged component of the garden space, the mirror of the era, its aesthetic canon, bearer of ideas and philosophy of the society, a sign of its spiritual wealth.*³²⁸ If we understand a garden in a broad sense as an open space under the sky, created by means of landscape architecture, by a human being for a human being, the definition comprises any urban public space. So even here this principle is valid: a work of art, either a sculpture, a painting or even modern multimedia art, has an essential role. There are some public spaces that are unthinkable without their artwork: Piazza Signoria in Florence is unthinkable without Michelangelo's David and other sculptures, placed in Loggia dei Lanzi and outside.

*A work of art as imago mundi helps a person live.*³²⁹ Art also helps people understand who they are, what culture and history they are related to. And that only people are capable of artistic expression. Art in the public space is supposed to bring associations and questions. It does not need to be fully 'understood', in the sense of 'what it is', especially if the artwork is abstract or conceptual. Its placement in a public space of a square or a street is driven by principles similar to the placement of water elements (which are often considered artwork too, for their artistic value). However, a sculpture or a painting have a wider range of means of expression at their disposal, thanks to which they are able to tell a story and thus give their message and fill spaces with a meaning, materialize their spirits.

The immense potential artwork in a public space carries seems to be ignored more and more. Formerly natural presence of a sculpture or another work of art seems to be exceptional in modern modifications of public spaces. This may be caused by the society's orientation to consumerism and unwillingness to make 'redundant' investments. However, what else than an inspirational artistic expression could have the power to free people from the undesirable

³²⁸DAMEC, J. Kompoziční potenciál zahradního umění. In Sborník ze semináře SZKT. Praha, 2001. str. 20-21

³²⁹NORBERG-SCHULZ, CH. Genius loci: k fenomenologii architektury. 1. čes. vyd. Praha: Odeon, 1994. 224 s. ISBN: 80-207-0241-5

civilization effects and help them realize their position in the world, where their significance seems to be reduced to a role of a mere consumer. And art can use the same means as the current media. Public space is able to house various multimedia projections, installations or performances supporting its individuality. Thus, a work of art can help people see the uniqueness of each place, and in the case of an artistic happening also the uniqueness of each moment of human life.

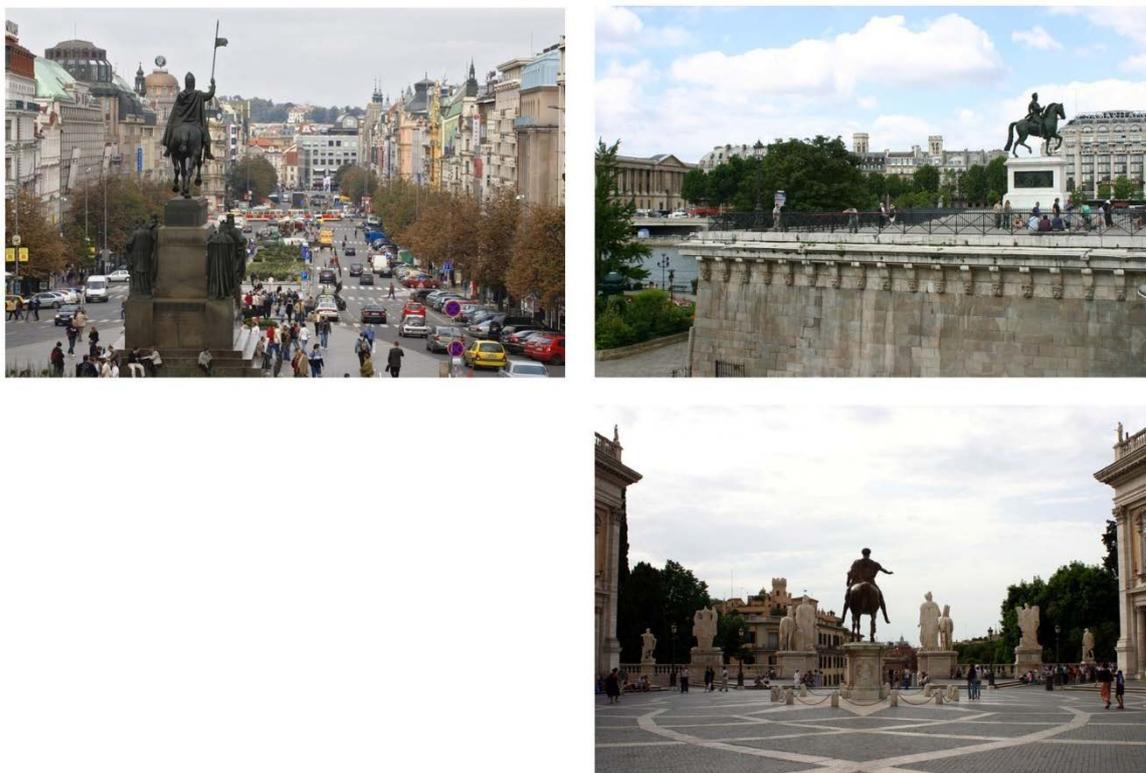


Fig. 3 Statues as the city identity symbols: Saint Wenceslaus at the homonymous square in Prague, Henry IV at the Pont Neuf Square in Paris and Marcus Aurelius at the Capitoline Square in Rome

Modern art installations as natural parts of the public space are numerous mainly in Paris. Progress in this field has recently been manifested also in Prague, where mainly seasonal installations of current art are frequent. However, new landscape architectural designs of public spaces usually remain without art. By contrast, the Roman public space, usually unthinkable without an opulent sculptural fountain, has no place for current artistic additions.

Vegetation

‘More greenery’ is a probable requirement an average respondent will mention as one of the main prerequisites for a better quality of urban public spaces. However, there is usually the mistaken idea of quantity instead of quality. Quality understood as functional utilization of potentials various forms of vegetation offer for each specific place and also the quality of vegetation maintenance, which considerably affects its appearance and condition and thus the overall impression of the landscape architectural composition.

Vegetation has an exclusive position among the means of landscape architecture entering urban public spaces. Elements of vegetation are changeable in temporal cycles and along a temporal line, they are living organisms with initial and final life stages, which are thus witnessed by public space users. Vegetation is ‘different’ from other architectural elements and therefore it is a medium of contrast. At the same time, it has the unique ability

to unite environments that are uncongenial from the perspective of architecture. Elements of vegetation have a valuable potential in their variability – the range of forms, colors and shapes the creator is provided with. They also affect the climatic and hygienic conditions of a city: the moisture and temperature of air, dustiness and noise. Another important function is the mental hygiene – properly used and maintained vegetation suits both the eye and the mind. These specific potentials of vegetation are often overlooked even by professionals, who reduce them to mere ‘decoration’ of the space instead of assigning it its real potential equal to other architecture means.

*The earth and the sky unite in a tree. Not only spatially because it goes up from the earth, but also because it grows and is ‘alive’.*³³⁰ A tree has an exclusive position among vegetation elements. Thanks to its extraordinary dimensions (dependent on the species and age); it usually leaves an unforgettable impression. Its anatomy makes associations with basic architecture elements: a column and an arc. As such, a tree should be mainly used to create the ‘interiority’ of a space. Using a tree, the space can be spanned or divided, rhythmized or united; the tree can be a dominant feature, the centre of the composition. Remarkable individual trees, alleys or groups of trees can also be strong elements of the city identification as they are unique in their anatomy and atmosphere around them. Due to its longevity, a tree is a link to history and future of the place we inhabit. Some species are traditional for and typical of specific places as significant attributes of their identity.

Looking for a symbol of Paris among trees, we would probably settle on the plane (*Platanus*) as the most frequent company of a typical city boulevard. Colonnades of stems and arcs of crowns are perceived here as completely natural elements of the public space; in Paris they have even become integral parts of the city physiognomy. Clipped crowns of the planes help create the architecture of the most famous Paris boulevard Avenue de Champs Elysées. Besides the plane, we often meet alleys of the common hackberry (*Celtis occidentalis*), Sophoras, or Paulownias, especially impressive in spring. Another significant element of the Paris urban landscape is clipped crowns of limes (*Tilia* spp.) e.g. the Tuileries Garden and the Luxembourg Gardens.

The silhouette of Rome is unthinkable without the typical umbrella crowns of pines (*Pinus pinea*) forming its image mainly around the Roman forums, in Piazza Venezia, the Pincio Hill and the Janiculum, where they are supplemented by slim cones of the cypress (*Cupressus*).

The distinctive image of the Prague panorama is characterized by horse chestnuts (*Aesculus hippocastanum*), which lights up the islands of Prague during the blossoming period as well as the banks of Kampa and the Petřín hill. The most frequent alley trees are limes (*Tilia* spp.), black locusts (*Robinia pseudoacacia*) and maples (*Acer* spp.).

Shrubs or shrubberies are used in a city space mainly for volume, as filling, an element that can divide, frame or unite a space. Dependent on their height, shrubs can prevent undesirable views or direct them. Recently there have been discussions of shrubberies, mainly in relation to safety of public spaces especially in Prague, where the shrubs and shrubberies are most often applied in a role of an indifferent filling; there are mainly lilacs and yews. Their compositions often show signs of degradation, with relics growing on without any considerable compositional or growth-related interventions. By contrast, the potential of clipped hedges and impressive blooming shrubberies (especially hortensias) is fully used in Paris city spaces. In Rome, shrubs, especially laurels and oleanders are used as typical potted plants.

³³⁰NORBERG-SCHULZ ref. 3 page 6



Fig. 4 Vegetation: Pines at Fori Romani in Rome, Chestnut trees at Slovanský Island in Prague and clipped crowns of limes in the Palace Royal Garden in Paris

A view of a facade covered in a creeping plant, usually *Parthenocissus* or colorful *Bougainvillea*, is very frequent in the narrow streets of Rome. Creeping plants in Paris mainly grow on trellises and pergolas; wisteria is typical of city parks and gardens. Patrick Blanc, a Paris designer of green walls that enter the public spaces as parts of facades of cultural institutions such as Fondation Cartier or Musée du Quai Branly, has become world famous.

A lawn is one of the fundamental means of landscape architecture – a matrix, a foundation on which the designer's compositional game is played. It can be a representative carpet or a ground for lingering, where an impressive play of light and shadow takes place. It is a necessary surface for each park recreation area where games are played, people relax or have picnics. The current trend is terrain shaping designs creating attractive 'draperies'. These lawns are artificial systems demanding expensive maintenance. That is why many public spaces that are not supposed to be under heavy load use 'meadow lawns' – meadows where flowers grow, are scythed only a few times and are thus mainly to be looked at.

A lawn that is supposed to be stayed on is typical of Paris. Lawns there are used both by Parisians and tourists without any hesitation. Lawns are present in all Paris parks and pocket parks and the load imposed on them dictates the way of their maintenance. The absence of grassy areas in Prague public space used to such an extent is probably a result of restrictions on entering lawns as well as their unattractiveness caused by their insufficient maintenance. Lawns in Rome only occur to a negligible extent due to the climate in the city and are always provided with irrigation systems.



Fig. 5 Lawn in the public space of Paris: Parc André Citroën, Luxembourg Garden and The Place des Vosges

Annuals and perennials and their mixtures with woody plants and grasses are usually the most attractive parts of landscape architectural composition. They bring color, variability, scents and plant details into the urban space. It is recommendable to use them in places exposed to views and in places where people stay so that they can be properly perceived. Due to the expense of their establishment and maintenance, they are a luxurious element, a jewel, which should be used adequately. The Prague public space does not exploit the potential of flowerbeds fully, concerning both annuals and perennials. Beds of perennial flowers appear sporadically in parks. Beds of annual flowers occur as parts of historical park spaces and have usually the carpet form based on patterns from the 19th century. However, the examples of annual flower beds in historical spaces of Paris, for example in Rond Point or the Tuileries Garden prove that a more progressive approach directed to more irregular planting is possible and suitable even here. The most frequent flower used in Prague public spaces is the rose, a typical feature of representative city space in the Czech Republic; unfortunately, a bit profaned by its use for monuments of Red Army soldiers and Communist leaders during the past era.

Potted plants, or mobile greenery, are a special chapter that can contain trees, shrubs, annuals and perennials as well as lawns. In dependence on the climate, it can be a seasonal element, which is a part of the composition during the growing season only, or it can be a permanent part.

Traditionally, the Rome public space uses potted plants abundantly. They often serve for space division, for example for a restaurant to be separated from the pavement or the traffic, or they just accompany a street space. The pots are usually classical, based on historical forms; the same occurs in Paris, where potted plants are parts of the classicist garden and parks reflecting them, such as Parc André Citroën. Potted plants are also quite abundantly used in the public space of Prague, the most frequently in architectural forms typical of the 1980s. They are usually planted with annuals (*Tagetes* or *Salvia*) or resistant woody plants (*Juniperus*). However, they are often relicts from the past as the same design is renewed every year, rather from habit than a practical or aesthetic intention. This element often completely avoids new designs.



Fig. 6 Climbing and potted plants in the streets of Rome

Furniture

Furniture is usually in the role of a more or less significant accessory within a landscape architectural composition; however, it is essential for proper functioning of the space. Both its function and its accord with the whole are important. First of all, it serves us to be comfortable in the urban space, to be able to relax there. Where people need to stay for more than a few minutes, they need to sit down. The basic principle of sitting furniture design is its adaptation to a human body.

A typical representative of urban furniture is a bench; the current urban space also houses various hybrid multifunctional forms of furniture that border on sculptural art. Both the form and the placement of furniture are important so that inhabitants in streets or squares can watch what is happening from the best possible angle.

A specific feature of the furniture used in Paris public space is mobile metal chairs that are freely available in Paris gardens: the Tuileries Garden and the Luxembourg Gardens. In this respect, Paris shows high responsiveness to the users of the gardens: the comfortable sitting furniture is provided in sufficient numbers and adequate forms where it corresponds to the space function. Seldom, also beds are provided in the public space, for example in the Paris roof garden Jardin Atlantique, where a sloping area of a long wooden slatted platform is adapted for lying.

A bench is a natural part of Prague public space. When walking along streets and squares of Rome, we will find hardly any benches or other sitting furniture. This is probably caused by the Italians 'nature. Italians like to sit and have a cup of coffee or a glass of wine in the omnipresent cafes and restaurants. Tourists then use the typical steps of numerous Roman churches or in some spaces, such as Piazza Navona or Piazza del Popolo, the separating metal fences adapted for occasional sitting.



Fig. 7 Chairs in the Luxembourg Garden in Paris, sitting on a fence at Piazza Navona in Rome, and a bench in the Royal Garden in Prague

Constructions

Minor constructions, such as gazebos, vending kiosks, pergolas or phone booths, perform the functions of business, communication, need for roof or shadow. At the same time, new spatial relations arise as a consequence and these constructions are other artistic and architectural expressions. The symbols of Paris public space and also representatives of architectural art nouveau are Guimard's Paris metro entrances. Neither of the other explored cities have such a strong identification sign among minor constructions that would be so prolific in the city and world known. Their modern followers, similarly unique, are pavilions – follies in the Parc de la Villette. As in an English landscape park, which these seemingly purposeless constructions refer to, they accent the space of the park, offer vantage points and mediate views of the park from a different perspective; moreover, there is the experience stemming from their architectural design.

Light and time

Two variables with specific effect on the perception of the external spaces of a city are light and time. Natural light is changing independent of our wish, and artificial, which we can control. It changes the atmosphere, the mood, contributes to the multi-layer character of a work of architecture. Without the visitors being aware, light affects their positive or negative acceptance of the surrounding world. Natural light changes during the day and the year; the designers work with light and shadow using structures they place in the space. The dusk and the dark of the night enable designers to create effects using artificial lights.

In contrast to light, which can be partly controlled, nobody can control the time. It needs to be taken into account and its cycles and flow have to be considered when designing landscape architectural composition. Practical components of the urban scene always indicate their temporal dimension: the new modern city x the old historical center; the durability of a building x evanescence of a temporal facility; the gradual depth of the past x one-time origin; end x openness to further development.

Roman light, as we perceive it in its streets and squares, is most often sharp and clear; the contrast between light and shadow is deep, the skies are blue. The heat is tolerable in the shade of narrow streets and in squares people dwell under cafe parasols or around fountains. The sun of Paris and Prague is not so scorching; it often hides behind white clouds in the blue sky. Nowadays, scenic lighting of architectural dominant features is frequent; new implementations also use lighting of tree crowns.

Conclusion

The role of the means of landscape and garden architecture, giving the content to the spaces, is for the recognition of the city identity as important as the boundaries of the spaces, given to it by building structures with their architectural characteristics. The city and garden are not antitheses. Both of them are the complex wholes. Both of them also comprise of the same means and the only difference is their proportional representation. Public open space is than coherent system and all his components have their importance. Ability to identify with a place, which consists of a certain composition of particular components, is than depending on their "fitting" into a whole of the city.

The designer, whose work enters the urban public space, needs to be aware of and knowledgeable about the means he uses and the potentials they provide to meet his objectives. One of the sources of this knowledge is research into real situations with wider contexts and ability to compare and review them. Through this research, some generalizations can be made, with respect to the uniqueness of each place, its history and spatial context. The research should comprise a wide exploration of public spaces and search for mutual, often hidden or indirect parallels. The study shows that these exist among the chosen European cities and can serve as a guideline for further designs of urban public spaces.

This work was supported by grant OPVK CZ.1.07/2.4.00/31.0089 of the Ministry of Education of the Czech Republic

References:

- AYMONINO, A., MOSCO, V. P. *Espaces publics contemporains: Architecture volume zéro*, SKIRA Editore, 2006. 393 s. ISBN: 88-7624-274-0.
- BEARDSLEY, J. Mario Schjetnan: *landscape, architecture, and urbanism*. Washington, DC: Spacemaker Press, 2007. 139 s. ISBN 978-0-9749632-7-3.3.
- BEČKOVÁ, K. *Zmizelá Praha*. Praha: Paseka, 2005. 350 s. ISBN: 80-902505-4-8.
- BĚLINA, P. *Dějiny evropské civilizace II*. 4. upr. vyd. Praha: Paseka, 2002. 323 s. ISBN: 80-7185-473-5.

- BĚLINA, P. Dějiny Prahy 2., Od sloučení pražských měst v roce 1784 do současnosti. 1.vyd. Praha: Paseka, 1998. 565 s. ISBN: 80-7185-143-4.
- BRINCKERHOFF JACKSON, J. Landscape in Sight: Looking at America. New Haven: Yale University Press, 1997. 34 s. ISBN 0-300-08074-3.11.
- BRUNON, H., MOSER, M. Le jardin contemporain – Renouveau, Expériences et Enjeux. Paris: Éditions Scala, 2006. 128 s. ISBN 2-86656-375-1.
- CASSETTI, R., FAGIOLO, M. Roma: Il verde e la città – giardini e spazi verdi nella costruzione della forma urbana. Roma: Gangemi Editore, 2002. 384 s. ISBN: 88-492-0314-4.
- CASSETTI, R., SPAGNESI, G. Il centro storico di Roma: Storia e progetto. Roma: Gangemi Editore, 2004. 385 s. ISBN: 88-492-0646-1.
- DAMEC, J. Kompoziční potenciál zahradního umění. In Sborník ze semináře SZKT. Praha, 2001. str. 20-21
- DAMEC, J., WILHELMOVÁ, D. Stand der Tschechischen Landschaftsarchitektur. Garten + Landschaft : Zeitschrift für Landschaftsarchitektur. 2001. č. 12, s. 1. ISSN 0016-4720.7.
- DAMEC, J., WILHELMOVÁ, D. Trendy a tradice v krajinářské architektuře a zahradním umění na prahu 3. tisíciletí. In Trendy a tradice 2008. 1. vyd. Brno: Mendelova zemědělská a lesnická univerzita, 2008, s. 9--17. ISBN 978-80-7399-510-2.9.
- DORAZIL, O. Řím, Paříž, Londýn, Berlín, Vídeň: dějiny a popis měst. Praha: Československý červený kříž, 1933. 199 s.
- GEHL, J. Život mezi budovami. 1.vyd. Brno: Nadace Partnerství, 2000. 202 s. ISBN 80-85834-79-0.
- GEHL, J., GEMZOE, L. Nové městské prostory. Brno: ERA, 2002. 264 s. ISBN: 80-86517-09-8.
- GROTH, P., BRESSI, T.W. Understanding ordinary landscapes. New Haven: Yale University Press, 1997. 272 s. ISBN: 0-300-07203-1.
- HALÍK, P., KRATOCHVÍL, P., NOVÝ, O. Architektura a město. Praha: Academia, 1998. 204 s. ISBN:80-200-0665-6.
- JELICOE, G. A., JELICOE, S. The Landscape of Man: shaping the environment from prehistory to the present day. 3. vyd. London: Thames & Hudson, 1995. 408 s. ISBN-10: 0500278199.
- KROUPA, I. Architektura v kategorii životního prostředí, stavby, interiéru, designu a umění = Architecture in category of landscape, building, interior, design and art. Praha: České vysoké učení technické, 2005. 20 s. ISBN: 80-01-03369-4.
- KUPKA, J. Zeleň v historii města. Praha: ČVUT, 2006. 146 s. ISBN: 80-01-03443-7.
- LE BOHEC, Y., LE GLAY, M., VOISIN, J. L. A history of Rome. Oxford: Blackwell Publishers, 2005. ISBN: 1-4051-1084-8.
- LÍBAL, D., LÍBAL, P. Architektonické proměny Prahy v jedenácti stoletích. 1.vyd. Praha: Svoboda Servis, 2000. 296 s. ISBN: 80-86320-11-1.
- LUKEŠ, Z. Deset století architektury. 6, Architektura 20. století. 1.vyd. Praha: Správa Pražského hradu, 2001. 189 s. ISBN: 80-86161-34-X.
- LYNCH, K. Obraz města = The image of the city. 1. čes. vyd. Praha: Polygon, 2004. 202 s. ISBN: 80-7273-094-0.
- MADDEN, K. Utváření místa: příručka k vytváření kvalitních veřejných prostranství. Vyd. 1. Brno: Nadace Partnerství, 2003. 99 s. ISBN: 80-239-0614-3.
- MOSCONI, M. C. Progetto Roma: La città dell 2000. Roma: Gangemi Editore, 1999. 224 S. ISBN: 88-7448-855-6.
- NEUMANN-ADRIAN, M., HEEB, CH. Paříž: metropole světa. 1. čes. vyd. Praha: Slovart, 1999. 72 s. ISBN: 80-7209-111-5.

- NORBERG-SCHULZ, CH. *Genius loci: k fenomenologii architektury*. 1. čes. vyd. Praha: Odeon, 1994. 224 s. ISBN: 80-207-0241-5.
- ROBIDA, A. *Paris de siècle en siècle : le coeur de Paris : splendeurs et souvenirs*. Paris: Librairie illustrée, 1896. 412 s.
- SITTE, C. *Stavba měst podle uměleckých zásad*. 1. čes. vyd. Praha: ABF, 1995. 111 s. ISBN: 80-901608-1-6.
- VRANCKX, B. *Urban landscape*. Gloucester, Mass.: Rockport, 2006. 190 s. ISBN 1-59253-272-1.12.
- WALDHEIM, C. *The landscape urbanism reader*. New York: Princeton Architectural Press, 2006. 295 s. ISBN 1-56898-439-1.4.
- WILHELMOVÁ, D., DAMEC, J. *Podstata a role krajinářské architektury ve spoluvytváření a dotváření soudobé městské krajiny*. In *Dny zahradní a krajinářské tvorby: prostor pro lidi*. Praha: Společnost pro zahradní a krajinářskou tvorbu, 2007, s. 77-78. ISBN 978-80-86950-03-7.6.

PROTOTYPE MODEL OF CARRYING CAPACITY IN TOURISM: THE IMPLEMENTATIONS FOR THE ISLAND OF RHODES

D.G. Prokopiou

B.S Tselentis

University of Piraeus, Greece,

G.Mavridoglou

Technological educational institute of Kalamata, Greece

D.Lagos

University of Aegean, Chios, Greece

Abstract

Sustainable tourism can be defined as the tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities. From the above definition it is mentioned that sustainable development ties together concern for the carrying capacity of natural systems with the social and economic challenges faced by humanity.

Carrying capacity is defined as the maximum number of people that may visit a tourist destination at the same time, without causing destruction to the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction. Today, controlling tourism growth has become a central policy issue for the tourism trade and it is noteworthy that carrying capacity assessment has become an important tool for facilitating planning and developing policy issues for the industry.

In this paper we present a model for assessing the carrying capacity. It is the first time that we apply the valuation of carrying capacity indicators of Greek islands in a new prototype model, which examines twenty indicators regarding environmental and tourism for the island of Rhodes.

Based on the proposed model first the results from the island of Rhodes are compared with the indicators from all the Greek islands, the islands in the North Aegean Archipelagos and the islands in the Dodecanese Archipelagos. At least a comparison between the municipalities of the islands of Rhodes is presented.

Keywords: Sustainable Tourism, Island of Rhodes

Island of Rhodes

The island of Rhodes is an island in Greece, located in the eastern Aegean Sea (Fig. 1). It is the largest of the Dodecanese Archipelagos islands in terms of both land area and population, with a population of 115,490 it is the fourth largest island of Greece. It covers an area of 1,390 sq. km and has 70 km of beaches.

The present municipality of Rhodes was formed at the 2011 local government reform by the merger of the following 10 former municipalities that became municipal units (constituent communities in brackets)

Table 1:

municipalities	beaches length	inhabitants	hotel beds	rooms to let beds	total seasonal population	beach impact factor (people/m of beach)
ARHAGELOS	6	7758	1044	629	9437	1,6
ATTAVIROS	3	3214	79	11	3307	1,1
AFANDOU	12	6557	6673	1667	14909	1,2
IALYSOS	8	10275	16606	951	27840	3,5
KALLITHEA	10	9979	16828	4733	31550	3,2
KAMIROS	16	5315	127	168	5626	0,4
LINDOS	9	3719	5516	3568	12812	1,4
SOUTH RHODES	70	4315	3357	359	8101	0,1
PETALOUDES	12	11858	3357	912	16139	1,3
CITY OF RHODES	5	54802	16575	1752	73134	14,6
TOTAL		117007	70162	14750	201919	

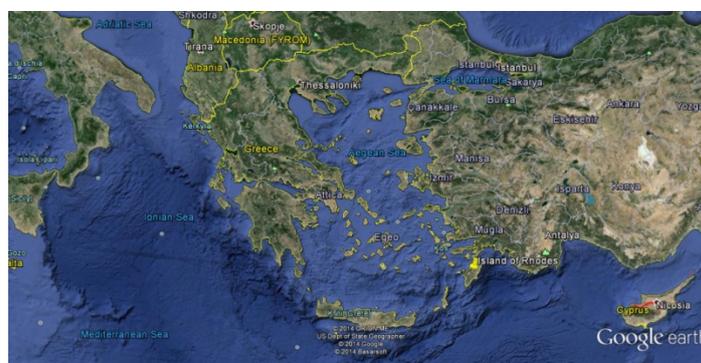


Figure 5. The Island of Rhodes.

Island of Rhodes is one of the major tourist destination in Greece (Tables 1 & 2). Tourism supply in Rhodes includes more than 130,000 beds which cover tourism demand with more than 1,5 million international tourist arrivals per year. The Rhodes environment, both natural and man-made as the cultural and historical heritage can sustain a polymorphic tourism product for

Table 2. Arrivals in Rhodes Airport

Year	International		Domestic	
	Arrivals	Departures	Arrivals	Departures
2009	1.321.806	1.327.955	407.960	418.717
2010	1.416.991	1.428.051	364.260	372.306
2011	1.717.477	1.737.505	332.505	343.958
2012	1.593.298	1.606.937	294.635	305.532
2013	1.781.768			

Table 3. Cruise passenger arrivals

Year	Arrivals (Ships)	Arrival (Passenger)
2010	536	565.786
2011	526	588.171
2012	448	472.308
2013	373	409.991

Environmental indicators

The need to develop and apply sustainable development indicators in order to facilitate the assessment and evaluation of impacts from the tourist industry has been

documented in several studies. Since 1980 the idea of sustainable development became established in policy and academic circles to discuss the combination of development and environment. Now, after 20 years, the environmental indicators can analyse the environmental condition of tourism destinations. Tourism development is adding to already existing pressures in coastal areas. Population densities are increasing in the tourism coastal regions during seasonal peaks.

In this study indicators for waste management, pressure on the coast line, illegal building, shore and marine pollution, use of fresh water resources have been used in order to address the sustainability profile of tourist development in Island of Rhodes.

Methodology

The proposed model based on sixteen variables which take values from 0 to 100. The sixteen variables can be divided into different groups.

The main objective of the first group of variables is the rating of environmental characteristics and infrastructure of the area, the group includes twelve of the sixteen variables (Table 3) and the score for each one of these variables is obtained by using questionnaires or personal observation and qualitative indicators of each area.

Table 4. Environmental and infrastructure variables

Variable name	Description	Measurement
x_1	Urban waste management	0-100
x_2	Legality of buildings	0-100
x_3	Protection of noise nuisance	0-100
x_4	Garbage management	0-100
x_5	Protection of pesticides using	0-100
x_6	Over pumping in sea waters	0-100
x_7	Sufficient quantity of water resources	0-100
x_8	Sufficient quality of drinking	0-100
x_9	Forest clearance	0-100
x_{10}	Forest clearance	0-100
Variable name	Description	Measurement
x_{11}	Conservation of the landscape	0-100
x_{12}	Adequacy of green areas	0-100

The second group consists of 4 variables (Table 4). The score of each region is derived using quantitative data and quantitative indicators. It should be noted that for quantitative indicators 13-15 high score correspond to a large burden on the environment and therefore the variable should have little score in the model, for reversal and mapping the value of the indicator to a 100-grade scale descriptive analysis was used, extreme values was excluded and finally from environmental literature minimum tolerable limits for environmental burden was defined.

Table 5. Environmental and infrastructure variables

Variable name	Description	Measurement
x_{13}	Beds per kilometre of beach	0-100
x_{14}	Beds per square kilometre	0-100
x_{15}	Beds per inhabitants	0-100
x_{16}	Blue flags per kilometre of beach	0-100

From these sixteen variables three individual indexes and the final score are calculated.

Ground Index

Ground Index Y_1 is derived from the following equation:

$$Y_1 = \frac{b_1 \cdot x_1 + b_4 \cdot x_4}{2}$$

where x_i is input variable to the model and b_i the correspond weight (Table 5).

Table 6. Ground Index

Variable name	Description	Weight
x_1	Urban waste management	1
x_4	Garbage management	1

Water Index

Water Index Y_2 is derived from the following equation:

$$Y_2 = \frac{b_5 \cdot x_5 + b_6 \cdot x_6 + b_7 \cdot x_7 + b_8 \cdot x_8}{10}$$

where x_i is input variable and b_i the correspond weight according to Table 6.

Table 7. Water Index

Variable name	Description	Weight
x_5	Protection of pesticides using	1
x_6	Over pumping in sea waters	2
x_7	Sufficient quantity of water resources	3
x_8	Sufficient quality of drinking	4

Urban and Nature Index

Urban and Nature Index Y_3 is derived from the following equation:

$$Y_3 = \frac{b_2 \cdot x_2 + b_3 \cdot x_3 + b_9 \cdot x_9 + b_{10} \cdot x_{10} + b_{11} \cdot x_{11} + b_{12} \cdot x_{12}}{15}$$

where x_i is input variable and b_i the correspond weight according to Table 7.

Table 8 .Urban and Nature Index

Variable name	Description	Weight
x_2	Legality of buildings	3
x_3	Protection of noise nuisance	3
x_9	Protection of fire incidents	2
x_{10}	Forest clearance	2
x_{11}	Conservation of the landscape	3
x_{12}	Adequacy of green areas	2

Total score

Total score Y_{Score} is derived from the following equation:

$$Y_{Score} = \frac{\sum_{i=1}^{12} b_i \cdot x_i + b_{14} \cdot x_{14} + b_{15} \cdot x_{15}}{45}$$

for area without beach, and

$$Y_{Score} = \frac{\sum_{i=1}^{16} b_i \cdot x_i}{55}, \text{ otherwise.}$$

Variables x_i and correspond weights b_i are presented at Table 8.

Table 9.Total Score

Variable name	Description	Weight
x_1	Urban waste management	5
x_2	Legality of buildings	3
x_3	Protection of noise nuisance	3
x_4	Garbage management	5
x_5	Protection of pesticides using	1
x_6	Over pumping in sea waters	2
x_7	Sufficient quantity of water resources	3
x_8	Sufficient quality of drinking	4
x_9	Protection of fire incidents	2
x_{10}	Forest clearance	2
x_{11}	Conservation of the landscape	3
x_{12}	Adequacy of green areas	2
x_{13}	Beds per kilometre of beach	5
x_{14}	Beds per square kilometre	5
x_{15}	Beds per inhabitants	5
x_{16}	Blue flags per kilometre of beach	5

Results

Environmental indicators by municipality are presented at Table 9 (a & b). According to the results for the urban waste management (indicator x_1) Arhagelos, Afandou, Kallithea, Kamiros and NotiaRodos are the municipalities with the major pressures. There is protection to environment against illegal buildings (x_2), and the level of protection against the noise (x_3). Garbage management (x_4) is covered at all the municipalities with places of sanitary burial. Protection against pesticides using (x_5) is implemented in all the municipalities except Ialysos and Lindos. There are no any incidents from over pumping in sea waters (x_6). The quantity of water resources is adequate (x_7) as also the quality of drinking water (x_8). There are no fire incidents except LindosAtaxiros and Petaludes (x_9). Incidents of forest clearance (x_{10}) happened in tourist area as Afandou, Ialysos Kallithea and southern Rhodes.

Table 10a.Environmental Indicators per municipality

Nuts Code	Discription	x1	x2	x3	x4	X5	x6	x7	x8
PO2	Rhodes town	100.0	100.0	50.0	80.0	100,0	100,0	100,0	100,0
PO3	Arhaggelos	0.0	100.0	100.0	80.0	100,0	100,0	100,0	100,0
PO4	Attaxiros	30.0	100.0	100.0	80.0	100,0	100,0	100,0	100,0
PO5	Afandou	0.0	100.0	100.0	80.0	100,0	100,0	100,0	100,0
PO6	Ialysos	65.0	100.0	0.0	80.0	0,0	100,0	100,0	100,0
PO7	Kallithea	20.0	100.0	50.0	80.0	100,0	100,0	100,0	100,0
PO8	Kamiros	20.0	100.0	100.0	80.0	100,0	100,0	100,0	100,0
PO10	Lindos	60.0	100.0	100.0	80.0	0,0	100,0	100,0	100,0
PO11	Sout Rhodes	0.0	100.0	100.0	80.0	100,0	100,0	100,0	100,0
PO12	Petaloudes	60.0	100.0	100.0	80.0	100,0	100,0	100,0	100,0

Table 30b. Environmental Indicators per municipality

Table 10 presents the total score, calculated as the arithmetic mean, and the standard deviation by environmental variable for whole the Island of Rhodes. High score is presenting to the following variables : legality of buildings, protection of noise nuisance, garbage management, protection of pesticides using, over pumping in sea waters, sufficient quantity of water resources, sufficient quality of drinking and adequacy of green areas, the mean score for these variables are between 80%- 100%.

The management of the urban waste (v1) with 35.50 % indicates that the urban waste management has lack of efficiency, due the many incidences of forest clearance the correspond indicator takes the low score 60.0%.The non-effective protection against fires in forests are serious threat for the environment, so the score to correspond variable, x10, is only 60.0%.

Nuts Code	Discription	x9	x10	x11	x12	x13	x14	x15	x16
PO2	Rhodes town	100.0	100,0	80.0	100.0	678,23	2549,6	850,7	0,31
PO3	Arhaggelos	100.0	100,0	0.0	0.0	186,44	186,4	16,32	0,24
PO4	Attaxiros	0.0	100,0	100.0	100.0	34,35	34,35	0,34	0,02
PO5	Afandou	100.0	0,0	50.0	100.0	1375,4	1375,4	223,77	1,54
PO6	Ialysos	100.0	0,0	50.0	100.0	3368,3	3368,3	1068,9	1,77
PO7	Kallithea	100.0	0,0	50.0	100.0	3911,08	3911,0	231,64	2,48
PO8	Kamiros	0.0	100,0	100.0	100.0	8.0	8.0	1,02	0,04
PO10	Lindos	0.0	100,0	80.0	0.0	1188,3	1188,3	73,73	3,63
PO11	Sout Rhodes	100.0	0,0	80.0	100.0	105,1	105,1	12,90	1,16
PO12	Petaloudes	0.0	0,0	100.0	100.0	258,4	258,4	49,28	0,36

Table 11 .Environmental Indicators for Island of Rhodes. Mean Score and Standard Deviation by Variable

Variable Code	Variable Name	Mean	StDev
X1	Urban waste management	35,5	34,2
X2	Legality of buildings	100	0
X3	Protection of noise nuisance	80	35
X4	Garbage management	80	0
X5	Protection of pesticides using	80	42,2
X6	Over pumping in sea waters	100	0
X7	Sufficient quantity of water resources	100	0
X8	Sufficient quality of drinking	100	0
X9	Protection of fire incidents	60	51,6
X10	Forest clearance	50	52,7
X11	Conservation of the landscape	69	31,8
X12	Adequacy of green areas	80	42,2

Table 12. Infrastructure Indicators for Island of Rhodes

Indicator Code	Indicator Name	Range of values	Mean	StDex
I13	Beds per kilometre of beach	0-100	62,39	39,29
I14	Beds per square kilometre	0-100	36,68	43,15
I15	Beds per inhabitants	0-100	59,52	39,85
I16	Blue flags per kilometre of beach	0-100	11,54	28,03

According Table 12, Infrastructure Indicators I13 to I15 for Island of Rhodes are in low level, this score indicates large burden of the environment. The certifications of quality of the beaches (blue flags) in Greece is not a very developed procedure so the score as Rhodes is quite close to the Greek mean value.

Table 13. Indexes and Total Score for Island of Rhodes

	Mean	StDex
Ground Index	57,75	17,1
Water Index	98,00	4,22
Nature Index	75,13	10,35
Total Score	59,97	11,08

The scores of the three indexes and the total score is presented at Table 13. Low score at waste and garbage management leads to low level score to ground index. Water and Nature index are in very good level but the total score is almost 60%.

Table 14. Variable, Indexes mean Scores for Islands in two Archipelagos and all Greek Islands.

	GREEK ISLANDS	NORTHERN AEGEAN ISLANDS	DODECANESE ARCHIPELAGO
	Mean	Mean	Mean
X1	27,94	26,7	25,71
X2	54,64	66,03	83,87
X3	84,94	82,86	78,06
X4	57,05	45,24	53,55
X5	64,64	65,24	70,97
X6	77,49	70,48	80,97
X7	66,77	55,73	59,68
X8	75,15	70,63	62,90
X9	71,83	81,59	67,10
X10	80,68	73,33	61,29
X11	71,79	73,81	80,65
X12	66,51	61,27	79,35
I13	61,15		
I14	38,04		
I15	58,55		
I16	15,38		
Ground Index	42,37		
Water Index	72,05		
Nature Index	71,48		
Total Score	57,075		

Comparing the variables scores for Island of Rhodes (Table 11), whole Greek Islands, the mean scores of Dodecanese Islands, Island of Rhodes belongs to this archipelago, and the close to Rhodes archipelago of Northern Aegean Islands (Table 14) the following comments can be made:

- Island of Rhodes have a score close or above the mean score of Dodecanese Islands, except the variables Protection of fire incidents, Forest clearance, Conservation of the landscape.
- The scores for Northern Aegean Islands for the most of the variables are worsen than Dodecanese Islands. Again Island of Rhodes have lower evaluation to the variables Protection of fire incidents, Forest clearance, Conservation of the landscape.
- Island of Rhodes presents better assessment of the mean value of whole Greek Islands except, again the three same variables: Protection of fire incidents, Forest clearance, Conservation of the landscape.

The overall assessment of Island of Rhodes is better than the mean value of all Greek Islands except the three variables about fires and forest clearance.

According the final scores of the model the Greek Islands can be classified into three groups.

- For the Islands in the 1st group the main findings are serious environmental problems with lack of infrastructure and problem regarding natural sources. Tourism could be developed after the solutions of these problems
- The Islands in the 2nd group is in the middle between tourism saturation and island that tourism could be developed is sustainable limits. The basic Greek tourism destinations belongs to this group.

- The Islands in the 3rd group don't have massivetourism according the area of the island. As there are some islands with eliminated tourism supply. For The Islandsin this group the opportunity is to design and develop sustainable tourism policies.

The Island of Rhodes is included in to the second group with limited difference from the third. If the decisions of the local government must be focus to the problems with the forest and also the future tourist development must be designed based on the principle of sustainability. The proposals to the next paragraph leads to this direction.

Table 6 Classification of Greek Islands according the final scores of the model

ISLAND	SCORE	ISLAND	SCORE	ISLAND	SCORE	ISLAND	SCORE	ISLAND	SCORE
KALYMNOS	26,87	MYKONOS	40,337	SYROS	49,83	CEFALONIA	57,56	FARMAKONISI	69,091
EGINA	28,282	AMORGOS	40,771	KYTHNOS	50,285	SYMI	57,745	ARKI	70
PAROS	30,5	CHALKI	40,825	MATHRAKI	50,604	CHIOS	57,77	NAXOS	70,28
EVALEFONISE	31,025	SIFNOS	42,023	SAMOS	50,68	DOKOS	58,182	AGIOS EFSTRATIOS	70,363
AGISTRI	31,818	SKLATHOS	43,321	THIRA	51,111	KITHIRA	58,565	AGIOS ACHILIOS	72,302
AMOULLANI	32,229	POROS	43,631	ANAFI	51,147	ITHIENA	58,791	INOUSES	76,965
SPETSES	33,758	CORFU	44,09	ERIKOUSA	51,92	THRASIA	58,805	SALAMINA	78,72
IOS	33,994	PAXI	44,608	ANTIPAXI	52,726	ANDROS	58,87	STROFADES	81,818
MEGISTI	34,669	KOS	45,14	TRIZONA	53,315	RHODES	59,97	NISIOANTONON	94,888
SCHINOUSA	35,972	ASTYPALALA	45,292	TILOS	53,562	FOURNI	60,293		
SKOPELOS	36,032	KARPATHOS	46,39	PSARA	53,748	ANTIPAROS	61,264		
ALONISOS	37,052	HYDRA	46,91	AGATHONISI	54,094	KASTOS	61,338		
SIKINOS	37,258	PSEIMOS	47,029	PALJO TRIKERI	54,335	THASOS	61,631		
TELENDOS	37,273	KEA	47,25	GAYDOS	55,493	KASOS	62,804		
MILOS	37,499	IRAKLIA	47,697	OTHONI	55,532	LESVOS	63,94		
LEROS	37,876	DONOUSA	47,83	ITHAKI	55,96	MITILINI	63,94		
KOUFONISI	38,177	KIMOLOS	47,911	LEFKADA	55,97	CRETA	65,81		
FOLEGANDROS	38,909	SKYROS	48,087	MEGANISI	56,177	ANTIKITHIRA	67,971		
PATMOS	39,376	NIROS	48,969	IKARIA	56,92	LIPSI	68,479		
IINOS	40,2	ZANJE	49,76	KALAMOS	57,33	SERIFOS	68,727		

Proposals

1. The increasing public interest in nature and landscape preservation is, today, considered a major positive factor in the tourist development process. It is true that the growing influx of visitors can exert strong pressures on fragile ecosystems.
2. Tourist development indicators for Rhodes lead us to conclude that the tourism industry should aim at extending the tourist season to include more months, attain occupancy well over 50% for April, October, and probably more visitors with varied interests and expectations of the island, organization for the protection and development of environmentally sensitive areas.
3. Due to the increased tourism demand, it is suggested that all the areas with environmental interests must be protected by a special organization that, doesn't exist for the time in Rhodes except the National Park of Samaria. Nature 2000 Network areas are a step in the right direction, but must be supported with effective management schemes.
4. Extension of tourism services for the winter season months by developing and marketing novel tourist activities particular for the island (mountaineering, cultural events, conferences etc).
5. Completion of urban waste treatment plants and network, appropriate garbage handling (urban garbage treatment - olive oil press residuals management), restriction of illegal buildings at cities and coasts, control of hotel's urban waste management systems.
6. The concept of linking visitors with culture, nature and the environment in a harmonious way is not a new idea, but is now viewed on a global scale.
7. Long-term, successful community involvement has preserved many popular rural tourist destinations such as the wine regions of Europe and the United States, many rural communities have acted on instinct, rather than governmental directives or support, and usually with enough individual investment to achieve results
8. Alternative tourist development is conceptually related to sustainable development includes approaches to deal with development and economic options, to prevent environmental damage and to involve public and stakeholders in decision-making processes. It is proposed that serious efforts have to be made in the direction of formulating viable policies and developing tools for effective implementation and control, as till now alternative tourism is not yet massively developed in Rhodes. xiii. Tourism industry of the island must be extended by supporting winter time charter flights.
9. Planning is conceptually related to sustainable development. It includes approaches to deal with development and economic options, to prevent environmental damage and to involve public and stakeholders in decision-making processes,
10. Completion of the treatment of urban waste and garbage and
11. Deal with the problem of illegal buildings, noise nuisance from the municipalities. In some of them the problem seems very serious.

Acknowledgements

We would like to thank: .Kostavaras K, Tselou D. economist, Gaxanozis S. Hellenic Civil Aviation Authority, Greek National Tourist Organization, Rhodes Branch as all the municipalities of the island

MODERN IT TOOLS SUPPORTING INDIVIDUAL TOURIST PROJECTS

Cezary Bolek, PhD
Joanna Papińska-Kacperek, PhD
University of Lodz, Poland

Abstract

IT tools supporting individual tourist projects are taken into consideration in this paper. The concept of the individual tourist project becomes competitive for tourism products offered on the market. Modern ICT tools supporting travel planning facilitate individual undertakings. Polish tourists' experience based on the e-tourism applications will be presented as the report from the survey conducted among Polish Internet users. The aim of this research was to verify if IT tools supporting all phases of individual tourist projects are known and used in Poland.

Keywords: E-tourism, individual tourism project

Introduction

The World Tourism Organization (UNWTO) defined that 'Tourism comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.' Tourism is one of the largest and fastest growing sectors of the European industry. Information and Communication Technologies (ICT) with particular emphasis on the Internet have significantly enlarged the number of opportunities for tourism consumers, who are more likely to give up the services of travel agencies and willing to prepare the tourist project by themselves. The purpose of this article is to verify whether potential recipients of tourist services in Poland are familiar with and use IT tools for travel preparation.

E-tourism

Each year it is increasing the number of people who want to spend their free time away from home. Due to ICT tools expansion and growth, the scope of holiday travel evolves and changes in time. On one hand the travel agencies broaden their range of services, on other, individual consumers receive wider range of tools to prepare and arrange the trip by themselves with no travel agency support. The individual approach could take place thanks to contemporary IT solutions that significantly emerged in this field [Estêvão et al., 2014].

E-tourism is the application of ICTs on the tourism industry [Buhalis, Jun, 2011]. They suggested that e-tourism reflects the digitisation of all processes and value chains in travel, hospitality and catering industries. Information. That includes ICTs applied for maximising the efficiency and effectiveness of the tourism as the organisation. E-tourism revolutionises all business processes, the entire value chain as well as the strategic relationships of tourism organisations with all their stakeholders [Buhalis, O'Connor, 2005]. However, it is not only the sale of travel services via the Web. Buhalis in 2008 admitted that e-tourism has three main areas: consumers and demand dimension, technological innovations and industry functions. It takes advantage of reorganising all processes.

Electronic tourism was often related only to the web pages of travel agencies or aggregators offering many services, whereas many applications and devices are applied in tourism. There are: the audio guides and mobile guides (sometimes with augmented reality functions), the electronic cards in museums, 2D codes systems, NFC tags, web pages for individual tourists, geographic information systems (such as Google Street View), the social network sites recommendation, and profiles of cities on the social network sites like Facebook. Therefore, e-tourism means the use of ICT in all processes related to tourism, i.e. tourist activity, promotion of the tourism products, cash flow resulting from the sale of these services, sightseeing and getting around travel destinations [Papińska-Kacperek 2013]

Individual tourist project versus a product in tourism companies

The tourism product means a tourism sector product which is a necessity for a tourists during their travel activity. It is combination of all the elements, the tourist consumes during the trip, e.g. trip package which consists of accommodation, transportation, guiding services etc. Middleton and Clarke define tourism product as customer value which is “the perceived benefits provided to meet the customer’s needs and wants, quality of service received, and the value for money” [Middleton, Clarke 2001, 89]. There are three levels of a tourism products: the core product, the formal or tangible product and the augmented product. The core product is the essential service or benefit designed to satisfy the identified needs of target customers. The formal one means the specific offer for sale. It contains the facilitating services and goods that must be present for the customer to use the core product. The augmented one comprises all the forms of added value producers to make the core product more attractive [Middleton et al. 2009, 128].

Tourism products [Kaczmarek et al. 2012], [Smith, 2004] can be categorized according to different criteria, one of them is level of complexity or number of services combined in a single offer. Thus, tourism products can be divided into simple and compound ones. There are 4 main types of simple products:

- Service (i.e. guidance, gastronomic service, hotel service, tourist information, etc.)
- Item (i.e. guide, map, souvenir, tourist equipment, etc.)
- Object (i.e. museum, castle, church, monument, natural monument, etc.)
- Event (i.e. show, presentation, exhibition, cultural event, sport event, etc.)

Simple products can be combined together offering more complex and advanced products. There is often situation that single simple product is being enriched by another one creating coupled product: Service-Object (i.e. museum guided tours), Object-Item (i.e. museum printed guides), Item-Event (i.e. exhibition maps), Event-Service (i.e. gastronomic support to the sport events). Most advanced compound tourist projects involve all the simple components:

- Undertaking (i.e. camping trip, excursion, survival camp, etc.)
- Trail (i.e. theme hiking trail, bike trail, car trail, etc.)
- Place (i.e. country, region, city, national park etc.)

Tourism is a field based heavily on the exchange of information. Today the Internet is the major source of tourist information for travelers. The main activities of travel arrangements are: transportation to the destination, accommodation, getting information about the structure of local transport, location of catering points, worth seeing facilities (including opening hours, ticket prices, etc.), selection of objects, the optimal order of sightseeing, return to the place of residence, and also localization of access points providing access to the Internet. It is important because nowadays many travelers use the Internet as a one of the primary information sources and people very often use mobile phones to connect to the Internet in these locations for free.

Therefore modern ICT tools provide the mechanism that can treat individual tourism activities as a project – Individual Tourist Project (ITP), that can be defined as follows: series of related activities and tasks, bound by time and costs limits, carried out in specific sequence in order to complete the specific tourist objective.

As an individual tourist project is just the special case of regular project, same rules apply to it. Thus ITP must have the at least one objective (e.g. city touring, sightseeing, leisure, relaxation, hiking etc.) In order to accomplish the objectives ITP consists of two phases: planning and execution. Planning usually involves such activities as: points of interest selection, accommodation and transportation, gathering information on public/nonpublic transportation, currency etc. Planning phase must also consider human and nonhuman resources consumption (money, guides, equipment etc.), time and cost boundaries (if applicable). Although the planning phase usually results in simple linear sequence of activities (e.g. trip-accommodation-sightseeing-trip), thus external constraints (such as opening hours, limited offers, limited vacancies) may lead the time planning to more complex optimization problem. Execution phase (touring) is just performing a sequence of planned activities according to time schedule which in many cases may be very restrictive due to reservation thus progress tracking with impact analyzing and making adjustments is an integral part of ITP. Tourist project should also have clearly defined measure of success. In classical project management its success include completion within allocated time period, budgeted cost, at proper performance, with user acceptance, and others [Kerzner, 2005]. In ITP those components are tightly related with tourist satisfaction and this may constitute the main measure of success. Changing of the scope, overspending or time exceeding don't have to result in project unsuccessfulness. It can be considered that in case when even all mentioned above could take place, the tourist can treat the project as satisfying what results in accepting the project as successful.

The following research work is meant to verify if IT tools supporting both phases of individual tourist projects are known and used in Poland. It was conducted a survey on Polish Internet users regarding sightseeing and travel planning using IT including popularity and penetration of some chosen services.

Study

Before the primary data collection, the research instrument (the electronic survey) was pre-tested on a sample of students from three Polish cities. Students as a young and very often travelling people were perceived to be an appropriate respondents. In order to obtain the study participants, the invitation with link to Web questionnaire was sent in e-mail to students and university graduates from three Polish universities of Łódź, Poznań and Szczecin. The survey was active at the turn of May and June 2013.

The questionnaire was administered to 186 respondents. Women constituted 67% of them. Age ranged from 19 to 50 but 77% of respondents were 19-25 years old. 27% of participants were MA degree holders, 31% bachelor's degree holders and 42% were postgraduates.

To obtain main study participants the survey was administered in two different groups: the first, diverse group of Polish Internet users and the second, students and university graduates from University of Lodz. Respondents were also encouraged to invite their colleagues or acquaintances to visit the survey. Therefore sample of research was collected by non-probability method: purposive sampling and snowball sampling (respondent is asked to identify another potential respondent). The survey was active at the turn of May and June 2014. Overall, the survey was completed by 116 respondents. Women constituted 54% of them. Age ranged from 19 to 60 years old and over. Most of the respondents were between 31 and

40years old (22%) and between 51 and 60 (20%). 60% of participants were MA degree holders, 22% bachelor's degree holders.

Most of the questions were closed, but many provided the opportunity to add the own responses, such as examples of sites with train schedules, pages with information for tourists and examples of sites where is possible to enjoy the audio-guide.

The study results showed that 81% of pooled checktrain or bus schedules on the web site but only 66% buy a ticket on the Internet. Merely4% of respondents lookfor accommodation with no Internet use andonly 17% never reserved room via Internet. Majority checks the location of the facilities planned to see on the visited city, 53% on the sites of the municipal authorities. Majority of respondents checked the way of reaching planned destination on Google Maps (81%) or at city sites hosted by municipal authorities (21%). 74% of respondents looked for photographs of the planned destination points, 63% on Google Street View.

Table 1. Individual tourist project activities(%)

Activities	2013	2014
Checking train or bus schedules on the web site	89	81
Buying a ticket on the Internet	47	66
Looking for accommodation on the web site	93	96
Reserving room via Internet	73	83
Checking the location of the facilities planned to see	83	81
Checking the way of reaching planned destination	94	90
Looking for photographs of the planned destination points	70	74
Mobile phone usageduring trip	60	66
m-guide usage	12	24

Only 34% don't use mobile phone during trip. For others mobile phone helps in locating objects by GPS (48%) and checking the opening hours of museums, restaurants (43%). Only 12% read 2D codes, 24% use mobile guide and 12% use mobile in locating objects with augmented reality application (details in Table 2).

Table 2. Objectives of mobile phone use during travel (%)

Objective	2013	2014
I do not use my phone	17	10
In anything related to tourism	23	23
In reading 2Dcodes	16	12
In playing downloaded audio guides	3	5
In locating objects using augmented reality application	11	12
In locating objects by GPS location	54	48
In checking the opening hours of museums, restaurants	47	43

The respondents are looking mostly for information about interesting objects on the web sites prepared by local newspapers publishers, local organizations (61%), local authorities (43%) or social networks (26%). Local web site is the best (45%) in the opinion of respondents, but not the one developed by the authorities. 31% of the respondents visited cities where a tourist card allowed to ridea public transportation and tour of selected objects.

Some results that were obtained have improved, what means that within a year e.g. m-guides have become more popular. A larger proportion of on-line booking can be combined with older age of the second sample. Similar decrease of City profiles on social

networks as source of information was observed that could be caused by age diverse in the study sample where people under the age of 30 were in minority (36%). Some statistics are similar to other research results indicating that people less frequently reserve or pay for transportation and accommodation on the Internet than search for the information [Bigné et al., 2010, Garín-Muñoz, Pérez-Amaral, 2010]. Many travelers use the Internet to find information but still purchase offline, therefore, they do not fully exploit potential of e-services.

Table 3. Source of information useful for tourists (%)

Source of information	2013		2014	
	Many answers possible	One best answer	Many answers possible	One best answer
The local website such as Krakow Our Town	60	38	60	44
The city profile on a social network	39	19	25	10
Other	15	14	19	14
The website of local authorities	45	12	44	13
Traditionally, without electronic media	20	10	17	10
The mobile application (m-Guide)	6	7	11	9
Total		100		100

Conclusion

ICT tools are changing the structure of the tourism industry. Nowadays modern IT tools encourage consumer to create his own products (Individual Tourist Project) and organize own tour with no travel agency support. There are applications helping to plan, organize and execute the excursion and there are also applications like audio guides that help sightseeing. Sophisticated ICT systems allow organizations to predict and target the new consumer needs and prepare new services e.g. web pages dedicated to individual tourists. It is also a challenge for the local government, which can help to develop projects to support the individual tourism. It can positively affect saturation level of tourism in the region, and consequently bring the profit for local businesses.

The result of the study shows that Polish tourists adopt many e-tourism solutions. It should be noted that, based on the results, the increasing trend of this acceptance is observed. All the declines result from different age of respondents, but in both cases Polish tourists appreciated the site prepared by local authorities, even though this is not the most popular source anyway.

References:

- Bigné, E., Sanz, S., Ruiz, C., Aldás, J. Why Some Internet Users Don't Buy Air Tickets Online. In *Information and Communication Technologies in Tourism* pp. 209-221. Springer. 2010.
- Buhalis, D., Jun, S.H. *E-tourism*, Goodfellow Publishers Limited, Woodeaton, Oxford, 2011.
- Buhalis, D., Law, R. Progress in information technology and tourism management: 20 years on and 10 years after the Internet – The state of eTourism research. *Tourism Management*, 29 (4), 2008, pp. 609-623.
- Buhalis, D., O'Connor, P. Information communication technology revolutionizing tourism. *Tourism recreation research*, 30, 2005, pp 7-16.
- Estêvão, J. V., Carneiro, M. J., & Teixeira, L. The Evolving Value of eTourism for Suppliers and Visitors. In: *Handbook of Research on Enterprise 2.0: Technological, Social, and Organizational Dimensions*. IGI Global, 2014.

- Garín-Muñoz, T.; Pérez-Amaral, T. Internet Usage for Travel and Tourism. The Case of Spain, 21st European Regional ITS Conference, Copenhagen, 2010.
- Kaczmarek J., Stasiak A., Włodarczyk B. Produkt turystyczny albo jak organizować poznanie świata, Wydawnictwo UŁ, 2002.
- Kerzner H. Project Management, John Wiley, ninth ed., 2005
- Middleton, V.T.C., Clarke, J. Marketing in Travel and Tourism. 3rd Edition. Oxford: Butterworth-Heinemann, 2001.
- Middleton, V.T.C., Fyall A., Morgan M. Marketing in Travel and Tourism. 4th Edition Routledge 2009.
- Papińska-Kacperek J. E-tourism services in Polish tourists' opinions "Problems of Management in the 21st Century", 7/2013
- Smith, S.L.J., The Tourism Product Tourism: in: The nature and structure of tourism. Williams S, ed. Vol. 1. Taylor & Francis, 2004, pp. 229-244.
- Steinbauer, A., & Werthner, H. Consumer behaviour in e-tourism. In Information and Communication Technologies in Tourism Springer 2007, pp. 65-76.
- World Tourism Organization UNWTO <http://www2.unwto.org/> Retrieved 3/06/2014

THIRD SECTOR AND LOCAL CITIZENSHIP: THE WAYS TO STOP THE GENERATING STRUCTURE OF UNDERDEVELOPMENT IN CAPE VERDE

Nardi Sousa, PhD
Sociologist

Department for Social Sciences/University of Santiago, Assomada, Cape Verde

Abstract

This article analyses on the role of Third Sector/Social Economy in Cape Verde, as an attempt to construct a citizenship of Peace (and municipal community welfare), which would combat/neutralize the generating structure of underdevelopment. It also seeks to understand what happened in the post-independence period, the political strategies that have been developed to achieve this goal, and new forms of partnership between the state (becoming weak), the market (not so expressive) and the third sector (emergent), and analyze the costs of transitions of a political-economic system carried out in the absence of regulatory policies, as well as the importance of promoting dialogue and partnership between the social, political and economic actors, and the strengthening of tripartite institutions. It tries also to understand the dilemma of the Africans intellectuals in present days, as Amílcar Cabral (1978) pointed out. The dilemma between betraying Africa's interests and revolutionary mentality or becoming a liberal 'petty bourgeois' that follow Washington (and ex-colonizers) Consensus.

Keywords: Third Sector, Citizenship, Development, Intellectuals, Cape Verde

Introduction

The reflection on development is one of the most important intellectual issues of the moment, but we cannot forget two key points: i) that the task is not easy, and ii) the existence of widespread social crisis that affects, with various modalities and intensity, every countries.

The management of social transformations requires a strategic and pro-active guidance. The objectives of the development, economic growth, human development, poverty reduction, social equity, good governance and local autonomy became central, making and reinforcing the habit of seeing the world through the lens of historical experience, current situation and long-term interests to populations; acting in terms of self-definition rather than defined by other.

In Cape Verde, we know little about how the public, private and third sector or social economy interacts at local, national level. It's very important, in the economic perspectives, to examine three aspects associated with social economy/third sector: i) their role in the struggle against unemployment, ii) its contribution to increase the welfare; iii) its importance as a model for social change. Normally, all economies are mix and assume various forms of planned economies, market economies and social economies.

Social changes require participation and creativity (Majid Rahnema, 1998). Therefore, we tried to know how Cape Verde, aware of the historical and chronic deficit of citizenship, tried, through the promotion of the Third Sector/Social Economy, to build a local citizenship of peace in order to overcome/neutralize the generating structure of underdevelopment inherited with independence.

We assumed two basic and complementary premises. The first one strengthens that in Cape Verde, the associations and NGOs were for the Second Republic (1991-2001), what the consumer cooperatives accounted for the First Republic (1975-1991), *impaired intermediaries* in the State / Civil Society.

The second premise considers that the independence, despite many difficulties, has created in cities, towns and villages a certain citizenship of peace that made Cape Verdeans dream to live in Cape Verde and this was changed after 1991 by new social pathologies that rocked the peace and social balance.

Reflection on Third Sector

Internationally, third system or third sector has been seen as a new lever for employment policy, a new form of alternative economy, a kind of sociability, or a path to the development of a space for local democracy.

Since late nineteenth and early twentieth century, it has been observed a more pronounced fragmentation of the third sector institutions, starting to distinguish three subsets corresponding to three statutes: cooperative, mutuality and associations (Boccacin, 1993). Cooperatives were inserted into the market economy, occupying sectors of capitalist activities whose intensity remained weak, several types of cooperatives emerged (consumption, housing, agricultural). The associations had a role of social pressure and claims, mobilizing networks that incited the creation and supply of public services. The emergence of the welfare state has modified the role of mutuality; many initiatives have been organized to address issues related to disability at work, illness and elder people, rallying the members of a profession or locality. In some countries, mutuality are controlled by the authorities (Belgium and France), and had also transformed it in complementary insurance companies/schemes, or even managers of Social Security (Belgium and Germany).

In this perspective, Third Sector can be seen as: a) a set of social formations endowed at the same time with the characteristics of 'community' and 'society', b) a kind of 'collective action' with stable operating solidarity mechanisms extended (going from inside to outside of social formations concerned), c) a scope of production of common goods in the special sense of 'relational goods'.

A feature of the third sector is represented by the production of specific goods not available at state or private level. Some authors define them as relational goods because they are produced jointly based in solidarity aims. This *third* entity makes visible and stable at social level a organized solidarity action based on the presence of multiple elements.

Quite often, researchers reflect on welfare crisis to analyze a specific placeholder to the third sector. It emerges within the welfare society three types of actors who develop a crucial role: i) actors as citizens and consumers of services, ii) non-governmental bodies and forms organized under the tutelage of citizens, iii) new businesses/companies as third sector, mixed forms in the field of production and services distribution.

The use of the expression third sector stresses as a criterion of unification/differentiation of the sector, the development of another/third code of communication, different from the one circulating in the state (power/policy exchange), in the market (money/economic exchange). It is the code of the donation or solidarity.

Third sector or non-profit sector is every non-governmental organization that produces/provides services of collective interest and that is not bound in the distribution of income (of any kind: in cash or in-service) to its own members or at the moment of organization dissolution (Colozzi, 1993).

As many studies have shown, one of the heaviest and negative consequences of decades of totalitarian regimes was the emptying and paralysis of the resources of civil society, along with economic progress that seemed stagnant or in worrying decline. It is

possible that the severe shortage of civil society, the poor economic development and poor communication infrastructure, modern civil society organizations are in their infancy. There is a double threat in these countries; on the one hand, there is a wrong and simplified design, brought by the recent financial and industrial Western penetration, according to which democracy would be mainly from capitalist exploitation, on the other hand, there is the defense of national and ethnic identity.

The new forms of social relations are networks of collective action and associations that had their origins in civil society, and involving solidarity, cooperative and reciprocal or more generally pro-social motivations, operating profit and investing in a growing number of activities, as recreational, sporting, cultural and leisure activities, protection of environmental goods, promotion of rights, supporting scientific research, social services, health, care, training and education, finishing in various forms of international cooperation with several poor countries of the South.

Many expressions used to define the phenomenon were originated in the Anglophone countries. In the United States there's a strong tradition of organized actions, voluntary, non-profit that justifies the terminology production cited.

Probably the expressions that enjoy a more established tradition are charities or charitable sector, philanthropy, or philanthropic sector and voluntary sector. These feature organizations that develop pro-social actions to categories of persons who experience problematic existential conditions. Initially, these expressions were forged to designate organizations (one charity) or a type of action (the philanthropy) more than one sector of society (Stanzani, 1998).

Also in Europe exist many expressions to define the third sector. The most traditional expression is social economy. It sets a mode of action different from the economic market and a precise scientific discipline. This indicate precisely a pro-social orientation of economic behavior that accompanies reflections and experiences of the nineteenth century, it makes reference to a vast economic action based on the principle of the primacy of the person and guided by values as mutuality and solidarity.

The hallmark of citizenship is seen as the ability of the oppressed citizens to organize themselves (functional principle) around the true interests because, in the end, rights are manipulated and sometimes the State is unable to provide them. This view, unlike the theory of citizenship-balance, addresses the issue of the end of citizenship. The aim is to free themselves from oppression and exploitation of those who own and control the means of production, bringing equal control of production and distribution of benefits, self-actualization, and more dignity of workers, labor and justice.

The Neutralization of the Structure of Underdevelopment

When Cape Verde gained its independence from Portugal in 1975, it inherited a deeply underdeveloped economy with low level of production, highly monetized, based on a poor agriculture, a service sector holding a predominant position, highly dependent on foreign aid, poor satisfaction of basic needs in terms of nutrition, health, employment, education and income (Melo, 1986). The country had, and still has, scarce arable land, with obsolete techniques and exploration methods of production, social inequalities. The sector of agriculture was unable to secure employment and sufficient income for the rural population, and ensure the food needs and provide a national base for support in the industry sector. In that period, about 90% of the active population depended on agriculture.

Before we get into the analysis of inherited socio-economic structure, it is necessary to understand the evolution of capeverdean society. As Amílcar Cabral (1978), pointed out, in that period, when we analyse the Social Structure in Cape Verde (and Guinea-Bissau), its important to differences of the situation in the city(ies) and in the rural areas, as key to

sociological analysis. The social structure in the countryside consisted of: (i) Large Land Owners, (ii) Small land owners and (iii) land tenants.

There was a reduced number of white owners who could keep their land, amplifying them through usury.

The group of Small land owners was large and possessed one third of the land. It was a very diversified group, it had three types of attitudes in terms of independence: some wanted the independence from Portugal, ii) some were against and some were undecided. Those who were in favor of independence wanted to increase their properties; the ones against feared social and political transformations, they had doubts about the future land reforms. They adopted an ambiguous attitude. The small land owners represented in the rural area, the petty bourgeoisie.

In urban areas, the social structure was not different from other Portuguese colonies: (i) an important number of the urban population was connected to the land, (ii) a Small group were European. In the cities, there were: a) senior European officials, b) high qualified Cape Verdean officials, c) merchants and business men, who had certain amount of richness, d) an entire category of employees (in public and commercial sector); e) salaried workers f) people without work, the 'masses'.

There was no urban bourgeoisie, because the high qualified Cape Verdean officials did not hold own capital for investment, they were against the idea of national liberation. The merchants and business men were not considered a class, their money or capital didn't come from local accumulation process, they were dependent on the metropolitan bourgeoisie. Their ambition led them to a certain degree of nationalism, as a way to get rid of Portuguese and create their own businesses.

The petty bourgeoisie were constituted by employees (in public and commercial sector), small traders, students and all individuals exercising liberal professions. It was characterized by the adoption of an ambiguous behavior towards the political and social transformations. We could find in that period: i) the small conservative bourgeoisie, and ii) the 'rebel' petty bourgeoisie. It was among the rebel petty bourgeoisie, who had revolutionary aspirations, that we could find some identification with the masses (that face discrimination and permanent unemployment).

The economic structure as well as the political superstructure were from a colonial state: 'a people without autonomy, dependent, whose daily lives depend on a foreign State, that invaded the country with its troops, police, administrators, prisons and courts - instruments from a dominant State, aiming at maintaining the colonial situation in the country (Amílcar Cabral, 1978).

Renato Cardoso (1987), reflecting on the problems of underdevelopment in African countries, argues that the majority of these countries, including Cape Verde, had to face and manage, after its independence, a political and economic system which configured a true generating structure of underdevelopment (political, social, economic and ecological crisis). This structure was so dynamic that created and reproduced underdevelopment. The society inherited by Africans, the political, economic and administrative structure, that even the Africans helped to build, the social and economic system in which they were caught, and not destroyed, when they had their independence from European countries, were dynamic and generate underdevelopment, and parts of a system that would fail in the struggle for development.

These internal factors that generate the structure of underdevelopment come either from the dynamics of African societies, whether from the colonial and post-colonial situation. Its internal and external components are intertwined and complementary. The changes, of the process, should be global and structural, otherwise it would be not effective, and to be structural it should also be designed in its internal and external components. Often, these new

societies, especially when they emerged as a rupture with the colonial past, faced several internal difficulties within the colony, which had been raised to blindly believe in the values and the model of the colonizer, and faced external difficulties because former colonial power tried to perpetuate its domination in different forms.

The structure contains values, norms, facts and creatures that are justified only if understood as continuity, consequence and corollary of the past. In political terms, many of the colonial regimes outbound process emerge as copy and continuity of that process.

In the case of Cape Verde, Portugal had little interest in post-independent country, since the country had no natural resources like other former colonies. However, Portugal was interested in the cheap labor force that was used before and even during the period of independence (first in the plantations in São Tomé e Príncipe, in Angola, and later in Portugal).

The process allow us to think in terms of a plot between Cape Verde and Portugal. For the Capeverdeans post-independence leaders, emigration should be included in the country development strategies, it would be beneficial for Cape Verde, because the emigrant would send their remittances (part of their incomes) to the family members who remained in the mother land. Cape Verde would get advantages from it, given that remittances help on GDP growth and government revenues, and alleviate public spending. On the other hand, Portugal influenced and participated in this plot, given that with the departure of Portuguese emigrants to Central Europe (France, Switzerland and Germany), it could create a stock of cheap labor force from Cape Verde, which would fill this exodus of Portuguese. Between 1960 and 1970 more than one million portuguese immigrants leaved Portugal, half a million to France (Sousa, 2003).

When we discuss the process of development conduct in Africa, by europeans countries, we can observe that they turned the story into a program, a necessary and inevitable fate. The conqueror should take responsibility for economic development of the conquered region and at the same time, should accept the responsibility to look after the welfare of the native populations (Esteva, 1998).

In the Sixteenth, development continued to be perceived as a path defined by the economic growth with several stages, and 'integration' was the slogan that linked the social aspect to the economic one.

In the Seventeenth, the UN resolution established a project to identify a unified approach for planning and development, able to fully integrate the social and economic components in the formulation of policies and programs, aiming to the inclusion of every sector of the population, in order to produce changes and development. It should operate a structural change that favors the development of national and active sectors of the population to participate in the process, to achieve greater equality in terms of income distribution and give priority to human development. This second decade of development was a large dispersion, the 'big issues' such as environment, population, hunger, women, habitat or employment began to be in the forefront. In the 70s the perspective was for a human-centered development.

The 80s was defined as the 'lost decade of development'. The obsession with competitiveness, the fear of getting out of the race leads to accept the destruction of the entire scope of what was 'developed' in the last thirty years. The idea was re-development, the priority was for transnational projects as requested by the world market. Re-development includes the economic colonization of the informal sector. In the name of modernization and under the banner of the war on poverty, redevelop the South means, according to Esteva, launching the last and final assault against organized resistance to the development and economy.

For the people in the margins or periphery, extricate itself from the economic logic of the market or the planning, became the necessary condition for survival. People are constrained to confine itself to economic interaction in the sovereign base areas outside spaces where they organize their lifestyles. These spaces are the last refuge during the era of development.

The main actor of the new common spaces, the man from the community, dissolves or prevents shortages in their fanciful efforts to confront their situation. He searches for free spaces or, at least, for spaces that support its initiatives.

It seems that there's some difference between the perspective of independence leaders/intellectuals and nowadays africans leaders (politicians and intellectuals), in terms of vision, engagement and perspectives with African peoples.

Amílcar Cabral's concept of 'class suicide', his most controversial one, a possible and foreseeable "suicide" of the petty bourgeoisie as a class, is not fallacious and contradictory in itself. However, if we want to use the theory as a weapon like Cabral recommends, we should not be content with easy victories of words, given that Cabral was facing a crucial aspect of the revolutionary movement of the twentieth century, the question of 'how to prevent this same enemy to return again, in subtle ways, to control the power and so to abort the long process of revolutionary transformation of capitalist world economy in a global, egalitarian and democratic "socialist order" (Davidson, 1983).

Cabral sees the petty bourgeoisie the only group capable of driving and use the tools that served the colonial state against the people. In the colonial situation, the petty bourgeoisie is the heiress of state power. When it hold the power, we consider that it returns to history, emerging new internal contradictions. According to Cabral, if the petty bourgeoisie remains identified with the fundamental interests of the masses (workers and peasants), it will have to commit suicide.

A reformist petty bourgeois only lead to a neo-colonial solution. The revolutionary petty bourgeoisie has only one way, if do not want to betray itself: 'to strengthen its revolutionary consciousness; repudiate the temptations of natural embourgeoisement and request of its class mentality, to identify with the working classes'.

Betray the revolution or suicide as a class, is the dilemma of the petty bourgeoisie in the general framework of the national liberation struggle. The majority of the petty bourgeoisie in the former colonies states was not free from of isolation and has never left that feeling of inferiority.

The petty bourgeoisie is essentially 'marginal', once isolated from the African masses there is possibility to "return to the sources". This "return to the sources" is an awakening a rejection of the dominant culture and authority. This return to the origins extends from individuals to groups and movements. The return will only have historical significance if it involves not only a real movement in the struggle for independence, but also a total and definitive identification with the aspirations of the masses, that rejects not only the foreign culture, but the foreign domination.

According to Wallerstein (1983), all revolutionary parties that came to power, discovered that the control of the state machine raised their political power. This feeling helped to decreased the atmosphere of a high degree of collective revolutionary consciousness and politicization. There were considerable social changes, but not as deeply as waht the working classes were expecting (Unequal distribution of income, corruption and arbitrariness).

As Amílcar Cabral argued, its the workers/peasants who must impose this class suicide to their representatives.' One of the key feature of African society in general, and Cape Verde, in particular, has been the inability of the mobilization of material and spiritual resources of the nation. The first obstacle has been the difficulty of mobilizing civil society.

There was a difficulty to define what civil society was and establish its parameters. The first problem arises at the level of national consciousness; many states were forged.

African states rarely organized power in order to mobilize the whole society. The state has emerged as an instrument to achieve the nation. The public authorities were trying to create little by little, a community in which each group identified with the community and the community identified with all its members. The power was often occupied by civil servants, who then tried to achieve economic and social power.

It's important to acknowledge that the nationalization of African society has served multiple purposes, especially the replacement of colonial power in many key aspects. At independence, the agents of colonial power, or foreign monopolies have occupied extremely important issues in the African economy and the only way to dislodge them was nationalizing these sectors. In some moments, the nationalization was due simply to the need to replace the colonial state, because it distributed water, electricity and other social services, everywhere. At independence, the new state was obliged to assume these obligations.

What we use to call State, the modern nation-state, appeared on the world scene after the treaty of Westphalia in 1648. The concept would not have had the strength that had if the French Revolution had not subscribed it, linking the history of the State to the one of nationalism. The concept of state that emerges from this experiment had some distinctive features.

The new concept presupposed a closer bond between the reality of ethnicity, nation and state, giving the state a more central role in society than did the old regime and redefining the state as the precursor of modern institutions associated with industrial capitalism. Under the influence of the concept of nation-state, the state is always seen as impartial and secular referee between the various classes, ethnicities and interests (Ashis Nandy, 1998).

Gradually, the concept of nation-state has tried to discredit and scatter all other nations of the Third World as primitive. The process was enhanced when society after society intellectuals and indigenous political activists, who clashed with the colonial power, found in the idea of the nation-state the fuel of economic success and Western political domination. Only today, over seventy years after World War II, some social analysts began to seriously see the increasing inability of nation-state to meet the needs of civil society styles.

Many Eurocentric critics, including Max Weber characterized the non-western states as pre-modern. They knew or respected very little the different traditions of conceptualizing the state in other parts of the world. Predictably, this mythical pre-modern state advocated by the most outstanding European scholars resembled so remarkable to african-Asian version of the ancien regime. It was mythical, because it destroyed analytically the past of the non-western, making them collapsing in an ideal type, as in Weber's case, instead of increasing the understanding of those societies, they decreased them.

The new critics considers that the concept of the modern state always appears weak, out of touch and unable to cope with new problems and threats to human survival. And the concept has acquired a large institutional power and has a large base in the global mass culture. It became an axiomatic component of conventional wisdom or common sense. This paradox made impossible, or create difficulties to mobilize and organize political power, also in the South, to resist the pathologies of the modern state.

For the benefits of the state, a growing proportion of citizens are willing to tolerate oppression as a sacrifice, while patriotic citizen does this for the future of the coming generations. It is reinforced in the minds of many in the 'Third World' countries that the state is one of the few conceivable tools to achieve progress and equality in the global context.

The idea of the nation-state has made its entry into the mainstream of society in the South by the colonial route. This experience has been internalized. When, after decolonization, indigenous elite gained control of the state apparatus, they quickly learned to

seek legitimacy in a native version of the civilizing mission. They seek to establish relationship between the type of colonial state and society. They found justification in theories of modernization that came into vogue after World War II. The role was to modernize and provide security to society. They used to call this sacrifices for the future of the country.

The development process controlled by the state, does not guarantee the development of society itself. There are a number of state in the world where development means the development of the state or the state sector. The appreciation of civil society and state reform through this control activity, can automatically lead to a redefinition of the sphere of the modern state. The consensus of the state about diversity, allows it to marginalize, democratically, grassroots initiatives of all kinds, and in particular those from the political parties.

All this situation has got historical consequences in Africa: the cold war impact, oppression, exploitation, systematic violence, restriction of freedom and human dignity, torture, world blocs, religious fundamentalism.

Reflection on Cape Verde's Development

Twenty years ago, sub-Saharan Africa (SSA) was a region of despair, outside Botswana, Mauritius, and Cape Verde. Democracy was a distant dream. There were more violence, corruption, no freedom of speech, violation of human rights.

Today, we are aware that African countries can not develop while they continue to function as clients of development and social institutions that have their own political agenda and economic organizations. Africa should not accept proposals for development that compromises their development vision and mission. The development in Africa must be based in African institutions and organizations, and the main component is people (Mararike 1998).

Cape Verde is a country of good news. The country is putting behind it the stagnation, and poverty. The old stereotypes of the sub-Saharan Africa don't apply to this country. Cape Verde initiated in 1991, after fifteen years of monolithic regime, a pluralist democracy after a brief transition period, completed by a political alternation and an extension of democracy through local power as a product of original historical process of the archipelago: geo-strategic position and historical opening to the world, ancient emigration, and some development of education sector (Fafali Kowdwo, 2001a).

Cape Verde, nowadays, tries to escape poverty and reach the Mecca of development. The country is out of the list of Least Developed Countries, is now advancing slowly to Lower Medium Development Country. The exit from a list to another does not means that the country is no longer vulnerable. This transition requires a careful approach to the country's sustainability and reduction of its vulnerabilities.

When we analyze poverty in Africa we faced two schools of thought: a) one that see the colonial legacy as the cause of African underdevelopment, stressing that the whole crisis that followed seems to have been the exploitation of Africans and the natural resources by European settlers; b) another cause that addresses colonialism and their attempt to fully integrate Africa into the global capitalist economy. For the first school, no continent was colonized for so long and by many European powers, and no civilization, cultures, indigenous traditions and social education were ruined as the African ones (Tirfe Mimmo, 1999).

Cape Verde is a country that started from zero in terms of economy, and in terms of many other goods and structures, but there was rigorous, careful, transparently and honestly investment of the donations from international solidarity, and good use of migrant remittances and sacrifice consented by the people, which was multiplied into wealth, more dignity, companies, factories, banks, insurance companies, merchant navy, services, qualified

personnel, etc., in reproductive assets yielding profits, producing work and created jobs for many workers (Pina, 2000).

Cape Verde is a country with some specific features: insular condition, small size, small population (Estevão, 2001). It belongs to the category of Small Island Economies (SIE), which creates a basis for economic isolation and difficulties in terms of relationships with international markets, with important consequences for its operation: i) poor diversification of the productive system, ii) weak institutional capacity, iii) distance and economic isolation, iv) very opened economy and v) strong dependence on foreign economy and market.

Over the past 15 years the country has had an annual growth in income per capita of 4.0% per year (Africa average is 3.2%), well above the global average of 1.9%. As result, the income of the average capeverdeans has increased by more than 67% (Africa average 50%) (Redelet, 2010).

Education, life expectancy has reach 72 and 74 years, for man and woman respectively. There's a vibrant democracy, liberty of press, competitive elections, better protection of human rights.

In 1991, after the liberalization of the economy and the introduction of democratic system, Cape Verde started to import models and methods inspired by liberals, leading to a deplorable situation, based on a bureaucratic minority that manages the economy and society, persisting in external consultation and technical assistance in projects that reinforce dependency.

Despite the vulnerabilities, structural poverty, environmental problems, scarce resources, excessive reliance on the international community, the country was able to invest in education and health, attracting Diaspora savings and FDI (Foreign Direct Investment). But the problem is that this move seems as *false development*, i.e. , Cape Verde is far from winning its economic sustainability, the country remains vulnerable and dependent on the international community. Even so, in recent years, the country has attracted thousands of citizens of the countries of West Africa, where the vast majority is in an illegal situation. Many enter the country based on the Free Movement Protocols between the ECOWAS countries. They come to Cape Verde due to the fact that the country garners freedom, social peace, political stability and some economic growth.

Cape Verde is, today, according to the credit policy of the African Development Bank (AfDB), a country with low average income (LMICs). The Gross National Product (GNP) per capita in 2010 was around \$ 3,270, well above the level of \$ 1175 per capita GNP of LMICs. Despite significant progress over the past two decades, the country continues to face some constraints and significant development challenges.

To respond to the decline in economic activity, resulting from international economic crisis (debt of euro zone), the Government adopted a public investment program (PIP) counter-cyclical to the 2010-2011 period. As a result, the Gross Domestic Product (GDP) accelerated to 5.4 % in 2010, subsequently slowing to 5 % in 2011. Experts consider that the fiscal stimulus offset the contraction in private investment and maintained an adequate level of infrastructural development. Tourism maintained the trajectory of recovery in 2011, but the current account balance continued to deteriorate, mainly due to higher imports of capital goods, reflecting the government fiscal stimulus. In 2012-2013, the baseline scenario from authorities assumed a contraction of fiscal policy and prudent monetary policy. The real GDP growth was around 5 %, allowing foreign reserves to ensure above three months of import cover of goods and services, to safeguard the fixed exchange rate with the euro. During this period, inflation was around 3% below the figures recorded in 2011 (4.5 %).

The IMF and World Bank specialists, who visit developing countries, or their advocates in these countries, are rarely insightful and innovative theoretically. They prefer to

release arbitrary assumptions with no transparency, based on calculation, believing in adjustment of the prices. The assumptions are made to produce global explanations, not based on realism, (Amit Bhaduri, Deepak Nayyar, 1997).

Many intellectual and bureaucrats from the South did not reject the prevailing orthodoxy - the 'Washington Consensus' - because it is not good for their careers. The international system of reward offers interesting jobs, not only in the IMF and World Bank, as well in the university. It's easier to get a job when you accept norms. There are no opportunities for anyone who challenges the established order.

To the bureaucrats of 'Third World' countries, the reward system is even simpler: a few years at the World Bank and the IMF with high wages, pension in dollars, ensures a more comfortable retirement. The rule is to apply the guidelines of the IMF and World Bank and have the reward at the right time. These technicians can leave the government to the World Bank or vice versa, is an opportunity to make a career.

It's important to ask whether there really is something beyond the current development paradigm, tangible goals that can be identified and towards which Africans can aspire – new ways of understanding how wellbeing could be secured in the greater context of a human existence fully cognizant of the cultural, social, spiritual and natural dimensions of that existence (Stelan Andreasson, 2010).

There's a need to promote a communal effort at reinventing development and overcome the alienation that modernity brought to us. There's a possibility for communities and nations, especially Africans, to build a better present and future, based on principles other than those deriving from the dynamics of the global economy and competitiveness.

It's by rethinking the role of the intellectuals and politicians, as Cabral (1978) pointed out, the Cape Verde trajectory and the political economy of transformation that we can begin to understand whether the questions we ask are feasible to begin with.

Besides all gains, the country must strengthen and reform the institutions, and reduce persistent and unjust inequality, which liberal vision of global market, and even the global markets alone will not resolve (Southall & Melber, 2010).

Conclusion

Both PAIGC/CV - *Partido Africano de Independência da Guiné e Cabo Verde* - as MPD - *Movimento para Democracia* -, the two strongest political parties in Cape Verde, used instrumentally cooperatives (the former) and NGOs and associations (the second) to impose a logic of *Godfather* (authority, manipulation) in the relationship with civil society. We are not putting in question the usefulness and functionality of these instruments. It is clear that cooperatives, NGOs and associations contributed, and still contribute, to a relative socio-economic development of Cape Verde. We are concerned about the autonomy of civil society and coexistence under the shade of a hegemonic and authoritarian *godfather*.

Cape Verde is paying a cost of transition from a political-economic system carried out in the absence of regulatory policies, as well as the importance of promoting dialogue and partnership between social, political and economic actors, and the strengthening of tripartite institutions.

In our view one of the strategies used to combat or counteract the generating structure of underdevelopment and chronic citizenship deficit was, at an early stage, the use of some legacy of Amílcar Cabral, especially the principles of revolutionary democracy, the major international solidarity, good foreign policy, trained staff abroad and the maintain of a certain social peace.

However, the attempt of strengthening the nation and maintaining the social peace has created a situation in which public institutions gave little importance to the construction of

local citizenship. We think that this chronic citizenship deficit persists today through institutional practices that block the relationship/interaction between citizens and institutions.

The absence of reflections on the process of citizenship itself, which can be considered implemented and sediment, and some social changes that are taking place in Cape Verde are shaking the social peace in Capeverdean society. We also realize that a huge social cleavage is drawing, and the inability of the state to reduce chronic unemployment, some corruption, clientelism and a certain careless and abandonment of public service.

The generating structure of underdevelopment, inherited the period of independence is mobile, i.e., nobody can destroy it, even with the development of good public policy and projects. It can return at any time, with more energy, because there are internal and external conditions that propitiate it.

This structure was not totally rejected, it was fought, in certain way in people's mentality (because actions/practices start in the mind), and in the *modus operandi* of central and local institutions; and even the political elite can neutralize it, to the extent that their practices reinforce the foundations of it, to install not only in public institutions, but in society itself. The structure contains values, norms, facts and creatures that only justified if understood as continuity, consequence and corollary of the past.

A relevant indicator of the reproduction of this structure has to do with the fact that the local citizen stand and wait for the municipality to resolve his/her problems, the municipality, in turn, looks for the Central Government and the latter looks at the international donors. It's a cycle.

References:

- Andreasson, Stefan. (2010). *Africa's Development Impasse: Rethinking the Potential Economy of Transformation*, Zed Books, London.
- Bahduri, Amit. & Nayyar, Deepak. (1997). *Le Consensus de Washington et la Liberalisation de l'Économie. Revue Tiers Monde* N°150 Avril-Juin, pp295-310.
- Bocaccin, Lucia. (1993). *La Sinergia della Differenza: Un'Analisi Sociologica Del Terzo Settore in Italia*, FrancoAngeli, Milano.
- Cabral, Amílcar. (1978). *A Arma da Teoria: Unidade e Luta*, Volume I Seara Nova, Lisboa.
- Cardoso, Renato. (1987). *Estado e Desenvolvimento em África*, in *Economia e Socialismo*, Ano X N°71, Lisboa, Março, PP45-69.
- Colozzi, Ivo et al. (1993). *Terzo Settore e Nuove Politiche Sociali in Italia e in Europa*, in *La Ricerca Sociale* N°49, Franco Angeli, Milano.
- Davidson, Basil. (1983). *Sobre o Nacionalismo Revolucionário: O Legado de Cabral*, in *Continuar Cabral: Simpósio Internacional Amilcar Cabral – Cabo Verde*, 17 a 20 de Janeiro de 1983, pp 83-126.
- Esteva, Gustavo. (1998). "Sviluppo", In Wolfgang Sachs et al, (1998) *Dizionario dello Sviluppo*, Edizioni Gruppo Abele, Torino, pp347-378.
- Estevão João. (2001). *As Pequenas Economias Insulares e as Condições do Desenvolvimento Económico*, *K(C)ultura*, Revista de Estudos Cabo-verdianos, Setembro, Número Especial, pp71-78.
- Koudawo, Fafali. (2001). *Cabo Verde, Guiné-Bissau: Da Democracia Revolucionária à Democracia Liberal*, Bissau, INEP.
- Mararike, Claude. (1998). *African Philosophy and Human factor Development*, PP87-95, in C Chivaura, C.G. Mararike, *The Human Factor Approach to Development in Africa*, University of Zimbabwe Publications.
- Mimmo, Tirfe. (1999) *The Paradox of Africa Poverty: the Role of indigenous Knowledge, Traditional Practices and Local Institutions – The Case of Ethiopia*. The Red Sea Press, Asmara.

- Nandy, Ashis. (1998) Stato, PP329-346, p 330, in Wolfgang Sachs et al, *Dizionario dello Sviluppo*, Edizioni Gruppo Abele, Torino.
- Radelet, Steven. (2010). *Emerging Africa: How 17 Countries are Leading the Way*, Centre for Global Development, Washington.
- Stanzani, Sandro. (1998). *La Specificità Relazionale del Terzo Settore*, FrancoAngeli, Milano.
- Sousa, Nardi. (2003). *Cidadania Local e Terceiro Sector: Experiências de Welfare Mix em Cabo Verde*. ISCTE, Lisboa.
- Southall, R., Melber H. (2010). *A New Scramble for Africa? Imperialism, Investment and Development*, University of Kwala-Zulu Natal Press.
- Wallerstein, Immanuel. (1983). *A Integração do Movimento de Libertação Nacional no Quadro da Libertação Internacional*”, in *Continuar Cabral: Simpósio Internacional Amílcar Cabral – Cabo Verde*, 17 a 20 de Janeiro de 1983, pp493-501.
http://www.biodiversity.ru/coastlearn/tourism-eng/con_capacity, World Tourism Org.
 UNEP/MAP/PAP,1997,<http://www.unepmap.org>
http://ec.europa.eu/environment/iczm/pdf/tcca_en.pdf
- Coccosis, H. & Mexa, A., *Challenge of Tourism Carrying Capacity Assessment*, Ashgate 2004
- Garrigós-Simón F., Narangajavana Y., & Palacios-Marqués D., 'Carrying capacity in the tourism industry': a case study of Hengistbury Head' *Tourism Management* 2003
- Briassoulis H., Policy and Practice, Sustainable Development and its indicators: Though a (planner's) Glass Darkly, *Journal of Environmental planning and Management* vol. 44(3), 409-427, (2001)
- Stein I, Riley J., Halberg N., Issues of scale for environmental indicators, *Agriculture, Ecosystems and Environment* vol. 87, 215-232(2001)
- Petrosillo I., De Marco A., Botta S., Comoglio C., EMAS in local authorities: Suitable indicators in adopting environmental management systems, *Ecological Indicators*, Elsevier vol. 10.1016, ecoind.(2011)
- Trumbic I., Tourism carrying Capacity assessment in the Mediterranean Coastal Tourist Destinations, *14 Biennial Coastal Zone Conference*, New Orleans Louisiana, July 2005
- Papayanis T., 'Tourism carrying capacity in areas of ecological importance'
- Tselentis B.S. and Prokopiou D.G. 'Proposals for sustainable development and environmental protection for the island of Rhodes', Rhodes 2003, Publication Rodiaki 27 -5-04(in Greek)
- Papayanis T., 'Tourism carrying capacity in areas of ecological importance'
- .Fidelis T., "Integrating environmental issues into the Portuguese planning system- 10 years of emerging challenges and persistent problems" *Conference on sustainable planning and development* Bologna 2005, Wessex Institute of Technology
- Prokopiou DG ,Tselentis BS Bousbouras D. &Toanoglou M "Environmental impacts caused by the tourist industry in Elafonisos Island and the Neapoli district, Greece" *ECOSUD 2007*, Organised by: Wessex Institute of Technology, UK -The University of Coimbra, Portugal-The University of Siena, 4 – 6 September 2007 Coimbra, Portugal

ISSUES IN DEFINING REGIONAL DEVELOPMENT: EXPLORATION POTENTIAL FROM THE SEA OF AZORES

Luz Paramio

Teresa Tiago

Flávio Tiago

Sandra Faria

University of Azores, Portugal

Abstract

Purpose – The purpose of this paper is to consider the methodological issues in last years of business development in the ocean-cluster research, which are holding back further development.

Design/ methodology/ approach – The paper reviews several studies on business development and classifies definition inconsistencies found. Those differences are compared with methodological choices on sampling and with subsequent results.

Research implications – Research on business development needs to introduce more attention to ocean-driven activities as a prerequisite for its advancement. The authors propose a framework based on the 10 issues identified to advance towards a consensus definition.

Practical implications – Most measures launched are formulated based on studies done on inconsistent definitions and biased results. They might need to be reassessed.

Findings – The diversity of definitions is explained by difficulties to obtain data and leads to different results. The authors propose a framework to advance towards a consensus definition, correctly contextualize the phenomenon of ocean-business investing and redefine public policies going forward.

Originality/ value – The paper highlights the consequences of the lack of definition consistency in a research field of high interest for policy makers and practitioners.

Keywords: Business development, Blue Ocean, definition

Introdução

A globalização provocou profundas alterações no panorama competitivo mundial, originando um novo conceito de regiões económicas. Este fenómeno foi agravado pela crescente e rápida difusão do conhecimento, que permite retirar partido das vantagens inerentes aos processos de inovação mais rápidos e à ubiquidade da Internet. Neste contexto, o desafio que se coloca às economias mais periféricas é o de olhar para a economia numa perspetiva regional, baseada estrategicamente numa política de foco em atividades económicas específicas. Como consequência desta mudança de paradigma, os clusters estratégicos regionais surgiram, nos últimos anos, como determinantes do desenvolvimento regional.

Neste contexto, surge uma nova forma de equacionar os clusters regionais. Passam a ser considerados como um conjunto de empresas geográficas concentradas que trabalham ao longo de uma cadeia de valor específico e aproveitando-se dos esforços sinérgicos para gerar vantagens competitivas (Porter, 1998). Existem diversos trabalhos teóricos e empíricos sobre os clusters que apontam que clusters podem estimular a inovação e a produtividade das empresas (Asheim et al., 2006).

Apesar destes desenvolvimentos, não se encontra consenso na literatura sobre a definição do cluster e do modo como estes podem ser compostos em torno de um recurso específico existente numa região. É esta a linha de investigação que este trabalho procura seguir, apresentando os ganhos de se apostar no desenvolvimento económico de uma região em torno de recursos endógenos da mesma.

Apesar das numerosas contribuições encontradas na literatura relacionadas com os clusters regionais estratégicos, surgem muitas questões quando se olha especificamente para o cluster marítimo. Este trabalho visa analisar algumas destas questões, aplicadas à região dos Açores.

Enquadramento teórico

O desenvolvimento económico regional tem atraído o interesse dos economistas, geógrafos, políticos e cientistas regionais desde há muitos anos. Porém, o contexto e os eixos de intervenção têm sofrido alterações ao longo do tempo. Neste sentido, encontram-se evidências nas áreas mais distintas da importância de alguns setores de atividade no processo de desenvolvimento dos clusters (Paramio et al, 2013).

Trippl (2006) argumenta que há quatro razões que justificam olhar para os clusters numa perspetiva regional, a saber:

1. Inovação – as atividades de inovação apresentam padrões geográficos distintos. Vários autores têm demonstrado a existência de padrões de inovação, (Doloreux, 2004; Vang et al., 2007). No trabalho de Natário et al. (2010), é apresentada uma reflexão sobre os padrões de inovação das regiões portuguesas e é sugerida a existência de quatro padrões de inovação em Portugal. De acordo com os autores, os Açores surgem como uma região isolada, com uma menor taxa de inovação.
2. Difusão de conhecimento - A difusão do conhecimento quando aplicada numa determinada área geográfica, tende a funcionar como elemento de contaminação dos agentes no processo de inovação, (Bottazzi & Peri, 2003).
3. Conhecimento tácito – O conhecimento tácito e o estabelecimento de relações de cooperação baseadas na confiança entre os diferentes agentes surge também como elemento determinante. Apesar da tendência crescente para a codificação e a quantificação do conhecimento, a inovação tende a basear-se e a confiar muito no conhecimento tácito e, por consequência, é difícil de quantificar (Polanyi, 1966). Porém, para que ocorra esta partilha de conhecimentos de natureza tácita é necessário existir uma rede de contatos e laços de confiança. Estes dois aspetos tendem a ganhar com a proximidade das fronteiras geográficas (Morgan, 2004; Tödtling & Trippl, 2005).
4. Competências e instituições - O nível de competências e instituições regionais, quer pelas suas competências, quer pela sua tipologia podem funcionar como elementos impulsionadores incrementais da atividade empresarial e da promoção de redes colaborativas. Neste sentido, tendem a apresentar um comportamento ativo no sistema regional de inovação (Cooke, 2001; Goodwin et al., 2006).

Seguindo esta perspetiva, as dimensões foram definidas como apresentado abaixo e tendo em conta as especificidades de um cluster marítimo tal como mencionadas por Wiljnost et al. (2003).

Tabela 1 – Dimensões de análise do cluster regional

Dimensão	Conceito
Inovação	A inovação é a conversão do conhecimento num benefício que pode ser comercializado ou usado como bem público. No contexto do mar, reflete a busca e o avanço, experimentação, desenvolvimento, reprodução e adoção de novos produtos, processos organizacionais e novas ideias de negócio que gravitem em torno do mar.
Conhecimento	Fluxo misto de experiência moldada, valores, informação contextual e opiniões de

	especialistas que fornece uma estrutura para avaliar e incorporar novas experiências e informações. Origina-se e é aplicada nas mentes do Sapiente e pode ser adotada em processos organizacionais.
Redes colaborativas	Uma rede colaborativa consiste num grupo de empresas, indivíduos e outras entidades organizacionais que trabalham juntos, com vista a alcançarem sinergias da colaboração e que possuem os recursos necessários para alcançar um resultado específico, numa cadeia de valor do negócio.
Smart Governance	Engloba a estratégia de governança inclusiva, global e orientada para o desenvolvimento do conceito de bem comum e de políticas públicas. Esta abordagem é suportada pela inovação e pela tecnologia, que são utilizadas de forma integrada com vista à construção de um sistema de sustentabilidade económica, social e ambiental.

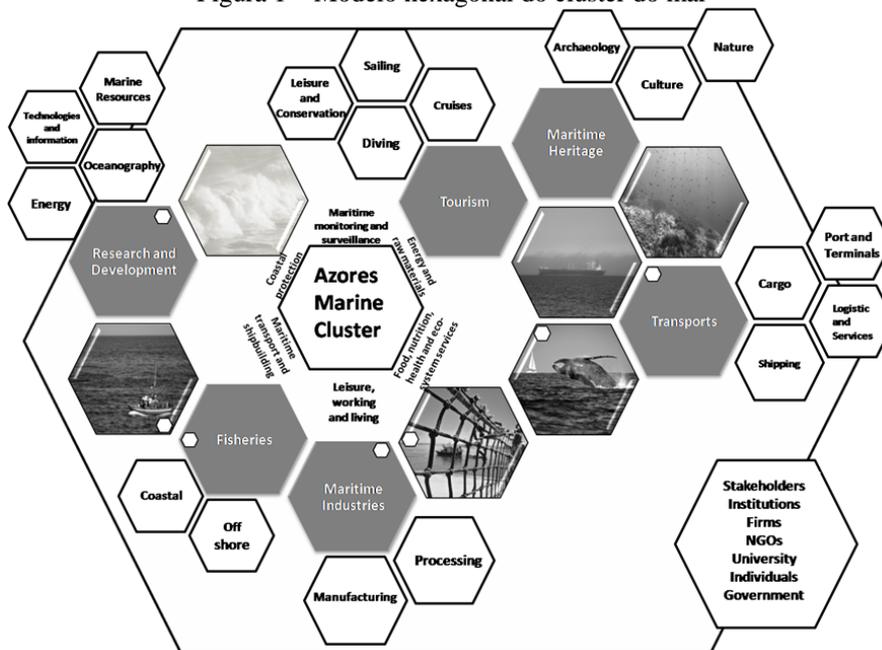
De acordo com a teoria de desenvolvimento económico endógeno, os fatores que mais influenciam a dinâmica inovadora das empresas estão associados à criação e distribuição de novos conhecimentos através do capital humano (Arrow 1962; Romer 1986, 1990; Uzawa 1965, cf Tiago et al, 2012). Este capital humano pode assumir um papel ativo no modelo de desenvolvimento económico, quer pela criação de novos negócios, quer por uma postura inovadora dentro das organizações preexistentes, ou seja o intraempreendedorismo e o empreendedorismo.

O empreendedorismo não possui uma definição única, podendo-se elencar um conjunto que abarcará conceitos como os de inovação de Schumpeter (1934), de criatividade de Von Stamm (2008) e de cultura regional empreendedora de Storper & Scott (2009). Neste trabalho o empreendedorismo entende-se como um processo no qual se realiza algo criativo e inovador, objetivando a geração de riqueza e valor para os indivíduos e para a sociedade (Filion, 2004; Shane; Venkataraman, 2000; Bruyat; Julien, 2000, cf Tiago et al 2012).

Nesta ótica, duas visões são relevantes: a do empreendedor como agente de inovação e a do empreendedor como articulador de redes. Estas duas noções, apesar de distintas, entrecruzam-se na medida em que um empreendedor pode ser entendido como um indivíduo com capacidade de criação de redes submetidas a graus variados de inovação.

Quando observamos a estrutura de cluster regional do mar proposta por Paramio et al., (2013), consegue-se encontrar o capital humano e o mar como os elementos comuns a todas as atividades e iniciativas potenciais:

Figura 1 – Modelo hexagonal do cluster do mar



Após uma revisão dos principais quadros teóricos que foram aplicados para nos ajudar a entender esses processos, destacamos as maneiras em que as tentativas atuais para compreender as relações entre o turismo, o empreendedorismo, o mar e o desenvolvimento económico se entrecruzam no cluster estratégico do mar. Quer pela complexidade de relacionamentos intra e entre indústrias que este cluster encerra, quer pelo seu potencial para as ilhas e locais mais remotos, como ainda a sua influência no surgimento de novos negócios, o cluster estratégico do mar requer uma atenção especial.

Defendemos que as novas formas de ver e estudar a economia da geografia do “turismo de mar” devem refletir uma cultura inovadora e empreendedora que integre a nova geografia económica e a importância crescente das redes e novas tecnologias de informação e comunicação.

Considerações Finais

Este trabalho é uma primeira abordagem que procura interligar áreas até agora analisadas de forma isolada: desenvolvimento económico, turismo, mar e empreendedorismo.

Os clusters regionais estratégicos são importantes fontes de desenvolvimento económico e seu impacto no processo de incremento das condições locais e regionais de governança e sustentabilidade precisam ser avaliados (Neto & Serrano, 2011). Pesquisas anteriores, demonstram que os clusters bem sucedidos têm por base o estabelecimento de ligações entre as empresas constituintes do cluster, bem como uma elevada capacidade de inovação, especialmente nos clusters de base tecnológica.

Verifica-se, ainda, que as regiões com modelos de desenvolvimento económico sustentado tendem a possuir um elevado grau de inovação e empreendedorismo na base do seu modelo de crescimento.

Este trabalho encontra-se ainda numa fase inicial, pelo que apresenta limitações quer quanto à profundidade dos conceitos analisados, quer pela inexistência de evidências empíricas que suportem o quadro conceptual. Numa próxima fase, procurar-se-á efetuar o levantamento de dados para o cluster do mar dos Açores, no domínio do turismo, inventariando o potencial empreendedor que lhe está associado.

References:

- Asheim BT, Coenen L. Contextualising Regional Innovation Systems in a Globalising Learning Economy: On Knowledge Bases and Institutional Frameworks. *Journal of Technology Transfer* 2006;31(1):163-73.
- Bottazzi L, Peri G. Innovation and spillovers in regions: Evidence from European patent data. *European Economic Review* 2003;47(4):687-710.
- Cooke P. Regional innovation systems, clusters, and the knowledge economy. *Industrial and corporate change* 2001;10(4):945-74.
- Doloreux D. Regional innovation systems in Canada: a comparative study. *Regional Studies* 2004;38(5):479-92.
- Goodwin M, Jones M, Jones R. Devolution and economic governance in the UK: Rescaling territories and organizations. *European Planning Studies* 2006;14(7):979-95.
- Morgan K. The exaggerated death of geography: learning, proximity and territorial innovation systems. *Journal of Economic Geography* 2004;4(1):3-21.
- Natário MMS, Couto JPA, Tiago MTB, Braga AMM. Factors and Dimensions of National Innovative Capacity. *Innovation in Business and Enterprise: Technologies and Frameworks* 2010:92.
- Neto P, Serrano MM. Governance and Creativity on Urban Regeneration Processes. *CEFAGE-UE Working Papers* 2011.

- Paramio, L; Tiago, T; Tiago, F, Vieira, J. Contributions of marine cluster for regional sustainability: economic prospective for Azores. *Maria Scientia-scientific e-journal* 2013,6(1):48-67.
- Polanyi M. The logic of tacit inference. *Philosophy* 1966;41(155):1-18.
- Porter ME. The Adam Smith address: Location, clusters, and the " new" microeconomics of competition. *Business Economics* 1998;33(1):7-13.
- Schumpeter, J. *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle* 1934;(55), Transaction Publishers.
- Storper, M, & Scott, A. Rethinking human capital, creativity and urban growth. *Journal of Economic Geography* 2009.
- Tiago MTB, Tiago F, Botelho M. *Dinâmicas regionais: ideias e desafios*. In: iBook, ebook. Ponta Delgada; ISBN 978-989-97942-0-7; 2012.
- Tödting F, Trippel M. One size fits all?: Towards a differentiated regional innovation policy approach. *Research Policy* 2005;34(8):1203-19.
- Trippel M. *Cross-Border Regional Innovation Systems*. 2006.
- Vang J, Coenen L, Chaminade C, Asheim B. Universities, Regional Innovation Systems and the Bangalore Experience: Towards a Contextual and Evolutionary Perspective. In: Chen Jin XQ, Wu Xiaobo, (Ed.), editor. *5Th international Symposium on Management of Technology (ISMOT'07)*; 2007; Hangzhou: Zhejiang University Press; 2007. p. 884-8.
- Von Stamm, B. *Managing innovation, design and creativity*. John Wiley & Sons,2008.
- Wijnolst N, Jenssen JJ, Sodal S. *European maritime clusters: global trends, theoretical framework, the cases of Norway and the Netherlands, policy recommendations*: Foundation Dutch Maritime Network; 2003.

ART IN THE SERVICE OF THE CHURCH IN YORUBALAND OF SOUTH-WESTERN NIGERIA: AN APPRAISAL

Emi Rod Adoh, PhD

Department of Creative Arts Tai Solarin University of Education Ijebu-Ode, Nigeria

Babatunde Samuel Olufemi

Department of Linguistics and European Languages University of South Africa (UNISA)
Pretoria, South Africa

Abstract

The association of artworks with religion is dated back to the pre-historic times. The Yoruba who live in south-western Nigeria have traditional religions which were serviced by local artists before the advent of Christianity in the area. Utilizing some Western artworks as well as traditional ones, which were produced by local artists/artisans with materials and tools derived from the immediate physical environment, the Christian missionaries built and decorated the early churches they constructed in Yorubaland during the nineteenth century A.D. Christian patronage increased from the 1980s in south-western Yorubaland with the founding and proliferation of Pentecostal Christian Ministries. The aim of this paper is to conduct a concise historical survey of Christian's patronage of art in the area. This is done with a view to revealing the extent to which art contributed to the success of Christian church liturgies and evangelism there. In the end it was observed that art has contributed immensely to the planting, growth and sustenance of Christianity in the end it was observed that art has contributed immensely to the planting, growth and sustenance of Christianity in Yorubaland of southwestern Nigeria.

Keywords: Christian missionaries, Churches, artworks, Yorubaland

Introduction

It is pertinent to open a discussion on a topic like art - a very broad subject, by defining its scope and citing examples of it in this paper. Art within the scope of this paper is limited to the visual arts, which consist of graphic and textile designs, ceramics, paintings, sculptures, architectures and their allied crafts. It therefore, excludes the literary and performing arts, which pertain to dance drama and music.

Prior to the early fourth century A.D. when Christianity was legalized and the arts used in its practice became common in the Roman Empire, art has been associated with man's religious practices in ancient world. It is believed today that prehistoric cave drawings and paintings of Paleolithic man, which were found in several parts of the world, were the vestige of early man's magico-religious rituals (Bazin, 1958: 1-7 Gombrich, 1972: 19-79). Indeed, all the different peoples of the world have practiced some kinds of religions that were related to their various traditional belief systems. The Yoruba had such religions before the arrival of Western missionaries in their area. These, like Ogun Sango, Obatala and Esu religions, had depended on traditional arts and crafts like statues/statuettes that were carved in wood, woven/dyed costume and hair weaving/plaiting, tattooing in performing their rituals and liturgies.

Although European explorers had reached the Nigerian coastal towns of Warri, and Gwatto at the mouth of the Benin River in the Gulf of Guinea in the 15th century, it was not until September 24, 1842 that missionaries of the Wesley Methodist Church arrived in Badagry, a coastal town in southern Yorubaland. They were subsequently followed by members of the Church Missionary Society (CMS) of the Anglican Church in 1843; the Southern American Baptist Society in 1850, and the Society of African Missions (SMA) in the 1860's (Ajayi, 1965: 13-15).

From their initial stations in Badagry and Abeokuta, the Christian missions made vigorous attempts to open stations in the interior of Yorubaland and elsewhere in southern Nigeria. These were stalled for sometime in Yorubaland by the Yoruba civil wars and the hostilities of some Yoruba people, like the Ijebu, to Christian missionary enterprise (Ajayi and Smith, 1971: 9-122; Johnson, 1921: 235-637). Christianity was, eventually, planted firmly in Yorubaland following the intervention of the British colonial government in the civil war at the close of the 19th century (Johnson, 1921: 606-668). Consequently, several Yoruba towns and villages had churches most of which have since collapsed, dilapidated or renovated. Some have new churches built to replace them.

New indigenous Christian churches were founded in the late nineteenth century in Yorubaland. Their founding was facilitated by the discrimination against indigenous clerics by Western missionaries; the persecution of some indigenous converts because of their traditional African lifestyles; doctrinal differences, and the schism arising from management problems in the orthodox Churches. Some of the earliest churches to be established as a result of these reasons are the United Native African Church and the African Bethel Church founded in 1891 and 1901 respectively (Ajayi, 1965: 272-273).

Events, which engendered the proliferation of churches in Yorubaland, took place in Ijebu-Ode and Ilesa simultaneously during the First World War (1914-1918) in the second decade of the 20th century A.D. Two prayer groups that were organized in these towns by some members of the Anglican Church crystallized into a Pentecostal church, which was affiliated to The Faith Tabernacle (a Pentecostal church in USA) in 1923. Serious misunderstanding with the authorities of Faith Tabernacle abroad and the persecution of its Nigerian members such as Apostle Joseph Babalola, by officials of the British colonial government compelled the Nigerian body to terminate its affiliation with the church and forge a new one with the Apostolic Church of England. It is from this new relationship that the Apostolic Church and the Christ Apostolic Church (CAC) of Nigeria metamorphosed (Adebanjo, 1996:2; Emi-Oliseyenum, 2007: 109-118).

Some other indigenous Nigerian Christian religious movements which sprang up in south-western Yorubaland in the 20th century are The Church of Our Lord (Aladura) (1931), the Cherubim and Seraphim (1925), the Celestial Church of Christ (1947), The Redeemed Christian Church of God (1948) and The Deeper Life Bible Church (1973). A number of foreign Christian religion organizations have also planted churches in south-western Nigeria. Examples of these are the Apostolic Faith (1944), the Foursquare Bible Church (1955) and The Seventh-Day Adventist Church (1914).

Christian Art in Yorubaland

In the beginning, Christian missionaries applied some artworks in carrying out their work in Yorubaland. The first type of artwork created for Christian religious worship in south-western Yorubaland by the early Christian missionaries is church architecture. In doing this, the missionaries, like their contemporaries in other parts of Nigeria, took cognizance of the physical environment of the area (in terms of its climate and weather) and the indigenous people's architectural materials and technology. The diverse features of the land, which is situated within the rain forest zone, savannah, riverine and coastal areas determined the

missionaries' use of materials like mud, bamboo, raffia palm frond, timber, leaves and grasses in the construction of church buildings. The walls of the churches in the riverine, lagoon and coastal areas were made mainly with raffia palm fronds and propped with strong wooden posts. The latter were derived from the mangrove trees, which exist abundantly in the area and could withstand the physical condition of the area. Some towns in which such building were and are still being constructed are Lagos, Ikorodu, Epe Itebu-Manuwa, Iwopin, Imeko, and Imobi. Others are Makun, Eleko, Lekki and Ebute-Oni in Yorubaland.

Initially, the walls of the churches built in towns, like Abeokuta, Ijebu-Ode, Ijebu-Igbo, Ago-Iwoye, Ibadan, Oyo, Iwo, Ikire, Ile-Ife, Ondo, Akure, Ile-Oluji, Ogbomosho, Osogbo, Ilesa, Esa-Oke, Ikole-Ekiti, Ikere-Ekiti and Ado-Ekiti, which are located in areas of highland were made of swish mud or daub and wattle (Emi-Oliseyenum, 2007: 9). Church building roofs were often made with thatches created with palm fronds and grasses. For example, the *bere* grass (sacrophyrynium species), *ewegbodogi* (anadelphia arrecta), bamboo and raffia fronds were used for this purpose in the savanna, rain forest, and riverine areas, respectively (Emi-Oliseyenum, 1984: 38-39).

The arrival of liberated slaves from Brazil via Liberia and Sierra Leone provided much impetus for church architectural development as majority of the missionaries constructed churches. Some of these churches, which were characterized by the flamboyance of Baroque art style, have been pulled down, ostensibly with the intention of replacing them with the so-called modern ones in recent times (Godwin, 1996: 21-23; Adeleke et. al. 1999: 51-65). The Holy Cathedral in Lagos, the old St. Peter's Anglican Church, Ake in Abeokuta and the Anglican Church at Kudeti in Ibadan exemplify the churches of this era.

The opening up of the interior of Yorubaland by the creation of motorable roads and railway lines from Lagos to Osogbo in 1910 facilitated the transportation of building materials and personnel into central and northern Yorubaland (Akinwunmi, 1996:16). Thus churches with cement walls and corrugated zinc roofs began to appear. Many of such buildings which had the conventional crucifix ground plans that were common features of ancient orthodox churches have, since the Second World War (1939-1945) years, given way to the construction of free form ones that conform with the international styles. The Dominican Chapel in Ibadan, which was designed by Demas Nwoko exemplify these. The palatial Methodist Cathedral in Ilesa, which is in the form of a rotunda and the new St. Annes' Anglican Church in Ibadan, both of which were built during the cocoa and oil-boom economic era in Nigeria respectively, symbolize the extent to which the economic condition of a society can impact on the design, size and construction technology of buildings and hence, churches. The free form church buildings were preceded by churches with facades of austere flat rectangular shapes and forms that were sometimes erected by fledging Pentecostal ministries.

It is noteworthy that the interior of some of the churches in Yorubaland, like those built elsewhere in Nigeria, are decorated with stained glass. Some churches in the area of this study have facades that are decorated with mosaic tiles. A series of artworks, usually in the form of paintings that illuminates Biblical stories such as *Christ's Last Supper*, *The Storm*, *Christ's Temptation by Satan* as well as the fourteen *Stations of the Cross* are used not only to adorn the church interior but also to remind the congregation continually of the passion of Christ and his sacrifice to save mankind. Pulpits, lecterns and altars were executed with wood and glass.

There are many churches of the era in Yorubaland with carved wooden door panels. Some Christian chapels, especially those of the Catholic and Celestial Church of Christ, have statues of Jesus Christ, Holy Mary as well as those of some other revered Christian figures or objects such as the crucifix of iconic significance, which executed in wood or cast with ferro-concrete materials, erected within and outside them. For instance, Rod Adoh Emi

designed a commemorative centenary anniversary cenotaph for the Emmanuel Anglican Church, Italupe in Ijebu-Ode, Nigeria, which was executed by the staff of the Department of Fine and Applied Arts of the Tai Solarin College of Education, Ijagun in Ogun State, Nigeria, in 1992. In a similar vein, the Saint Sebastian Catholic Cathedral, Ijebu-Ode, Nigeria, commissioned Rod Emi and Samkay Adekoya, (sculptors) to execute the life-size statue of its patron saint (St. Sebastian) in fibre glass in 2011. This was unveiled during the Cathedral's centenary anniversary in November that year.

Churches have also used copies of the Bible, catechism, prayer books, hymnals and wall hangings in form of posters, which portray the images of Jesus Christ and notable scenes from the Bible in their religious works. These graphic art products as well as wooden crucifix in various sizes were used to facilitate the education and indoctrination of the new Christian converts and their liturgies. The wall hangings were also used to beautify the interior parts of the churches.

Post- Independence Christian Art

Post-independence Christian art was influenced by the introduction of Western art education and further development in the visual art forms that were associated with Christian religious worship. Church architectural designs experienced a kind of rejuvenation as attempts were made to imbue its church facades with African identity. This was doubtlessly a result of the clamour of Nigerian artists, who had acquired formal Western art education, for the restoration of Nigerian or African character or images in their artworks immediately after independence. Demas Nwoko designed the Dominican Chapel at Samanda in Ibadan. Indigenous Nigerian artists also created artworks for church decoration. Ben Enwonwu's wooden sculpture the *Risen Christ*, which some radical Muslim students of the University of Ibadan attempted to set on fire in the late 1990s, was used to adorn the interior of the Chapel of Resurrection in the University.

Yusuf Grillo executed stained glass works for the Presbyterian Church in Yaba, Lagos. The church was designed by Atkinson, an indigenous Nigerian architect. Ajidaun, a Nigerian artist who was formerly an art teacher at the Adeyemi College of Education, Ondo cut a niche for himself in the Nigerian art world by producing several stained glass works for Christian churches in towns, like Owo and Ilesa in central and eastern Yorubaland.

The positive results of experimental art workshops such as the ones, which were organized for indigenous artists, craftsmen and women between 1947 and 1953 by Reverend Fathers P.M. Kelly, Kevin Carroll and O' Mahoney in Ondo, Ikole-Ekiti and Ijebu-Igbo respectively began to show in the period immediately after independence, in Yorubaland (Beier, 1960: 14-15; Adepegba, 1995:81; Oladimeji, 1999: 65-68; Geteloma 2005: 238-239). This followed Papal approval that indigenous artworks could be used by its missions abroad if they (the works) do not contradict Catholic Church doctrines. Some of the beneficiaries of the workshop at Ikole-Ekiti of which Lamidi Fakeye, the renowned wood carver is inclusive, won commissions to produce carved wooden door panels, pulpits, altars, wooden crucifix and other objects of Christian religious worship for churches (Willett, 1971; 228-237). For instance, Our Lady of Wisdom Catholic Church in the University of Ibadan has carved wooden and metal repoussi door panels, which were executed by such artists. The new St. Anne's Anglican Church at Molete in Ibadan has several of such doors that were carved by Tunde Allen-Taylor, an avant garde artist (Emi, 2009: 20). The churches also request for that artist and craftsmen and women produce pulpits and lecterns with animal motifs like eagles and lions portrayed on them.

Filade Marble Works, an indigenous marble works company has produced several works for church decoration. Among these are baptismal fonts, altars as well as pulpits and lecterns that were initially made of wood. It is remarkable that some churches, especially new

generation Pentecostal churches have availed themselves of the advancement in metal and glass working technology in contemporary times to produce their church furniture. They have altars, pulpits and lecterns that are made of glass sheets, which are set in aluminum; silver or chrome-coated metal pipes and rods.

The interior of the churches in Yorubaland, like those built in other parts of Nigeria are decorated with different materials. The Methodist Cathedral, Otapete in Ilesa has timbered walls and ceiling. Rug is often spread on church aisles, altars and often in the apse in which the presiding priests, pastors or ministers seat.

Church Vestments

An aspect of church art that is seldom paid due attention is Christian textile fabric designs and costumes. This is in spite of the fact that they have implication for church life and operations. Unlike some new generation church ministers, like those of the Mountain of Fire and Deeper life Bible Church, the ministers of Catholic, Methodist and Anglican Churches wear garments, which are designed specially for their offices. Indeed, the ministers and entire members of some indigenous Nigerian Pentecostal churches such as the Cherubim and Seraphim (C&S), the Celestial Church of Christ (CCC) and Church of the Lord (Aladura), which are located in Yorubaland, wear assorted cassocks, caps, belts that are made of satin, velvet, damask and brocade of different colours. The costumes may also be decorated with sequin, metallic lace and tassels. The cross, dove, sheep and other motifs of iconoclastic significance could be sewn onto them (Renne 2005:209-210).

These costumes are worn with the objective of distinguishing church leaders from the rank and file members of the churches. Church choir members wear uniforms, which were usually in the form of gowns, hoods and caps. Geleloma (2005:239-246) informs that Yoruba textile designs have also been used as altar cloths and seat covers in churches, aside their use to produce chasuble. He cited the use of green (*adire oniko*) for the altar and seat cover by the SMA Chapel in Bodija, Ibadan as an example of this practice.

Church societies or groups have special textile materials designed for their corporate use. These may be in the form of tee-shirts or vests, caps, wrappers and head ties with the societies' names and logos printed on them. In fact the Catholic Church commissioned a Nigerian textile industry to produce *ankara* prints which were used nation-wide for the commemorative service organized as part of the late Rev. Father Tansi beatification programme in 1998. The *ankara* prints were created in three colours: namely white, green and purple, and they featured the images of Father Tansi, Pope John Paul II and his coat of arms, among other motifs (Geleloma 2005:245). The Saint Sebastian Catholic Cathedral in Ijebu-Ode also commissioned a textile industry in Lagos to produce Ankara fabric with motifs of its patron saint that was worn by members during the commemoration of the church's centenary anniversary in November, 2011. It is remarkable that the Catholic women in Nigeria seem to have adopted customised Ankara textile fabrics as uniforms which they wear when they attend special events that pertain to the Church or congregational members.

Graphic Artworks

(a) Advertising Agencies

The origin of the proliferation of new generation Pentecostal Churches in Nigeria could be traced to the United States of America where church ministers, like Billy Graham, applied business-like approach to Church organization and evangelism in the 1960s. although the practice was adopted by some Pentecostal church pastor in Nigeria, the proliferation of churches in the country of which Yorubaland is inclusive, did not reach its present peak until in the period between 1980s and 1990s during the implementation of the structural adjustment programme (SAP) in Nigeria. The graphic communication needs

created by the new converts who thronged the new churches with the desire to benefit from the miracles performed by the church ministers and their prosperity preaching, became lucrative patronage for advertising agencies.

The orthodox and indigenous Pentecostal churches which were already in existence in the pre-colonial era (Lintas, 1978:17), also provided advertising agencies with ample graphic art jobs. The new generation Churches needed the service of graphic artists to forge unique identities for themselves through the design of logos, letter-head papers, complimentary cards, calendars and signposts. Graphic artists were generally required for the execution of posters, handbills, billboard designs and newspaper advertisements for communication purposes.

Church outreach programmes, which are rather frequent are, nowadays, promoted with screen-printed banners, tee-shirts, face caps of both paper and textile fabric, and vesolim tapes. The stupendous art works produced by advertising agencies to boost the attendance of the Redeemed Christian Church of God's annual programme, referred to as *Holy Ghost Convention* is an example of the extent to which churches have adopted multi-media approach in their dire bid to attract more converts and expand their ministries.

(b) Printing Press

Copies of the Holy Bible a vital Christian religious document were originally produced by monks and nuns in the monasteries using the woodcut and engraving methods in the medieval era in Europe. Before this time, they produced the Bible calligraphically. The printing technology which was revolutionized much later with the movable types invented by Johann Gutenberg in the fifteenth century A.D. in Europe (Adewusi 2002: 5-8), made the production of copies of the Holy Bible, which was imported into Nigeria by the early missionaries easier. However, Henry Townsend the Anglican missionary introduced printing into Yorubaland in the nineteenth century. With a hand press that he obtained from his brother in England, he published pamphlets, hymns, catechisms and prayer books. He began to publish the *Iwe Irohin*, a fourth nightly journal in Yoruba in 1859 at Abeokuta. The journal disseminated news of the church and the nation. The printers he trained in Abeokuta become the frontline workers of the printing presses which were established later in Lagos and elsewhere in Nigeria at the close of the nineteenth century and early twentieth century (Ajayi. 1965:158-159).

The Church has used other publications with Christian religious contents, like the Catechism, printed portraits, church calendars and almanacs to enhance evangelism in Yorubaland. Many Christian authors such as Pastors Enoch Adeboye, Kumuyi and Oyedepo have also written and published books of scriptural values as a part of their soul winning drives. Some ministries have published magazines, and other in-house periodicals, like bulletins and newsletters for the dissemination of information about the church to their members. The covers and pages of these publications are often spiced with photographs, cartoons and other kinds of illustrations and line drawings. Examples of these publications in recent times are the *Christian Women Mirror*, *The Redemption Light* and *The light of Hope*, which are published by the Deeper Life Bible Church, The Redeemed Christian Church of God and The Apostolic Faith respectively.

It is however, noteworthy that the use of computer for graphic design in recent times has revolutionized Christian art in Yorubaland and in the world at large. Although the computer quickens graphic design and production processes, the visuals of the posters, the handbills, newspaper advertisements and most graphic designs, which are produced with it sometimes appear similar and banal (Odutokun, 1989:146). The result has been the production of graphic art designs that lack the artistry with personal individual touch, which characterized the cherished graphic designs of the pre-computer era.

Conclusion

Art has served churches in Yorubaland in several ways since the advent of Western missionaries in the territory in the nineteenth century. Both Western and traditional Yoruba arts and crafts have been deployed to facilitate and enhance Christian religious practices within the area in question. Art provided means by which some vital aspects of Christian religious beliefs and life could be perceived visually. In doing so, it enhanced the understanding and provided means for achieving effective communication channels between the clergy and the congregation within and outside churches. The invaluable didactic values of art in its role of facilitating Christian education and evangelism and its provision of shelter for fellowship and liturgy are functions of art that have sustained the religion in Yorubaland since its introduction there over a century and half ago.

The establishment of experimental art workshops which encouraged the execution of artworks and crafts with Christian themes rendered in African motifs and images by traditional Yoruba artists resulted inadvertently in the creation of a new visual art idiom.

The visual arts, in responding to technological advancements in their production systems in contemporary times, have met perennial needs resulting from the dynamics of the churches effectively and efficiently. They have thus proved that they could be relied on to serve the continual artistic needs of the churches now and in future.

References:

- Adebayo, S.A. (1996). *Christ Apostolic Church, 88 Folagbade Street, Ijebu-Ode: 60years of its existence (1935-95)*. Ijebu-Ode: Christ Apostolic Church.
- Adeleke, K. Godwin, J. et al (1999). Sites, Monuments and Buildings listed by N.C.M.M. In *The Nigerian Field*, Vol. 64, Parts 1-2.
- Adepegba, C.O. (1995). *Nigerian Art: It's Traditional and Modern Tendencies*. Ibadan: Jodad Publishers.
- Adewusi, S. (2002). *Repromethod Technique in Printmaking*. Ibadan: Sico Publishers.
- Ajayi, J.F.A. (1965). *Christian Missions in Nigeria 1841-1891: The Making of New Elites*. Essex: Longman Group Ltd.
- Smith, R. (1971). *Yoruba Warfare in the Nineteenth Century*. Ibadan: Ibadan University Press & Cambridge University Press.
- Akinwunmi, R.S. (1996). *Methodist Church in Ilesa Diocese- How it all Started. Methodist Church Nigeria. Ilesa Diocese. 1896-1996: Years of Evangelism*. Ilesa: Centenary Committee.
- Bazin, G. (1958). *A Concise Story of Art*. London: Thames and Hudson.
- Beier, U. (1960). *Art in Nigeria 1960*. London: Cambridge University Press.
- Emi-Oliseyenum, R.A. (1984). *Six Decade of European Architecture in Nigeria: A Case Study of Old and Ibadan Provinces (1900-1969 A.D)*. M.A Dissertation, University of Ibadan.
- Emi-Oliseyenum, R.A. (2007). *A Century of Church Architecture in Ilesa, Osun State, Nigeria 1901-2000 A.D*. Ph.D Thesis, University of Ibadan.
- Emi, R.A. (2009). On the Works of Mr. Tunde Allen – Taylor. In *Celebration of Life: Babatunde Allen – Taylor*. (Funeral Brochure).
- Geteloma. C. (2005). Yoruba Indigenous textile and Catholic Liturgy. In Renne. E.P. and Agbaje-Williams, B. (eds.), *Yoruba Religious Textiles*. (Essays in Honour of Cornelius Adepegba). Ibadan: Book Builders.
- Godwin. J. (1996). Nigerian Architecture as Historical Monuments. In *The Guardian* (Nigerian).
- Gombrich, E.H. (1972). *The Story of Art*. London: Phaidon Press Ltd.

- Johnson, S. (1921). *The History of the Yorubas: From the Earliest Times to the Beginning of the British Protectorate*. Lagos: CSS Bookshops.
- Lintas, (1978). *Lintas 1928-1978. Fifty Years Growing*, Lagos: Lintas.
- Odotokun, G. (1989). Art in Nigeria Since Independence. In Ekeh P.P. and Ashiwaju, G. (eds.), *Nigeria since Independence: The First 25 Years. Vol. VII. Culture*, Ibadan: Heinemann Educational Publishers (Nigeria) Ltd.
- Oladimeji, T.A.G. (1999). Oye-Ekiti Art Workshop: An Instrument for Cultural Colonialism in Nigeria. *Journal of Arts and Social Sciences*, Vol. 4.
- Renne, E.P. (2005). Visions of Sacred textiles in a Yoruba Aladura Church. In Renne, E.P. and Agbaje-Williams, B. (eds). *Yoruba Religious Textile* (Essays in Honour of Cornelius Adepegba). Ibadan: Book Builders.
- Willett, F. (1971). *African Art: An Introduction*, London: Thames & Hudson.

THE CARPET PARADIGM AND THE BLUE TILE FROM THE WALL OF DAMASCUS, THE GRID AND THE ARABESQUE

Cristina Cojanu, PhD
Royal College of Art, London

Abstract

That painting is understood as being visual cannot really be contested. Even when Duchamp introduced his disavowal of painting and the schema of the chessboard to indicate an anti-retinal strategy, the implication of visual imaginary was still in place. Indeed the link between knowing and seeing is not only at the root of metaphysical (the desire to know is the desire to see —Aristotle) thinking itself, but persists even within the disavowal of it within Late Modernity.

This paper takes two key concepts from the discourse of painting in Late Modernity, the carpet paradigm and the grid, and looks at them through the idea of the arabesque and the ornamental. The arabesque is not a schema of a visual revelation, but the perceptive, as-well-as intermediary of donation and reception of form in re-presentation and the ornamental does not realise itself as ornament, even though it is also a form of manifested (planar) surface-embellishment, a tensely contracted figure-ground collapse. The ornamental is here the activity of form itself, the plasticity of beings, the “becoming essential of accident” and, at the same time, “the becoming accidental of essence”, as the capacity to receive and to produce form simultaneously. Meaning as a constant emergence of meaning, infinitely deferring from ‘taking’.

Keywords: Painting, grid, arabesque, ornamental

Introduction

This paper is part of my ongoing research as an artist and writer on the nature of the painted image, the ornamental and the idea of the arabesque. The paper is based on a chapter from my PhD thesis entitled *Painting as Gaze: On the Revelatory Force of the Arabesque*. I am confronting two models of painting and art history, the carpet paradigm (Masheck, J., 1976) and the grid (Krauss R., 1979), with the idea of the Arabesque and the ornamental (two of the main ideas of my research) in order to question the relationship between painting and decoration or ornaments. On this route, I am engaging with the image in western painting and thought through the idea of the Arabesque, the quintessential creative drive of Early Islamic Art.

I.

WHAT IS TO PAINT THE ABSOLUTE? AND SO: WHAT IS ABSOLUTE PAINTING? TO PAINT OR TO FIGURE IS NO LONGER TO REPRODUCE, THEREFORE NOT EVEN TO REVEAL, BUT TO PRODUCE THE EXPOSITION OF THE SUBJECT. TO PRO-DUCE: TO BRING FORTH, TO DRAW IT OUT(nancy 2006: 220, emphasis my own).

every image [painting] is in some way a ‘portrait’, not in that it would reproduce the traits of a person, but in that it pulls and *draws* (this is the semantic and etymological sense of the word), in that it extracts something, an intimacy, a force. and, to extract it, it subtracts or

removes it from homogeneity; it distracts it from it, distinguishes it, detaches it and casts it forth (Nancy 2005: 4). [...] The image is separated in two ways simultaneously. It is detached from the ground [*fond*] and it is cut out within a ground. It is pulled away and clipped and cut out. The pulling away raises it and brings it forward: makes it a 'fore', A SEPARATE FRONTAL SURFACE, whereas the ground itself had no face or surface. The cutout or clipping creates edges in which the image is framed: it is the *templum* marked out in the sky by the Roman augurs. It is the space of the sacred or, rather, the sacred as a spacing that distinguishes itself (Nancy 2005: 7; emphasis my own).

The Distinct is in fact none of that, but it is not nothing. It is the thing itself: it is what is the ground of things, at the heart of all things that are, and that withdraws their sense of being into the secret from which all the senses draw their sensibility (Nancy 2005: 75). [Is it not the process of imagination: "this schematism of our understanding with regard to appearances and their form [that] is a hidden art in the depths of the human soul, whose true operations we can divine from nature and lay unveiled before our eyes only with difficulty (Kant 2008: 273; A, 142; B180-181)?"]

The Distinct and the Oscillator have a common cause. One supports the other, which in turn agitates the first. It is no more possible to distinguish them than to confuse them (Nancy 2005: 75). The *distinct* according to its etymology, is what is set apart by marks (the word refers back to *stigma*, a branding mark, a pinprick or puncture, an incision, a tattoo): what is withdrawn and set apart by a line or trait, by being marked also as withdrawn [*retrait*] (Nancy 2005: 7).

The first mark, made on a surface, destroys its virtual flatness [...] The flatness towards which Modernist painting orients itself can never be utter flatness (Greenberg, in Knives 2012: 13). The first mark is the distinct. And each image is a finite cutting out, by the mark of distinction. Each image is a singular variation on the totality of distinct sense — of the sense that does not link together the order of significations. This sense is infinite, and each variation is itself singularly infinite (Nancy 2005: 12).

Even if flatness is, for one reason or another (that of medium-specificity and self-criticism, or that of a decorative flatness that opens up into the absence of any illusion-space in an image), a space-modus of the painted image in Modernist painting, we still have to acknowledge that any kind of mark on such a flat surface, on a pictorial plane, will nevertheless lead absolutely, not only to the purity of medium specificity, but also to distinction and composition, to participation.

Traditional Western painting, especially Renaissance painting operated under the visual ideology of the congruity principle between a Newtonian box-space and the pictorial space, which had to be used in such a way, that it would create the illusion, sense or depth of a real perspectival space. The tension between real space and pictorial space in image is controlled by the figure-ground relation which regulates, through an ornamental process (that does not hypostatise itself as ornament; Hetzer 1978), ontologically and symbolically the different imaginative planes, in which schemata of representation and perception, visual expectations and aspects of a visual habitus and visual ideologies get woven into flat all-over pattern (Brett 2005: 121). When the picture plane becomes dominant over illusionistic effects than the pictorial field operates within a flatness that demands an integral planarity of all pictorial form (Masheck 1976). This ornamental space is a relational space, of rapport, that does not figure something simply in front of a ground, but with and through the ground. And, not only is its spatiality constantly re-con-figured with, through and in con-tact with the ground, but also its temporality, which is effectively an infinite series of regenerative instants. The dynamic polarity of a figure-ground, or distinct-oscillator relation, or a quadripartite tension figure-ground-nonfigure-nonground (Krauss 1994) structure — it doesn't really matter. In the end, what HAS TO be given necessarily is the possibility of disunity in unity

(and thus, ultimately a consciousness) of a ‘pattern’ on a ground. This is what constitutes the ornamental space, while the ornamental time is epitomized in the reconfiguration of the relational elements, through movement and cessation, as constant re-actualisations-modi. This ornamental space is an intermediary, internal plane in which sur-face and space, movement, still-stand or simultaneity co-exist, defying an either-or logic, in which either part would be denied and sacrificed for the perception of the other — as is the case, for example, in the famous paradoxical Duck-Rabbit figuration, in which, one can see the duck only by denying the rabbit and vice versa. Any figuration ex-poses itself, within itself, in an ornamental space and is a ‘as-well-as’ process, a *daimonic* act, an obvious demon, a monster, — half-man, half-god.

Absolute painting in this sense might be the absolute form of self-relation mediated through a departure from the self (Nancy 2006: 226), not to reproduce, not even to reveal, but to produce the *ex-position of the subject*. To produce it: to bring it forth, to draw it out (Nancy 2006: 226), to articulate a presence or the pre-sense of presence itself (Nancy 2006: 234). In this ornamental space of the in-between [*Binnen-raum; Zwischen-raum*], presence is por-trait and drawn to itself (Nancy 2006: 237).

The atmospheric INFINITE RAPPORT, the possibility of infinite growth in all directions —which Krauss addresses through the schema of THE GRID and as a centrifugal aspect of a work — is a characteristic of ornamental space. It has to be said here that it is ornament which, contrariwise to its traditional understanding, instantiates itself as an autonomous form of perception enabling not only a sensory but also a cognitive understanding of the imaginative space of the image, and of the constant relational re-calculation in the concatenation of different modus operandi in the pictorial field: on a first, conventional level, the perspectival box-space; on a second, ‘decorative’ level, a two dimensional flat space with a very short depth created through the raising of a plane before or in front of another (ground) plane (which is behind it) without any connection between the two (and this is a case not only for decorative (wall) patterns, but also happening when only one single mark is made —even in Fontana’s case, of cuts and punches through the canvas) and, on a third level, an in-between space that implies a series of planes placed ONE IN FRONT OF THE OTHER, as much as, ONE NEXT TO THE OTHER, in an ‘as-well-as’ relation between the different planes, between figure and ground, which ARE not, but becoming distinct in a chain of differing instantiations. Strictly speaking, there is no figure and no ground, in this case, but the infinite latent potential of becoming and the instantiations of this potential in contact with a subject, a sub-jectum or a subjectivity — or whatever is now in their place. In between these space-figures, and their specific co-relative temporalities, the atrophy and hypertrophy of one or the other regulates the infinitely finite imaginative space within an image. Depth-space with its hierarchical, perspectival, fixed structure of parts-to-whole relations, and co-existence-space of all parts on the same meaning- and value level, can be simultaneously and antagonistically realised within the ontological dimension that is constitutive of the ornamental space.

Infinite rapport, parallelism of contradictory elements, all-over coverage of a flat surface, the equal value given to all elements and placing the primary burden of interpreting and enjoying an image, object or monument on the viewer-user (Grabar 1987: 180) are characteristics of the arabesque as an idea and ornamental form (in Grabar’s specific understanding of ORNAMENTAL: carrying beauty and giving pleasure, an essentially redundant form that trans-forms anything it touches). The figure-ground inversion and the dynamic oscillation between the two is recognized as an invention of Islamic art (not in terms of new forms, but of new ways to combine and compose already existent basic forms within their potencies for new variants), whose creative attitudes manifested best in the idea of the arabesque: “the very notion of background is open to doubt, as almost all motifs appear on the same level of perceptibility” (Grabar 2006: 20). Direct visibility and immediacy of

interpretation are being avoided and there is no clear meaning that is transmitted — the creative impulse in Islamic culture was not to tell something, but to make life and its activities more beautiful. Early Islamic art, with few exceptions, was mainly secular and popular, modest and utilitarian in character. This can be seen best in what is recognized as its main form of manifestation, in the HIDDEN architecture of interior spaces that truly exists not in the collective experience and not when seen as a monument or symbol visible to all from all sides, but through how it exposes itself in private, in the inward-turned perception, when entered, penetrated and experienced from within.



Figure 1: Sheikh Lotf Allah Mosque, Isfahan, 1618. Available from URL <http://taghribnews.com/vgliwpazrt1auz2..tt9kluckiptl.x.html#2>. [Accessed October 2013].

It is a curious peculiarity of much of Islamic art (with the notable exception of Ottoman architecture) that even its grandiose architectural compositions can best be seen and appreciated, not as a collective experience, but as a lonely and private one. The understanding of a stalactite façade with its almost infinite subdivisions cannot be shared, just as the elaboration of the endless details of a rug and of the subtleties of a miniature or the use of an ewer or of a plate are individual, private activities. [...] It is as though the point of anonymous (collective) artistic creativity were to compel the viewer or user to withdraw within himself, to meditate on his own, in effect to find his own explanation of the work of art or to discover in it an inspiration for his own life (Grabar 2006: 28).



Figure 6: Ardabil Carpet, 10.51m x 5.34m, Victor and Albert Museum. Inscription at one end of the carpet: “I have no refuge in the world other than thy threshold./There is no protection for my head other than this door./The work of the slave of the threshold Maqsud of Kashan in the year 946.”



Figure 7: Detail of fig. 47.

One gets immersed in an ‘enclosed court’, with almost no outlook. In a manifold complexity of sensory perceptions coming from the sky, from an outer world, to imagine one’s own real and concrete world, and one gets arrested in this haphazard, indirect circulation that takes one by surprise in never-ending rhythmic circles and virtual sur-faces. It is not clear meaning that is transmitted, but the embodied perception of BLIND WRITING, the corporeal experience of simultaneous centrifugal and centripetal forces.

Either text is distinguished in the ground of the image and this image oscillates on the former’s face, or else the image is distinguished between the lines of the text and this text oscillates throughout. The image scintillates, and the text gives off a flat muffled sound. The image is mute, and the text crackles with noise. Or it is the inverse, at the same time, in the same movement. Each one, in the end, is the distinct and the oscillator of the other. Each is the *ekphrasis* of the other while also being its illustration, its illumination. *Ekphrasis* draws a phrase from its other, just as, from its other, illumination draws a sight. A phrase image and a sight of sense (Nancy 2005: 75).

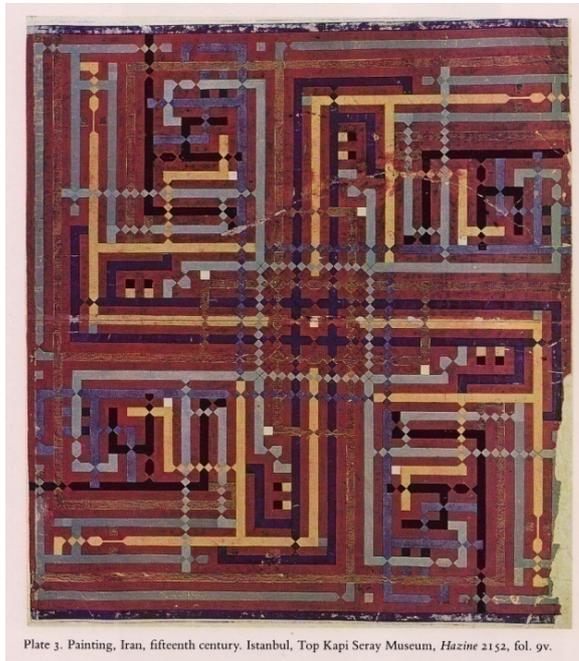
Plate 3. Painting, Iran, fifteenth century. Istanbul, Top Kapi Seray Museum, *Hazine* 2152, fol. 9v.

Figure 8: Painting on paper, 45 x 50 cm, 15th century; it contains the name of Ali rotated in four quadrants and depicted in every one of the colours used in the painting except for the red background (Grabar 1992: 47-48; 120, Plate 3.).

At this level we can modify Derrida’s assumption of writing as a signifier of the signified. In some written objects, like the Ali page (pl.3) [...] the primary signified is not the word or combinations of words that was written, but the artfulness of the

craftsman, the imagination of the artist, or an inversion of esthetic behaviour possible in a post-Bakhtian world, the pleasure of emotional, intellectual, sensuous reactions by today's viewer, regardless of the correctness or even appropriateness for the considered work of art, projected onto the object as examples of the pleasure or involvement of all viewers since the object's creation (Grabar 1992: 115)."

The attainment of a manifest planarity (*Flächenerscheinung*) and pictorial "farsightedness" that flattens what is seen into "optically farsighted planar impressions" (*optisch fernsichtige Flächeneindrücke* – Riegl, Masheck 2001: {167}), long before its modern and modernist rebound, was the structuring principle in medieval and Byzantine painting, as demonstrated by Riegl in *Spätromische Kunstindustrie* (1901).

When modern painting started to imagine itself as flat two-dimensional surface, through the old *text(ile)*-metaphor of the WOVEN TEXTURE, the ORIENTAL CARPET with its system of flat embellishment and colourful interlacings based on centralized motifs boxed into compartments, was the preferred analogy (to wallpaper-design). However its ornamental characteristics were gradually and increasingly neglected, until being entirely ignored in the modernist interpretation.

Cultural collages, fragments appropriated and embedded into another context are interesting traces to follow, not in order to decide upon their correctness, but in order to experience a webbing of contingent similarities and associations. The arabesque itself relies on such appropriations and imports from different cultures, regions or time periods.

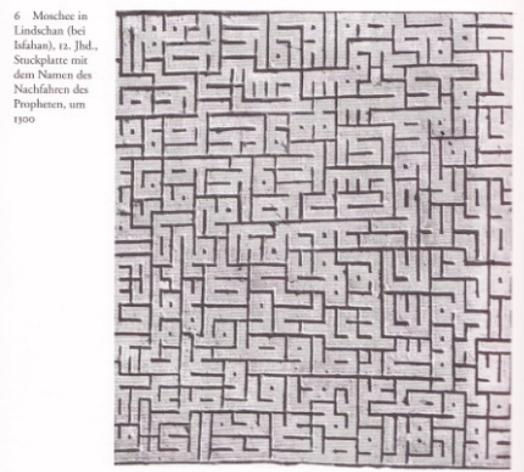


Figure 9: The Lindschan Mosque (in Isfahan), 12th century, stucco decoration repeating the name of the prophet, around 1300, (Grabar 2006: 74, fig. 6).

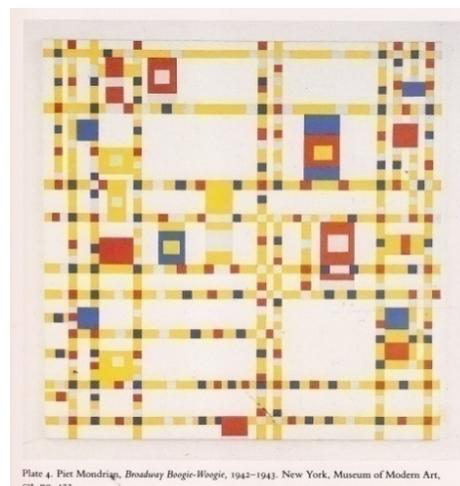


Figure 10: (Grabar 1992: 121, Plate 4.).

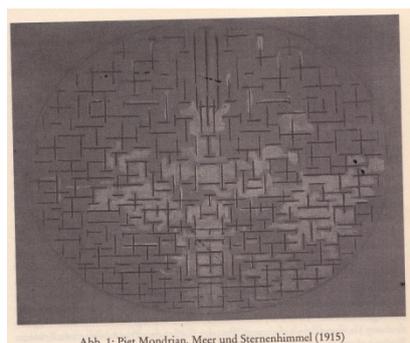


Figure 11: Pier Mondrian, *Ocean and Stars* (1915), (Hofmann (2001), 282, Illus. 1).

THE CARPET PARADIGM is a modern construct of Western painting, a model generated in Western art history from its perspective and for its specific needs and through an influence coming more from design-theory than an interest in Oriental carpets and what they manifested. Joseph Masheck published in September 1976 in *Arts Magazine* the essay entitled *The Carpet Paradigm*, which “was something of a history-of-ideas inquiry into carpet, textile and the related figures for integral flatness in surface design as they emerged out of the early modern design movement to serve the modernist cause” (Masheck 2009). The phrase was proposed to describe the enthusiasm and fascination for Oriental carpets among modern artists in the last years of the 19th century. These carpets seemed to provide a model for the pictorial space and colour combination, but also the revaluation of figure-ground rapports, which informed and preceded the 20th century theories of pictorial FLATNESS. In Post-impressionist circles, to compare painting to textiles was a singular point of praise; and the equivalence of the ‘decorative’ and the ‘fine’ arts was a topic that was gaining more and more terrain — this, until the modernist ideology of medium-specificity, self-criticism and ornament debate set in and imposed an ideological asceticism. In 1891, Oscar Wilde still wrote in *The Picture of Dorian Gray*:

In the flowerless carpets of Persia, tulip and rose blossom indeed, and are lovely to look on, though they are not reproduced in visible shape and line ... Nor, in its primary aspect, has a painting, for instance, any more spiritual message or meaning for us than a blue tile form the wall of Damascus (Brett 2005:209).

It had become commonplace to treat of carpets and tiles in the same sentence as paintings. This signified the overthrow of academic precedents — that taste could be formed in manufactures, and that *colore* had won over *disegno*. With this went the rejection of narrative values in painting, so that hitherto more humble genres such as still-life gained prestige over historical subjects; narrative meaning was to be replaced by musical analogy and symbolism [...] [and] in the avant-garde of 1900, [the motto became] [...] *ut pictura musica* [...] (Brett 2005: 210).

The conclusion has to be that any attempt to base a history of modern painting upon the development of painting’s own unique means and conditions of existence, autonomously self-generating and independent of other realms, is likely to be historically thin and theoretically restricted. Modern painting largely grew out of the nineteenth-century discourse of decoration, both in its formal means and its theory of meaning (Brett 2005: 210).

The connection between 19th century painting and modernist criticism was the Kantian assumption that aesthetic pleasure is detached from social function — *interesseloses Wohlgefallen* — which, Brett rightly writes, seems (falsely) to elevate the blue Damascus tile, while it just as falsely debases the decorative aspect of painting. Greenberg wrote about Picasso that it loads the picture with “decorative space fillers” — (Often Orientalists interpreted the ornamentalization of Islamic art as the drive of a *horror vacui*, the fear for empty space, which in Ancient Greece, in the Geometric Age, was considered a stylistic

element of all art, but which received increasingly negative connotations within the Vitruvian-Ciceronian discourse of *decorum*) — that are “cramping instead of liberating” (*Picasso at Seventy Five*, 1958, in: Brett 2005: 210) and that “collage declined into decoration” (*The Pasted Paper Revolution*, 1958, in: Brett 2005: 210). Greenberg explains his argument for the deprecation of the decorative:

“Solo works of art are meant to be looked at FOR THEIR OWN SAKE (and) WITH FULL ATTENTION, and not as adjuncts, incidental aspects, or settings of things other than themselves [...] they CHALLENGE OUR CAPACITY FOR DISINTERESTED ATTENTION in a way that is more concentrated etc. (*The Case of Modern Art*, 1959 in: Brett 2005: 210; emphasis my own).”

This seems to be the distinction between abstract art and decoration, but this argument not only presupposes a priori that the two are in fact distinct, but it also de-forms the Kantian argument which speaks about “*interesselose Wohlgefallen*” with respect to Nature, and not to culture, that is very much created for our own purpose and in which we invest a lot of interest (Brett 2005: 210-211).

A crucial juncture here: the painting that becomes in the studio and the painting that becomes outside the studio are two distinct things (or maybe one thing with a cut in the middle?) And then there is the painting in my head, which I can see, but which will never happen, and the one I cannot see, which will happen. And, without falling prey this time to any thoughtful entanglement: Is not every painting I made the ONE painting, as Balzac let Frenhofer to believe?

Painting in the studio and painting outside the studio are distinct, yet the same. Outside the studio and the art world, painting’s existence is most often intermingled with an idea of *lack* — of colour, of an object to fill an empty space, of a (taxonomic) presence in a collection, of value, of resemblance. Outside of the studio painting is an ornament of life “because, as at best in the ‘applied’ or decorative arts themselves, it magnifies (or celebrates) qualities already present in material life and work (Masheck 2009).” Painting in the studio, on the other hand, is ornament (in its traditional pejorative sense) because it:

Is but a guiled shore
 To a most dangerous sea; the beauteous scarf
 Veiling an Indian beauty; in a word,
The seeming truth which cunning times put on
 To entrap the wisest
 (Shakespeare, *The Merchant of Venice* in Grabar 1992: 26).

“*The seeming truth* which cunning times put on / To entrap the wisest” is very much what Krauss laid bare in the *Optical Unconscious*: the equation of painting with perception, that becomes disembodied personality, and flatness led to the repression of those aspects of painting that were impurely mixed with literature, dream, visual puns, and with other forms of depiction that were not part of ‘art’ (such as advertising), and of those works of art which used found objects and images, such as scientific illustration (Brett 2005: 211). But also, the lure of a theory that institutes itself in reaction to something that it in fact revives, a new academicism that represses its origins, and the lure of an empty historical formalism itself.

In another trail of thoughts, if painting comes from the ground of the image, from the distinct, desiring to be desirable, penetrated, touched, to find its ‘*seamă*’, its being-alike, from another world, or from the sky, then it most definitely IS (also) an ornament. The distinction between (painted) image and ornament is ambiguous and not clear, and it is not fixed.

My undecidability in the plasticity – ornamental couple, the fact that I would even end up with a couple to uncouple, haunts me. And before it gets forgotten, as it often happens with most unexpected thoughts, I have to write this down here, in such a manner, that at least once in the text, something was mentioned about this: plasticity, Malabou writes (and to

adjourn my trail of thoughts in this moment to find out where exactly she did this, so that I can guard the truthful authority of my argument would be a crime and I have to live with the guilt of not committing it!) has the following significations: it designates the capacity to receive form (reception), the power to give form (donation), and the possibility of the deflagration or explosion of every form (annihilation). These were the first three significations analysed in her earlier books. Later she focused on a fourth signification, discovered through drifting in psychoanalysis, cellular biology and neuroscience, that of the creation through the irrevocable destruction of form —that of negative, destructive plasticity. In the first three meanings of plasticity form retains in itself the possibility to return to its initial form, while the destructive negative plasticity completely and absolutely destroys any such possibility, creating an entirely new identity without past or future (Alzheimer disease).

This appears now as the suture of my haunting: the ornamental is plasticity that leads to something else, it doesn't come back to itself as itself, but as other, that it, itself, is. For some this is negative and destructive, for others it is positive and it implies effective completion (that still remains transitory), even transfer of sense and meaning from one to the other. And this is why the image is ornamental: “— because the image, then, is above all the there of a beyond. It is not at all its ‘representation’: it is thinking as the effectivity of a place opening itself to presence (Nancy 2005: 125).” The ornamental is the flight home, the interval, the in-between, the “infinitesimal calculus of a passage to the limit” (Nancy 2005: 111), of the transformational mask, between an interior and an exterior of form, between faces that make a sur-face possible. Plasticity spaces itself from within or without, the ornamental slips in, it buffers, filters, fills, spaces, attracts, expels, exhales, proofs, orients, directs appetites... Plasticity implies a host or a parasite and movement, the ornamental multiplicity and spacing — and, plasticity.

Thinking about destructive plasticity in the realm of art, this permanent dislocation of one identity through which a new, completely alien identity is formed, that is neither the sublation, nor the compensatory replica of the old form, but literally a form of destruction, which remains ultimately an *adventure of form* (Malabou 2012: 18), we have to pause and reflect what this means, if it happens, how it happens and if not, what if it would happen? (Ready-mades, icons, museum-marketing objects, souvenirs, performance-objects during the performance and after, installation objects — what is the relation between art's previous and other forms of existence? Is the image image or image plus its otherness, non-image?)

Painting and text — *ut pictura poesis* — and text (Latin *texere*, to weave) and textiles, thus painting and textiles, are at least terminologically interlaced with each other since ever.³³¹ “Consider painting once again: *pingo* means above all ‘to embroider with threads of colour,’ or else ‘to tattoo’. This mixes weaving, incision, and delineation with tinting and coloration. The woven thread and the puddle, or the line and the covered surface” (Nancy 2005: 74).

Text means *Tissue*; but whereas hitherto we have always taken this tissue as a product, a ready-made veil behind which lies, more or less hidden, meaning (truth), we are now emphasizing, in the tissue, the generative idea that the text is made, is worked out in a perpetual interweaving; lost in this tissue—this texture—the subject unmakes himself, like a spider dissolving in the constructive secretions of its web. [...] (Barthes 1975: 64).³³²

³³¹ After 4th century: *contexere*, *intexio*, *contextio* literally meaning to weave together and webbing, net; an ancient metaphor, is that of thought as a thread, and of the raconteur as a spinner of yarns, whereas the true storyteller, the poet, is a weaver; and the written page becomes a *textus*, meaning cloth.

³³² The metaphoric trail of text-texture-textile-context is complicatedly intermingled with that of the *veil*, and together they belong the platonic-macrobian paradigm of the relation between philosophy and literature connected through the third paradigm of truth. Chrétien de Troyes' (1140-1190) structural concepts of *contextio* (designing technically the *ordo relations*, the structure of content in a story), *conjointure* (the harmonious

XXX

What is interesting about the façade mosaics on the walls of the Great Mosque of Damascus, is the way in which an ornamental value is combined with an iconographic meaning. The main subject matter of the mosaics of the buildings is one which in the classical and Byzantine tradition whence it derived usually formed a background —at times meaningful, at other times ornamental —to some other topic. In Damascus the latter is absent; instead, a series of naturalistic trees is rhythmically set in the forefront. Since it appears unlikely that these trees were the main subject matter of the mosaics, they become the formal equivalents of personages who form the main subject matter in the models used by Damascus mosaicists, as for instance in the fifth-century mosaics of the church of St. George in Salonika (or Thessaloniki). A fascinating example of THE TRANSFER OF FORMAL RELATIONSHIPS BETWEEN THE PARTS OF AN IMAGE occurred here. The desire for a concrete meaning — paradisiac architecture — in an understandable iconographic language — the vocabulary of the classic tradition — led to the mutation of a background motif into the main subject and the transformation of the foreground motif—in the tradition the main subject — into a secondary theme (Grabar 1987: 88-89, emphasis my own).

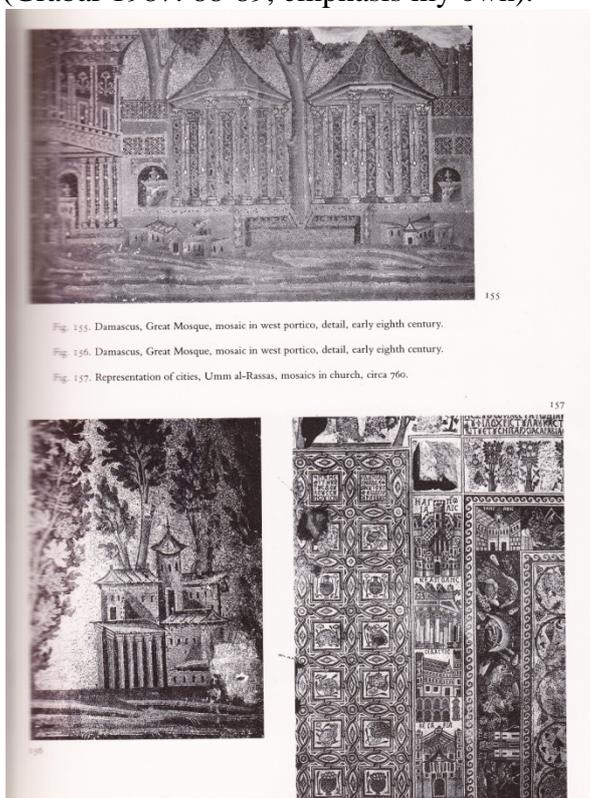


Fig. 155. Damascus, Great Mosque, mosaic in west portico, detail, early eighth century.

Fig. 156. Damascus, Great Mosque, mosaic in west portico, detail, early eighth century.

Fig. 157. Representation of cities, Umm al-Rassas, mosaics in church, circa 760.

Figure 12: Damascus, Great Mosque, mosaic in west portico details, early eight century (fig. 155 and 156) and representation of cities, Umm al-Rassas, mosaic in church, circa 760 (Grabar 1992: 181, Fig. 155, 156, 157).

The Great Mosque in Damascus is one of the most official buildings of early Islam and the intention behind its decoration was to have a symbolic and illustrative meaning. The avoidance of figural representations in early Islam was intentional and deliberate in the case of religious buildings and led to unexpected syntactic changes and transformations on the vocabulary of imagery borrowed and utilized by Muslim Patrons. However, the avoidance of

mélange of multiple traditions) and *velum* (referring to specific types of stories in the platonic paradigm used to represent truth): *Der Dichtung Schleier aus de Hand der Wahrheit*, the *Dichtung*'s veil from truth's hand (Goethe in von Graevenitz 1992: 235). With respect to the composition of an arabesque novel this metaphorical chain precedes and informs the literary theory of Early Jena Romanticism, and Schlegel's ideas.

figural representations was not the avoidance of symbolic meaning, which was still attached to forms that were used. Contrariwise, symbolic significance was given to new, or adopted forms in older artistic languages for which such symbolism had not been known (Grabar 1987: 89). It was not an *a priori* doctrine that informed the creative consciousness in Early Islam, but the avoidance of representations was the result of a response to an available formal vocabulary and of a search for an identifying original imagery. Grabar's argument brings here also *coinage* as an example, and he writes that the official art of the empire avoided representations of living things, but the culture as a whole seemed at first indifferent to the problem. This indifference will turn into an opposition later on, which was not only the result of a concrete historical circumstance, but: a typologically definable attitude that sees and understands any representation as somehow identical with that which it represents, and it is its peculiarity that it immediately interpreted this potential magical power of images as a deception and as evil.

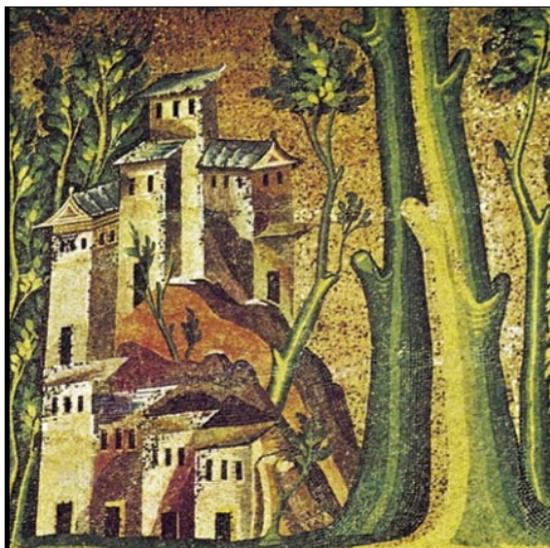


Figure 9: Damascus, Great Mosque, Syria, mosaic detail. available from URL <http://www.britannica.com/EBchecked/media/107279/Detail-of-a-mosaic-from-the-Great-Mosque-Damascus-Syria>. [Accessed October 2013].

Is not THE TRANSFER OF FORMAL RELATIONSHIPS BETWEEN THE PARTS OF AN IMAGE ONE OF THE MODI OPERANDI, if not THE MODUS OPERANDI, of contemporary painting —with all the good and bad infinities that it implies —and, of course, ‘formal relationships’ understood in its widest sense possible and not only within formalist parameters?

One has to slip in here some of Riegl's observations about Antique and Late Roman painting: Antique painting aimed to capture individual particular forms as unmediated, clear, material phenomena, in their extension in a two dimensional space. This was realised through a rhythmic composition of forms one next to each other or one above the other, but not one behind the other, in which case individual forms or parts of forms would cover each other up. A rhythmic, in-row repetition of similar or identical forms opened and created, in first place, a plane. Late Roman painting however, presented not so much individual forms as singular phenomena, but in their relation to a collective appearance and in a tri-dimensional space. This led, on the one hand, to the isolation of the individual autonomous form from the ground, or from the universal visual-plane, and on the other, to its co-relation to other individual forms. This meant also the emancipation of the ground, which gained a new function as an individual unity and creative form-force. Rhythm continued to be the principle that structured the composition of forms. The short depth of field that had been introduced added a new rhythm of colour and light/shadow play that would help to structure the rapports between what was posited (Riegl 1901: 211-217).

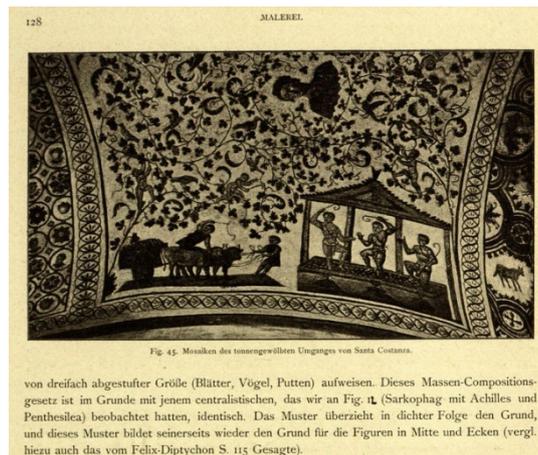


Figure 13: (Riegl 1901: 128).

What started to form and to manifests itself in early Islamic mosaic decorations, but also in other techniques (stucco decorations, wood and metal-work, ceramics, etc.) in resistance and under the temptation of Byzantine and Christian art is an attitude towards ornamentalization and an ornamental mode of creation that emphasizes visual pleasure, rhythm, ambiguity and ambivalence, and a peculiar nature of perception. This type of creativity found its right measure and determination in a spatiality and temporality in which “[...] the operative point of view is quite literally the place form which one uses, touches or views a motif displayed on a surface of something (as opposed to a place created in order to view it).” Thus, consciously or not, location and the activities connected with it (sitting or walking, for instance) determine the meaning of what one sees (Grabar 1992: 210).

Next to sensory materiality we have, thus, a choice of possible but incompatible ways of focusing. [...] the viewer-user penetrates into the object, both literally, as rugs are meant to be walked on, and perceptually, as the eye meanders its forms, to follow rinceaux or to decompose flowers. At this stage it no longer matters much whether kings and courtiers played here or whether some mystical message is encoded, for in reality it is only the sensory pleasure of seeing, feeling, composing, and recomposing that dominates. And it does so, because of a setting taken from nature that has nothing to do with any real nature, just as the people or animals are not common beasts or men in common activities. They are all in a dream, they are an imaginary fantasy. They are totally unreal and yet they are stems, leaves, animals and flowers. [...] Nothing is happening, has happened, nor will happen. It is all a dream, a fantasy, and that fantasy without event, without story, has been expressed with a stunning visual clarity in which every part, every brick or tile, every bit of inscription has been defined with utmost precision. Once caught, one cannot but wander and forget. (Grabar 2006: 240, 249).

This space and temporality is one of becoming, not of being. It is a space in which ornamental forms fulfil their intermediary agency and lead the viewer or user to behave in some way or another toward an object, image, monument. And it is one of the characteristics of ornament, as an intermediary, to transform everything it touches into something else, to lead elsewhere than towards itself (or towards itself as other).

For the secret Image of ... —[...] It is an image that must be unimagined, that is thought, if thought is a commotion, a syncope, and a bedazzlement. Its flash is not the image of the obscure, but the brilliance that sparks out from having knocked against it: a flash of darkness sliced away. A blow and a shout, a stupefying pain, a breath cut short, the wordless unimagined, in a bark, a wail, a groan, a sonorous uprising (Nancy 2005: 79).

XXX

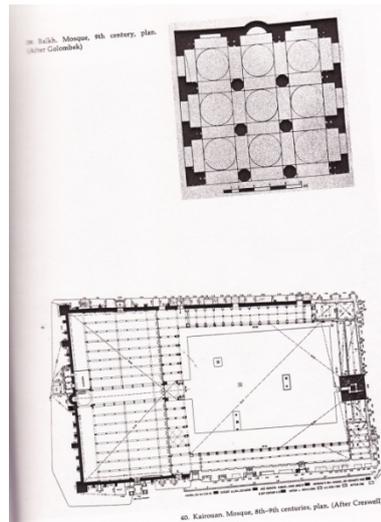


Figure 14: Balkh Mosque, 9th century, plan. Kairouan Mosque, 8th-9th centuries, plan. (Grabar 1987: Illus. 39 and 40).



Figure 15: Wall painting in Hellenistic mode in the bath at Qusayr 'Amrah (Grabar 2006: 433; Fig. 10).

In 1979, Rosalind Krauss published in Volume 9 of *October* magazine an essay entitled *Grids*. In this essay, she identifies the grid as the emblematic structure of the modernist ambition and as a form that relentlessly sustained itself as such, while, at the same time, being impervious to change. Its appeal relies in the demonstration that physical and aesthetic planes are co-extensive and coordinate. Its structure displays an infinite lateral spread of a single surface, over-all regularity, an order of pure relationship, and declares the pictorial field as: flattened, geometricized, ordered, anti-mimetic and anti-real. The grid claims thus not only for the pictorial field, but for the space of art in general, an autonomous and autotelic existence. Krauss identifies the grid with a hidden naked materialism, and as a matrix of knowledge that enacts the separation of perceptual field from real field. But looking at the work of artists such as Ad Reinhardt or Agnes Martin, she states that artist were attracted and devoted to the grid, which was a deterministic and hugely restrictive structure, not because they were interested in what happened in the concrete, naked materialistic order, but in the Universal, in Being, Mind or the Spirit, and thus in the Symbolic. The structure of the grid operates within its own, newly (or re-discovered) constructed spatiality and temporality: that of the infinite, autonomous and autotelic space and, respectively, its temporality that is an absolute present, that declared everything else to be the past: “in the temporal dimension, the grid is the emblem of modernity by being just that: the form that is ubiquitous in the art of our century, while appearing nowhere, nowhere at all, in the art of the last one” (Krauss, 1979: 50-59).

The grid is, to be clear about this, one of the oldest and most basic types of flatness, infinite rapport, all-overness, absolute symmetry, seriality, mirroring and uninterrupted continuity, while being also, as Krauss claims, the emblem of modernity. Emblem that is: symbol, inlaid ornamental work, embossed ornament, or insertion – to insert, to throw in (Online Etymological Dictionary). The structure of the grid on which the chequerboard pattern is based — and the Duchampian anti-retinal chessboard schema — is one of the most ancient examples of ornamental space, in which the figure-ground relation is not only annulled or levelled out, but presented as becoming and in visual form. Already in Late Roman painting, the ground, as *Intervalle*, interval/gap/cessation, became a creative individual unity with potential to form through rhythm (Riegl 1901: 210). The ground was not so much a surface behind or underneath another sur-face, but the condition of possibility for a gap, a cessation, a blank in and of rhythm — of the Distinct.



5 Detail from the mosaic pavement in the bath hall at Khirbat al-Mafjar

Figure 16: Detail of the Mosaic Pavement in the Bath Hall at Khirbat al-Mafjar (Grabar 2006: 428; Fig. 5).

The affinity of modern painting with ornament and pattern lies in the reevaluation of the ground and this does not imply that modern paintings have to be spatio-logically or semantically flat. The change from perspectival box-space to ornamental space, or the reduction of space to sur-face, led to a gradual de-substantiation and simultaneous metamorphosis of the image-figures into ornamental figures and to an optical and ontological gain in substance of the ground. Spatial homogeneity of conventional image-space is thus abrogated, and the figure-ground relation negates the depth of field and becomes an ornamental blank, interstice, gap, distance. There is a phenomenological necessity involved here: figure and ground have to be phenomenologically given as distinct from each other for the ex-tension and ex-pansion of an ornamental distance or gap to take place; so the intelligibility of the ground has to be present and this ground-intelligibility constitutes not only any surface decoration, but consciousness itself (Kirves 2012: 15). In *The Optical Unconscious*, Krauss speaks of a figure — non-figure — ground — non-ground schema, as modernist painting negated both figure and ground, and thus dialectically levelled out the difference between them.

So, what is ornamental space, ornamental temporality? Is it space that accommodates within itself non-space, blank or gap, and non-time, cessation? The fiction of what is not; the ‘what is not’ that is real? The ornamental is the imaginary production without a referent, a pure ontological creation, “the foreigner on the inside, the whole of the metabolic force that

sleeps without sleeping in what is, the very face of being that concepts cannot say without losing face (Malabou 2011: 12).

And what is the grid, this emblem of modernity? This ornamental structure that resists development, that covers up and reveals at the same time the shame of its relation to the symbolic and to the ornamental? — The character that best embodies the tragic mythology of the grid, that of not being able to act in accordance with his own thinking, is Don Juan (or Don Quixote):

His entire anxiety is to give himself Determinations. But these are denied to him, in their truth, in the first part of the book (they are windmills and flocks of sheep), because it is he who invents them, while in the second part of the book they are not real Determination for him, because everything depends on the invention of others (Noica 2009: 32).

The grid, like Don Juan, fully incorporates the Individual. Both are true individualities, characters severed from the inertia of common generality. They are not into something already given, but have provided themselves with the image of their own. Don Juan no longer wishes to be caught in the truth and prejudices of society and belief. He is a libertine and does as he pleases. The problem that both face and that leads to their tragedy is that although they are individualities, they are really into anything, as they reject any General. They are caught into an infinity for which they have no responsibility and no RAPPORT and are thus caught not even in a ‘bad infinity’, but in the IN-DIFFERENT infinity of more and more. They are both advocates for INFIDELITY, like Plato, but whereas Plato saw INFIDELITY as necessary to ascend to the Idea of Beauty, the grid and Don Juan ascend to nothing, because they are blind and refuse any general order, or are unable to see it. Don Juan loves conquest for its own sake, as the grid, in mere self-repetition or blind rotation. Don Juan falls into lower and lower determinations, into complete disorder in his ‘becoming’, only to face an inert generality, nothingness. But nothingness itself speaks in the name of order, of the general, of death. Don Juan and the grid are figures of human slaves who have forgotten all masters, even the inner one: fortress, ghetto, the Stone Guest, the General, defied by man and accepted only as a guest and not as a true master. It is Molière who introduces GUILT as a characteristic of man in the old Spanish story, and it is SHAME, Krauss writes, that the grid presides over, the shame of the indecision about the grid’s connection to matter and spirit. Both Don Juan and the grid are mythological structures that deal with contradictions and that allow contrary views to be held in some kind of para-logical suspension, through covering up the contra-diction or through repression, but not through re-solving the paradox.

Furthermore, Krauss pays attention in *Grids* to what she calls “a certain kind of accessory literature to which painting paid an increasing amount of attention” and identifies the grid as the illustrative matrix of knowledge in physiological optics. Thus, even though, “itself invisible in nineteenth-century painting”, the grid, “as an emblem of the infrastructure of vision”, became an insistent and visible feature of neo-impressionist and symbolist painting. The grid was present in symbolist painting, Krauss writes, in the form of the window, which in the associative system of symbolism, was equally opaque and transparent, as transmission and reflection, as mirror that flows and freezes; as source towards birth and, simultaneously, as freezing into stasis towards death. As grid or window, as a matrix of ambi- and multi-valence, the grid is present even where one does not expect it, Krauss writes, in the works of Matisse, who “admits openly to the grid only in the final stages of the *papiers découpés*”.

The grid (like the image) is “fully, even cheerfully, schizophrenic, because it portends the centrifugal and centripetal existence of the work of art” — however, I believe that the precariousness of being of the work of art is something ontologically constituent for the work of art as such and does not reside in the grid as a structure to portend to this. It is rather the mode of being that the work of art is, that is cheerfully schizophrenic: beyond-the-frame-

attitude and within-the-frame-attitude; engulfment, implosion and petrification; complete isolation from and complete merger with the world.

Krauss ends her essay with the conclusion that one has to interpret the grid not from a historical perspective, that is in terms of development, because, as she stated in the beginning of her argument, the grid resists any development, but from an etiological psychological condition, which is different from the historical one as it is not progressive, but rather “an investigation into the conditions for one specific CHANGE -the acquisition of disease to take place”, “into the background of a chemical experiment, asking when and how a given group of elements came together to effect a new compound or to precipitate something out of a liquid (Krauss 1979: 50-64).” The lack of development does not imply a lack of quality (in the same way as a malady can be creative). And thus the grid is also anti-developmental, anti-narrative and anti-historic.

Conclusion

Traditional Western painting was the art form par excellence. It was a way to an ideal higher state, a ‘window to another world’, something to be transcended through contemplation. It had a narrative and symbolic meaning. Traditionally, painting implied frontality between viewer and a painting on the wall that constituted an opening into a metaphysical space. And even after all modernist and avant-garde moves to challenge and disrupt a traditional understanding of painting, after all postmodernist attempts to deconstruct and re-construct it, painting, or rather paintings in plural, still remained primarily a visual form of art (subjected to truth’s paradigms).

The idea of the arabesque remembered here is not a schema of a visual revelation, but the perceptive, as-well-as intermediary of donation and reception of form in re-presentation. In it, the infinite plenitude of the one manifests itself suggestively (directly, not symbolically). The arabesque confronts sight with a kaleidoscopic challenge that no longer allows it to linger on details or individual forms, nor to be able to take in the whole image at once, there is no ideal operative view point anymore. The arabesque is an avoidance of immediate and quick interpretation, of immediate and collective apperception of interpretable phenomena. Visual perception is intensified by the excessive sensuousness of the interiorization of aesthetic experience. Complex and rich interlacings protect the mysteries and intimacies of thoughts and images. The fascination with the subtleties of detail, the elaboration of endless details are best explored and experienced in private. Confronted with arabesques, one has the feeling as though the creative impulse has been driven by a desire to compel the viewer or reader to withdraw within her/himself, to meditate on her/his own, to discover meaning for her/himself and for her/his own life.

Krauss brings to the sur-face the relation of the grid to the symbolic, which modernist painting tried to (un)consciously hide away. But she does not look at the grid in terms of an ornamental structure. Nakedly displayed as symbolic structure, as myth, matrix of knowledge, as window or as schizophrenic sur-face, defined as an *emblem*, Krauss does not refer to what remains repressed even for her, the inlaid ornamental work, the embossed ornament that determines its character. The grid is the most basic and oldest schema of the ornamental, and also of the arabesque. The grid is an ornament — in which pure (mathematical) presentation and aesthetic ex-position can be displayed on the same value plane. And the conclusion has to be, in Brett’s words, that any attempt to base a history of modern painting upon the development of painting’s own unique means and conditions of existence, autonomously self-generating and independent of other realms, is likely to be historically thin, theoretically restricted and, I believe, a less interesting and empty formalist game.

References:

- Barthes, Roland, *The Pleasure of the Text*. New York: Hill and Wang, 1975.
- Brett, David, *Rethinking Decoration. Pleasure and Ideology in the Visual Arts*. Cambridge: Cambridge University Press, 2005.
- Grabar, Oleg, *The Formation of Islamic Art*. London: Yale University Press, 1973, 1987.
- Grabar, Oleg, *The Mediation of Ornament*. New Jersey: Princeton University Press, 1992, 1995.
- Grabar, Oleg, *Islamic Visual Culture, 1100-1800. Constructing the Study of Islamic Art*, Vol. II and Vol. III. Hampshire: Ashgate Publishing Limited, 2006.
- Kant, Immanuel, *Critique of Pure Reason*. New York: Cambridge University Press, 2008.
- Kirves, Martin, *Ornament als Erkenntnisform. Die epistemische Entwurfstheorie der South Kensington School* [online, 2012]. Available from URL http://www.dgae.de/downloads/Martin_Kirves.pdf. [Accessed October 2013].
- Krauss, Rosalind, *The Optical Unconscious*. London: The MIT Press, 2009.
- Krauss, Rosalind, *Grids* [online, 1979]. Available from URL <http://www.jstor.org/discover/10.2307/778321?uid=2129&uid=2&uid=70&uid=4&sid=21102754458581>. [Accessed October 2013].
- Malabou, Catherine, *The Heidegger Change*. New York: Suny Press, 2011.
- Malabou, Catherine, *The New Wounded. From Neurosis to Brain Damage*. New York: Fordham University Press, 2012.
- Masheck, Joseph, *The Carpet Paradigm. Integral Flatness From Decorative to Fine Art* [online, 2009]. Available from URL http://www.josephmasheck.com/BIOgraphy_files/carpet.pdf. [Accessed October 2013].
- Nancy, Jean-Luc, *The Ground of The Image*. New York: Fordham University Press, 2005.
- Nancy, Jean-Luc, *Multiple Arts. The Muses II*. Stanford California: Stanford University Press, 2006.
- Nancy, Jean-Luc und Ferrari, Federico, *Die Haut der Bilder*. Zürich: diaphanes Verlag, 2006.
- Noica, Constantin, *Six Maladies of the Contemporary Spirit*. Cornwall: University of Plymouth Press, 2009.
- Riegl, Alois, *Die Spätromische Kunst-industrie nach den Funden in Österreich-Ungarn im Zusammenhange mit der Gesamtentwicklung der bildenden Künste bei den Mittelmeervölkern*. Wien: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901.
- Woodfield, Richard, ed. *Framing Fromalism. Riegl's Work*. Amsterdam: G+B Arts International, 2001.

IMMIGRATION MOVIES IN TURKEY: HOW ECONOMIC CHANGES AFFECT TURKISH CINEMA IN 1960S

Gökhan Uğur, PhD
Beykent University, Turkey

Abstract

The essence of this study is defined by the Marxist concept of infrastructure and superstructure. In 1950, Adnan Menderes, the leader of Demokrat Parti (Democratic Party) won the presidential election in a landslide victory. Then, he implemented liberal economy which caused fundamental changes in the country. The changes in economic base affected the superstructure. New economic conditions forced people to move other places, especially to larger cities. Farmers became factory workers. Meanwhile, the role of women in the society was changed, since they were also integrated into the production process. Therefore, the movies dealing with the problems of immigrants emerged as a result of the new economic system. *Gurbet Kuşları* (1964), directed by Halit Refiğ, is the first movie which analyzes the results of these economic changes.

Keywords: Economic and Social Change, Immigration, Immigration Movies

Introduction

According to some people, mass migration in 1950s in Turkey is caused by wrong political moves. In this work, how the notion of migration in 1950s is reflected in Turkish movies that are made in 1960s will be analyzed. In the first part of the work, I will focus on the theories that try to define the notion of migration in the broadest sense. If we take into consideration that the factors that lead to migration are not only wars and natural disasters but also economic conditions, it is inevitable to examine economic approaches to migration.

After a general frame about migration is created in the first part, the emergence of domestic migration in Turkey and its reflection on social life will be the focus of the second part. In Turkey, where social changes such as urbanization and industrialization are not healthily experienced, the poor who immigrate to big cities to make living get lost in metropolis. Some of them go back to their hometowns, some struggle to live in these big cities. The immigrants that start a new life in big cities (especially in İstanbul) cannot break their bonds with their hometowns and they create their own rural areas in these big cities. The ones that cannot feel satisfied economically- that include the majority- build a house for themselves in any empty area. As a result of this, "gecekondu"³³³ emerged as the biggest problem of big cities. These issues will be the focus of the second part.

The reflection of social developments in the art of cinema will be analyzed in the third part. There are two movies which are made in 1960s about migration that draw attention. Therefore; the movies *Gurbet Kuşları* by Halit Refiğ and *Bitmeyen Yol* by Duygu Sağıroğlu will be the focus of the third chapter.

³³³House put up quickly without proper permission.

A General Look at the Notion of Migration

In the broadest sense, migration means that a group of people leave where they live due to various reasons and move to another region/city/country. The history of migration is as old as the history of humanity. The notion of migration, which people have to face since the very ancient times, has affected the fate of humanity and has been experienced more in the last fifty years because of various reasons. Therefore, it draws the attention of sociologists (Abadan, 2002: 1). The first theoretical explanation about migration was made in the 19th century. Today, it is approached from various perspectives; not only economic aspects but also social aspects are taken into account. However, I contend that it is necessary to focus on economic reasons that lie at the core of migration. Hence, it is of utmost importance to concentrate on explanations which are based on economy.

According to neo-classical approach, the main reasons that lead to migration are the geographical differences in offer and demand. While underdeveloped countries offer low salaries, developed countries provide higher salaries for employee. As a result of this difference in salaries, people in underdeveloped countries migrate to developed countries (Abadan, 2002: 6). On the other hand, recent economic theories oppose to neo-classical approach and claim that the decision to migrate is not always taken by individuals but by a whole society. According to Abadan, the defenders of this claim think that when a family decides to migrate, what they desire is not always to increase their income but to decrease the level of their relative poverty. Based on this new theory, it can be said that the main reason for migration is not the difference in salary. Even if this difference disappears, migration will not end.

In addition to the general approaches to migration, a new theory emerged recently; Split Labor Market Theory. According to this new theory, the main reason for external migration is not unemployment or low salaries in underdeveloped countries but the need for employees that will work with low salaries in the countries to which people migrate. If the fact that the main principle in market economy is the lowest expense with the highest profit and production, the need for employees in developed countries can be understood better (Abadan, 2002: 11). Another claim of the defenders of split labor market that draw attention is that the main desire of the people who migrate is to increase their social reputation (Abadan, 2002: 11). The aim of individuals is to have a place as high as possible in social hierarchy. Immigrants from underdeveloped countries give the people in developed countries chance to climb up the social ladder because these people consider themselves only as workers, not as citizens of the countries they migrate. Moreover, since now their salary is higher than the salary they receive in their own countries, they have already received the prestige they needed. In this respect, while immigrant workers can be classified as having no desire to reach higher levels, native workers are more motivated to climb the social ladder. Therefore, it can be said that they are more qualified in market; this claim gives birth to Piore's split labor market (Abadan, 2002: 12).

I would like to refer to another view about migration without getting to much far away from the main approaches that analyze migration in 1960s. According to Wallerstein's World-systems theory, as capitalist countries economically have more control over non-capitalist countries, migration from underdeveloped countries begins. According to this theory, international migration is a result of developments in capitalism. Migration is inevitable when developed countries take control of labor and commodity in underdeveloped countries. The factories that developed countries run in underdeveloped countries depend on technological developments, so they put an end to traditional production methods. Moreover, more women workers are employed because they are given lower prices. As a result, the possibility of employment for men decreases and this gradually leads to migration (Abadan, 2002: 16). If we take this approach in consideration, it can be better understood that the

internal migration in Turkey emerged as a result of the changes in economic conditions. Although all the theories mentioned so far are about migration from underdeveloped countries to developed countries, it is possible to consider the same approaches to understand migration from developed regions to less developed regions in a country. As Adnan Menders became the prime minister of Turkey, the relationship between Turkey and the United States of America got closer. This increased the level of development in different regions of Turkey. Production depending on machine power started and this became the main reason that led to migration from rural areas to cities. All these will be analyzed in detail in the second part.

Migration in Turkey

The theories about migration that are explained in the first part also give important information about Turkey that rapidly started to adopt capitalist economy since 1950. Democratic Party, founded by Adnan Menderes in 1946, followed policies to create a consumer society in Turkey since 1950s. Therefore, industrialization relatively increased and migration from rural area to urban areas increased. According to Turkish scholar Oğuz Makal, crediting facilities in urban areas is the reason behind industrialization (Makal, 1987: 31). Moreover, the rural people's view of the share of land between brothers and inheritance law in East and South East of Turkey caused each member to have less amount of land. This, in turn, led to lower income (Esen, 2000: 102). Furthermore, social insurance, which is considered to provide individual safety, is more common in urban areas; that is why, this is another factor that triggers migration to urban areas. While such changes occurred in urban areas, trade increased in cities and economy got livelier; these changes made cities more attractive. When these changes happened in Turkey between 1950s-1960s, the rise of population in cities was around 80%. In addition to the changes in economic field, developments in transportation were made in 1950s. This made transportation between cities easier. It means going to cities was no more difficult. High rates of unemployment in rural areas, together with easy transportation to cities made urban areas hopeful places. The city which was affected mostly by these changes was İstanbul and it was reflected as a magical city (Öztürk, online). However, migration from rural areas to cities in Turkey was different from migration in West.

The point that should be paid attention is the fact that when big cities like İstanbul, Ankara, and İzmir got bigger due to migrations, the people who migrated there could not get urbanized at the same speed. Moreover, the number of immigrants who were expecting to find jobs in big cities was a lot more than the employment opportunities in big cities. As a result of the rise in population in big cities and insufficient employment opportunities, unemployment emerged as a big problem in these cities. Unemployed immigrants did not consider going back to their hometown as a solution. However, they did not have the money to buy a house for themselves in big cities, either. Therefore, they built their own houses and "gecekondu"s emerged. According to Öztürk, the history of gecekondu overlaps with the history of urbanization (Öztürk, online). Turkish movies made in 1960s showed the life of bourgeoisie living in İstanbul. This made people watching them in urban areas to dream of such lives and as a result, migrate to cities (Öztürk, online). People who migrated to big cities with big expectations could neither end connection with their hometown nor adopt the life styles of the places they migrated. This caused them to be alienated to and to be in conflict with where they live. What Makal claims is that an immigrant in a big and different city struggles with his problems that he has no chance to solve. He feels disappointed as a result of the big gap what is reflected in movies and what he has experienced in reality. Therefore, all the values he used to have in his hometown collapse and he feels alienated to society. His failure in social life and his inner conflicts make him feel desperate (Makal, 1994: 32). His personal values and the values where he has migrated clash. As a result of this, he looks for

new things and gets closer to people who live the same dilemma. As a result, even if he lives in the biggest metropolis in the world, he cannot benefit from the urban features of the city. He creates, together with the people like him, a rural area in the city. Hence, the borders of village and city intertwine.

According to Split Labor Market Theory, which was explained in the first part, immigrants are like unqualified workers that increase the employment opportunities of the qualified workers in the places they migrate. The situation is the same in 1960s in Turkey. People who have no source of income except for agriculture in rural areas migrate to big cities due to various reasons. These people turn into unqualified workers who are willing to do any kind of job in order to survive. In other words, these immigrants are employed for the jobs that do not require much qualification (Öztürk, online). Moreover, the same theory explains that these people migrate to big cities for a temporary time period. Therefore, they are not interested in how prestigious their jobs are but how much money they earn.

What Kaplan states is that a person differentiates himself from others by means of the identities he owns. Indeed, this differentiation can be explained through the importance of others for us (Kaplan, 2005: 48). The identities other people have are more related to how we perceive them rather than what they reflect to us. One has to create an identity in order to define himself (Kaplan, 2005: 48). This is also the beginning of a binary procedure. Knowing the identity of others means knowing who you are. It will be beneficial for us to consider this situation together with the identity problem of one who migrates to big cities with big dreams but who gets disappointed. Cultural reflection of this situation begins in 1970s and 1980s (if not in 1960s) with the birth of arabesque. Arabesque music, which is like a village boy born in a big city, mainly reflects the regretful feelings and longing for going back to hometown of the people who cannot receive what they have expected in city life. Regrets and disappointments of immigrants were reflected in folk song lyrics as follows: “Why have I come to Istanbul?”³³⁴, “Come on, Let’s go back to our village”³³⁵, “Wash me with the rain of my village”³³⁶. This arabesque culture was born to explain the feelings of the immigrants and to create and identity for them. After it was mixed with pop culture, it became popular in city as a new kind of music type called “fantasymusic”.

Movies in 1960s That Concerned with Migration

The art of movie is explained by Öztürk as accompanying reality with photographic reality. (Öztürk, online). It can be seen that the reasons for migration did not change between 1960s and 1980s (Kamal, 1994: 34). In 1960s Turkish movies, there are only two movies that dealt with migration which was a recent social phenomenon then. The first one is *Gurbet Kuşları* made by Halit Refiğ in 1964, and the *Bitmeyen Yol* made by Duygu Sağıroğlu in 1965. What Güçhan states about these movies is that the characters in the movies feel humiliated because of being from a village and they want to be like the people in the city. However, the moral values of their society do not let this to happen (Güçhan, 1992: 168).

Refiğ, described by Sconomillo as “respectively moved from being a cinema writer to assistant director, then from a scenarist to a director” says although some scenes were not shot as he desired due to financial reasons, the movie *Gurbet Kuşları* is close to what he desired to make (Refiğ, 1971: 15). The movie, which is a turning point in the director’s life with the passion and the scene- setting in it (Sconomillo, 2003), is about the story of a family who moves from Kahramanmaraş to Istanbul but cannot adapt the life there and turns back to

³³⁴ “Neden Geldim İstanbul’a” is a folk song written by Erkan Oğur

³³⁵ “Hadi Gel Köyümüze Geri Dönelim” is a very popular arabesque song performed by Ferdi Tayfur

³³⁶ “Beni Köyümün Yağmurlarında Yıkasınlar” is very popular song written by Erhan Guleryuz and song by Omer Danis.

Kahramanmaraş. Refiğ reflects his ideas about migration during the movie. The story is based on play writer Turgut Özakman's *Ocak*; the scenario is completed by Refiğ and Orhan Kemal (Makal, 1994: 37). According to the interview between Refiğ and Onaran, Refiğ wants to "consider migration as a problem, analyze it realistically, and reflect the problem and the people experiencing it with a realistic approach" (Onaran, 1981). Refiğ reflects the story of people from a conservative environment, from minorities, and from a modern environment in order to show the contradictory structure of Istanbul. By doing so, he reflects three characters from three different environments. According to Makal, women do not have the primary status in the movie and they are used as a means to depict the desired idea (Makal, 1994: 38). What Scognomillo states is that Fatoş, who is defeated by her desires, the belly-dancer working in the pavilion, and the women with Greek origin, played by Gülbin Eray, are the examples of women that live in big cities and they draw attention sexually (Scognomillo, 2003: 227). On the other hand, Akad thinks that the subject of this movie is misleading and criticizes that the failure of the family is directly connected to sexuality in the movie (Onaran, 1990: 165). Overall, Refiğ considers alienation in social terms in the movie and emphasizes the fact that one should be like the people living in a city in order to succeed living in a big city (Makal, 1994: 39). At the end of the movie, he shows that İstanbul is a big hope for people despite everything (Esen, 2000: 109). Migration continues to draw Refiğ's attention, in 1970s and he makes a new movie *Fatma Bacı* in 1972. Since my main issue is the movies about migration in 1960s, I will mention *Fatma Bacı* briefly. It tells us the story of a woman who migrates to a big city from Anatolia with her children and works as a custodian to make her living. This movie created different reactions (Scognomillo, 2000: 232). According to Nijat Özön, *Fatma Bacı* is not strongly founded (Özön, 1985). On the other hand, Uçakan thinks that Refiğ reflects the disappointment of the new generation very scientifically and beautifully in that movie (Uçakan, 1977).

The movie *Bitmeyen Yol* was made by Duygu Sağıroğlu one year later *Gurbet Kuşları* was shot. It is about the people who leave everything they have in their hometown and move to a big city to find a job. However, by time, these people understand that finding a job in big city is not easy and they feel disappointed. (Esen, 2000: 111). This was the first movie by Duygu Sağıroğlu and it was censored. It starts with Güllü Bacı who lives in "gecekondu" that recently emerged in those years. Makal notes that this is the first movie that closely depicts "gecekondu" (Makal, 1994: 39). There are villagers who migrate to Istanbul with their quilts on their shoulders. The first thing they do in the city is to find other immigrants and get information from them about city life. Sağıroğlu highlights how social inequality in city defeats the villagers who leave their hometowns (Şaşa, 1968: 118). In terms of the story it tells, the movie *Bitmeyen Yol* is in agreement with the ideas of sociologists. According to Makal, it reflects the reality of not its own time period but of 1940s and 1950s. Moreover, some critics think that the movie is sometimes like a manifesto, so criticism and depiction are intertwined (Şaşa, 1968). On the other hand, Scognomillo contends that *Bitmeyen Yol*, which is sometimes natural and sometimes lyrical, if approached with today's point of view, reflects one of the first examples of movies to be made twenty years later (Scognomillo, 2000: 232).

These two movies I explained in this paper received great attention through the ideas they represent and their great success in reflecting reality during the years they were presented. Refiğ and Sağıroğlu drew attention to internal migration in 1960s when it was not a popular issue. They are the first successful directors that depicted migration and its bitter results on screen.

Conclusion

Migration starts with the history of humanity and still continues. Although many different reasons are considered to be behind it, mainly economic reasons are focused in this

paper. As far as the theories based on economic reasons are analyzed, it can be seen that they can explain internal and external migration in Turkey. The problems experienced in urban areas in Turkey during industrialization mainly depend on the fact that this period was experienced not naturally as in Europe. Industrialization and urbanization/urbanization and migration to urban areas did not occur in a balanced way, so problems could not be solved and cities became centers of problems. The directors who dealt with these problems for the first time in 1960 are Refiğ and Sağıroğlu. They created the best art products that focused on migration through the way they represent the issue.

References:

- Abadan, N. 2002, *Bitmeyen Göç: Konuk İşçilikten Ulus Ötesi Yurttaşlığa*, Bilgi Üniversitesi Press: İstanbul.
- Esen, Ş. 2000, *80'ler Türkiye'sinde Sinema* Betaş: İstanbul.
- Güçhan, G. 1992, *Toplumsal Değişme ve Türk Sineması* İmge Publishing: Ankara, in Esen, Ş. 2000, *80'ler Türkiye'sinde Sinema* Betaş: İstanbul
- Kaplan, N., 2005, *Türk Sinemasında Almanya'ya Dış Göç Olgusu ve Kimlik Sorunu*, unpublished PhD Thesis.
- Makal, O. 1994, *Sinema'da Yedinci Adam*, Ege Publishing: İzmir.
- Onaran, A. Ş., 1981, "Prof. Dr. Alim Şerif Onaran'n Halit Refiğ ile Özel Konuşması", Bkz. Makal, O. 1994, *Sinema'da Yedinci Adam*, Ege Publishing: İzmir.
- Onaran, A. Ş., 1990, *Lütfi Akad*, Afa Publishing: İstanbul, in Esen, Ş. 2000, *80'ler Türkiye'sinde Sinema* Betaş: İstanbul page: 109.
- Özön, N. 1985, *Sinema, Uygulayımı-Sanatı-Tarihi*, Hil Publishing: İstanbul, in Sconomillo, G. 2003, *Türk Sinema Tarihi* Vol. I., Metis Publishing: İstanbul page: 232.
- Refiğ, H., 1971, *Ulusal Sinema Kavgası* Hareket Publishing: İstanbul, in Sconomillo, G. 2003, *Türk Sinema Tarihi* Vol. I., Metis Publishing: İstanbul. page: 229.
- Sconomillo, G. 2003, *Türk Sinema Tarihi* Vol. I., Metis Publishing: İstanbul.
- Şasa, A., "Bitmeyen Yol ve Gerçeklik Sınavı", *Ulusal Sinema*, Nr: 3/4, 22 November 1968. Quoted by Scognamillo, *Türk Sinema Tarihi*, Vol II, page: 118.
- Uçakan, M., 1977, *Türk Sinemasında İdeoloji*, Düşünce Publishing: İstanbul,
- Öztürk, M., *Türk Sinemasında Gecekondular* için lütfen bakınız:
<http://www.ejts.org/document94.html>

BETWEEN HISTORY AND LEGEND: FOOD, CULTURE AND POLITICS AT THE ESTE COURT OF FERRARA - A PSEUDOSCIENTIFIC APPROACH TO REIGNING.

Andrea Guiati, PhD

Distinguished Teaching Professor Director, Muriel A. Howard Honors Program Coordinator,
Italian Section SUNY Buffalo State

Abstract

Gastronomy, by which I mean the *pleasure* and the *luxury* of the dinner table, was always a passion of the ambitious Este family. They were rulers of Ferrara from the beginning of the 13th to the end of the 16th centuries. The Estensi, as they were called, fancied fine clothes, elaborate ceremonies, beautiful art works and succulent food. Today's Ferraresi have adopted many of their customs and habits. If they can afford it, that is. The Este laid a splendid table. Famous chefs, such as Cristoforo Messibugo, whose name is still revered in culinary circles, spent their time inventing dishes for the many courses that typically made up one of these gargantuan feasts. And what a sparkling life was lived in those splendid times!

When I grew up in Ferrara in the 1960s and early 1970s very few people seemed to remember the city's glorious past, the castle moat had become one of the favorite dumping grounds to rebellious teenagers who would throw in it outdoor bar furniture, bicycles and whatever else they found lying around late at night. The breathtaking castle was in need of repairs. Via delle Volte with its arches and cobblestones had become home to prostitutes and small-time thieves, the wall surrounding the city was crumbling down. The Estensi's work had been lost, not only through fire and earthquake, but also due to civic disregard.

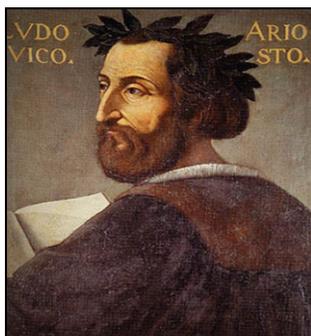
Keywords: Politics, Culture, Food, Estensi, Ferrara

Introduction

There was a time in Italy when countries/territories were city-states. The Este family ruled Ferrara, a city of the Po Valley, from the beginning of the 13th to the end of the 16th centuries. They loved art, food, and they were skilled politicians. They left an architectural legacy and gave the city an unmistakable identity, comparable to none.

I.

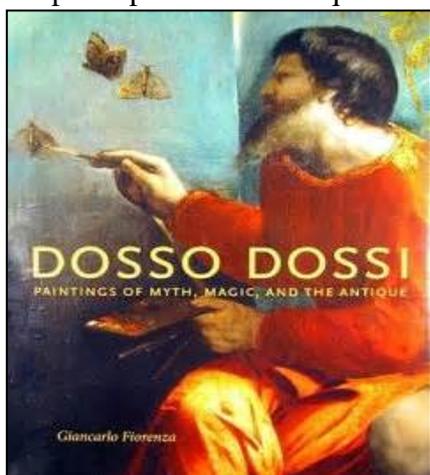
Gastronomy, by which I mean the *pleasure* and the *luxury* of the dinner table, was always a passion of the ambitious Este family. They were rulers of Ferrara from the beginning of the 13th to the end of the 16th centuries.



The Estensi, as they were called, fancied fine clothes, elaborate ceremonies, beautiful art works and succulent food. Today's Ferraresi have adopted many of their customs and habits. If they can afford it, that is.

The roots of culture and civilization of the inhabitants of this magnificent city of the Po Valley may be found in the verses of Lodovico Ariosto, considered by many to be one of the greatest Italian poets along with Dante Alighieri, Torquato Tasso, Petrarca,

Ugo Foscolo, Giacomo Leopardi, to name a few. Ariosto was also known as "the Brilliant Madman of Renaissance Literature." Those roots are also to be found in the paintings of Dosso Dossi and other members of the Ferrarese Painting School, and of course in the Este's sumptuous parties and banquets.



Under Ercole I, who is said to have led the courts of culture, as well as in generosity great castle that today defines the the idea of the joyful feastings court one of the most magnificent

At the time the castle was appearance from the present one, northern limit of the town; it imposing towers: Lions, Paolo, and Santa Caterina. They formidable appearance of the

The Este laid a splendid table. Famous chefs, such as Cristoforo Messibugo, whose name is still revered in culinary circles, spent their time inventing dishes for the many courses that typically made up one of these gargantuan feasts.

And what a sparkling life was lived in those splendid times!

Among the rulers of Ferrara, Ercole I d'Este, the second duke, is specially remembered for his parties, banquets and tournaments. He graced his court with poets,



musicians, painters, intellectuals, and above all beautiful courtesans. have created modern their times in art and and hospitality. The heart of Ferrara suggests that made the Este in Renaissance Italy.

very different in its it stood at the extreme incorporated four Marchesana, San contributed to the stronghold.



Only after a long time did the Este decide to transform the fortress into a residence for their court. Starting in the second half of the 16th century they undertook considerable renovation works. Indeed, one of the most rewarding experiences of the construction process was inspired by the duke's commitment to the highest possible standards of workmanship, which was embraced by the builders. First, they built a wing connecting the castle and the ducal residence (the present Town Hall), and enlarged the Tower of Lions and the Marchesana Tower. Then they constructed kitchens on the ground floor and the pretty hanging garden on the main floor *giardino pensile*, the one above street level, which we would call the second floor, but the Estes refer to it as the "*Piano Nobile*." Finally, in the second half of the 16th century, after the damage caused by a great fire in 1554 and by an earthquake

in 1570, the transformation from military fort to elegant residence was completed. Grand staircases, spacious halls, monumental arches and richly carved decorations became the background of the sumptuous life at the court of Este.

When I grew up in Ferrara in the 1960s and early 1970s very few people seemed to remember the city's glorious past, the castle moat had become one of the favorite dumping grounds to rebellious teenagers who would throw in it outdoor bar furniture, bicycles and whatever else they found lying around late at night. The breathtaking castle was in need of repairs. Via delle Volte with its arches and cobblestones had become home to prostitutes and small-time thieves, the wall surrounding the city was crumbling down. The Estensi's work had been lost, not only to fire and earthquake, but also due to civic disregard.

Alfonso II continued the tradition of Ercole I and spent lavishly on art and culture. However, there was also a political motive for his lavishness. He realized that Pope Pius V intended to make the territory of the court of Este part of the Papal States in order to squeeze to gain the Pope's respect if not his affection. The chronicles say that he surrounded himself Florence, the pontiff's enemy. Alfonso's strategy was smart and effective. He laid out a plan with many powerful, clever, courtiers. Ariosto himself was surprised to find so many nobles at the court. In the *Cassaria* he tells Lucrano "That there are so many here, money must run



loose in the streets and gold must pour like rain." To him, the picturesque customs of the Este court were nothing more than "pomposity and fumes."



Subsequently, he lunatic and spent the rest of to the Ospedale Sant'Anna.

How treacherous Este could be!

Do you really think that life was any different than nowadays? Let's not forget these intellectual hangers-on were paid by the Este for their services, which meant writing flattering things about them. Few dared to speak honestly about their employers. As a matter of fact, when Tasso dared to do so he found himself in the castle prison, located in the Tower of Lions.



was declared a his life confined

those fun-loving

During their parties and tournaments so much gold, bounty, and good food was passed around that even the poor Ferraresi benefited from it. It would seem that the Ferraresi and their wealthy guests were enemies of the melancholic life. Their life was one party after

another. Any occasion was worth celebrating, whether it was the arrival in the city of a new captain, a marriage, or the conclusion of a fishing/hunting tournament. Every ceremony ended with a succulent banquet accompanied by a cascade of *Lambrusco Frizzante* or *Vino di Bosco* (the latter is a local red wine produced at the Este summer residence at Bosco Mesola, on the Adriatic Coast, near the breathtaking Abbey of Pomposa).



Here is how Sir Cristoforo Messibugo (at least to my memory of it) the greatest of all of the Este's chefs, describes a Rabelaisian four-course dinner offered to Girolamo Giglio by Duke Ercole II during the carnival of 1536. The table was set with perfectly white tablecloths on which were laid finely wrought forks, spoons and knives, sparkling crystal glasses, beautifully decorated plates, ornamental salt and pepper holders and shining candelabums.

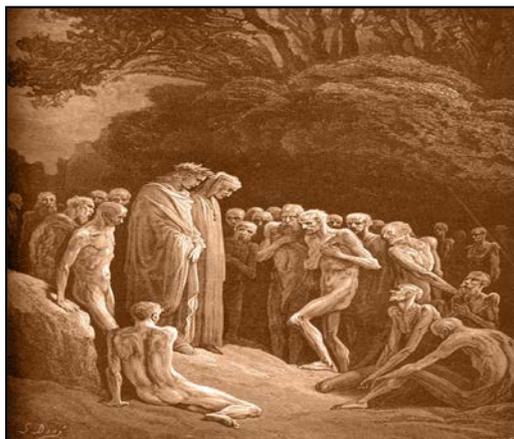
In front of each setting Cristoforo placed a piece of bread in the shape of an animal such as a pig or a chicken. This is the first record we have of any kind of bread different from the commonly used round loaf. Falcons made of sugar or carved out of fruit also adorned the table. The antipasto included various salads, four kinds of salami, four types of sliced beef tongue; capons stuffed with a mixture of wild boar meat, bread crumbs, Parmesan cheese, parsley, rosemary and nutmeg; and last but not least, a plate of puff-pastry partridges with Turkish rice.

Now, I don't know about you, but I am getting hungry!



The first course included twenty pheasants; pork roast for forty, scores of roasted partridges topped with a French creamy garlic sauce, Gorgonzola cheese and butter. Calories and fat, here they come! Then, ten boneless capons sautéed in liver sauce, fried slices of salami with sugar, wild boar soup with pine nuts, and ten ducks blanketed in dough.

The second course consisted of ten capons in a red peppery sausage sauce; thirty one pigeons-Lombardy style-with thirty-eight pieces of yellow sausage and cabbage; ten pheasants stuffed with prosciutto in regal sauce. Let's continue with the menu, there is more! Pork loin; turtledove soup; and ten barbecued baby turtle doves.



These were the animal lovers of the time: they loved to eat them!

The third course was a potpourri of pasta with olives, oysters, sugar, pine nuts, pistachio, pears and butter. Because the chef cut the butter curly shapes, that resembled lamb's wool, the dish was called *pasta alburrito lanato*.

Those still seated for the fourth course

(while the others would fight for a space in the courtyard to, shall we say, make room for more comestibles!) watched as five hundred oysters decorated with sliced oranges and lemons were carried to the table. The meal ended with rose water. At bed time, each surviving guest received fresh grapes, sugar water, apples, lettuce and watermelon syrup to ward off insomnia and heartburn. And just in case any unpleasantness occurred during the night, a huge ceramic bowl was placed at each bedside.

No wonder Dante found a place also for gluttons in his Inferno!

When it came to love for cuisine, the Estensi were not alone among the courts of Italy. At Pesaro, a city on the Adriatic coast not far from Ferrara, during Costantino Sforza's marriage to Camilla d'Aragona in 1475, the celebration was so extravagant nothing like it had ever been seen before. The wedding cake replicated one of the twenty-four castles of the city. Chronicles tell us how during the festivity gold apples were thrown to the guests and to the populace as they ran wildly through the streets. One thousand gold coins were given to painters, musicians and other artists engaged for the occasion. And from the fountain in the main square, wine poured out instead of water.

And everyone was sooo happy!

They didn't have to worry about DWI laws; they just let their carts be pulled home by oxen, mules or horses.

When the Estensi heard of the celebration Pesaro was mounting they decided to outdo the rival city. On the occasion of the arrival of Beatrice d'Ungheria (sister of Elenora d'Aragona) they built a tunnel of sugar and hazelnuts on the main street and put white wine in their fountains too.

As you see, the idea of outdoing the Jones' did not originate in American suburbia. Nossignore! Here comes the kicker!

Among the Estensi's extravagant parties, the one planned to celebrate the marriage of Alfonso I d'Este, in 1503 to the sexy Lucrezia Borgia, was one of the best. Guests ate 300 quality cows – none of them from England of course (subconscious premonition and fear about mad-cow disease), 300 wheels of Parmesan cheese, 1500 birds, and the same number of rabbits. At the table, guests confronted halves of watermelons into which a single red grape had been placed to honor Lucrezia's celebrated... a picture is worth a thousand words.



like a pear, usually served
hallmark of *salumerie*
since then; *cappelletti*



During
Lucrezia's time, many
typical dishes of Ferrara
originated, among them
are: *salama da sugo* (a
pork sausage – shaped
with mash potato), which has been the
(delicatessen) in the city of Ferrara



(stuffed pasta shaped like little hats); *brazadela*
(a type of Italian sweet quick bread – shaped like
a big donut, usually hanging from the waiter's
right arm, while with the left hand he would
pour wine into glasses); and *pampepato* (a
round, sweet cake typical in many Italian
cities, available mostly during the holiday
season).



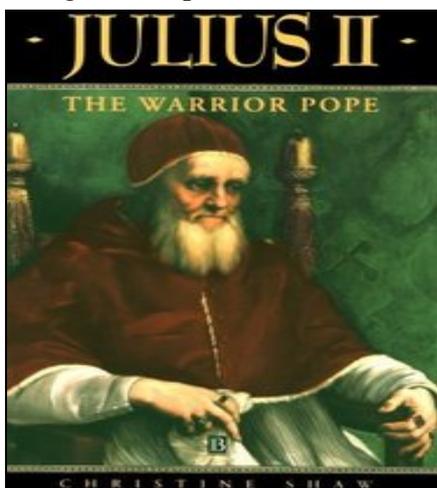


Please forgive me for the following digression, but this information has been passed down in my family for centuries. I must have had an ancestor among the people I'm about to mention. The beautiful Lucrezia, who became popular with the ordinary people of Ferrara (my ancestors were among this class), is remembered as a brilliant flame that attracted many trembling moths. According to the tale, she loved to sunbathe in the nude on the *giardino degli aranci*, a garden/balcony of the castle that

overlooked the main street. Men fought duels to gain the best view of her. That is how the duchess achieved stardom and found a place in everyone's heart, and in many discrete alcoves, including that of Pietro Bembo (Renaissance cardinal who wrote one of the earliest Italian grammars and assisted in establishing the Italian literary language *lingua aurea*. So it is written in my family history book!

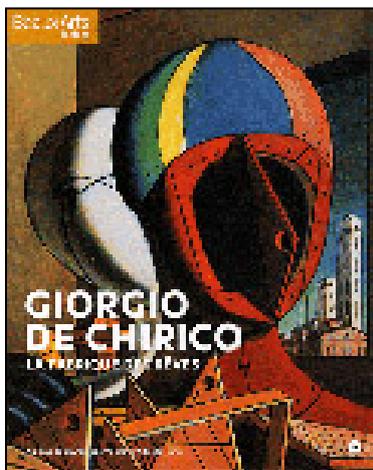


While devoting themselves to the delights of food, the members of the Este court did not neglect the pleasures of the soul. They especially cultivated music and theater with great passion. Regardless of the expense, they brought the most renowned musicians to the court. And the most fanciful machines were invented for theatrical scenery. The salons of the *Piano Nobile* resounded with verses of Boiardo, Ruzzante and Tasso, and with musical concerts often performed by courtesans. Between dances and banquets, the dukes took care of government affairs. Being expert statesmen, they also attended to the town military defense. At a stone's throw from the castle there was a large arsenal where Alfonso I developed his expertise at warfare. Here he fabricated extremely powerful weapons to which he gave



picturesque names like *Gran Diavolo* (Great Devil) and *Terremoto* (Earthquake). Heaven melted down a statue of Pope Julius II to make a *culverin* (a small cannon), out of it. And make no mistake about it; he called the new armament *Giulia*. Who was Julius II anyway? Pope Julius II (5 December 1443 – 21 February 1513), nicknamed *il papa terribile* (the fearsome pope) and *il papa guerriero* (the warrior pope), born Giuliano della Rovere. He was the head of the Catholic Church from 1503 to his death in 1513. His papacy was marked by an active foreign policy, ambitious building projects, and patronage for the arts—he commissioned the destruction and rebuilding of St. Peter's Basilica, plus Michelangelo's decoration of the ceiling of the Sistine Chapel.

God keep me from my enemies was the Este's motto. As a matter of fact, the House of Este was not tender with either its enemies or its friends and relatives. Nicola III, for example, did not hesitate to sentence to death his very young wife, Parisina Malatesta, and her lover, his stepson, Ugo. The marquis did not have any compassion for them, even though he had many love affairs himself. He fathered many children; so many, in fact, that the inhabitants of Ferrara still say: "On this side and on the other side of the Po River, we are all children of Nicola." Well, perhaps I was influenced by Washington's fame on this one, but it sounded so good I could not resist the temptation. What about Alfonso I? He locked up for life his brothers Giulio and Ferrante when he found them guilty of conspiring against him. On these occasions, the castle's Tower of Lions became the prison of those unlucky protagonists whose romantic and tragic histories poets and writers have immortalized. There are other stories to tell here – more subtle perhaps, but no less interesting. The castle appears serene, even sublime, when enveloped in thick early winter fog, enticing local and visiting pedestrian alike. All of this gives me not only a sense of pride, but also of renewed respect for the later civic leaders who focused their energy and political influence to restore the architectural landscape of this magnificent city of the Po Valley.



These are old-fashioned stories. Stories I like to tell. But even in the present day, less inclined to enthusiasm and legends, the great towering bulk of the *castello* stands as a symbol of Ferrara. It has been accepted by everyone: from the enigmatic painter Giorgio De Chirico, who interpreted its subtle metaphysical atmosphere; to the local association of bakers, who print its image on the paper bags they use for fragrant Ferrarese bread.

To this Buffalo State professor, it is a far away reminder of the extravagant life and treacherous history of the Este family. For generations they guided the culinary, cultural and political destiny of my beloved hometown.

Conclusion:

Historical research can be exciting and frustrating at the same time. Research can be a creative proposition, following one's findings in sometimes unexpected places which lead to more questions related to questions already answered. Something magical, sometimes called scholarship happens, when imagination and documentation blend into something meaningful and appealing. In this creative history of the Estense family I have tried to illustrate the creative genius of these



Renaissance rulers and their political scientific savvy to reigning. In today's society, more than ever, we need to speculate about our past if we care to best predict our future. We use it every day subconsciously, and in doing so we become imaginative and disciplined scholars. In the end I hope for nothing more but to have educated you some and entertained you at the same time. Grazie a tutti, or is it prego?

References:

- <http://old.castelloestense.it/eng/castello/storia/lacorte.html>
https://en.wikipedia.org/wiki/House_of_Este
http://www.castelloestense.it/en/the-castle/the-history/from-1200-to-1600?set_language=en
<http://www.amazon.com/La-cucina-ferrarese-Storia-ricette/dp/8867100300>
<http://www.academiabarilla.com/italian-recipes/meats-charcuterie/salama-sugo-ferrarese.aspx>
http://books.google.com/books/about/I_sapori_della_cucina_ferrarese.html?id=swI7KAAACAAJ
<http://servizi.comune.fe.it/index.phtml?id=4426>
<http://www.infoplease.com/encyclopedia/people/este-italian-noble-family.html>
https://en.wikipedia.org/wiki/Alfonso_I_d%27Este
<http://www.geni.com/people/Lucrezia-Borgia-duchessa-di-Ferrara-Modena-e-Reggio/6000000001045265093>
<http://www.geni.com/people/Ercolo-I-d-Este-duca-di-Ferrara/6000000001045266891>
http://www.ranker.com/list/members-of-the-house-of-este/reference?utm_source=slinklinks.com&utm_medium=referral&utm_campaign=slinklinks.com&utm_expid=16418821-19.fYivk2gAQXaM6nD77CvZZA.0&utm_referrer=http%3A%2F%2Fblekko.com%2Fa%2Fserpr%3Furl%3Dhttp%253A%252F%252Fwww.ranker.com%252Flist%252Fmembers-of-the-house-of-este%252Freference%26i%3DZmZjM2YxNTE2YjdiMzEyMzFhNThlMGRmZmU3M2M2OTEsMTQwMjI3NjIxMDoyZjViNmU%26r%3D10
http://www.barnesandnoble.com/w/land-and-power-in-late-medieval-ferrara-trevor-dean/1111987719?ean=9780521331272&cm_mmc=AFFILIATES-_-Linkshare-_-TnL5HPStwNw-_-10:1&r=1
<https://www.powells.com/biblio/9780521522632>
<http://whc.unesco.org/en/list/733>
http://www.potiori.com/Este,_Italy.html
http://books.google.com/books/about/The_Court_of_Ferrara_its_Patronage_La_co.html?id=xy4MAQAAMAAJ
<http://www.adriacoast.com/eng-15-1-s1--provincia-ferrara.php>
<http://www.visitporiver.it/l/ENG/Emilia-Romagna/Ferrara/page/113/8/106/Ferrara-and-its-Province:-history-and-culture.html>
<http://www.wetheitalians.com/index.php/magazine/8450-italian-culture-and-history-ferrara-and-the-po-river-delta>

ASPECTS OF PERSONALITY SELF-ACTUALIZATION IN THE CONTEXT OF LIFE QUALITY IN RELATION WITH SENSE OF HUMOR

Irina Strazdiņa, Dr.psych.,
Liepaja University, Latvia

Abstract

Diverse factors that determine life quality and aspects that higher or lower sense of life quality corresponding to the needs of individual are analyzed in the article. There is fortified necessity of appropriate self-nurturing corresponding to the most important competence of person, that includes the readiness of person for self-development and self-organization of own activities, acting, readiness to take responsibility for own life. Possibilities of personality self-actualization and meaning of sense of humor in the context of life quality.

Keywords: Quality of life, self - Improvement, Self-Actualization, Self – Realization, Legal capacity, Sense of Humor

Introduction

Self-actualization theories does not offer ready answers, does not ease solving of persons life problems, but put him in front of existential choice that includes two options:

1. either person acknowledges opportunity and actively works in sake of own life project realization and if he manages to realize it, he acknowledges himself as a personality, tries to escape from inner conflicts; external life obstacles are not anymore perceived as hindrances or hostile interference, they become an instruments and obstacles of his individual life
2. or a person does not acknowledge such opportunity, does not involve in realization of own life project; in this case his life vanishes in the senseless obstacles, becomes aimless.

Self-actualization does not mean nonexistence of problems; it is a movement from temporary and unreal problems to real problems and solving of them.

Person`s life quality is determined by his capacity to act, that is entirety of qualities, abilities and actions, that allow him to create appropriate life and self-realization model in the preferable direction. Life quality forms in daily life. Capacity to act is to be related with setting targets, making choices and practical acting. Characteristics of capacity to act are initiative, activity, taking risk, adaptation, innovation and ability to change, leading of action etc. Capacity to act is an active mechanism of life netting that connects knowledge with practice, resources with activity. Person`s ability to act is significantly influenced by education, social origin, upbringing, that changes during the life, and is influenced also by persons experience, self-confidence, reflection, sense of humor and willpower.

In the European culture more often as a happy person is perceived not one, that lives in poverty and due to lack of education is not aware about this, but an individual, who has set and reached considerably high targets in the fields of welfare, education, culture and social status.

On the way to educated society Latvia has a lot of to be done, the focused actions should be done, that would insure each society member with possibilities to develop

according to own interests and abilities, and they could use these interests and abilities in today's labor market, as well as to enable own life quality.

Sustainable development is oriented towards people, its aim is to improve their living obstacles. Persons life quality, inner harmony, education, economical and social comfort are the base values in our society.

I.

Purpose of research

- To clarify factors and aspects that form quality of life.
- To study socially psychological aspects of sense of humor in the context of personality self-actualization.
- To find out self-actualization and self-realization socially psychological aspects in the life quality context.

Wholesome living is an ancient question in philosophy, social thought and each individual's personal life, it rouses important existential and at the same time practical questions: what is a good life? How to reach it? How to link wishes with possibilities? How to build own life? These questions strive to unite in a single point of view various aspects and dimensions of life: daily trifles and meaning of life, concreteness of events and long-term strategies, material needs and mental aspirations, life temptations and real possibilities. (4; 7)

Life quality concept to the point addresses social and political self-feeling of the age. Although Latvia has become EU member, it still lags from European social standards. Too low population growth and lifespan indicators, weak health, emigration of labor force, low salaries and uneven growth of welfare in different groups of population are the processes that heavily mark insufficiency of life quality in all wide sections of the population. (4; 8)

In fact deeply human striving towards better life, higher living quality is prior to each individual and therefore to the whole society. There are no reasons to think, that life-quality will lose its importance in the future; it is the other way round, it becomes more and more explicit as most important aim in the future that is centered on person. (8; 3)

Rising of each Latvia's inhabitants different life quality aspects is set as a target of Latvia's development model "Person in the first place" (10). It can be reached, actively utilizing potential of knowledge accumulated by its inhabitants. Welfare, safety and sustainability are determined as main factors composing life quality in the model, and going in detail, several closely interconnected aspects:

- awareness and education;
- creation, science and research, innovation, ability to create and use new ideas;
- employment and material welfare
- environmental protection; usage of material and energy resources;
- infrastructure services – electricity, gas, heat and water supply, electronic communication networks, postal, transportation, waste processing services;
- balanced development of regions; human resources; health; social security; home;
- family; solidity of society; raising of democracy level;
- growing level of rule of law; physical security; privacy;
- modernization of state administration, people friendly services of state administration; involvement in processes, significance of "myself";
- openness; stability of growth (development);
- preserving Latvia's identity; culture; development and functional improving of Latvian language; usage of free time and opportunities.

In order to reach set aim, it is necessary to develop life quality aspects in a coordinated and well-balanced way, considering both integrity of actions to be taken and expansion over the

formal boundaries of own industry, institution or country, as well as keeping in mind Latvia's ties with processes in partner countries.

In October 2005, Latvia's Parliament confirmed unanimously development model as a conceptual document, that determines people oriented Latvia's development in nearest 20-30 years within the context of global development.

Material welfare of people is closely related with country economical development. Only high growth of gross domestic product is able to insure inhabitants income rapid increase - nominal and real. Last year's achievements have allowed Latvia's society to move from survival mode to development mode.

Employment, good workplaces are an obligatory prerequisite for raising of life quality level. Problem includes new characteristic mark, since the knowledge based economy and raising of productivity, provided in development model, itself do not mean an increase of good workplaces.

Education, retaining of knowledge level and further development is not anymore only individual choice, it becomes important for the development of the country according to the chosen model. Highly qualified specialists are the countries strategic potential. For each person's full-blooded involvement in processes new specific features of educational system strengthen – ability to operate with information, transition from learning to independent studies, lifelong education, symbiosis of education and work process.

Health is among each individual's top priorities during whole life, healthy society is also a fundamental precondition for existence and development of country. As a result of growing knowledge potential, opportunity to fulfill his health potential derives for each individual. Fight with causes of illnesses becomes more active, that should be facilitated by increasing understanding and responsibility about own health. At the same time the importance of social programs is not diminishing and segregation of society by material standing will remain in the nearest future.

Home as a living-space and prerequisite for existence of person in our country will remain as a basic need in any stage of society development, right for living-space is also one of most important human rights provision. But the home is not only a living-space anymore; it is also the private working place.

Each individuals sense of physical security for himself and family, for health and even for life, for self-respect and property, safety on street, at home, in school is closely related with high level overall security level in the country. Minimizing of security risks preventive activities for prevention of crimes, wide usage of modern technical tools, and at the same time, strict observing of state guaranteed human rights and security of personal live are only few aspects of inner security.

Family is the bases of our society; it has a very important role in the strengthening of solidarity of generations and society integration. Children are our society's most important value; persistent family insures natality, love, health, care within family, education for children. Strong family facilitates values orientation, passing the life aims further to the youngest generation; it also performs social protection functions in the circumstances of ageing society.

Involvement in processes, importance of own "myself" in the welfare country becomes primary, instead of survival. Psychological wellbeing of individual is closely related with involvement, subsidiarity in the management and decision making, participation in non-governmental organizations, state and private sector partnership. The base of involvement is the principle of equal opportunities and involvement, involvement of all society members, rising of life quality for every member of society. Each individual benefits, if society life quality rise is achieved.

Wholesome rest, including cultural activities, recreation, tourism and sports, hobbies, is absolutely necessary at the intense mental load that is integral part of the chosen model (8; 9. - 10.)

Finish sociologist Eric Allardt (1993) has offered to structure good life according to three basic needs of a person: to belong, to love and to be. *To belong* indicates on the necessary economical and social goods, which person can obtain and use during the life – job, income, property, home, etc. There can be added also personality resources – education, health, mental and physical abilities. These are resources of individual that he can use – it is his human capital. *To love* expresses necessity to be socially involved – in family, wider society. It is a necessity for emotional closeness, love, partnership. Care for other people and receiving of care, maintenance of relationship, managing of emotional life, are the most important for love. It provides emotional security and comfort to the person. According to E.Allardt *to be* means self-realization of an individual, recognition and evaluation from other people. (2; 88.-95.)

Functioning of a person, striving from elementary things to more comprehensive welfare includes prerequisites of complex behavior in order to develop own abilities, to rise self-confidence. Avoiding different interferences and using own resources, wider opportunities open to act and to choose own level of welfare. (12)

Person's life quality is determined by persons legal capacity, which is a sum of qualities, abilities and actions, that allow to create life and self-realization model appropriate for himself and in the preferable direction. Life quality develops in daily life. Life quality is related with setting of targets, choices and practical activity. The characteristics of legal capacity are initiative, activity, taking risk, adaptation, innovation and ability to change, sense of humor, managing of own actions etc. Legal capacity is an active mechanism of life netting that connects knowledge with practice, resources with action. Persons legal capacity is substantially influenced by education, social origin, nurturing, that changes during the life, and it is also influenced by persons experience, self-confidence, reflection and willpower. (4;19)

Performing quantity research about Latvia's population satisfaction with life quality, factors that higher or lower the sense of life quality were clarified.

The identified factors, characteristically to the people who are satisfied with the life are as follows:

- ability to set reachable targets;
- active life position, that can be characterized with entrepreneurship, initiative, purposefulness;
- flexible adaptation to obstacles;
- ability to mobilize and to use available resources, to look for new opportunities;
- social activity;
- harmony with yourself (living according to the own world perception, sense of life rhythm, values);
- optimistic view on life;
- ability to see in yourself life encouraging power.

While the factors that lower life quality or hinder its rising, are as follows:

- inability to formulate targets;
- uncertainty for life;
- inability to decide;
- lack of entrepreneurship and initiative;
- seclusion;
- pessimistic view on life;

- expecting, that others (state, accident) will help to solve the situation;
- seeing life encouraging power outside yourself. (3; 52. – 53.)

In order to live more wholesome, better and happier, it is important to discover, untie and use own resources, instead of penetration in own sufferings. These, who feel the need for own development, search for answers to the questions about the meaning of life, themselves, own future.

In nowadays world, person is required specific competencies:

- readiness to work in group in the competitive conditions;
- ability to align own personal interests with group's interests;
- ability to make decision in the time constraint conditions under external pressure;
- ability to take responsibility for the results of taken decisions.

The forming of required and actual individual, group and social competences is a central problem to the formation of modern person, which is addressed by education system, pedagogy and practical psychology. In the contemporary psychology the person is defined as living in his own surrounding reality world (K. Jaspers terminology - *Umwelt*) (24), in the world, which he perceives with his senses, where he realizes his life activities, interacting with other people and environment. S. Rubinstein points out that one has to be in the essence of the existence ...The problem of existence cognizance, setting the proportion between the cognition and the existence as an objective reality, occurs inside of person. (23)

In the objectively existing world, every person has a set living space, a situation where there are a lot of problems and many solutions that could solve them, but a person has a certain degree of freedom in the choice of problems and their solving techniques. Choosing problems and ways of solving under pressure or from free will, he will inevitably enter into the social and cultural interaction with other people, making progress towards solving of set challenges and suffering losses. Contact and interaction with other people within the acting of life on the basis of positive and negative analyses results, as well as the acquired experience reflection, allows everyone to change their individual worlds image. Humor is a special emotional expression. It is a tool that helps people to adapt to the environment and helps to reduce mental and psychological stress. Humor can ease people negative emotions, eliminate frustration and pain. If a person has a sense of humor, life is joyful, many things seem painful, but he copes with the problem quite easily.

Humor is used: in order to cope with the problems and conflicts that make people feel happy, in harmony, humor reduces or eliminates the contradictions and conflicts, minimizes the alienation, reduces human depression and anxiety, helps to maintain psychological balance, creating a pleasant feeling. (6) A well-developed sense of humor helps people to reduce aggression, promotes social adaptation, protects from stress. Recently there appear more and more statements about scientific studies that prove that: for people with no sense of humor it is not only difficult to contact, but also their lifespan is shorter. (7) Practical Psychologist L.Liberte (2011) indicates that the meaning of the sense of humor is not to see and understand the comic side (funny, amusing) where it is, but to comically perceive the things, that are actually claim to be serious. Humor and games element stimulates positive changes in person:

- Reduces tension and allows to release energy;
- Smooths affects of suffering;
- Promotes mental activity;
- Helps to address problems with creative approach;
- Allows to look at the situation from the outside;
- Simplifies perception of the problems, related to the life complexities;
- Helps to investigates "taboo" topics in a peaceful and favorable environment;

- Reveals the sincerity and abundance of feelings;
- Eases getting in contact with others. (11)

Looking at interaction of the logical structure and emotional dynamics, we can say: there occurs the situation of an incompatible content or merging of ideas in the human mind, then the sudden change from one - expected situation to another - unexpected, resulting in a sharp deceleration of worry in the form of spontaneous laughter, since the piled up energy and tightness looks for the way out. Emotions and moods that we experience directly affect our immune system. A sense of humor allows you to perceive and evaluate the reality of life and provides moments of joy and delight. These positive emotions can create neurochemical changes that will act as a buffer against immunosuppressive effect of the stress.

In his book "Stress without Distress," Hans Selye has brought to the idea that person's interpretation of the stress depends not only on external occurrences, but also depends on the perception of the event and the importance that the person attaches it. So, depending on how one sees and understands the situation, it determines the response reaction to it as threatening or stimulating. Humor gives a different view on problems. If one can get away from the situation, *it is no longer threatening*. With such isolating attitude the person feels more protected and takes control over his environment. (5) Humor lets person to think about himself, about his life values and wishes and about other people's feelings. G.Weisfeld (2006) indicates that the good-natured humor is a unique communication and conflict settlement tool. The world remains the same, but at some point we become more tolerant, loving. We think not only about ourselves. (15) The person's individual world's image develops from inconsistent images, which are rooted in childhood and are characterized by one or another degree of compliance to the objective image of the world. This level depends on 1) the notion about the individual world's image, the reality of objects and their mutual interactions; 2) from the degree and volume of misinterpretation of the particular percepts. A person can learn, in what degree his own individual world image corresponds to reality only through practical action, making effort to solve the existing problems with the techniques that a person considers relevant to the present situation. Thus, each individual world image is the product of such person's thinking, who is aware about his way of life, and it is a dynamic formation. Each captured and conscious event in the life is a prerequisite for changes in the individual world image, as well as in the changes of life plans and their implementation methods. (17, 7)

In 1963, the President of the Humanistic Psychology Association James Bugental defined five basic postulates of humanistic psychology:

1. The person as an indivisible being surpasses himself and research of his individual expressions does not allow to understand him as a whole;
2. Human existence is revealed in the context of human relations: the person and his expressions cannot be explained theoretically, without taking into account the interpersonal experience;
3. Person is conscious of himself, and he cannot be understood scientifically, not respecting his continuous, multi-level self-awareness;
4. The person has a choice, he is not a passive observer of his existence process: he creates his experience himself;
5. The person is intentional: he has focused on the future, his life has purpose, value and meaning.

From the mentioned above there comes conclusion about necessity of special, appropriate to the *most important persons' competence* self-education, that involves the person's readiness at the certain moment of life *for self-development and own activities self-organization, activity, readiness to take responsibility for own life and the life of closest ones.*

Self-actualization - a scientific term that defines the reality, truth. The fundamental characteristics of real world are variability, changes related to the activity of live beings. The concept of *self-actualization* is introduced with the purpose to classify changes, it is related with changes, that are caused by the activity of live beings. In the meta psychological level the self-actualization tendency (K. Rogers) is the trend of the depths actualization: it's a trend that permeates throughout the life in all its complexity to which the body is capable to. It is a creative tendency and ability to improve yourself, to create new, spiritual directions in the human evolution.

The first scientific concepts *self-actualization* and *self-realization* were introduced by neurophysiologist Kurt Goldstein (1878 - 1965) in his book "The body" outlining the holistic characteristics of all living organisms, emphasizing the idea that organisms evolve and become more and more knowledgeable, and that new, higher forms of behavior are developing, that change also the life of the organism. Thus, the new capacities, characterized to these higher forms, are not a simple addition to the otherwise steady neurophysiology, but - the new capacities bring changes also in the neurophysiologic operation in a way of "dialectical" assimilation. K.Goldsteins philosophically describes self-actualization as a universal principle of life. His basic idea is - the body is a united wholeness and what is happening in any part of it affects the whole body. Self-actualization is a basic and in essence - the only motive in the person's life. Self-actualization is the activities directed towards satisfaction of the needs. While the need is a condition of a deficit, that motivates person to satisfy it. When people are hungry, they actualize with the help of food, if they crave power, they actualize obtaining it. Satisfaction of any single need becomes urgent, when it is a prerequisite for all body's self-actualization.

Self-actualization is a creative trend of human nature. It is the body's development and improvement basis. For example, a clodhopper, who seeks knowledge, feels internal emptiness, feels keenly for own personal incompleteness. Reading and learning satisfies the need for knowledge, and the emptiness disappears. This creates a new person, for whom learning took up the lack of education. The wish has become a reality. Any need is a deficit position that motivates person to fulfil it. It's like a hole that needs to be filled. The filling or satisfying the need, it is self-actualization or self-realization. (1) Psycho-dynamical theories provide, that the development and growth involves in itself certain deep crisis, turning moment that can appear in the form of mental disorder, neurosis. Exactly this way existential psychotherapy describes A.Adler's *inferiority complex* Z.Freud's *Oedipus complex*, feeling of *abandonment*, *sense of guilt*, etc.. Dissatisfaction and the pointlessness of life, problem of facing the death goes ahead of identifying the need to seek "rescue" in all the world's religions. Persons activity, geared towards self-actualization does not foresee "prior conditions" of such kind and can occur either various conflicts (in the form of productive solutions) exist or not. The psychologist Abraham Maslow named philosophical, benevolent sense of humor as one of the characteristics of self-actualized person. In the daily work of school, sometimes unfortunately quite ruthless sarcasm and even ridicule prevails - as a weapon for fighting between the two warring parties. While it is so great to laugh together! It's like a friendly hug. Laughing together is one of the highest forms of human community, which is much harder to achieve than being together serious, because the first process is based on mutual trust. In the book "Motivation and Personality" A. Maslow describes self-actualization as a person's striving towards self-incarnation, towards actualization of personal potential, striving for identity. This term represents the "wholesome human development", leaving his biological nature, which is the norm for all species, regardless of place and time. (19) Another explanation of A. Maslow in the article "Critique of Self-Actualization" (1959): Self-actualization can be described as a personal development that frees person from the deficite of upgrowth problems and from the neurotic (or infantile or

imagined or "unnecessary" or "false") life's problems. Thus, a person may turn to the "real" life problems (human problems in its essence, inevitable "existential" problems), which do not have the final solution - and not only can turn towards them, but also to solve them. So the self-actualization is not the lack of problems, but the movement from transient or false problems to real problems. (13) Good sense of humor has an effect similar to medication, because it helps to successfully solve a variety of problems, even in very adverse conditions. "If our daily life will be accompanied by humor and laughter, we will have more energy, fatigue will decrease and we will not go into self-pity," said the specialist of oncology and palliative care Dr. Jaime Sanz-Ortiz Sanz-Ortiz, H. (2005). Different people and different nations sense of humor, quite naturally, differs. "A sense of humor, like beauty understanding is subjective," says the aforementioned expert. Sense of humor may be influence by the origin or education, but in any case it usually helps to build relationship with people and get rid of anxiety, tension and insecurity. There is no doubt that a sense of humor is very valuable, but how to develop it? First we need to stop focusing only on own health and other problems, and to learn to rejoice for all the good things, that are given to us by every day. In addition, we should try to think rationally, to get rid of exaggerated, unsubstantiated opinions, which only would make the everything more depressive. In order to develop a sense of humor, it is also important to learn to look at life from the other side. This does not mean that we always have to laugh or smile, but if we will learn to see the comic side of life, we will find it easier to cope with difficulties. "Fun allows us to step away from the problem in the moment and view it in a different light... , which in turn helps to deal with the problem with fresh ideas and energy, "writes H. Sanz-Ortiz. (7) Hugo Carretero Dios (2007), the researcher at the methodology of social psychology department of University of Granada has made the research whether there exist universal jokes that make people laugh, regardless of their gender, profession or cultural origin? This study, conducted by researchers Cristino Pérez Meléndez and Gualberto Buena Casal, is the first study in Spain, whose aim has been to develop a sense of humor criteria, to measure people sense of humor and to evaluate the values of humor. Carretero Dios analyzed more than 1,500 persons aged 18 to 80 years.

The study focused on the following types of humor: sexual humor, black humor, humor about men and humor about women, simple humor and complex humor. "There has been a change in the value and importance of women in our society," says Carretero Dios. People aged between 45 and 50 years pointed out that both men and women laughed more for jokes about women than for men. At the same time, both men and women in larger extent rejected the jokes about men. Trend among 18-25 years old participants was different, the men and women had different reactions. Men laugh more over the jokes about women and reject the jokes about men. On the other hand, women laugh more over the jokes about men and reject the jokes about women. Do these findings point on changes in the values of education? According to Carretero Dios – about the humor it is useful to study the prevailing values within the given society, it is also a powerful tool for identifying the cultural trends (beliefs, actions, etc..). (14) It is necessary to look at the self-actualization process not from the "abstract observer", nor from abstract "highest achievements" position and their theoretical criteria or medically - from statistical notions about norm and anomaly. This process is available for the understanding only at the person's presence position here - and - now, who is aware of reality "challenge". Self-actualization needs to be seen and described from "inside" of person's life, from his point of view as determines and deliberate choice of target. From this perspective self-actualization is a definite sequence of episodes and situations; in every situation "Me" faces specific problems accepting the challenge. During the problem-solving the person develops, evolves, consciously chooses for himself the more difficult (but appropriate to own existence - adequate to the own strength, more realistic) problems or degrades, not accepting the challenge, refusing to solve the problems or choosing

those that do not meet the persons "Self " In this case, not finding a solution in a timely manner, as a result "Me" will inevitably come to a collision with an even more complex problems, but already with other - "neurotic" nature, the solution of which will have to be enforced, and it will reduce the opportunities for self-determination will require psychological or medical help. A. Maslow emphasizes that the person should make the choice in sake of growth towards self-actualization at *any situation of choice*. It should be noted that as the result of declining to develop, the person can experience mental disorders, impairment of the individual abilities. For the person, who strives for self-actualization, certain practical acts can rouse to realize achieved the results and the resulting consequences. Acknowledgement of the situation and theoretical analysis, which is a process of self-realization, leads to the change of person's notion about himself, notion about the world and adjustments in the "life plan". (13) Roger K. defines this as a congruence. The „self”, which in the self-realization perspective can be viewed as a system of persons notions about himself, can become a real human activity "organizer" that result in changes in both the mental and physical aspect. It can serve as a basis for perception and understanding of the "self-determination". (21, 22) Realization is awareness, cognitive action. Actualization means acting as a process, as power consumption (from Latin, actus - Action), which has an important result. The concept of self-realization means thinking, action cognitive aspect, theoretical activities, the work from the internal aspect. Self-realization expresses in creation of "I concept", in correction and modification, including awareness of the "ideal Me", the image of the world and the life plan, as well as awareness of past performance results. Thus, self-actualization and self-realization are two integral parts of one single process of development and growth and as the result the person who has maximally loosen and used his human potential – self-actualized personality. *Self-actualization* is a set of subject's conscious actions, based on consciously formulated goals for himself and on developed strategy for achieving them within the self-realization process. Each self-actualization ends with a specific emotional response - positive "peak experience" in case of success, and a negative "peak experience" in case of failure. "Peak experiences" are the transition moments of self-actualization. The person is more integrated, more aware of himself and the world at his life "peak" moments. In such moments we think, act and feel more clearly and precisely. We love more and in larger extent accept others, we are freer from internal conflict and anxiety, we are more able to make constructive use of their energy. (18, 47) Many theories of person's development, including self-actualization theory does not provide ready-made answers, does not ease solving of person's life problems, but puts him in front of the existential choice, which includes two options:

1. Either person recognizes the opportunity and actively acts in sake of his life project realization, he realizes himself as a personality, escapes from internal conflicts; external living conditions are no longer perceived as obstacles or hostile interference, they become his individual living conditions and instruments;
2. or a person does not recognize such possibility and does not involve in his life project implementation; in this case, his life fades in conditions, which does not make sense, becomes meaningless. (16) A. Maslow notes such features of self-actualized persons:

- more efficient perception of reality and more comfortable relations with it;
- acceptance (of self, others, nature);
- spontaneity, simplicity, artlessness;
- focus on the task (opposite to focusing on yourself);
- a certain isolation and need for solitude;
- self-dependency, independence from culture and environment;
- continuous freshness of assessment;

- mystic and experience of higher states;
- sense of participation, unity with others;
- deep and genuine interpersonal relationships;
- democratic character structure;
- making a distinction between tools and targets, between good and evil;
- philosophical, good-natured sense of humor;
- self-actualized creativity. (19; 153. – 172.)

Conclusion

- Self-actualization is not a nonexistence of problems; it is a movement from the temporary and unrealistic problems to real problems.
- In the European culture more often as a happy is perceived not the person, who lives in poverty, but because of his lack of education does not realize it, but the individual who has set and reached rather high goals in the fields of welfare, education, culture, social status.
- In the objectively existing world every person has determined living space, *a situation* where many problems and many solutions exist, but the person has a certain degree of freedom in the choice of problems and problem-solving techniques.
- Selecting the problems and ways of solving them under pressure from or at the free will, he will inevitably enter into the social and cultural interaction with other people, making progress in the facing of challenges and suffering losses. Contact and interaction with other people during life action, actualization of sense of humour, basing on analysis of positive and negative results, as well as on the reflection of gained experience, enables person to change his individual world's image.
- Sustainable development is oriented on people; it aims to improve their living obstacles. The persons quality of life, inner harmony, education, economic and social comfort, good-natured humor are the core values in our society.
- Humor can ease people's negative emotions, to eliminate frustration and pain. If a person has a sense of humor, life is joyful, many things seem painful, but he copes with the problem quite easily.
- Humor is used: in order to cope with the problems and conflicts that make people feel happy, in harmony, humor reduces or eliminates the contradictions and conflicts, minimizes the alienation, reduces human depression and anxiety, helps to maintain psychological balance.
- Towards a knowledge-based society there is a lot to be done yet in Latvia, targeted measures should be taken to ensure that each member of society can develop according to their interests and abilities, and would be able to use these interests and abilities in today's job market, as well as to contribute to their quality of life.

References:

- Achim Votsmeier. Kurt Goldstein and Holism.- Lecture held at the GTILA – Summer – Residential – Programm BARCELONA – 1996.-
http://www.gestaltpsychotherapie.de/LAgo1_ho.pdf
- Allardt E. Having, Loving, Being: An Alternative to Swedish Model of Welfare Research// The Quality of Life. Oxford Scholarship Online Monographs, 1993, March.- P.88.-95.
- Bela B. Labā dzīve: subjektīvie vērtējumi un vīzijas. – Dzīves kvalitāte Latvijā. – 2006, Dzīves kvalitāte Latvijā.(). - R.: Zinātne. – 2006.
- Humors - <http://stresaprofilakse.lv/Humors.php>
- Humora izjūta – Pasaules enciklopēdija -
http://lv.swewe.net/word_show.htm/?449504_1&Humora%7Cizj%C5%ABta

- Humora izjūta palīdz paglābties no slimībām.- <http://www.starstyle.lv/blogs/humora-izjuta-palidz-paglabties-no-slimibam/#ixzz33QDLnWoI>
- Latvijas iedzīvotāju dzīves kvalitātes indekss. Stratēģiskās analīzes komisijas darba grupas atskaite.- R., 2006.
- http://www.president.lv/images/modules/items/DOC/item_550_Dzives_kval_indekss.doc
- Latvijas izaugsmes modelis Cilvēks pirmajā vietā. – 2005.
- http://www.saeima.lv/bi8/lasa?dd=LM0815_0#b.
- Liberte L. Smejies kopā ar psihologu .- 2011. -
- <http://puspietura.blogspot.com/2011/07/smejies-kopa-ar-psihologu.html>
- Nussbaum M., Amartya S. The Quality of Life. Oxford: Clarendon Press. – 1996.
- Maslow A.H. Critique of Self – Actualization.- Journal of Individual Psychology.- 1959.- 15.- P.24. – 32.
- Psychological Profiles Examined In Scientific Research On Sense Of Humor. - Main Category: Psychology / Psychiatry News Article Date: 18 Jun 2007 – [canal.ugr.es/medios-impresos/item/download/9723 http://www.eurekalert.org/pub_releases/2007-06/udg-sro061407.php](http://www.eurekalert.org/pub_releases/2007-06/udg-sro061407.php))
- WeisfeldG.Humor appreciation as an adaptive esthetic emotion. - Humor – International Journal of Humor Research. Volume 19, Issue 1, Pages 1–26, ISSN (Online) 1613-3722, ISSN (Print) 0933-1719, DOI: 10.1515/HUMOR.2006.001, May 2006
- Аббаньяно Н. Введение в экзистенциализм. – СПб.: Алетейя.- 1998.
- Бурлачук Л.Ф., Коржова Е.Ю. Психология жизненных ситуаций. – М.: Российское педагогическое агентство. – 1998.
- Маслоу А. Дальние пределы человеческой психики. – СПб.: Евразия. 1997.
- Маслоу А. Мотивация и личность. – СПб.: Евразия. – 1999.
- Маслоу А. Психология бытия. – Киев. – 1997.
- Роджерс К. Взгляд на психотерапию. Становление человека. – М.: Прогресс. – 1998.
- Роджерс К. Клиенто-центрированная терапия. – Киев. – 1997.
- Рубинштейн С.Л. Человек и мир. – М.: Наука. – 1997.
- Ясперс К. Общая психопатология. – М.: Практика. – 1997.

CULTURAL AND CIVILIZATIONAL PROCESSES IN EGYPT IN THE XIX CENTURY

Turekulova Zhuldyz

South Kazakhstan State University named after M. Auyezov,
Republic of Kazakhstan, Shymkent

Abstract

The article examines the transformations begun in Egypt at the beginning of the XIX century by Muhammad Ali and continued by his successors. It is very important that this stage of the history of Egypt has an extremely wide range of dramatic events of the political-military, socio-economic, cultural and civilizational content. It should also be borne in mind that in that period of history, despite its formal dependence on the Ottoman Empire, Egypt actually turned into one of the leading, largely-independent states in the Middle East.

Keywords : Egypt, civilization, Muhammad Ali, Abbas Pasha, Said Pasha

Introduction

As it is in the history of mankind, the supreme ruling elite can play a decisive role in the process of national revival of entire peoples. This is explained by the vast opportunities available to it to determine the dominant vectors of political, socio-economic, cultural and spiritual developments of their countries. In this context, special attention should be activities in the XIX century of the rulers of Egypt, particularly the political-military, socio-economic, cultural and Enlightenment changes undertaken during Muhammad Ali, Abbas Pasha, and Said Pasha.

Transformation in Egypt with Muhammad Ali

The results of operations for Muhammad Ali in civilizational spheres found expression in the construction of numerous schools and other educational institutions, as well as the direction of youth and learned men in Europe for training and their knowledge (Russell, Mona L. *Competing* 2001: 53). For the development of science and dissemination of knowledge, he used the European system of his time. When it was established, it was a system of teacher training (James Heyworth-Dunne 1968: 108-109). Muhammad Ali was well aware of the importance of training personnel for modern country. Based on this, already in 1816 in Cairo opened its first engineering college, and in 1834 in Bulak - one called "Muhandiskhana". In 1827, the medical college was opened, and in 1836, the famous "School of Languages " was founded.

Of particular importance for the development of the education system was the creation of "Divan schools" (Abdarrahman Al-Rafiy. 1989: 403) - a kind of ministry of education. His progressive role for the country manifested , in particular, the opening of primary schools in Beheira, GarboManufii, Dakhalii, Sharqiya, Banha, Giza, Faiyum, BeniSuveyfe, Minya, Asyut, Dzhirdzhe, Ken Asne, and other regions of Egypt (Salah Ahmed Haridi. 2000 : 383) .

In 1813 the first group of Egyptian students was sent to Italy to be educated on military affairs and shipbuilding, as well as in engineering. In this structure, NicolaMasabiki Effendi was directed in 1816 to go to Rome and Milan for mastering printed matter.

Returning home in 1821, he initiated the opening of the first printing press in the Egyptian Bulak, led since its inception and until the last days of his life (1831).

In 1826, a large group of young people, about 40 students, was sent to France. Subsequently, the activity of sending Egyptian youth to this country has continued: in 1828 44 were sent, and in 1844 - 70 young people selected specifically to do this job by Suleiman Pasha al- Fransavi (Abdul Hamid Batrik., 1999: 247).

Cultural and civilizational development of Egypt during the reign of Abbas Pasha I.

When Abbas Pasha I gave the British the right to reconstruct the road from Cairo to Suez in 1852, they began construction of a railway linking Alexandria to Cairo. Preparation of a draft of this construction was entrusted to the famous English engineer R. Stephenson involving Egyptian Engineers (PPZabarinskaya Stephenson. 1937:107-108). Monsieur World (Abdarrahman Al-Rafiy. 1978: 20) wrote that many Egyptian engineers, including Salam Ibrahim Pasha, Pasha Saqib, Muzaffer Pasha, and Pasha Bahjat who participated in this project, subsequently made a great career and achieved great posts.

Under the reign of Abbas Pasha I in 1854 part of the railway was completed between Alexandria and Cairo and commissioned. Indeed, the construction of the railway was the great event of his time and gave an impetus to the development of modernizing processes in Egypt. Significance of this railway line was increased by the fact that it was the first not only in Egypt but throughout the Middle East. Thus, according to the Egyptians, their country has advanced to the forefront of civilizational transformations implemented in the Muslim East. During this period in the development of rail transport, Egypt was ahead of even Turkey. This was acknowledged by the Sultan Abdulaziz personally, traveled by rail in 1863, during his visit to Egypt by rail from Alexandria to Cairo. The Sultan was delighted that in his entire life had he seen such locomotives (Abdarrahman Al-Rafiy. 1978: 21).

However, the education system declined and gave the impression that he was not interested in science and education. This is manifested in the fact that Abbas Pasha I was indifferent to the closure of schools and send some of the highly educated people of his time, such as Rafea Bey Rafi al- Tahtawi, Muhammad Bayoumi Effendi, and Effendi Daklato Sudan under the pretext of organizing primary school in Khartoum. The true cause and purpose of this step was to remove these individuals from Egypt, which, naturally, had a negative impact on the development of education in the country and their personal activities. This is confirmed and biographies Rafea Bey Rafi al- Tahtawi (Abdarrahman Al-Rafiy. 1989 : 488) and lecturer of Mathematics School "Muhandiskhana" Muhammad Bayoumi.

Cultural and civilizational activities under Said Pasha

Said Pasha, who came to power after Abbas Pasha I, significantly increased his effort to further reform agriculture and the advancement of the fellahin. While in power, Fellah got ownership of the land that he tills. The previously mentioned "Project Said" (Abdarrahman Al-Rafiy. 1978 : 31), as already noted, is considered the greatest of his achievements in reforming agriculture, though, because when Muhammad Ali stripped the peasants' rights, he also abolished the state monopoly on the crop, which took place under his father. As a result, farmers were entitled to free sale of their crops and cultivation of the crops they deem fit. Tax cuts contributed to greater independence from the state and the peasants had a positive impact on their socio-economic status.

Said Pasha first introduced procedure for payment of civil service pensions. Subsequently, it served as the basis for developing provisions civil servants' remuneration in Egypt.

However, under Said Pasha, as well as his predecessor, the activity did not differ in the development of education (James Heyworth-Dunne 1968: 288), which further aggravated

the state of affairs in this area. When in 1855 the “Sofa Schools” were closed, he practically ceased directing Egyptians to study in Europe and the total number of those for the whole period of his reign was only 14 people.

In fairness it should be noted that in 1858, Said Pasha reactivated the previously closed “Muhandiskhany”, giving it the status of a military school. It was moved to the fortress “Said” on a dam on the Nile, and was subsequently declared a military academy. He also reopened Naval School in Alexandria. But all this was not enough to meet the needs of the country’s specialists and therefore, as he wrote Abdarrahan al- Rafi, “this situation has been heavily criticized by researchers of Egyptian history” (Abdarrahan Al-Rafiy. 1978 : 49).

Following the best traditions of the reformist Mohammad Ali Said Pasha, Ismail Pasha (1863-1879) , in turn, finally secured the status of the Arabic language as the only official language of Egypt. Significantly increased the number of primary schools, secondary and special schools , and they are today known centers of culture and education, such as the National Library of Egypt, the National Museum, as well as the Cairo Opera House, the first in the Middle East (Ponchaeva HJ. 2004:18).

One consequence of the decline of the national education system was the discovery of ways for foreign educational institutions to penetrate Egypt, mostly religious schools. In particular, it allowed the opening of the Cairo and Alexandria branch of the French school for nuns. Americans also achieved opening in Egypt their school for nuns. The Italian government had allocated 24 thousand pounds for the opening of the Italian school in Alexandria, under which was allocated land in an elite area. This gave rise to talk when Said Pasha said that foreign educational institutions in Egypt have been awarded more attention than national, which was appreciated by historians as a negative quality Said Pasha had as a ruler (MacCoan JC 1898:49).

Also of significance as a civilizational project, Said Pasha began work on the conservation of ancient monuments. Said Pasha decided to concentrate all the historical monuments in the same place, which was given the name "Bulak." Responsible for the implementation of this unique work, he appointed the archaeologist, Mariette Pasha. In the project important research in astronomy was also to be carried out. Thus, the scientist-astronomer Mahmud- Bey was sent to Dongola observatory to monitor the process of the eclipse of the sun. In the course of these investigations, during the observation of the firmament, 42 places were found located between Aswan and Dongola. After returning, Mahmud- Bey was commissioned to create a detailed map of Egypt, which was also attended to by many other major Egyptian engineers of his time.

When Said Pasha in 1856 completed construction of the railway from Alexandria to the capital through Kafrez- Zayyat Benham, he found that he did not require the construction of bridges across the Nile River. Later it was extended by the Cairo-Suez line, which was commissioned in 1858. Bringing the railway to Suez was dictated by the increasing number of ships coming into this seaport.

After connecting with the Suez Cairo railway line, its trade and civilizational role increased dramatically, the line also contributed to the creation of Majid Companies, and a noticeable revival of sea communications in the Red Sea basin. Said Pasha also requested the French company Diss for the reconstruction and expansion of the seaport in Suez. In addition, with the company, he signed an agreement on the construction of the dock for ship repair. But the completion of these projects met the requirements of his time, as they had already during the reign of Khedive Ismail Pasha .

As a result, a system of transportation was established not only passengers but also for cargo to Alexandria via Cairo. Along the new railway from Alexandria to Cairo and Suez, a

telegraph line that runs parallel to the old road was built, which existed even during the reign of Muhammad Ali.

Said Pasha at the same time created two shipping companies with fleets inside trading and foreign trade. The inside trading shipping company carried cargo on the Nile and the foreign company carried freight on the sea. Inside trading—"Egyptian shipping company" which provided navigation on the Nile, founded in 1854, was intended for the passage of goods and passengers on the Nile. To improve the Egyptian fleet, Said Pasha began replacing sailing vessels with steamships. The main argument in favor of the replacement of sailing ships by steamships was that the sailing ships went only by wind and distance, and Cairo - Alexandria covered 15 days, and in the absence of reverse wind could not go back. Steamboats were able to do this distance in 36 hours and did not depend on the wind factor, it was very important for the timely delivery of the crop in Alexandria, especially after a sharp increase in the population of the city.

It should be noted that the said company was actually foreign, as its founders were Europeans. Although this company was called the "Egyptian shipping company," in fact, other than the name, there was nothing of it that was Egyptian. Under its conditions, it provided special benefits to European companies, the government had been deprived of the possibility of acquiring foreign ships. Foreign advisors strongly recommended Said Pasha to use the services of the company to carry out works on the extension of the channel that connects the Nile and the port in the Mediterranean, and for the establishment of their cleaning pumps for securing the necessary amount of water because of a lack of financial opportunities in Egypt itself.

The Majid Company, founded in 1857, engaged in maritime navigation. Emir Mustafa Fazil ibn Ibrahim Pasha was appointed the chairman. The Board consisted of Egyptians and foreigners: deputy chairman Nubar Pasha, Abdullah Bey, Monsieur Dumrikera, Kamil Hasan Bey, Mukhtar Bey, Monsieur Pastrami, Monsieur Ruisenara, Said Effendi, and Monsieur Hugues Turburna Zakkai.

The company name was associated with the name of the Ottoman sultan Abdulmajid. Its activities were purpose-implementation shipping in the Mediterranean and Red seas, the Persian Gulf, and the Indian Ocean. Its ships transported pilgrims as well as freight, went between Suez and Hijaz, the Yemen, islands Kathir, Masood, and other islands located around the Arabian Peninsula. The company also had individual vessels in the Mediterranean, and in Suez, Kathir and Masuda- they own storage terminals and port parking. The grace period for the company was 30 years. Ships sailed under the flag of Egypt. Misunderstandings and disputes were resolved by the Egyptian courts and not by foreign consuls.

However, due to poor governance in the era of Said Pasha, the company experienced many difficulties and the profits earned by it for 10 years were only 340,000 pounds. When Khedive Ismail Pasha reigned, it was given financial assistance, but despite all this, it went bankrupt and subsequently another company, Aziz, took its place.

Conclusion

Thus, the cultural and civilizational processes that took place in Egypt in the XIX century reaffirmed the relationship and interdependence of economic, political, social, and spiritual subsystems in its development. It is their aggregate product, expressed in a multifaceted process that gave impetus to the rise of modern civilization, which is confirmed by the experience of Egypt and the period under review.

References:

- Russell, Mona L. Competing, Overlapping, and Contradictory Agendas: Egyptian Education Under British Occupation, 1882-1922 // Comparative Studies of South Asia, Africa and the Middle East, Volume 21 , Number 1 & 2, 2001 , pp. 50-60
- James Heyworth-Dunne. An Introduction to the History of Education in Modern Egypt London: Frank Cass, 1968 .
- ص. 595 م. 1989 / هـ 1409 , دارالمعارف للطبعة الخامسة , القاهرة . عصر محمد علي . عبدالرحمن الراجحي .
- جامعة الإسكندرية . م. 1798 - 1517 / 1213 - 923 . دراسات في تاريخ مصر الحديث والمعاصر . صلاح خير الدين علي .
- ص. 472 . 2000 . الطبعة الأولى
- القاهرة . (1882 - 1805) عصر محمد علي ونهضة مصر في القرن التاسع عشر . تأريخ المصريين . عبدالحميد البطريق .
- 1999 . الهيئة المصرية العامة للكتاب
- Zabarinskaya PP Stephenson .M. , coffee - news association . Series " Life of remarkable people ." 1937, Issue 11-12 (107-108) // <http://vivovoco.rsl.ru>
- م. 1978 - هـ 1408 , الطبعة الرابعة . دارالمعارف . القاهرة . الجزء الأول . عصر إسماعيل . عبدالرحمن الراجحي .
- Ponchaeva HJ The development of education in Egypt in the XIX - early XX c .Author.dis. on soisk . exercises. step .k.ist.n. : special. 07.00.03 St. Petersburg . 2004 .
- MacCoan J.C. Egypt. - New-York: Praeger, 1898 .

SEX IDENTIFICATION OF HUMAN REMAINS FROM AN IRISH MEDIEVAL POPULATION USING BIOMOLECULAR METHODS

Sheila Tierney, B.Sc., PhD

School of Science, Institute of Technology Sligo, Ireland.

Dr Jeremy Bird, B.Sc., M.Sc., PhD

School of Science, Institute of Technology Sligo, Ireland.

Abstract

The excavation of a medieval cemetery in County Donegal has allowed the recovery of one of the largest assemblages of human remains from a burial ground in Ireland to date. In order to enhance the interpretation of the assemblage and give a more complete picture of the Ballyhanna community as a whole, a sample of the juvenile population from Ballyhanna were sexed using DNA based techniques. Sex identification of human remains is generally assigned using skeletal morphology or on some occasions using associated grave goods. When an assemblage contains immature or fragmentary material, an alternative and reliable means of sexing these individuals is required. In this research project the reproducibility of two PCR based sexing methods were evaluated on 38 adults of known sex to determine the accuracy of the methodology for sexing individuals from the Ballyhanna assemblage. Using real time PCR and STR profiling, a reliable sexing system was developed for adult remains which was validated against osteoarchaeological sexing. The reproducibility of the results from the amplified samples meant that the methodologies were valid and could be used to sex juveniles from the assemblage. The molecular sexing results from nineteen juveniles sampled determined that four of the juvenile individuals were males, 10 were probable males, one was a probable female and four were inconclusive. The results from this study, although they may not be fully representative of the entire juvenile population excavated from this cemetery, indicate higher levels of juvenile male mortality than female.

Keywords: Ancient DNA, Human, Molecular, Sex determination, Medieval

Introduction

Sex identification of human remains is generally assigned using morphological and morphometric analyses or occasionally using associated grave goods. Juvenile individuals exhibit little sexual dimorphism in their skeletons and thus assigning sex to such skeletal remains is difficult. Where an assemblage contains a high number of ambiguous remains such as immature or fragmentary material, an alternative and reliable means of sexing individuals is therefore required. A number of attempts have been made to develop reliable osteological methods for diagnosing sex in juvenile material (Weaver, 1980; Holcomb & Konigsberg, 1995; Schutkowski, 1993; Cardoso, 2008) although reliable sex determination cannot be established for immature individuals using standard osteological methodologies (Brickley, 2004). Molecular sexing techniques on the other hand, have proven to be an alternative method (Cappellini et al., 2004; De La Cruz et al., 2008; Daskalaki et al., 2011).

Following the discovery of a medieval cemetery in the Ballyhanna, Co. Donegal, Ireland, in 2004, 1296 human skeletal remains were recovered comprising 869 adults and 427 non-adults. The period of burial at Ballyhanna dates from the late seventh century until

the 17th century (MacDonagh, 2012). The substantial number of non-adult remains recovered could provide insight into how children lived and died in medieval Ireland. In order to enhance the interpretation of the assemblage and give a more complete picture of the Ballyhanna community as a whole, a sample of the juvenile population from Ballyhanna were sexed using DNA based techniques so that the mortality ratio of the male and female non-adult individuals could be assessed.

The most widely used DNA based methods for sex identification targets the amelogenin gene (AMEL) which is found on the human X and Y chromosomes and can be used to distinguish between males and females due to differences between sequences on the two chromosomes (Sullivan et al., 1993; Mannucci et al., 1994).

The second method selected utilised STR analysis. STR analysis is a highly effective genetic typing method, as the number of repeats in STR markers is highly variable among individuals (Butler, 2005). The application of STR profiling in ancient DNA analysis enables reliable identification of inconsistencies between samples which have been independently replicated in two centres of analysis. STR profiling is therefore a dependable and useful approach for indicating authenticity of ancient DNA extracts (Bramanti et al., 2003). The narrow size range of the STR alleles makes them especially suitable for typing aDNA samples (Butler, 2005). Incorporating the amelogenin assay into a multiplex STR typing system enables co-amplification of the X Y homologous amelogenin gene with a number of polymorphic STRs in one reaction, which in turn allows for the sex and STR genetic fingerprint of an individual to be simultaneously obtained. Therefore not only can the sex of an individual be identified but it can be determined if the amplified DNA is endogenous to the ancient specimen or from contemporary contaminants.

Materials and Methods

Before using either of the biomolecular tools for DNA based sexing we verified that the methods were accurate and reliable by firstly validating them on morphologically sexed adult skeletons from the assemblage. By testing our methods on adults of known sex, we were able to ensure that a reliable and unambiguous method was developed for determining the sex of juveniles from the assemblage. The authors adhered to the criteria of authenticity published by Cooper & Poinar, (2000) and Pääbo et al., (2004) where appropriate for this study.

2.1 Preparation of samples for DNA Extraction

Thirty eight adults and nineteen juveniles were selected randomly from the collection for analysis. Teeth which had intact crowns with minimal cracks were selected while badly eroded teeth were avoided. Teeth with poorly preserved or broken tips were also rejected as it was observed that teeth with intact root systems yielded improved profiles. When available a second or third tooth of good quality was also chosen from each skeleton for confirmation of DNA results. A reproduction of each tooth selected for aDNA analysis was made by creating a mould using dental prosthetic material (Heraeus). Each tooth was cleaned using sterile scalpels and 10% sodium hypochlorite, before being incubation in 7.5ml of decontamination solution (Cline et al., 2003) comprising 1% SDS, 25mM EDTA, 20mg/ml Proteinase K and deionised water for 1 hour. The tooth was UV irradiated for one hour and left to dry before being ground into a fine powder using a SPEX SamplePrep cryogenic mill (SPEX). One hundred mg of tooth powder was then aseptically dispensed into two DNA free microcentrifuge eppendorfs (Sigma- Aldrich) and used for extraction. The remaining sample powder was stored at - 20°C.

2.2 DNA Extractions

In order to prevent contamination from modern and amplified DNA, all ancient DNA extractions and pre PCR set up were conducted in a separate laboratory dedicated exclusively

to ancient DNA work (O' Rourke et al., 2000). No modern DNA analysis or PCR amplifications had been conducted in this laboratory previously (Yang & Watt, 2005). Personnel entering the pre PCR laboratory were only to do so if they had not worked in the post PCR laboratory on that same day and when wearing the correct personal protective clothing. Before any work was carried out in the ancient DNA laboratory, all surfaces and equipment were thoroughly decontaminated with 10% Sodium Hypochlorite. Surfaces, equipment and reagents used in the extraction process were also exposed to ultraviolet light for a minimum of 1 hour to degrade modern DNA template residues (Yang & Watt, 2005). All consumables used were DNA free or of a high sterile standard.

After comparing the quantitative yields from a number of extraction techniques, the DNA extraction method chosen for the Ballyhanna samples was the rapid column based silica extraction method (Rohland et al., 2010). This method was selected as it maximised DNA yields from the Ballyhanna skeletons while at the same time was cost effective and reliable. All extractions from each tooth sampled, including the extraction blank, were performed in duplicate (sample A and sample B).

2.3 Quantitative PCR

The Quantifiler Duo DNA quantification assay (Applied Biosystems) was used for a dual purpose in this study; firstly to quantify the amount of amplifiable human DNA and human male genomic DNA in each extract for further analysis such as STR profiling and secondly as a preliminary sexing assay. The Quantifiler Duo assay amplifies short target sequences thus making it ideal for detecting degraded ancient DNA. From each tooth sampled, at least two PCR amplifications were conducted from the A and B extracts. Two μ l of aDNA extract was added to a 25 μ l reaction and was amplified on the ABI 7500 RT-PCR system using the optimised reaction conditions recommended by the manufacturer. At least two non template controls were amplified with each set of samples to monitor for contamination.

2.4 Short Tandem Repeat (STR) Profiling

The PowerPlex® S5 System (Promega) which detects four STR loci (D18S51, D8S1179, TH01 and FGA) and the Amelogenin locus was used to generate the STR profile and identify the sex of each individual sampled in this study. The quantity of DNA in each extract, obtained using the Quantifiler Duo assay, was used to determine the amount of sample to be added to the STR reaction. The optimal amount to be added was between 0.25-0.5 ng of template DNA. In situations where the quantity of aDNA was less than this, the maximum amount of extract which could be added to the reaction (17.5 μ l) was aliquoted. For the negative amplification control, nuclease free water (Promega) was added to the reaction tube instead of template DNA. The cycle number was increased from the recommended 30 cycles to 33 cycles to increase the sensitivity when using low amounts of template (Gill et al., 2000). PCR amplifications were performed according to the recommended protocol for the Applied Biosystems 2720 thermal cycler. The amplified products were subsequently loaded onto an ABI PRISM 310 Capillary electrophoresis system (Applied Biosystems) for analysis. Electropherograms were analysed using the GeneMapper software. Each sample was amplified at least twice in both centres of analysis. The STR profile obtained in IT Sligo was subsequently compared against the STR profile generated in our second centre of analysis and against a staff elimination database.

2.5 Second centre verification

All molecular data from the adult individual included in this study was verified and replicated in an independent second centre facility in the University of Wisconsin (UW) using a second tooth from each skeleton sampled. Second centre analysis for the juveniles sampled was conducted in IT Sligo in a second aDNA laboratory located in a separate

building to the first centre analysis. This analysis was conducted by a second researcher up to six months after the first samples had been processed.

2.6 Criteria for Interpreting STR genotypes and authenticating sex of Ballyhanna adults

In order to avoid mistyping due to the presence of non-allelic peaks or sporadic contamination, an interpretation strategy was developed for authenticating the STR profiles and consequently the sex of the Ballyhanna adults. When comparing the molecular results from the adult teeth sampled in the two centres of analysis, the results were interpreted based on the following criteria.

- 2.6.1 **Confirmed sex:** To fully confirm the sex of an individual and conclude that the molecular sex was in accordance with the morphological sex, the results from the Quantifiler assay and the Powerplex assay (Amelogenin and four STR loci) needed to be in full agreement between both centres of analysis. In order to avoid mistyping STR profiles due to the presence of false alleles or sporadic contamination, an allele was only recorded in the consensus profile if it was observed at least twice in separate amplifications. The sex of such individuals was then compared against the morphological sex and these were assigned as true Males or Females. Artefact peaks present in the STR profiles which could be explained (i.e. stutter products) did not impact on the sex assessment.
- 2.6.2 **Probable sex:** In situations when only one molecular sexing method was in accordance between the two centres of analysis, the sex of such individuals was indicated as probable male or female. A probable sex was also assigned to partial STR profiles that could not be fully verified as a match to the second centre profile.
- 2.6.3 **Inconclusive:** When the sex and/or STR profiles identified using the two molecular methods were in disagreement between the two centres of analysis or did not correspond with the morphological sex, the sex of such individuals were assigned as “inconclusive”. Also, if one STR marker in a sample was reported but did not match the corresponding sample from the second centre, such samples were also inconclusive.

Results

3.1 Validation of sexing assays using adult skeletal remains

The accuracy of our molecular sexing methods based on the SRY (Quantifiler Duo assay) and amelogenin gene (PowerPlex® S5 System) was tested and validated on 38 adult skeletons of known sex, 26 sexed as female and 12 sexed as male using osteological sexing methods (Bass., 1995). Where possible, both quantitative and STR assays were reproduced up to four times to confirm sexing and STR results from each skeleton. Of these 38 adult individuals, the morphological and molecular sex of 20 adults was in full accordance in the two centres of analysis. The STR profiles generated in each centre were also fully comparable. The molecular sex of 10 adults could not be confirmed due to poor amplification of the ancient DNA by either one or both assays and due to the strict interpretation criteria could therefore only be assigned a probable sex. The sex of 8 individuals was identified as inconclusive as the two sexing assays failed to detect sufficient amplifiable DNA.

The reproducibility of the results from the 20 individuals whose STR profiles and molecular and morphological sex were in full accordance determined that the methods used were valid. Thus these methods under the same criteria could be used to sex juvenile remains from Ballyhanna. Overall, the extraction technique and the two sex determination assays chosen for this study demonstrated a 53% success rate. However this low rate was more of a reflection on the preservation of the DNA within the skeletons sampled and the strict criteria

used to interpret the molecular sex, rather than the sensitivity and reliability of the molecular techniques used as part this study.

3.2 Determining the sex of the Ballyhanna juvenile remains

From assessing the results of both sexing methods in the two centres of analysis (see Table 2) the sex of four individuals, SK164, SK232, SK305 and SK870 were replicated at least twice in both centres and were thus identified as Males. The sex of 11 samples; SK10, SK53, SK56, SK319, SK536, SK668, SK687, SK730, SK772, SK859 and SK865 were also in accordance between the two centres, however as the results were not replicated more than twice for both sexing methods in either one or both centres, the sex of such individuals was indicated as probable male or female. According to our interpretation criteria, 10 of these individuals were thus sexed as probable males, while SK772 was sexed as a probable female.

The sex of four individuals, SK600, SK627, SK691 and SK694 were determined as inconclusive due to poor replication of the results in either one or both centres.

The measures taken against modern contamination appear efficient as all non template controls and extraction blank controls were negative. To prove the results were authentic, the STR profiles of each individual sampled were assessed between both centres of analysis. The veracity of the results was thus established as unique STR profiles were obtained for each sample. Each profile was compared against the staff elimination database which confirmed that the profiles were not contaminated by any of the personnel involved in the excavation or subsequent analysis of the remains. An inverse relationship between the amplicon product/allelic size and its quantity was observed throughout the analysis showing appropriate molecular behaviour, which is in accordance with ancient DNA authentication criteria.

Conclusion

As juvenile skeletal remains exhibit little sexual dimorphism, attempts to develop osteological techniques to determine the sex of individuals have been difficult. These methods are usually population dependent and as a consequence a number of studies demonstrated reduced accuracy when these methods were applied to other populations (Vlak et al., 2008; Cardoso & Saunders, 2008). It was for this reason that an alternative method was required to sex juveniles from Ballyhanna. By testing and validating the accuracy and reproducibility of our molecular sexing methods using osteoarchaeologically sexed adult remains, it was established that these methods could be used reliably on sex determination of individuals. As the only means of confirming the molecular sex of juveniles in this study was through reproducing the results in a second centre of analysis, extreme care had to be taken when interpreting the results. The possibility of a male individual being falsely identified as a female through allelic dropout of the Y chromosome was therefore always considered when interpreting the sex. It was noted when preparing juvenile teeth for extraction they were not as well preserved compared to the adult teeth. As a consequence, it seems that the aDNA was also less well preserved for some of the juvenile samples and thus made interpreting STR profiles a more difficult task due to stochastic and random sampling effects.

From the 19 juveniles sampled in the two independent aDNA centres, the results of 4 individuals were replicated at least twice for both sexing assays and were fully comparable between the two centres of analysis. According to the interpretation criteria, SK164, SK232, SK305, and SK870 were thus identified and confirmed as males.

Confirming the sex of the remaining 15 samples was more difficult due to poor replication and amplification of the ancient DNA by either one or both sexing assays. Adhering to the interpretation guidelines, the sex of 10 juveniles; SK10, SK53, SK56, SK319, SK536, SK668, SK687, SK730, SK859 and SK865 were sexed as probable males. SK772 was sexed as a probable female as the Quantifiler Duo assay detected only human

DNA in both centres. However the lack of signal from the SRY gene does not necessarily prove that the sample originated from a female source. This is specifically true for ancient degraded samples. The SRY gene cannot differentiate the presence of female DNA from an amplification failure as the SRY fragment is less informative than the amelogenin gene (Cunha et al., 2000). This was the rationale for using two DNA based sexing methods in this study and has been observed in other aDNA studies also (Cappellini et al., 2004; Cunha et al., 2000). The Amelogenin results for SK772 detected the X allele only but this was not replicated more than once in both centres of analysis. As duplication of every allele is required before it can be reported, confirming the sex of this individual was problematic as the presence of just the X allele could be a result of allelic dropout of the Y allele. Assigning a probable sex to this sample was the most appropriate solution. The sex of four individuals, SK600, SK627, SK691 and SK694 could not be confirmed due to poor replication of the results in either one or both centres of analysis and thus were determined as inconclusive.

The skeletal collection at Ballyhanna was representative of a typical population, with a 0.97:1 ratio of male to female adults which is close to the modern day sex ratio of 1.05:1 (Chamberlain, 2006). However, the mortality pattern at Ballyhanna suggested that fewer males were surviving to old age compared to females in medieval Ballyhanna and also revealed that more young males (17%) between 18-35 years died in Ballyhanna than females (15.3%) (McKenzie, 2012). The results from this study indicate a proportionally higher number of males among the juvenile remains analysed. Four of those analysed were sexed as males, 10 were probable males and one was a probable female. However, the number of juveniles sampled was small and thus these findings should be interpreted with caution.

In conclusion, the results from this study, although only representative of a small proportion of the entire juvenile population excavated from this cemetery, indicate an excess of juvenile male mortality in juveniles which could be due to a higher male mortality rate. For any firm conclusions to be drawn on the outcome of this analysis the sample number would have to be considerably expanded and further genetic sexing analysis conducted.

Acknowledgements

We thank the National Museum of Ireland for giving us permission to sample the Ballyhanna skeletal remains. We also thank the National Roads Authority for providing the funding for this research and all members the Ballyhanna Research Project for their help and support throughout the project. We are also grateful to Liza Kavanagh for conducting the second centre analysis on the juveniles.

Abbreviations

Ancient DNA (aDNA), amelogenin (AMEL), short tandem repeat (STR), real time PCR (RT-PCR), University of Wisconsin (UW), Tuberculosis (TB).

References:

- Akane, A., Seki, S., Shiono, H., Nakamura, H., Hasegawa, M., Kagawa, M., Matsubara, K., Nakahori, Y., Nagafuchi, S., and Nakagome, Y. (1992) 'Sex determination of forensic samples by dual PCR amplification of an X-Y homologous gene' *Forensic Science International*, Vol. 52 (2):143-148.
- Amory, S., Keyser, C., Crubezy, E., and Ludes, E. (2007) 'STR typing of ancient DNA extracted from hair shafts of Siberian mummies' *Forensic Science International* Vol. 166, 218-229.

- Brickley, M. (2004) 'Determination of sex from archaeological skeletal material and assessment of parturition' in M Brickley & J I McKinley (eds), *Guidelines to the Standards for Recording Human Remains*, IFA Paper No. 7, 23-25. BABAO and IFS
- Bramanti, B., Hummel, S., Chiarelli, B., and Herrmann B. (2003) 'Ancient DNA Analysis of the Delta F508 Mutation', *Human Biology*, Vol. 75, (1): 105-115.
- Brothwood, M., Wolke, D., Gamsu, H., Benson, J., and Cooper, D. (1986) 'Prognosis of the very low birthweight baby in relation to gender', *Archives of Disease in Childhood*, Vol. 61, 559-564.
- Butler, J. M. (2005) *Forensic DNA Typing: Biology, Technology and genetics of STR markers*, 2nd edition, Elsevier Academic press, New York.
- Cappellini, E., Chiarelli, B., Sineo, L., Casoli, A., Di Gioia, A., Vernesi, C., Biella, M. C., and Caramelli, D. (2004) 'Biomolecular study of the human remains from tomb 5859 in the Etruscan necropolis of Monterozzi Tarquinia (Viterbo Italy)' *Journal of Archaeological Sciences*, Vol. 31 (5): 603-612.
- Cardoso, H. F. V. (2008) 'Sample-specific (universal) metric approaches for determining the sex of immature human skeletal remains using permanent tooth dimensions', *Journal of Archaeological Science*, Vol. 35, 158-168.
- Cardoso, H. F. V. and Saunders, S. R. (2008) 'Two arch criteria of the ilium for sex determination of immature skeletal remains: A test of their accuracy and an assessment of intra- and inter-observer error' *Journal of Archaeological Science*, Vol. 35 158-168.
- Chamberlain, A.(2006), *Demography in Archaeology*, Cambridge University Press, Cambridge.
- Cline, R. E., Laurent, N. M, and Foran, D. R. (2003) 'The Fingernails of Mary Sullivan: Developing Reliable Methods for Selectively Isolating Endogenous and Exogenous DNA from Evidence', *Journal of Forensic Science*, Vol. 48, (2): 1-6.
- Cooper, A., and Poinar, H. N.(2000) 'Ancient DNA: Do It Right or Not at All', *Science*, Vol. 289. (5482): 1139.
- Cunha, E., Fily, M-L., Clisson, I., Santos, A. L., Silva, A. M., Umbelino, C., Cesar, P., and Corte-Real, A., Crubézy, E., and Ludes, B. (2000), 'Children at the Convent: Comparing Historical Data, Morphology and DNA Extracted from Ancient Tissues for Sex Diagnosis at Santa Clara-a-Velha (Coimbra, Portugal)' *Journal of Archaeological Science*, Vol. 27, 949-952.
- Daskalaki, E., Anderung, C., Humphrey, L., and Götherström A. (2011) 'Further developments in molecular sex assignment: a blind test of 18th and 19th century human skeletons' *Journal of Archaeological Science*, Vol. 38, 1326-1330.
- De La Cruz, I., Gonzalez-Oliver, A., Kemp, B. M., Roman, J. A., Smith, D. G., and Torre-Blanco, A. (2008) 'Sex Identification of Children Sacrificed to the Ancient Aztec Rain Gods in Tlatelolco', *Current Anthropology*, Vol. 49, (3): 519-526.
- DeWitte, S. N. (2010) 'Sex Differentials in Frailty in Medieval England' *American Journal of Physical Anthropology*, Vol. 143, 285-297.
- Drevenstedt, G. L., Crimmins, E. L., Vasunilashorn, S., and Finch, C. E. (2008) 'The rise and fall of excess male infant mortality', *Proceedings of the National Academy of Sciences*, Vol. 105, (13): 5016-5021.
- Faerman, M., Filon, D., Kahila, G., Greenblatt, C. L., Smith, P., Oppenheim, A., (1995) 'Sex identification of archaeological human remains based on amplification of the X and Y amelogenin alleles' *Gene*, Vol. 167, 327-332.
- Faerman, M., Bar-Gal, K., Filon, D., Greenblatt, C. L., Oppenheim, S. A., and Smith, P. (1998) 'Determination of the sex of infanticide victims from the Late Roman Era through DNA analysis', *Journal of Archaeological Science*, Vol. 25, 861-865.

- Falagas, M. E., Mourtzoukou, E. G., and Vardakasa, K. Z. (2007) 'Sex differences in the incidence and severity of respiratory tract infections' *Respiratory Medicine*, Vol. 101, 1845-1863.
- Gill, P., Whitaker, J., Flaxman, C., Brown, N., and Buckleton J. (2000) 'An investigation of the rigor of interpretation rules for STRs derived from less than 100 pg of DNA', *Forensic Science International*, Vol. 112, 17- 40.
- Gordon, E. C. (1991) 'Accidents among medieval children as seen from the miracles of six English saints and martyrs', *Medical History*, Vol. 35, 145-163.
- Haas-Rochholz, H. and Weiler, G. (1997) 'Additional primer sets for an amelogenin gene PCR-based DNA-sex test', *International Journal of Legal Medicine*, Vol. 110, 312-315.
- Hanawalt, B. A., (1977) 'Childrearing among the Lower Classes of Late Medieval England', *The Journal of Interdisciplinary History*, Vol. 8, (1): 1-22.
- Hill, K. and Upchurch, D. M. (1995) 'Gender Differences in Child Health: Evidence from the Demographic and Health Surveys', *Population and Development Review* Vol. 21, (1): 127-151.
- Holcomb, S. and Konigsberg, L. (1995) 'Statistical study of sexual dimorphism in the human fetal sciatic notch', *American Journal of Physical Anthropology*, Vol.97, 113-125.
- Hummel, S., Bramanti, B., Schultes, T., Kahle, M., Haffner, S., and Herrmann, B. (2000) 'Megaplex DNA typing can provide a strong indication of the authenticity of ancient DNA amplifications by clearly recognizing any possible type of modern contamination', *Anthropologischer Anzeiger*, Vol. 58, (1): 15-21.
- Kaestle, F. and Horsburgh, K. A. (2002) 'Ancient DNA in anthropology: methods, applications and ethics', *Yearbook of Physical Anthropology*, Vol. 45, 92–130.
- Keyser-Tracqui, C., Crubézy, E. and Ludes, B. (2003) 'Nuclear and Mitochondrial DNA Analysis of a 2,000-Year-Old Necropolis in the Egyin Gol Valley of Mongolia', *American Journal of Human Genetics*, Vol. 73, 247–260.
- Klein, S. L., (2000) 'The effects of hormones on sex differences in infection: from genes to behaviour', *Neuroscience and Biobehavioral Reviews*, Vol. 24, 627-638.
- Lassen, C., Hummel, S., and Herrmann, B. (2000), 'Molecular sex identification of stillborn and neonate individuals ("Traufkinder") from the burial site Aegerten' *Anthropologischer Anzeiger*, Vol. 58, (1): 1-8.
- Laupland, K. B., Church, D. L., Mucenski, M., Sutherland, L. R. and Davies, H. D. (2003) 'Population-Based Study of the Epidemiology of and the Risk Factors for Invasive *Staphylococcus aureus* Infections' *The Journal of Infectious Diseases*, Vol. 187, 1452–1459.
- Lewis, M. E. (2002) 'The impact of industrialisation: comparative study of child health in four sites from medieval and post-medieval England (AD 850–1859)', *American Journal of Physical Anthropology*, Vol.119, 211–223.
- Lewis, M. E. (2007) 'Difficult births, precarious lives' in *The Bioarchaeology of Children, perspectives from biological and forensic anthropology*, Cambridge University Press, 81-96.
- MacDonagh, M., (2012) 'Introduction', in Murphy, E. M. and McKenzie, C. J. (eds.) *The Science of a cemetery, The Ballyhanna Research Project* Editorial solutions, Belfast. In press.
- Macdonald, P. and Carver, N. (2012) 'Chronology, development and context—an analysis of the excavated graveyard at Ballyhanna', in Murphy, E. M. and McKenzie, C. J. (eds.) *The Science of a cemetery, The Ballyhanna Research Project* Editorial solutions, Belfast. In press.
- Mannucci, A., Sullivan, K. M., Ivanov, P. L., and Gill, P. (1994) 'Forensic application of a rapid and quantitative DNA sex test by amplification of the X-Y homologous gene amelogenin' *International Journal of Legal Medicine*, Vol. 106, 190-193.

- Matheson, C. D. and Loy, T. H. (2001) 'Genetic Sex Identification of 9400-year-old Human Skull Samples from Cayönu Tepesi, Turkey', *Journal of Archaeological Science*, Vol.28,569–575.
- Mays, S. and Faerman, M. (2001) 'Sex identification in some putative infanticide victims from Roman Britain using ancient DNA', *Journal of Archaeology Science*, Vol. 28, 555–559.
- McKenzie, C. J. (2012) 'The Adult Population at Ballyhanna' in Murphy, E. M. and McKenzie, C. J. (eds.) *The Science of a cemetery, The Ballyhanna Research Project* Editorial solutions, Belfast. In press.
- Meyer, E., Wiese, M., Bruchhaus, H., Claussen, M. and Klein, A. (2000) 'Extraction and amplification of authentic DNA from ancient human remains', *Forensic Science International*, Vol.113, 87-90.
- Migeon, B. R. (2007) 'Why females are mosaics, X-chromosome inactivation and sex differences in disease', *Gender Medicine*, Vol. 4, (2): 97-105.
- Murphy, E. M. (2012) 'Lives Cut Short – Insights from the Osteological and Palaeopathological Analysis of the Ballyhanna Juveniles', in Murphy, E. M. and McKenzie, C. J. (eds.) *The Science of a cemetery, The Ballyhanna Research Project* Editorial solutions, Belfast. In press.
- Naeye, R. L., Burt, L. S., Wright, D. L., Blanc, W. A., and Tatter D. (1971) 'Neonatal Mortality, The Male Disadvantage', *Pediatrics*, Vol. 48, (6): 902-906.
- Nagaoka, T., Hirata, K., Yokota, E. and Matsuura, S. (2006) 'Paleodemography of a Medieval Population in Japan: Analysis of Human Skeletal Remains from the Yuigahama-minami Site', *American Journal of Physical Anthropology*, Vol.131, 1–14.
- Nakahori, Y., Takenaka, O. and Nakagome, Y. (1991) 'A human X-Y homologous region encodes "amelogenin" ', *Genomics*, Vol. 9, (2): 264-269.
- O' Rourke, D. H., Hayes, M. G. and Carlyle, S. W. (2000) 'Ancient DNA studies in physical anthropology', *Annual Reviews Anthropology*, Vol. 29, 217–242.
- Pääbo, S., Poinar, H., Serre, D., Jaenicke-Despres, V., Hebler, J., Rohland, N., Kuch, M., Krause, J., Vigilant, L., and Hofreiter, M. (2004) 'Genetic Analyses from Ancient DNA', *Annual Review of Genetics*, Vol. 38, 645-679.
- Resnick, D. and Niwayama, G. (1995) Osteomyelitis, septic arthritis, and soft tissue infection: organisms. in Resnick, D. (eds.), *Diagnosis of Bone and Joint Disorders*, third ed. W.B. Saunders, Edinburgh, 2448–2558.
- Ricaut, F.-X., Fedoseeva, A., Keyser-Tracqui, C., Crubézy, E. and Ludes, B. (2005) 'Ancient DNA analysis of human Neolithic remains found in north-eastern Siberia', *American Journal of Physical Anthropology*, Vol. 126, 458-462.
- Rivara, F. P., Bergman, A. B., Gerfo, J. P. and Weiss, N. S. (1982) 'Epidemiology of childhood injuries II: sex differences in injury rates', *American Journal of Diseases of Children*, Vol. 136, 502-506.
- Rogaev, E. I., Grigorenko, A. P., Moliaka, Y. K., Faskhutdinova, G., Goltsovd, A., Lahti, A., Hildebrandt, C., Kittler, E. L. W. and Morozova, I. (2009) 'Genomic identification in the historical case of the Nicholas II royal family' *Proceeding of the National Academy of Sciences, USA*, Vol. 106, (13): 5258-5263.
- Rohland, N., Siedel, H. and Hofreiter, M. (2010) 'A rapid column-based ancient DNA extraction method for increased sample throughput', *Molecular Ecology Resources*, Vol. 10, (4): 677-683.
- Roth, E. A. (1992) 'Applications of Demographic models to paleodemography, in Saunders, S. R. and Katzenberg, M. A. (eds.), *Skeletal Biology of Past peoples: Research methods*, Wiley- Liss, Inc, 175-188.

- Schofield, R. and Wrigley, E. (1979) 'Infant and child mortality in England in the late Tudor and early Stuart period', in Webster, C. (ed.) *Health, Medicine and Mortality in the Sixteenth Century*. Cambridge, UK: Cambridge University Press, 61-95.
- Šlaus, M. (2000) 'Biocultural analysis of sex differences in mortality profiles and stress levels in the late medieval population from Nova Rača, Croatia', *American Journal of Physical Anthropology*, Vol. 111, 193-209.
- Stone, A. C., Milner, G. R., Paabo, S., and Stoneking, M. (1996) 'Sex Determination of Ancient Human Skeletons Using DNA', *American Journal of Physical Anthropology*, Vol. 99, 231-238.
- Sullivan, K. M., Mannucci, A., Kimpton, C. P., and Gill, P. (1993) 'A Rapid and Quantitative DNA Sex Test: Fluorescence-based PCR analysis of X-Y homologous gene amelogenin', *Biotechniques*, Vol. 15, 636-641.
- Vlak, D., Roksandic, M. and Schillaci, M. A. (2008) 'Greater Sciatic notch as a sex indicator in juveniles', *American Journal of Physical Anthropology*, Vol. 137, (3), 309-315.
- Waldron, T., Taylor, G. M. and Rudling, D. (1999) 'Sexing of Romano-British baby burials from the Beddingham and Bignor Villas', *Sussex Archaeological Collections* Vol.137,71-79.
- Walker, P. L., Bathurst, R. R., Richman, R., Gjerdrum, T. and Andrushkp, V. A. (2009) 'The causes of porotic hyperostosis and cribra orbitalia: a reappraisal of the iron-deficiency-anemia hypothesis', *American Journal of Physical Anthropology*, Vol. 139, 109-125.
- Weaver, D. (1980) 'Sex differences in the *ilia* of a known sex and age sample of foetal and infant skeletons' *American Journal of Physical Anthropology*, Vol.52, 191-195.
- Yang, D. Y. and Watt, K. (2005) 'Contamination controls when preparing archaeological remains for ancient DNA analysis', *Journal of Archaeological Science*, Vol. 32, (3): 331-336.

THE STORY OF TWO NORTHWARD MIGRATIONS-ORIGINS OF FINNO-PERMIC AND BALTO-SLAVIC LANGUAGES IN NORTHEAST EUROPE, BASED ON HUMAN Y-CHROMOSOME HAPLOGROUPS³³⁷

Csaba Barnabás Horváth, PhD
Corvinus University of Budapest, Hungary

Abstract

This paper attempts to find a plausible explanation for the origins of Balto-Slavic and Finno-Permian languages in Northeast Europe by a research based on the analysis of statistical databases of human Y-chromosome haplogroups. The mainstream view that associates Balto-Slavic languages with haplogroup R1a and the Corded Ware Culture, and Finno-Permian languages with haplogroup N, fails to solve several contradictions: How come, that the presence of subclades of haplogroup R are as high in most Finno-Permian populations, as the presence of haplogroup N? How come, that Corded Ware culture spread so far north, that it covered the early-medieval range of most Finno-Permian languages? This paper is trying to set up a hypothesis that solves these contradictions.

Keywords: Human Y-chromosome haplogroups; Corded Ware, language shift, migration, assimilation

Introduction

This paper attempts to identify the origins of Balto-Slavic and Finno-Permian languages in Northeast Europe, by the analysis of statistical samples of human Y-chromosome haplogroups. Due to limitations in recommended paper length, this paper can not give a detailed description of the biological nature of human Y-chromosome haplogroups, and also, the topic of this paper is not the biological research of human Y-chromosome haplogroups, but the analysis of what their statistical presence in different human populations could indicate regarding the historical research of prehistoric migrations and the origins of language families. It does worth to note however, that human Y-chromosome haplogroups are distinct by the non-recombining parts of Y-chromosome DNA. Different markers draw a patrilinear phylogenetic tree. Thus the statistical presence of different human Y-chromosome haplogroups in different populations can give a help to historians and archeologists in finding out more about historical and prehistoric migrations.

Main haplogroups of Northeast Europe and mainstream views

In Northeast Europe, we can distinct two main Y chromosome haplogroups, haplogroup R1a and haplogroup N. Haplogroup R1a is dominant among Balto-Slavic peoples but as we will see, also significant among Finno-Ugric populations, while haplogroup N can mainly found among Uralic populations, and it is especially dominant among the Samoyeds. The dominant subclade of haplogroup R1a in Northeast Europe is R-Z283, that was born

³³⁷ *With special thanks to my friend, Tibor Fehér from FTDNA, who helped me with the latest Y-DNA statistics*

about 5500 years ago,³³⁸ and its' spread is often associated with the ancient expansion of the Bronze Age Corded Ware Culture. An other subclade of R1a is also present in the region: R-M458, that was born more than a thousand years later than R-Z283.³³⁹

Haplogroup N is also represented by two different subclades in the region. An older one, N1c, that seems to have been autochthon to the region before the arrival of haplogroup R1a, and a newer one, haplogroup N1b that seems to be a more recent arrival from Western Siberia.³⁴⁰

Two other haplogroups of presumably Central European origins, R1b and I2a are also present in the region.³⁴¹

Since the use of human Y-chromosome haplogroups in the analysis of prehistory and the origins of language families is pretty new, dating back only a few years, research in this aspect is still in early stages. Remarkable works have already been born, but due to limitations in recommended paper length, this paper can not give a literature review on the issue. At this point, the mainstream view regarding the research topic of this paper sees haplogroup R1a as the carrier of Indo-European languages (especially Balto-Slavic in the examined region) and haplogroup N as the carrier of Uralic languages. This explanation however contains several contradictions that the present paper is trying to solve. This paper attempts to identify these contradictions, and offer an alternate explanation for the prehistoric origins of Finno-Permian and Balto-Slavic languages in Northeast Europe based on human Y-chromosome haplogroups.

Questions raised by the dynamics of language shift

A key factor regarding the issue of Uralic and Finno-Permian languages, is that it is quite often the case, that present geographic range of language families does not coincide with their original or past range. It is highly misleading to approach present or recent geographic ranges as something static, since geographic ranges of language families are highly dynamic. A good example of this is the well-known case of the Celtic languages. It is common knowledge today, that the original core geographic range of the Celtic languages approximately covered the area of the La Tené and Hallstatt cultures, an area that roughly coincides with the present German states of Bavaria, Hessen, Baden-Württemberg and Rhineland-Pfalz, and the French regions of Alsace, Lorraine, and Burgundy, as well as parts of Austria. At the same time, present Celtic-speaking areas are located along the western coast of Ireland, along the western coast of Scotland, northern and western parts of Wales, and western Bretagne. What makes the situation bizarre is that not an inch of today's Celtic-speaking areas coincides with the original Celtic core area, and no native Celtic language is spoken any longer there. At the same time, those geographical areas where Celtic languages are still spoken, lie outside the original core area, and are the remnants of remote peripheral outposts of Celtic expansion in the Iron Age. Therefore, if unaware this fact, in order to identify the origins of the Celts, one would collect genetic samples from the present Celtic-speaking areas, ignoring the original core area, the results could easily be misleading.

The case is somewhat similar regarding the Finno-Permian language-group. Today Finno-Ugric languages are mainly associated by arctic and subarctic climates, with taiga and tundra regions, that were often characterized by hunting, gathering and semi-nomad reindeer

³³⁸Rozhanskii, Igor L., and Anatole A. Klyosov. "Haplogroup R1a, its subclades and branches in Europe during the last 9,000 years." *Advances in Anthropology* 2 (2012): 139.

³³⁹Rozhanskii, Igor L., and Anatole A. Klyosov. "Haplogroup R1a, its subclades and branches in Europe during the last 9,000 years." *Advances in Anthropology* 2 (2012): 139.

³⁴⁰Derenko, Miroslava, et al. "Y-chromosome haplogroup N dispersals from south Siberia to Europe." *Journal of Human Genetics* 52.9 (2007): 763-770.

³⁴¹http://www.eupedia.com/europe/european_y-dna_haplogroups.shtml

husbandry up until the modern age. The case however was much different as recently, as a millennium ago. For centuries, the northwards advance of the Slavic-speaking population was steady in the region, slowly but steadily assimilating Finno-Permian speaking groups. This means, that the further we look back into history, the further south we find the Slavo-Finnic language boundary. About 1000-1300 years ago, the area of the present day Central Federal District of Russia was mainly inhabited by Finno-Permian groups, such as the Merya, the Muroma, and the Meshcher.³⁴² This region lies southwards of the subarctic taiga region, and regarding climate, it can be defined more as continental than subarctic, mixed forest and not taiga,³⁴³ while its culture dating back at least to the bronze age is characterized more by some kind of farming agriculture, than by hunting or reindeer husbandry. Therefore, we are talking about a region with a population density much higher than that of the taiga and tundra regions further north. Besides the extinct Merya, Muroma and Meshcher, surviving remnants of the original Finno-Permian languages of this region are the Mordvin and Mari languages. Further west, in a similar latitude, -rather temperate than subarctic, with a traditional lifestyle rather agricultural than hunting- Estonian is such a surviving Finno-Permian language. About 1000-1300 years ago Estonian was accompanied by at least two other Finno-Permian languages right next to it: Livonian in the south, in present day Latvia, and Votic further east, in present day Russia. At the same time, about 1000-1700 years ago, most of what is Finland today was still inhabited by Sámi hunter-gatherers, and the case was the same in case of the area of the present day Republic of Karelia. Also, much of today's Komi Republic was populated by Samoyedic, and perhaps Ob-Ugric groups, and significant areas of present day Archangelsk Oblast were also populated by Sámi and Samoyed nomads.³⁴⁴

The Samoyeds are not Finno-Ugrians, but an other language family among the Uralic languages, that have developed on it's own for at least the last 6000 years. The Sámis do speak Finno-Ugric languages now, but it's widely accepted, that it's the consequence of a language-shift, and originally they had spoken some unknown pre-Finno-Ugric languages.³⁴⁵³⁴⁶

So Finno-Permian presence was not only much more significant in latitudes further south than it is today, but it was also either absent, or represented by a much lower population density in the subarctic taiga and tundra regions that we usually associate with Finno-Ugric languages today. So due to the historically agricultural lifestyle and thus higher population density, we can assume that as of 1000-1300 years ago, the Mari, the Merya, the Muroma, the Meshcher, the Mordvin, the Estonian, the Livonian, and Votic made up a solid demographic majority of Finno-Permian speakers, especially if we also take the above described contemporary situation of present day Finland, Republic of Karelia, and Komi Republic into account. This means that as recently as 1000-1300 years ago, the demographic core of the

Finno-Permian language group was located in today's Central Federal Region of Russia and the Baltic States, a belt south of the

If we go further back in time, what we find only confirms this assumption. About 1500-2000 years ago, the area of present day Finland and Republic of Karelia was almost entirely inhabited by Sámis, the area of the present Komi Republic was almost entirely inhabited by Samoyeds, while the area of present day Archangel Oblast was divided between

³⁴²<http://peacecountry0.tripod.com/900ad.htm#oz>

³⁴³Pounds, Norman JG. *An Historical Geography of Europe Abridged Version*. CUP Archive, 1990. map 1.2.

³⁴⁴<http://peacecountry0.tripod.com/900ad.htm#oz>

³⁴⁵Aikio, Ante. "An essay on substrate studies and the origin of Saami." *Etymologie, Entlehnungen und Entwicklungen: Festschrift für Jorma Koivulehto zum 70* (2004): 5-34.

³⁴⁶Aikio, Ante. "New and old Samoyed etymologies 2." *Finnisch-ugrische Forschungen Band 59-Heft 1-3* (2006).

Sámi and Samoyed populations.³⁴⁷ According to most estimates, the Finno-Ugric/Balton-Slavic linguistic boundary was somewhere around the Riga-Novgorod-Moscow-Tambov line about 1000 years ago, and somewhere around the Vilnius-Kiyev line about 2500 years ago.³⁴⁸

So this all means that if we we want to trace the origins of the Finno-Permian, the gene pool of the Estonians, Livonians, Votes, the Merya, the Muroma, the Mescher, the Mordvin, the Mari, and extinct Finno-Permian groups further south may tell more than Finns of Finland, or the northern Komi.

Besides shifts in the geographic range of certain groups, an other important issue is the dynamics of language shifts within a single population. It is quite common in case of migrations that conquering groups, outnumbered by the conquered indigenous population, but possessing advantages in weaponry, agricultural and industrial technologies, manage to achieve a language shift among the more numerous subjugated population. This happened in the case of the Slavic conquest of the Balkans when the bulk of the more numerous Romance and Greek-speaking indigenous population shifted to the Slavic language of the conquerors, the Anglo-Saxon conquest of England, where the Celtic and perhaps also Romance speaking natives adopted the language of the numerically weaker conquerors, in case of the Arab conquest, when the Aramaic-speaking population of Iraq and Syria, the Coptic-speaking population of Egypt, as well as the Berber-speaking population of the Maghreb largely changed their language to Arabic, despite being more numerous than the conquerors. The same thing happened in the case of Mexico, Peru and Bolivia, where the Native and Métis population (still a majority together) more and more switched to Spanish from their original Nahuatl, Quechuan, and Aymara languages. The medieval Slavic migration to Finno-Permian regions of Northeast Europe was marked by a similar process. Much of the original Finno-Permian population were assimilated by the Slavic newcomers.³⁴⁹

The subjugated native populations seemed to be able to assimilate the conquerors only in cases where besides solid numerical superiority, they also possessed more advanced economic structures, and the conquerors lacked advance in anything but military organization. This was the case in the assimilation of Germanic groups in the successor states of the West Roman Empire, and the assimilation of several nomadic groups by the Han Chinese.

This indicates, that we should find significant presence of genetic traces of the assimilated Finno-Permian groups among the Russian-speaking population of the region, but at the same time, high presence of Slavic genes among the Finno-Permian population is unlikely, since language shift to Slavic was the dominant scenario not only among mixed populations, but even simply among Finno-Permian populations affected by Slavic culture.³⁵⁰ Again, we can see analogic phenomenons from different parts of the world. Native origins are common among the Spanish-speaking populations of Latin-America, but one can hardly find Métis or people of mixed or European origins who use Quechua, Aymara or Nahuatl as their native language.

So if we accept the view of the mainstream, that considers the haplogroup N as the representatives of ancient Finno-Ugric population, and the R1a haplogroup as the emblem of Slavic newcomers, then we woul expect an extremely high frequency of haplogroup N among the Russians, and an extremely low frequency of haplogroup R 1a among the remaining Finno-Ugric speakers

³⁴⁷ <http://peacecountry0.tripod.com/400ad.htm>

³⁴⁸ Pounds, Norman JG. *An Historical Geography of Europe Abridged Version*. CUP Archive, 1990. map 2.3

³⁴⁹ Homén, Theodor: *East Carelia and Kola Lapmark*. Longmans, Green and Company, 1921. pp. 106-119.

³⁵⁰ Homén, Theodor: *East Carelia and Kola Lapmark*. Longmans, Green and Company, 1921. pp. 106-119.

The genetic composition of European Russia, however, is quite the opposite. The frequency of haplogroup N among Russians is only 23%, lower than the proportion of haplogroup R1a in most Finno-Permian populations. At the same time, in most Finno-Permian ethnic groups the frequency of R1a is about as high as the frequency of haplogroup N. Among the Estonians, the combined presence of haplogroup R1a and R1b is 40%, while haplogroup N is just 34%. Among the Mari, R1a and R1b together constitutes 39.5%, while haplogroup N 49.5%, among the Komi R1a and R1b makes up 40% while N 51%, among the Mordvin R1a and R1b constitutes 40% while N just 19.5%, and among the Udmurt R1a and R1b gives 24.5% while N gives 67%. A notable exception is Finland, where R1a and R1b constitute only 8.5%, while N is at 61.5%.³⁵¹ As we can see, in most Finno-Permian groups, the combined presence is higher or about the same as the combined weight of N1c and N1b. There are only two exceptions, where the frequency of N is higher than the frequency of R: The Finns of Finland and the Udmurts. The Finns however, -as described above- have only arrived to present day Finland between 0 and 500 AD, from Estonia and Karelia, wiping out the Sámi aborigines, and this migration caused a significant bottleneck affect that could be misleading regarding the genetic origins of Finlanders.³⁵² Also the particular subclade of haplogroup N1c, that is numerous among the Finns, the N1c1a1a1b (N-L1022) is a pretty recent one³⁵³, its' origins coinciding with the time when Finns arrived to present day Finland from Estonia. So the Finns are one of the newest, one of the most recently formed ethnic group among the Finno-Ugrians. So, their genetic composition, dominated by N1c1a1a1b, can by no means give any basis of speculations about the genetic composition of ancient Finno-Ugrians. So in aware of the extremely recent ethnogenesis of Finlanders, the only real exception with N-majority among European Finno-Ugrians are the Udmurts.

These genetic statistics are especially interesting in the light of the dynamic nature of geographic range of language families described above. As described, the bulk of the Finno-Permian population was located in the mixed-forest belt south of the 60th parallel as recently as 1600 years ago, and thus the gene pool of the Estonian, the Mordvin, the Mari, and the Udmurt population can tell us far more about the character of the prehistoric Finno-Permian population, than samples from ethnic groups further north, that were formed afterwards as offshoots of Northward migrations and expansion from these areas.

In the light of the dynamics of worldwide cases of language shift described above, it is highly unlikely that Finno-Permian groups would have managed to absorb without a language shift, masses of Balto-Slavic conquerors being not only technologically more advanced, but also as numerous as the natives themselves were. Therefore, the assumption that the first wave of R1a migration carried Balto-Slavic languages in the region seems to be highly unlikely.

Archeological findings show a similar pattern. The northern limit of the Corded Ware Culture –usually associated with haplogroup R1a and Indo-European languages – reached far more north, than the linguistic boundary between Slavic and Finno-Permian languages as recently as 1000-1300 years ago, and covered most of the above described key region of Livonian, Estonian, Votic, Merya, Muroma, Meshcher, and Mordvin traditional linguistic areas.

To summarize: Neither the range of R1a, nor the range of Corded Ware Culture coincides with the gap between the Balto-Slavic and Finno-Permian. Both geographical ranges seem to rather overlap with the gap between the ancient southern Finno-Permian groups (Estonian, Vot, Livonian, Merya, Muroma, Meshcher, Mari, Mordvin), and those

³⁵¹http://www.eupedia.com/europe/european_y-dna_haplogroups.shtml

³⁵²Kittles, Rick A., et al. "Autosomal, mitochondrial, and Y chromosome DNA variation in Finland: Evidence for a male-specific bottleneck." *American journal of physical anthropology* 108.4 (1999): 381-399.

³⁵³http://www.eupedia.com/europe/Haplogroup_N1c_Y-DNA.shtml#subclades

lands that were populated by Sámi and Samoyedic societies as recently as 1500-2000 years ago.

Subclade R-M458 of R1a, and haplogroup I2a as an answer to the question

There does exist a difference in gene pools however, that coincides with the gap between the Slavic-speaking population, and the surviving southern Finno-Permian nations. This is the apparently overlapping range of a subclade of Haplogroup R1a, R-M458, and a subclade of haplogroup I, I2a. Haplogroup R M458 is a younger subclade of haplogroup R1a, its' origins are estimated at 4200 before present, with a margin of 450 years.³⁵⁴ As much as there is no gap along the Slavo-Finnic linguistic boundary regarding the range of R1a, there does exist a clear gap regarding the overlapping ranges of R-M458 and I2a, as visible on the following table:³⁵⁵

	Czech	Slovak	Polish	Belarus	Russian average	Ukrainian average	Mari	Estonian	Udmurt
R-M458	30,20%	21,40%	26,60%	12,70%	12,47%	13,45%	0,00%	5,10%	0,00%
I2a	9,00%	16,00%	5,50%	17,50%	10,50%	13,00%	1,00%	3,00%	0,50%
R-M458 and I2a together	39,20%	37,40%	32,10%	30,20%	22,97%	26,45%	1,00%	8,10%	0,50%
Non M458 R1a	7,50%	24,90%	19,30%	42,00%	40,88%	33,73%	31,40%	28,00%	16,70%

These genetic traces indicate not one, but two northwards migrations: A first one, dominated by older subgroups of R1a, with impacts reaching most Finno-Permian populations of Northeast Europe, and a second one, dominated by R-M458 and I2a1, with its' impact largely limited to Slavic-speaking populations, but not reaching Finno-Permian speaking groups.

So, a plausible explanation could be that the Corded Ware Culture (or at least its' eastern flank) carried a first wave of R1a migration with Finno-Permian languages, while a second migration marked by R-M458 and I2a, and introducing Balto-Slavic languages occurred sometime between 3000-4000 BP.

This conclusion is quite close to that of Kalevi Wiik in his book on the origins of the peoples of Europe, except for the fact, that while Wiik placed the Northwards Finno-Ugric migration to the Neolithic, this paper places it to the Bronze Age, with the Slavic migration following perhaps at the dawn of the Iron Age.³⁵⁶

The Seima-Turbino phenomenon, and why it could not be the origin of Finno-Permian languages

A common concept is to view the alleged Seima-Turbino migration, the expansion of a subarctic Bronze Age culture that occurred about 3500 years BP, and spread from South

³⁵⁴Rozhanskii, Igor L., and Anatole A. Klyosov. "Haplogroup R1a, its subclades and branches in Europe during the last 9,000 years." *Advances in Anthropology* 2 (2012): 139.

³⁵⁵ Almost no statistics with the distinction of all these different subclades are available, so the table show a mathematical combination of statistical data from two sources (unfortunately no data was available for both of R-M458 and I2a for the Latvian, the Lithuanian, and the Mordvin population):

- Underhill, Peter A., et al. "The phylogenetic and geographic structure of Y-chromosome haplogroup R1a." *European Journal of Human Genetics* (2014).
- http://www.eupedia.com/europe/european_y-dna_haplogroups.shtml

³⁵⁶Wiik, Kalevi, and György Kádár. *Az európai népek eredete*. Nap Kiadó, 2008.

Siberia through the Urals reaching the taiga belt of northeast Europe,³⁵⁷ as a possible carrier of Finno-Ugric languages.

There are several factors however, that could exclude the possibility of Seima-Turbino migration being the carrier of Finno-Ugric languages:

- First, the range of this migration in the west did not extend into the west and south far enough to reach the medieval linguistic boundary. The Seima-Turbino only extended to the sparsely populated subarctic regions of Northeast Europe, but not into the more densely populated areas of the mixed forest belt of continental climate,³⁵⁸ so it did not reach the key area of southern Finno-Permic groups described above. This indicates that in the densely populated continental areas, the population unaffected by the Seima-Turbino migration vastly outnumbers the subarctic population affected by it.

- If the Finno-Ugric population had arrived with the Seima-Turbino migration, Finno-Ugric languages would be younger than Balto-Slavic languages. Therefore, diversity among Finno-Ugric languages should be lower, than diversity among Balto-Slavic languages. We can see the very opposite however. The linguistic distance between Finno-Permian and Ugric languages is extremely far in the first place, and even Permian languages are so distinct, that some scholars view them as an entirely separate branch of Finno-Ugric languages.³⁵⁹

The time and geographic range of the Seima-Turbino migrations coincide with the dating and geographic range of haplogroup N1b (N-P43Ö, however since haplogroup N1b is estimated to be about 4000 years old, and spread northwards and westwards from Southern Siberia³⁶⁰ exactly the same time and same way as the Seima-Turbino migrations did. This dating and geographical range may coincide with a narrower language group of Uralic however: the Samoyedic languages. They are indeed thought to originate from Southern Siberia, and their diversity support a dating of about 4000 years ago. As we can see above, Samoyedic languages did cover most of today's Komi Republic and Arkhangelsk Oblast as recently as 1600 years ago, so Samoyedic language and haplogroup N1b are plausible linguistic and genetic candidates to be associated with the Seima-Turbino migration.

Other factors that seem to exclude the mainstream view:

If we believe that mainstream view that haplogroups R1a and R1b, and the Corded Ware culture represented Indo-European Slavic speaking cultures, we should assume, that a Southwards Finno-Ugric migration somehow "reconquered" the lands of the Estonians, The Votes, the Latvians, the Merya, the Muroma, the Meshcher, and the Mordvins. The main problem with this scenario, is that, as described above, about 1500-1600 years ago, only Sámi and Samoyedic hunter-gatherer population existed beyond the 60th parallel north. These populations were marked by a far lower population density, and a less advanced technology and level of political association than their southern neighbors. Sámi and Samoyedic populations had neither the demographic, nor the technological resources to conquer far more numerous agriculturalist societies on their southern frontier.

³⁵⁷Koryakova, Ludmila, and Andrej Epimakhov. *The Urals and western Siberia in the Bronze and Iron ages*. Cambridge University Press, 2007.

³⁵⁸Koryakova, Ludmila, and Andrej Epimakhov. *The Urals and western Siberia in the Bronze and Iron ages*. Cambridge University Press, 2007.

³⁵⁹Kittilä, Seppo, Katja Västi, and Jussi Ylikoski, eds. *Case, Animacy and Semantic Roles*. Vol. 99. John Benjamins Publishing, 2011. p. 354.

³⁶⁰Derenko, Miroslava, et al. "Y-chromosome haplogroup N dispersals from south Siberia to Europe." *Journal of Human Genetics* 52.9 (2007): 763-770.

Conclusion

As described above, the conclusion of this paper is that haplogroups R-Z283, R-M458, I2a, N1c, and N1b were all carriers of different language groups. N1c has likely been the dominant haplogroup among a pre-Uralic native population of the region, while Finno-Permian languages were likely introduced in the region by R-Z283 with the eastern flank of Corded Ware migrations in the Bronze Age. N1b likely introduced Samoyedic languages with the Seima-Turbino migrations 3500 years BP, while Balto-Slavic languages were likely introduced by a population characterized by a blend of R-M458 and I2a 3000-400 years ago.

This explanation solves several questions ignored by the mainstream view: How Finno-Slavic linguistic boundary could be that much in the south as recently as early medieval times, despite the far more northern spread of both Corded Ware culture, and haplogroup R1a? How come that in most Finno-Permian populations the presence of haplogroup R is as high as that of haplogroup N, etc.

We have to admit, that this paper not only solves, but also raises questions. How come, that as different language groups, as Finno-Permian and Slavic could originate from two different subclades, R-Z283 and R-M458 of the same haplogroup, haplogroup R1a, while Samoyedic, a language group somewhat related to Finno-Permian, could originate from haplogroup N1b? These questions can be subject of further research, but language shift can be a plausible explanation. The parallel spread of haplogroup I2a (originating from further south) together with R-M458 could indicate such an early language shift for example. The number of questions solved is still higher however, than the questions raised.

References:

- Aikio, Ante. "An essay on substrate studies and the origin of Saami." *Etymologie, Entlehnungen und Entwicklungen: Festschrift für Jorma Koivulehto zum 70* (2004): 5-34.
- Aikio, Ante. "New and old Samoyed etymologies 2." *Finnisch-ugrische Forschungen Band 59-Heft 1-3* (2006).
- Derenko, Miroslava, et al. "Y-chromosome haplogroup N dispersals from south Siberia to Europe." *Journal of Human Genetics* 52.9 (2007)
- Homén, Theodor: *East Carelia and Kola Lapmark*. Longmans, Green and Company, 1921.
- Kittilä, Seppo, Katja Västi, and Jussi Ylikoski, eds. *Case, Animacy and Semantic Roles*. Vol. 99. John Benjamins Publishing, 2011
- Kittles, Rick A., et al. "Autosomal, mitochondrial, and Y chromosome DNA variation in Finland: Evidence for a male-specific bottleneck." *American journal of physical anthropology* 108.4 (1999): 381-399.
- Koryakova, Ludmila, and Andrej Epimakhov. *The Urals and western Siberia in the Bronze and Iron ages*. Cambridge University Press, 2007.
- Pounds, Norman JG. *An Historical Geography of Europe Abridged Version*. CUP Archive, 1990.
- Rozhanskii, Igor L., and Anatole A. Klyosov. "Haplogroup R1a, its subclades and branches in Europe during the last 9,000 years." *Advances in Anthropology* 2 (2012): 139.
- Underhill, Peter A., et al. "The phylogenetic and geographic structure of Y-chromosome haplogroup R1a." *European Journal of Human Genetics* (2014).
- Wiik, Kalevi, and György Kádár. *Az európai népek eredete*. Nap Kiadó, 2008.
- European Y-DNA haplogroups frequencies by country- Eupedia
http://www.eupedia.com/europe/european_y-dna_haplogroups.shtml
- Haplogroup N1c (Y-chromosomal DNA) – Eupedia
http://www.eupedia.com/europe/Haplogroup_N1c_Y-DNA.shtml#subclades
- Map of Finno-Ugric Distribution 900 AD <http://peacecountry0.tripod.com/900ad.htm#oz>
- Map of Finno-Ugric Distribution 400 AD <http://peacecountry0.tripod.com/400ad.htm>

FORMS OF AFFLICTION AND IDENTITY IN GRAHAM SWIFT'S NOVELS

Alexandra Roxana Mărginean, PhD
Romanian-American University, Romania

Abstract

This paper looks at forms of affliction in Graham Swift's novels. The idea is to analyse these in order to see the way identity is constructed by the characters in some special circumstances that test one's physical endurance, nerves and resolve. The first case scenario we are looking at is the objectification of one's body, going beyond the classical instance of women being reduced to sex objects, and looking at the way one's gaze may objectify a man as well, in a totally different sense than a sexual one. For this latter example we go into Lacan's theory about the mirror image. Other special instances of objectification under analysis are the symbolical reduction of the person to a dummy or an automaton, the implications of which are dwelled on in detail. The second part of the paper gets into more concretely violent forms of abuse – mutilated bodies, either in war or by torture, rape and even murder/suicide – explaining their impact on the characters' psychological profile and the personality/identity modifications that they entail. The conclusion of the paper is that apparently destructive elements may display building potential when it comes to identity.

Keywords: Identity, affliction, ambiguity

Introduction

Sometimes identity and subjectivity emerge in the most unexpected instances. We generally assume that self-assertion occurs or is more evident whenever the individual feels most empowered, in a position of superiority in relation to the others, as self-assertion is paired in common knowledge with freedom of one's actions. However, if we look at it from a different angle, we may plead for the idea that, on the contrary, it is when individuals are at their most vulnerable state that they give through their actions and attitudes the true measure of their personality and nature. A vital state of affairs may bring out unknown potential – either (for) good or bad deeds – from an individual, a potential that people may not have been aware of, and which may not have become known or surfaced at all in unexceptional positions. It is this latter aspect that I am interested in here.

Hence, I will firstly analyse instances in which the characters in Graham Swift are abused, in order to extract personality features and the way they build their identities in those difficult situations, following the logic that sometimes critical circumstances are the most revealing for who one really is. Secondly, we will see how interpretations referring to identity and certain roles played by the characters in Swift's fictional novelistic world are ambiguous, showing that things are never black and white, but preserve their elusiveness, challenging the reader to extract her/his own conclusions and to read between the lines.

Objectified Bodies

We will first look at instances of objectified bodies. By objectification we understand here an abuse in the form of the reductionism of the person to its body, and of the body to an object. It is usually done by others, bringing an affront to the individual, but it may be

performed to one's own body, for various reasons. Probably the most common context is considering women sex objects. In *Shuttlecock*, Prentis objectifies his wife, Marian, when he takes advantage of her flexibility, comparing her to the soft substance of "clay" (Swift 1992b: 27).

Turning the body into an object is primarily done through gaze. When gazes are sexual, the "victims" are most commonly women, but not exclusively. In *The Light of Day*, Sarah's portrait is a result of George's analysing stare. On the one hand, his interest is in her as a client, for aspects that potentially help the case. From the information obtained visually, he can approximate her financial status, in order to infer potential advantages for him as a payee. On the other hand, George's gaze is also sexual. Details such as the way light falls on her knees, while sitting in his office on the client's chair, make her vulnerable to him (*Ibidem*: 19). He is unprofessional, abusive in his position of a detective, while she seems to be the victim. However, one should not dismiss the possibility that she may be capitalising upon her beauty, manipulating him, in order to draw his attention to her and obtain a more involved collaboration from George.

Gazes are not always sexual, or directed at women in Swift's world. In *Ever After*, Bill Unwin's gaze in the mirror and his failure to recognise himself show his self-alienation. This feeling is the consequence of his attempted suicide, and the ensuing (as well as previous) trauma. However, Unwin confesses that he has always felt this way: "I recognise that I have never truly recognised it [his face]" (Swift 1992a: 3). The sensation haunts him "especially these days" (*Ibidem*: 118), but not only, so it is not necessarily related to recent events. In Lacanian terms, misrecognition occurs when the infant cannot integrate the image (s)he sees in the mirror. Although (s)he recognises its correspondence with the boundaries of his/her own body, its ideal integrity cannot be identified with the imaginary "I", which has been experienced as incoherent. Bill has a similar feeling. He is surprised at his corporal integrity and at his ability to perform as an actor. Therefore, he experiences himself as a fraud, as unreal. He faces the task of self-reconstruction, as he wants the result to be authentic, not a mask. This self, which he feels to be illusory, points to the theme of simulacra. It shows Bill and his discourse as ambivalent.

Besides alienation, this mirror image also produces a positive effect, of "defence against the anxiety of bodily fragmentation" (Bonner 1999: 239). The mirror presentation of the individual as a unit exorcises the anxiety that this integrity is available to the subject only through the eyes of the other (*Ibidem*: 240). This fear is born around the age of eight months, (but stays throughout one's life), and bears the name of "stranger anxiety" (Spitz qtd. in Bonner 1999: 240) or "wariness" (Kaplan qtd. in Bonner 1999: 240). It is as if a "confiscation" of the subject by the others who look at him" (Merleau-Ponty qtd. in Bonner 1999: 241) could take place, potentially resulting in desire for the other, in order to retrieve one's self. Bill's image depended on Ruth, who made him interesting to the others, and on Sam, who was his "other" as a plastic man of surrogates. Their death may have left Unwin without an image of his self, which he now tries to recuperate by glancing in the mirror. However, absence of the other(s), whom one's image depends on, may also be an opportunity to (re)create oneself outside their authority. Without their help, the individual could obtain a more "real" self, which Bill may in fact be attempting in his gesture. Ambivalence of both the interpretation of the mirror glance and Bill's empowerment is preserved.

In *Shuttlecock*, in the subway, people are subjected to each other's aggressive gazes. Even purposefully not watching somebody else is aggressive, because it is a reminder of the inescapability of the situation shared by the commuters. They are strangers violating each other's private space. Proximity makes them more visible to the other, and thus more vulnerable. Prentis ends up imitating the deliberately daring, self-confident, and zealous manner in which certain citizens in the subway move. These busy people hold jobs that

integrate them in the system of privileged positions of the metropolis. Their demeanour lends them an aura of importance. It is an image of success that Prentis copies and transmits to the others around him. However, he rejects this projected, socially integrated self, which is merely dissimulated by him as a survival strategy.

In *The Light of Day*, George's daughter, Helen, objectifies her own body as a place of protest: "She had a stud struck in the side of her nose [...] In those days that sort of thing hadn't yet become a kind of uniform." (Swift2004: 62) This form of manifestation is self-expression, (therefore use of the body to this purpose), as well as abuse – a somewhat violent alteration of its natural state. It is empowerment by showing the courage to defy norms, but also integration: non-conformity is, for people her age, a type of conformity. Underneath her nonconformist appearance, in school she abides by rules, being an exemplary student, particularly in Art and History. By means of her body, she abuses both positions – the rebel and the good girl. Her revolt is against George, as he is Helen's other in three respects. Firstly, he is her father, so her other by power position and generation gap. Secondly, Helen rejects patriarchy, which is visible in her sexual orientation. Thirdly, her father is the servant of a system that relies on rationality, facts, evidence, and practicality, whereas her preoccupations show an inclination towards aesthetics, art, the unpractical and the beautiful. Despite these aspects, she proves to be on his side, not on her mother's, which subverts her own subversion again.

The reduction of the person to a "dummy" takes place in *The Sweet-Shop Owner*, in the case of Will Chapman. He feels like "someone borrowed for the occasion", reduced to the function of a bridegroom, merely necessary as ornament, as "to have a wedding, you needed a bridegroom" (Swift 1993: 23). To Irene, he is "only something to occupy her with" (*Ibidem*: 22). To the others, he is a hollow, nicely-decorated package, an exhibit for the sake of the ceremony and saving appearances. Reduced to a straw man, he is allowed to exist in a position for as long as he does not upset the plans made for him by others. In his roles, he is a puppet that moves according to the way the strings are pulled. He is not supposed to have emotions or a will of his own. He must function within strict, pre-established routines, with exterior, controlled progression. His identity is not really his, and his personality is annihilated: "The content was unimportant. It was the layout that mattered." (*Ibidem*: 24) Nevertheless, as long as he finds a place, it suits him to perform received roles. Even if it gives him no freedom of expression in the creative sense, at least it spares him the trouble of inventing himself. For a weak character such as Will, this reductionism is a type of agency.

The automaton is related to the dummy. It implies reductionism, and a loss of feeling and humanity. It is, however, more complex in signification and potentialities. As we have seen in *Shuttlecock*, Prentis feels replaced by the Bionic Man, a character that his children see on television, which becomes their hero and surrogate father figure. This situation initially makes the protagonist resort to violence towards the other members of the family, in order to reassert his place by force. Prentis's attitude to the Bionic Man is ambivalent. He unconsciously both takes it as a landmark of masculinity, and rejects it, by turning off the TV. In order to understand this interaction, we should look into Baudrillard's theory on metafunctionality.

Since an automated object "works by itself", it displays "resemblance to the autonomous human being" (Baudrillard 1999: 111). A gizmo is an unnamable thing, whose purpose is not always known, but whose most important feature is that "it works" (*Ibidem*: 114). It also suggests that "for every need there is a possible [...] answer", with the implication that the world has "already been 'operated on'" successfully (*Ibidem*: 116). Consequently, any gizmo represents the fulfilment of basic human dreams and needs: autonomy, functionality of both oneself and of the world, mastery of the world, and the idea that the world is governed by Order. The functionality of the object is associated with that of

the human body, by transfer: “The myth of the wonder-working functionality of the *world* is correlated with the fantasy of the wonder-working functionality of the *body*.” (*Ibidem*: 117) Since Prentis feels disempowered, to him the robot’s functionality is a mocking reminder of his vulnerability. Moreover, as he is frustrated by his not knowing how the world “works”, the Bionic Man also reminds him of his ignorance.

Ambivalently, the robot is also a reassertion of human creativity and empowerment. Due to its anthropomorphic quality, it is “a simulacrum of a man as a functionally efficient being” (*Ibidem*: 120). The resulting empowerment may be interpreted as sexual: “the gizmo, the ultimate tool, is basically a substitute for the phallus” (*Ibidem*: 117), a fetish. Although it is more efficient than the human being, it remains his/her slave, because it is *made* by a human and it is sexless (*Ibidem*: 120). Thus, the robot is safely disabled in an important respect in comparison with a real person: it is “an object to which the world is subject yet which is simultaneously subject to my will” (*Ibidem*: 121). It is a part of the human being that has been “exorcised and turned into a sort of all-powerful slave” (*Ibidem*: 121). As long as it is a slave, it is meant to relieve anxiety. From these comments, another ambivalence results. The automaton gives the human being the possibility of an indirect mastery of the world, which offers safety, but also generates unease. The “sorcerer’s apprentice”, i.e. the robot, “may break its chains” and take control of its maker, making her/him redundant (*Ibidem*: 121). Both anxiety and relief are illustrated in Prentis’s behaviour in relation to the Bionic Man. This particular robot hero is safely kept at a distance, as it only appears on television. Prentis can shut it off at will. At the same time, The Bionic Man brings him anxiety and separates him from his children. It is both his mirror and his other, part of him and a threat. It illustrates Prentis’s ambivalence, as well as his (dis)empowerment.

Bodies of Affliction

The next focus is the body of affliction – the dismembered, mutilated, raped, murdered, and suicidal bodies. They metaphorically express identity crisis and decadent humanity.

In *Out of This World*, dismemberment is generally caused by war, and shown either during the carnage or in the aftermath, in various contexts. Firstly, there is the dismemberment caused on the front, captured by Harry Beech’s camera. He photographs a pilot who had “a cannon shell up his arse” (Swift 1998: 105), and who was posthumously awarded a decoration for his acts of heroism in bringing back his plane and crew from Germany. The horrible details are given on purpose, to highlight the absurdity of human condition. Heroism does not exist: it is the noble appearance used to cover cruelty, blindness, and foolishness. The presentation of scabrous facts is a form of protest to these.

Secondly, war can make its effects seen and felt long after it is over. It leaves permanent physical mutilation, as in the case of Robert Beech, who wears arm prostheses. They are considered an “index of the twentieth century” (*Ibidem*: 200), due to their progressive technologisation. The ambiguity carried by such an object is transmitted to its owner. The prosthesis both maims and upgrades the body, indicating both its dysfunctionality and superior functionality. In Robert’s case, it also shows absence of values and of humanity (in a double sense). It illustrates his statuses of hero and monster, aggressor and victim. The maimed body is figural of ambivalence of character, and thus of use and abuse of roles and positions.

As a violent act, war engenders a chain of violence within the mechanism of scapegoating, in René Girard’s terms, causing further dismemberment and murder. An example is the Nuremberg process. The deaths of the twenty-one condemned prisoners are meant to satisfy the world’s expectations of punishment for a whole series of violent acts. The condemned suffer not only physical, but also moral disintegration, by being declared

guilty and monstrous. Girard points out how violence is “deflected” to one or several individuals, who are made to bear all the responsibility and the guilt for “the troubled state of the community” (Girard 1977: 78). The effect is the appearance of a new community, based on common hatred, directed at this “surrogate victim” (*Ibidem*: 79). The mechanism is the following: “any community that has fallen prey to violence or has been stricken by some overwhelming catastrophe hurls itself blindly into the search for a scapegoat. Its members instinctively seek an immediate and violent cure for the onslaught of unbearable violence and strive desperately to convince themselves that all their ills are the fault of a lone individual who can be easily disposed of” (*Ibidem*: 79-80). Therefore, this process is no longer just about violence, but about the “ills or sins” of a community, as well as about people’s need to know things and explain them in a satisfactory framework (*Ibidem*: 82). The vagueness of this knowledge is suggested here. Although it is “illusion” and “mystification”, or in other words a lie, the mechanism has, nevertheless, genuine curative effects (*Ibidem*: 82). All these observations point to the ambivalent nature of the process and of its actors, in their roles. The members of the community are both victims and aggressors, cured and ill, just as the scapegoat is both poison and cure – *pharmakon* (*Ibidem*: 95) – guilty and innocent, within an interplay of use and abuse.

War also afflicts minds, jeopardising by trauma the integrity of the psyche. As a result of her grandfather’s physical disintegration and death, Sophie suffers a mental breakdown, and needs psychiatric counselling. She sometimes describes her interactions with her psychiatrist as a metaphorical rape. This violent probing into her mind becomes associated with one into her body. Bodily violence becomes mind violence, which can be symbolically transferred back to the body. Sophie also resents Harry, her father, for his insensitivity in photographing the explosion scene. She authors the most violent discourse in the novel, triggered by trauma. Here, violence shows its characteristics: transmissibility and versatility.

In Swift’s fictional world, the literally-raped body appears as well – Irene’s, in *The Sweet-Shop Owner*. Her sexual assault by Hancock makes her a victim, but it is also a trigger for her decision to marry an uninteresting man. It leads to change of statuses, putting her in a position where she is abusing both Will and her parents, in an attempt to compensate for the harm done to her by her family and Hancock. From a victim, she becomes an oppressor. A(n) (ab)used body can therefore engender major role changes.

We will now explore war mutilation in its version of torture. Prentis Senior underwent torture in a detention camp, at Château Martine. The prisoners were “like animals in cages” (Swift 1992b:141). They had a fixed number of night pots, so, when these were not enough, the guards shot one of the detainees. An official, whom they referred to as *le gorêt*, interrogated prisoners in a special secret room, where nobody knew what was going on. Taking these facts into consideration, we may infer some of the torture techniques that were applied. The “reeducation” of prisoners (Surdulescu 2006: 77) refers to remodelling their personality through humiliation. Here, humiliation is present in the situation of the night pots, and in imposed nudity (when he escaped, Prentis Senior had no clothes on). “Internal unmasking” (*Ibidem*: 79) is peer betrayal, which Prentis suspects his father to have performed.

Torture targets submission, and, to variable extents, renunciation to self and values. In case these cannot be done by the individual, or if peer torture is involved (*Ibidem*: 80), simultaneously-held double attitudes occur. They are enacted through pretence, as role-plays. For example, the imprisoned sometimes take turns in acting as their peers’ torturer, and as the tortured (*Ibidem*: 80). Such an experience entails the emergence of Girard’s “monstrous double” (Girard 1977: 164) with its characteristics: possession (*Ibidem*: 165), “hysterical mimesis”, and ritualistic structure (*Ibidem*: 166). In this process, “The subject watches the monstrosity that takes shape within him and outside him simultaneously.” (*Ibidem*: 165)

Loss of speech is another form of both bodily and mental affliction. It happens to Irene (*The Sweet-Shop Owner*), who is ill with asthma, and to Prentis Senior (*Shuttlecock*), in whose case it is not really clear if it is not feigned. Merleau-Ponty explains loss of speech as a “refusal of co-existence” (Merleau-Ponty 1999: 161): “Loss of voice does not merely represent a refusal of speech, or anorexia a refusal of life; they are that refusal of others or refusal of the future” (*Ibidem*: 164). In Irene’s case, this theory is proved valid by the way she refuses her husband’s love.

Inability or refusal to speak may also point to an incapacity to swallow, figuratively speaking, a prohibition imposed on the person (*Ibidem*: 161). Swallowing “symbolises the movement of existence which carries events and assimilates them” (*Ibidem*: 161). Irene had to figuratively swallow and digest multiple afflictions. She had to behave in a reserved way, which was deemed as congruent with her exquisite beauty. The rape she suffered was a physical imposition on her, a violent breach of bodily limits. She was prohibited to manifest her will, both during the traumatic incident, and after, as her family forced her to hide it in order to keep up appearances. Swallowing and digesting are processes that happen out of sight. They are hidden and involve transgressions, consumption, a certain amount of energy, and transformation. They imply struggle: Irene had to invisibly learn to integrate experiences that were heavy and brutal, i.e. unpalatable; Prentis Senior also needed to cope with the experience of war torture, and with betraying his comrades. Both these incidents bear similarities with rape. They involve (bodily) transgression, pain, the necessity of integration, and various transformations.

From what we see here, we may conclude that the body is a multiple interface. It transforms “ideas into things” (*Ibidem*: 164), expressing identity. The bodily transformations mentioned above are means to show an invisible truth about the person, but they may also become weapons to conceal it.

In the novels, we have a lot of bodies abused by murder – on a large scale, (at war), but also individually, for various reasons. In *Out of This World*, the explosion of the Daimler on the Hyfield lawn blows up Robert and his driver’s bodies. Sarah’s husband, Robert, is a victim of her jealousy, in *The Light of Day*. Moreover, murder can be attempted against oneself, as by Bill Unwin, in *Ever After*. What leads him to it is the traumatic loss of his wife, which signifies loss of love and of a chance to happiness. Death occasions an interplay of events, and discourse, which construct the characters.

In *Last Orders*, the theme of dismemberment is mirrored in the occupation of a butcher, and in the insistence on the proximity of Jack Dodds’s shop to the hospital and to the morgue. Anthropologically, animal meat is on the way towards transformation into food, which supports the human bodies that will one day become lifeless flesh as well (Turner 2007: XIII). Meat points to the triumph of both life and death, and to the human being as both predator and prey. This image has multiple implications. In a positive reading, animal carcasses suggest the survival and empowerment of the human being by appropriation of the world (*Ibidem*: XIII). Consumption, or taking in the world, also has social and religious connotations. It suggests conviviality, togetherness, and social interaction: “Eating is the origin of community, where festivals are celebrations of belonging and membership through a sharing of food” (*Ibidem*: XIII). From the Christian perspective of the Eucharist, food partaking has spiritual overtones (*Ibidem*: XIV). Moreover, it asserts the human condition of “embodiment” in the world (*Ibidem*: XIII).

However, there is a negative reading of the image of dead meat. Firstly, it calls attention to, on the one hand, the violence that dictates survival, as well as, on the other, the frailty of human condition (*Ibidem*: XIII). It shows human beings as both beast-like, essentially not different from the animals that they consume, and vulnerable, subject to the same laws of the cycle of birth, survival, and decay. Secondly, flesh evokes “sinfulness” and

sexuality (*Ibidem*: XIII). People no longer appear as grandiose and noble, but rather as mean and figuratively small.

Taking all these aspects into consideration, the image under analysis juxtaposes the sacred and the profane. In its turn, this juxtaposition reminds one of the plea for the legitimacy of subjective, alternative ways to the truth. The theme of dead meat involves both trust in human nature and distrust of it. It offers a simultaneously optimistic and pessimistic outlook on existence, and on the idea of making sense of the world.

Conclusion

Violence is apparently debunked by the narrators as evil. It is seen as destructive, desubjectivising, the mirror of a generalised crisis. On the other hand, it is shown to be creative of identity (by engendering discourse, roles etc.) Violence is versatile enough as to denote “loss or excess of meaning” (Wieviorka in Surdulescu 2006: 29). It creates identity types that are not “distinct, pure forms”, but highly ambiguous: the “floating subject”, of “loss of meaning”; the “hyper-subject”, of excess of it; the “non-subject”, or brainwashed servant; the cruel “anti-subject”; the “surviving” one, who merely tries to cope with situations (*Ibidem*: 31). Thus, it is a device that proves to be extremely fruitful to a discourse that is ambiguous and versatile itself, and which creates mostly hybrid identities of victims-aggressors. To Swift’s characters, it may be seen as both a scourge and a catalyst for identity creation and for the pursuit of duty as self-fulfilment. From the afflicted bodies, both further affliction (in passivity), and the agents of these processes may arise.

The narrators’ discourse is sometimes aggressive. They are looking for someone or something to blame for the crises they experience, and find it in the dominant authority and discourses. This makes them mirrors of the executioners of scapegoats, (who are already ambivalent). They are also the scapegoats, as they do not accept the dominant master narratives, (of progress, heroism etc.), and are thus outsiders, and to blame. They claim that the cult of reason has in fact made violence subtler, more deeply ingrained and undetectable in the very mechanisms and narratives people live by in everyday life. An example is television, made available by technology. Television desensitises people to violence through the distance ensured by the screen – called in psychology “cathodic anesthesia” (Surdulescu 2006: 51), a point made by Bauman as well (Bauman 1998: 151).

Generally, the negotiation of roles, their ambivalence, and identity formation entail a sort of symbolic violence themselves. By announcing symbolical deaths (Surdulescu 2006: 94), the (“post”) position taken by the narrators is violent. However, Swift’s character-narrator does not execute a violent discourse just for the sake of dismantling truths. (S)he is not merely performing a “hermeneutics of suspicion” (*Ibidem*: 92) to show how deplorable things have become. (S)he takes refuge in duty and/or emotional involvement and thus uses the announced endings as starting points to construct something.

References:

- Baudrillard, Jean. *The System of Objects*. Translated by James Benedict. London: Verso, 1999.
- Bauman, Zygmunt. *Life in Fragments*. Oxford: Blackwell, 1998.
- Bonner, Charles W. “The Status and Significance of the Body in Lacan’s Imaginary and Symbolic Orders” in Welton, Donn, ed. *The Body. Classic and Contemporary Readings*. Oxford: Blackwell, 1999. pp. 232- 251.
- Girard, René. *Violence and the Sacred*. Translated by Patrick Gregory. London: The Johns Hopkins University Press, 1977.
- Merleau-Ponty, Maurice. “The Body in Its Sexual Being” in Welton, Donn, ed. *The Body. Classic and Contemporary Readings*. Oxford: Blackwell, 1999. pp. 158-166.

- Surdulescu, Radu. *The Raping of Identity. Studies on Physical and Symbolic Violence*. Iași: Institutul European, 2006.
- Swift, Graham. *Ever After*. London: Picador, 1992a.
- Swift, Graham. *Out of This World*. Harmondsworth: Penguin Books Ltd., 1998.
- Swift, Graham. *Shuttlecock*. New York: Vintage Books, 1992b.
- Swift, Graham. *The Light of Day*. London: Penguin Books, 2004.
- Swift, Graham. *The Sweet-Shop Owner*. New York: Vintage Books, 1993.
- Turner, Brian S. *The Body and Society. Explorations in Social Theory*. Second Edition. London: Sage Publications, 2007.

COVER PAGE THE SYMBOLISM OF KOLANUT IN IGBO COSMOLOGY: A RE-EXAMINATION

Chidume, Chukwudi G.

Department of history and strategic studies
Federal university ndufu-alike, ikwo, ebonyi state

Abstract

This paper considers the symbolism of kolanut according to Igbo worldview. How kolanut helps to shape the people's philosophical ideology especially, in relation to religion. The roles of kolanut within the Igbo socio-cultural context and the values attached to these roles will be examined. The roles of kolanut as a means of socialization, education and transmission of cultural values from the preceding to succeeding generations will come under consideration. Equally, this paper looks at the traditional rules regarding not only the uses but more essentially the mode of kolanut presentation, blessing, breaking and sharing of kolanut. How these rules and kolanut have persisted in the face of social and cultural changes which have affected the Igbo people shall be reviewed. The roles played by kolanut in Igbo religion will come under study, this is to correct some of the misconceptions by writers who are motivated by Eurocentric idealism but quite oblivious of the Igbo cultural setting and the place of kolanut in it. The onslaught of Western civilization causing the change of attitude among the young generation towards kolanut as a vital aspect of our culture tends to pose a threat to the future and survival of kolanut. Again, the study of Igbo culture as many have done, rarely gives an indepth knowledge on the concept, roles and symbolism of kolanut as one of the sacred objects like Ofo and Shrines in Igboland. Most times it is forgotten that without kolanut, shrines cannot be attended to. Many people think that the spiritual significance and sacramental symbolism are not worth exploring. They therefore refuse to try and discover the ritual ramifications, claiming that to probe into the mystery demystifies the matter. Kolanut symbolism is not mysteriously inexplicable. It is a revered symbol of social intercourse with deep social relevance.

Keywords: Communion, Consecration, Igbo, Kolanut, Religion

Introduction

To the Igbo, the kolanut is not just the small seed, in actual fact the seed is very bitter to taste. It is merely the non-juicy unattractive, reddish or yellowish small content of the pod of a tree called *osisi oji* (kolanut tree). The Oji tree does not grow to a great height. The kolanut is caffeine laden and often prevents one from sleeping when chewed, yet the Igbo love and honour it. Kolanut excels more in Igboland for socio-cultural significance compared to its value than in any other ethnic group in West Africa. The predominantly Muslim Hausa and other northerners offer kolanut as a symbol of hospitality, but without elaborate ceremonies. The fact is that the rites of presentation, blessing, breaking, and distribution of kolanut in Igboland are much more solemn than we recognize. They symbolize a social and ritual bonding between the living on one hand, the living and the departed on the other. It is a ceremonial covenant of hosts and guests with benevolent ancestral spirits and deities in the presence of Ani, the Earth Deity. Chinua Achebe put it succinctly in his new book, "The kola

nut was a sacred fruit and had a very distinct and distinguished role to play in Igbo life and culture".¹

Symbolism of kolanut

The kolanut content is not conceptualized ordinarily by the Igboman but much in philosophical dimension as the totality of the Igbo culture with psychological providence for him. This is deduced from the Igbo cosmology which places him higher than other animals. Kolanut, therefore plays a large part in shaping man's view, particularly, emphasis is placed on the number of halves of a kolanut. Naturally and culturally, the Igbo kolanut must have more than two cotyledons and when two, it is called "*oji Ifilifi*" which must be cast away because it is a sign of bad omen.² Number two in Igbo culture stands for something bad and it could be inferred from the pre-colonial era when twins were born and thrown into the "ajo ofia" (evil forest). When a cotyledon is three, it signifies good omen and also tripot "*akwu kwa ito, ite esiri*". Four cotyledonous kolanut is an indicative of acceptance by gods in Igboland signifying four native market days namely Oye, Afor, Nkwo, Eke showing equality and social justice. Five cotyledonous kolanut is referred to as "*oji Ikenga*", six cotyledons is a sign of prosperity which means that prosperity of the man that prayed and broke the kolanut is guaranteed. Seven cotyledons also denote good omen and prosperity. From eight lobes are highly valuable but rarely found, they are signs of good omen, if such are seen or broken.

One may then be compelled to ask, how is ontology manifested through kolanut? In many expressions, Igbo people say, "*Oji bu eze*" kolanut is the king in the plant kingdom and therefore the first before the rest in Igbo culture. The kolanut is great not in size but in ideal of its significance to Ndigbo, *Onye wetalu Oji, wetalu ndu* (he who brings kolanut, brings life). With all its significance in Igbo culture, "Oji" is demanded and presented in all things concerning "*omenala*" (culture). Kolanut must be blessed, broken and eaten before any discussion or activity in Igboland can commence.³

Social dimension of the symbolism

Before any kind of discussion is carried out in any Igbo gathering, there must be a formal kolanut presentation hence in an ideal social life, kolanut comes first. Kolanut presentation is a precursor at receptions, important meetings, and customary ceremonies. G.T. Basden records that Igbo welcome is not complete without the sharing of the kola nut. Immediately after the prolonged greetings in the traditional manner, "...the kola nut is brought forth on a dish or saucer or, what is more correct, on a wooden platter (really a small box fitted with a vocer) prepared and kept for the sole purpose of presenting kola nut."⁴ Who offers or presents kolanut is determined by factors culturally discernible.⁵ One definite decree is that no guest presents kolanuts to his host. The idea of taking "kolanut" to a titled man is a literary interpretation because, in Igboland and indeed Nigeria, "kolanut" has come to mean anything from bribe to gift from the heart and on to police extortion. The person that offers kolanut is usually the host, the number of kolanut offered is normally from two upwards depending on the type of social gathering or forum and they are placed inside a traditional kolanut tray called "*okwa oji*". It is not usually presented alone but with alligator pepper (*zingiberaceae melaguata*) or flavoured and peppered peanut butter paste normally called "*ose Oji*". In some parts of Igboland, the host puts some amount of money together with the kolanut in the kolanut tray, the money is referred to as "*ego Oji*" (kolanut money) and is meant exclusively for the visitor/s.⁶ Each person must accept the plate or wooden bowl and thank the host with a brief statement, without profusely praising the host for the reception and or approving excessively the quality and quantity of offering. People must also try not to touch the kolanut. Don't pick up one and start a sermon. In some areas, you could be asked to keep the one you just touched! Simply say "*Onye wetere oji wetere ndu,*" (He who brings

kolanut brings life) a popular phrase of relay messengers. Dabbling into short, inapt and or inept idiomatic phrases demands a good grasp of the host's culture, his dialect, and the particularities of rites in the area. One should rather concern oneself with making sure the plate of kolanut is properly relayed. Wrong relays, especially in agnate (*umunna*) settings, attract a smack on the wrist.⁷ Before the visitor is expected to say the objective of his mission or visit, he is expected to eat kolanut first, hence the Igbo adage “*Obia taa oji, okaa ihe obiara*” (when a visitor eats kolanut, he says the objective of his mission).

The presentation of kolanut has an important dimension that many people fail to recognize. It is a time to get acquainted with everyone present. By following a certain pattern of relaying kolanut, the people present find out who comes from where. For example, sons of women born in the kindred are given some priority over other guests; sons-in-laws and their kindred also receive special positioning.⁸ By establishing who hailed from where, we know who is who. Hence, whenever kolanut embarks on this "relay race," it is said that "*oji agawala ijem itu agburu*." (Kolanut has embarked on a journey to establish lineages). It is in the course of this journey that whole lineages are linked. The elder celebrant makes sure this reaffirmation of relationships is properly conducted. Kolanut reaffirms the concept of unity in diversity.⁹

It has come to a point where people of other ethnic groups sit and watch how men who are enmeshed in affluence sit down and debate one other to a standstill over a simple seed. And it marvels to see all the Mercedes Benz, Infinity, Lexus, Toyota, Roll Royce and 4x4 trucks parked outside the venue where this caffeine-laden nut rules. Any wonder why Ndigbo call kolanut the king; he who brings it, a king and a provider of life; and those who partake in the communion are blessed with long life, happiness, love, and prosperity. Hence, the last words before the now much-relayed kolanut goes back to the host are "*Oji eze di eze n'aka*." (The king's kolanut is in the king's hand). This saying is important; it confers supremacy on the host by popular proclamation. And the solemn part of the ceremony commences with no decent person speaking over the kolanut. A man in his house breaks the kolanut regardless of his age because there is this adage “*Eze bu eze be ya*” (a king is a king in his house). The host or the eldest male in the immediate kindred of the host consecrates kolanut. This is common sense; the guests do not know the deities, spirits, and ancestors to whom the host prays, or how these unseen beings are addressed. It does not matter the rank of the guest, be he a lord or a priest, the host is king in his house. Any other thing is "*omenenu*" (counterculture) and un-Igbo.¹⁰ The Igbo society is rigidly organized around the agnate system, (*umunna*). Each *umunna* has its deities and ancestral spirits. No visitor has a clue, nor is expected to know, about the clan's inhabitants of the invisible world. It is not uncommon for Igbo elders to chide departed elders for not interceding enough to ameliorate sufferings. A visitor does not know this; he may not chide an ancestor, and he has no clue what deity he must mention nor those he must ignore. Consecration of kolanut is done in Igbo language hence this phrase “*Oji anaghi anu asusu ozo*” (kolanut does not hear foreign language). The indulgence of non-Igbo guest is craved during consecration, however, what was said during consecration can be explained to him later. Consecration of kolanut and other formal phases of kolanut rites are skipped at wakes and funeral ceremonies. Kolanuts are presented, broken, and shared without the rites.

After the consecration, the person that blessed the kolanut naturally breaks it. However, it is unethical that an elder should also split the kolanut and serve everyone. So, in many areas of Igboland, the elder holds on to the kolanut with which he prayed and delegates a younger man to take care of the actual breaking of the nuts. It does not necessarily have to be the youngest. In all Igboland, the elder reserves the right to break or delegate. In some communities, elders break the kolanut into small pieces, where the services of the youth are

not needed. An elder may point out mistakes as a means of imparting knowledge to younger ones.

No matter who breaks the kolanut, the host starts first by picking and eating the first piece as a show of his sincerity and to prove the wholeness of the kolanut. First, he offers bits to Ani, other deities and ancestral spirits. Then he dips his own piece into the flavoured and peppered peanut butter paste and chews it. Then others follow suit. If the host is not known to chew kolanut, he exhales onto it as a sign of sincerity or he may taste the “*ose oji*” or in alternative, another kinsman should take the kolanut first and eat it. This establishes the purity of the kolanut.¹¹

There is no hard and fast rules on how the kolanut is distributed to the congregation or guests present, as long as a woman does not take a piece before a man from the same plate. In some communities, the distributor starts with the elders indifferent of their ages and moves down to the younger people. An exception may be the matriarch of the clan who is sometimes served along with the elders, but not before the host. It does not matter if the host is her son or grandson.

Religious dimension

Oji Igbo (*cola acuminata*) is held in high esteem in that it signifies the beginning of every ceremony, as an object of communion between man and man and between man and spirits, it stands for love, loyalty, unity, honesty and stability of social structure. It's a way to religious practices, hierarchical recognition and to crown it all, the symbol of Igbo hospitality.¹² The kolanut is what the Igboman uses in his morning prayers to the supernatural being and veneration of his ancestors after washing his hands and face.

There is sacredness in *cola acuminata*. Chewing kolanut is not like chewing gum or coconut or another plant but it is chewed with a moral conviction. In this state therefore, it stands as a covenant for life for those that chew it. Invariably, kolanut is eaten under a sense of solemnity and sense of reverence due to the ancestors' participation in the communion through libation. The breaking of kolanut is a very ritualistic act and fulfils the kolanut symbolism. This is due to the ceremonious way in which it is presented, the ceremonial breaking of kolanut consists of presentation, prayer, breaking and sharing which symbolizes communion.¹³

The importance of kolanut to the Igbo nation is strictly socio-ritualistic. It transcends biological and physical dimensions; it extends far beyond the known world into the unknown world of departed ancestors, spirit beings, and deities. Most important, it re-affirms man to the most merciful deity in our world: Ani. Everything is linked to the Supreme Force (Chi) and Eke (the creator of heaven and earth), forces that the Igbo believe have power over the known and the unknown, over the living and the departed, and over all physical and paranormal manifestations in Cosmos.¹⁴

The role of women

Igbo people are rigidly paternalistic and agnatic, not uterine. Everyone bears his or her father's name. A woman married into a clan or community may have to live there long enough to understand the intricacies of the tradition and history. On the spiritual plane, women are considered the future of mankind. It will be imprudent to involve them in dealing with spirits and deities, some of which are not known for their benevolence. However, a woman may openly present the kolanut to the head of household, even in the presence of distinguished guests, but it must not be during menstrual cycle or during postpartum period (*omugwo*).¹⁵ Young boys and premenstrual girls are therefore preferred. No matter who brings in the kolanut, the man of the house takes charge of the proceedings. Before blessing, he should announce to females gathered: “*Umunwanyi, oji abiara*” (Womenfolk, kolanut has

arrived.) No woman may present kolanut to an assembly, bless, or break the kolanut. Women are not allowed to officiate at kolanut communions for roughly the same reasons that the Catholic Church does not allow reverend sisters to consecrate the Holy Communion.

Women are not supposed to climb or pluck kolanut pods from the tree.¹⁶ During distribution no woman takes a piece of kolanut before a man from the same plate. This was possible because men and women sat apart in public gatherings, a tradition that was adopted by the churches. In large gatherings, there is no way all the men present are going to be served before the women, therefore, a man should pick at least two pieces: one for his wife, if she wants to eat.

Influence of western civilization

Western civilization and all it encompasses including Christianity. The sacredness of kolanut has been violated to the extent that people now use kolanut to poison others, forgetting that kolanut is to be consumed under a sense of solemnity and sense of reverence due to the ancestors' participation in the communion through libation. Again, some neglect to pray before breaking and eating this source of life (kolanut) "*onye wetalu oji, wetalu ndu*" (he who brings kolanut, brings life). This makes one to ask, for what spiritual purpose is the plumule of kolanut thrown outside before chewing? It is thrown out to the gods looking over us in reverence due to their protection, guidance and to enhance fruitful communal living.¹⁷

In the olden days, while the prayers over kolanut are being said, people are supposed to stand up but with Western influence, the reverse is now the case. These days, *cola nitida* (Hausa Gworo) has started appearing in social functions in place of *cola acuminata*. Initially, first sons and womenfolk were not supposed to climb nor pluck kolanut(s) pods from the tree but now because of the quest for money and ravages of Western influence, these things are happening. Cases abound of where politicians holding kolanuts in their hands while addressing crowds make promises and accede to agreements they have no intention of keeping or fulfilling. Such acts, desecrate the sacredness and prestigious nature and value of the God sent kolanut.

Conclusion

With the coming and contact of the Europeans with the Igbo, the latter saw a culture that was quite different from theirs. They were inquisitive to find out what this new culture was all about and this was quite natural of an enterprising people. The wave of Western culture has swept through our people and we have discovered that we are almost stuck to it. Now, is the time to look back. Now is the time to stop and think, ask questions as the headway of the average Igboman and initiate the move for a rediscovery of our identity in terms of culture. Although a complete comeback is not envisaged, we cannot all the same get lost.

We have had examples of empires and civilizations which have come and gone but which are still survived by the contributions they made – the Egyptians by their pyramids and geometry, ancient people of Israel by their religion, the Greeks by their philosophy and athletics, the Arabs by their commerce/seamanship and the Romans by their politics and sense of justice. Therefore, I am making a contribution to the study of an important area of our culture through which the Igbo can leave their mark on the sand of time.

External influence has adversely affected the symbolism of kolanut in Igboland that one may be tempted to assume that the future of kolanut is bleak. But that is not to be! According to Ogbalu, "kolanut is one of the fruits which cannot be removed by the people not even by the Whiteman from Igboland".¹⁸ Since, kolanut serves as a precursor at receptions, important meetings, customary ceremonies in Igboland, some people believe in "*onye melu ihe nna ya melu, melu nma*" (he who repeats his fathers deeds, has done well).

The rules of Kolanut Communion are fairly established in Igbo communities. The details and the dialects may differ, but the rules are basically the same.

By and large, from all indications it has been proven that kolanut Communion is a generic religious phenomenon which serves as the base and offshoot of the socio-cultural life of Igbo people. The Kolanut Communion is much more than a symbol of hospitality: it is a sacred covenant among the living, between the living and the departed, for the adulation of *ndiichie* (ancestors). It is a solemn sacrifice to benevolent deities in the presence of *Ani*, the Earth Deity, in supplication that the divine will of *Chineke* (the Supreme Force and the Creator) be done on earth. Any attempt to do away with kolanut is a threat to the traditional belief of the Igboman because it serves as its nerve centre. Therefore, we must fight for the survival and continuity of Igbo customs and traditions especially the concept of kolanut, its symbolism and usefulness despite all threats of destabilization and extinction.

End notes

1. Achebe, C. (2012) *There was a country: A Personal History of Biafra* London: Penguin Press p.10
2. Pa Chukwura Azinwa, Oral interview at Abba, Ifite-enu Nimo, Anambra State September 3, 2004, aged 94 years
3. Ubesie, T. U. (1975) "*Oji*" *Akpa Uche* (An anthology of Igbo verse) Ibadan: Oxford University Press p.14
4. Basden, G. T. (1966) *Niger Ibos* London: Frankcass p.161
5. Ministry of Information (1976) *Oji Igbo*, Ministry of Education and Information, Cultural Division, Enugu, p.6
6. Ma Okuba Nweke, Oral interview at Igbuala, Umuanugo, Ifite-Dunu, Anambra State June 2, 1999, aged 69 years.
7. Evaristus Asadu, Oral interview at Ugwu oye, Nsukka, Enugu State December 18, 2004, aged 61 years.
8. Ene, M. O. *Kolanut Communion* at <http://www.kwenu.com/index.htm> assessed on September 16, 2010
9. Arinze, F. A. (1978) *Sacrifice in Igboland* Ibadan: University Press p.72
10. Pa Chukwura Azinwa, Oral interview
11. Basden, G. T. (1966) *Niger Ibos* p.162
12. Uchendu, V. C. (1967) *The Igbo of Southeast Nigeria* New York: Holt Reinhart and Winston p.71
13. Rev. Fr. Dr. P. Akaenyi Oral interview at Bigard Memorial Seminary Enugu, September 19, 1998 aged 56 years
14. Rev. Fr. Dr. P. Akaenyi Oral interview
15. Pa Shedrack Ogbonna, Oral interview at Umuigwu, Oboro, Abia State December 27, 2004, aged 89 years
16. Chidume, A. V. (1998) "*The rite of kolanut: A Case study of Nimo, Njikoka Local Government Area of Anambra State.*" Unpublished Diploma in Religion Project (UNN) p.32
17. Chidume, A. V. (1998) "*The rite of kolanut: A Case study of Nimo, Njikoka Local Government Area of Anambra State.*" p.32
18. Ogbalu, F. C. (1974) *Omenala Igbo* Onitsha: Varsity Press, p.51

INFORMALIDADE URBANA: REPRESENTAÇÕES SOCIAIS DA MÍDIA SOBRE A INFORMALIDADE HABITACIONAL URBANA NA CIDADE DA PRAIA

Rutte Tavares Cardoso Andrade

Universidade de Cabo Verde

Abstract

Cape Verde met a considerable development, taking into consideration the 36th year as an independent country. Nevertheless, this development is also marked by contradictions, mainly regarding the social dimension of the guarantee of social sector living conditions, which is still very vulnerable, since it faces issues of informality. Based on this idea, this research seeks to address the process of development of the peripheries of the country, especially the peripheries of Praia. This work seeks to answer how they are configured and what symbolic meanings around them are created by the media. The results show that the media makes a negative representation of informal urban housing in the city of Praia. In addition it stigmatizes and promotes social exclusion of the social segments that live in informal housing.

Keywords: Urban periphery, informality, social representation, media.

Introduction

O desenvolvimento de Cabo Verde é um processo embrionário, considerando a história recente do país que ascendeu à independência e auto-determinação política em 1975. Assim, a problemática do desenvolvimento de Cabo Verde deve ser analisado a partir do seu marco histórico fundamental que é a Independência Nacional, desenvolvimento esse que começa a assumir contornos cada vez mais acelerados com a abertura política ao pluripartidarismo e a conseqüente liberalização da economia ao mercado global, no início dos anos 90. Assim, é importante considerar que nesses 38 anos de história como país independente, Cabo Verde fez um percurso considerável, nos diferentes domínios do seu desenvolvimento político, social e económico, com reconhecimento diplomático a nível da comunidade internacional.

Todavia, esse desenvolvimento é também perpassado por profundas contradições, sobretudo do ponto de vista social e mais precisamente no que concerne à garantia das condições de vida de uma grande franja da população, a nível nacional, principalmente na capital do país, ainda muito vulnerável, que se depara com desafios como saneamento básico, água, energia eléctrica, transporte público, por viverem em bairros ou comunidades informais. Desta forma, importa levantar algumas questões de fundo como ponto de partida para a investigação: quais os sentidos e as repercussões da representação social da mídia sobre a informalidade habitacional urbana na cidade da Praia? Que impactos têm a cobertura jornalística e as informações veiculadas pela mídia sobre a informalidade urbana na Cidade da Praia? O presente estudo tem como propósito responder a essas questões.

Actualmente, as cidades estão crescendo a um ritmo acelerado sem precedentes, marcando as tendências sociais, políticas, económicas, culturais e ecológicas, com todas conseqüências daí advenientes. Em 1950, um terço da população mundial vivia em cidades. Apenas 50 anos depois, esta subiu para metade e vai continuar a crescer a dois terços, ou 6

bilhões de pessoas, em 2050. Portanto, as cidades são hoje o lar de metade da humanidade (DAVIS, 2006). As cidades são também os centros de produção nacional e de consumo - processos económicos e sociais que geram riquezas e oportunidades. Assim, as cidades estão cada vez mais confrontadas com problemas e disparidades sociais preocupantes, tais como doenças, criminalidade, poluição, pobreza e violência.

Porém, o esforço das entidades públicas para proporcionar habitação e trabalho para todos revelou-se ineficaz, visto que um grande número de pessoas enfrenta problemas de assentamento informal, com todas as implicações sociais decorrentes. No contexto cabo-verdiano, verifica-se uma urbanização desordenada que não corresponde aos anseios das populações que vivem nas periferias urbanas. Neste sentido, o problema da informalidade urbana remete-nos para outros contornos decorrentes do subdesenvolvimento, em que a questão das habitações informais é apenas a ponta do iceberg. A informalidade habitacional urbana é decorrente dos fenómenos de desenvolvimento e de crescimento urbano, porém, trata-se de uma questão conflituosa, visto que o mesmo não se compadece com o fenómeno de desenvolvimento sustentado tão propalado na pós-modernidade e de cuja retórica se tornou recorrente nos discursos políticos dos governantes.

Em consequência do desenvolvimento do capitalismo e da revolução industrial, ocorreu uma intensa migração das populações do campo para a cidade, marcada pela busca de melhores condições de vida, emprego e salário pela população rural. Neste sentido, no mundo todo verifica-se este fenómeno social conhecido por “êxodo rural”, caracterizado pelo deslocamento de grandes segmentos populacionais que procuram a sobrevivência nas grandes metrópoles, provocando profundas mudanças e desequilíbrios sociais.

A informalidade habitacional na periferia da Praia, não se confina às construções de assentamentos informais mas agregam igualmente outras informalidades relacionadas com o acesso aos bens fundamentais, quais sejam: habitação, saneamento, acesso à energia e a água potável. Portanto, a informalidade diz respeito a uma situação que está fora dos padrões convencionais, ou daquilo que é formal e que obedece a uma certa organização, norma ou ordem social e urbana. Assim, a informalidade habitacional é conotada com habitações cujas construções não obedecem às normas da urbanização. A informalidade urbana é o fenómeno resultante do desenvolvimento desordenado das cidades, regado pela emergência de mercados “imobiliários excludentes”, provocando o surgimento de assentamentos informais como favelas, loteamentos irregulares, cortiços e conjuntos habitacionais irregulares.

No entanto, Nezar Alsayyad (2004) considera a informalidade urbana como um “novo modo de vida”. Uma das tendências mais promissoras dos estudos urbanos vem se firmando justamente na tentativa de superar o recorte dualista consagrado ao partir para uma caracterização da informalidade urbana em sua positividade, como “modo de vida” (ALSAYYAD, 2004). Deste modo, diferentes pesquisas e análises que retratam a questão da periferia evidenciam a importância de se prestar atenção nas classes mais pobres, no sentido de compreender a sociedade atual. Deste modo é de se considerar a proliferação de bairros periféricos ou informais como um processo mundial e irreversível, estando presente em todos os centros urbanos, tanto nos países desenvolvidos como nos países menos desenvolvidos. É característica da contemporaneidade e dos processos de urbanização globais. Isso torna a periferia o centro da discussão para pensar as cidades. Neste sentido, verifica-se que a tendência da mídia em apropriar-se do fenómeno da informalidade, representando a periferia não apenas pela pobreza, mas também pela criminalidade e, de um modo geral, pela informalidade quase todas as actividades desenvolvidas pelas populações aí residentes.

Assim, pode ser tão difícil identificar o urbano através da presença de condições urbanas, pois é para identificar o informal exclusivamente através da lente da Liberalização. Contudo, a liberalização não oferece uma ferramenta com a qual se compreendem as mudanças na condição urbana, principalmente no contexto de Cabo Verde, fortemente

marcado por processos históricos e sociais específicos de uma sociedade pós-colonial. Assim, entendemos que os fenómenos da informalidade urbana não podem ser explicados e/ou entendidos fora do contexto da globalização e da liberalização estrutural marcadas pela utopia do mercado.

Segundo Alssayad, a informalidade pode ser vista como estruturado através de sistemas de “regulação extralegais”. Estes novos processos, denominados “modernidade medieval” (ALSSAYAD 2004) podem ser vistos como modos de governação que podem envolver até mesmo a “invasão silenciosa do comum”, com o terreno de luta política e emancipação, sendo esculpida por uma subalterna e marginalizada cidades dos países desenvolvidos (Alssayad, 2004). Esse populismo radical, muitas vezes dispensado no idioma do religioso e fundamentalismo está muito longe das visões normativas da democracia liberal que têm vindo a ser associado à ideia de administração urbana. O fato é que os pobres também se esforçam para resistir e fazer avanços em suas vidas, quando a oportunidade surgir. Além dessa evidência, em muitas partes do mundo verifica-se que eles também criam para o avanço, organizam-se envolvem-se em políticas contenciosas (BAYAT, 2000).

Alguns estudiosos consideram que os pobres urbanos não são excluídos da sociedade. Pelo contrário, como Asef Bayat, (2000, p. 529) tem escrito, essas populações foram totalmente integradas na sociedade, mas em termos que muitas vezes as levaram a serem exploradas economicamente, reprimidas economicamente, estigmatizadas socialmente e culturalmente excluídas. Contudo, verifica-se uma prolongada acção directa dos indivíduos e famílias que vivem na periferia, na e da informalidade para satisfazerem as necessidades básicas de suas vidas.

Representação Social da Mídia sobre a informalidade habitacional urbana

Durkheim (1987, p. XXVI) afirma que “o que as representações coletivas traduzem é a maneira pela qual o grupo se enxerga a si mesmo nas relações com os objetos que o afetam. Ora, o grupo está constituído de maneira diferente do indivíduo, e as coisas que os afetam são de outra natureza. É de destacar a relevância da representação coletiva da informalidade em detrimento da representação individual da informalidade habitacional, visto que a concepção que o grupo pode defender muitas vezes diferencia-se da concepção do indivíduo que por sua vez é marcado pelas ideologias, valores, visão do mundo bem próprio e pessoal.

As representações são construídas socialmente pelos grupos e se caracterizam como imagens da própria realidade. A representação construída pelo grupo ocorre nas suas próprias palavras “até mesmo pela maneira como se dispõe territorialmente, face à realidade. E suas formas organizacionais da vida social, além de mediações empíricas, são portadoras de uma ideologia implícita, que forma um arcabouço interno” (DURKHEIM *apud* RODRIGUES, 1990, p. 22).

Deste modo, importa igualmente interrogar até que ponto a informalidade urbana na Cidade da Praia não passa de um simples facto ou fenómeno construído pelo grupo de indivíduos que ocupam um mesmo território e que partilha, de certa forma, alguns valores comuns? Porém, sabe-se que esses indivíduos são oriundos de meios rurais heterogéneos, de ilhas diferentes, são portadores de valores e crenças também diversificados e aportam expectativas díspares que, na verdade, nem sempre constituem uma coletividade social. Como então compreender a informalidade urbana na cidade da Praia, a partir das categorias teóricas das representações sociais coletivas, ignorando ou subestimando as narrativas pessoais e individuais de cada sujeito que compõe esse mosaico social?

Quanto às representações coletivas, Durkheim (1987, p. 39) afirma que elas são exteriores com relação aos indivíduos, na medida em que não derivam dos indivíduos considerados isoladamente, mas de sua cooperação, o que é bastante diferente. Na elaboração do resultado comum, cada indivíduo dá a sua contribuição. Porém, os contributos individuais

apenas se tornam sociais pela sua cooperação, sob a ação de forças *sui generis*, que a cooperação entre os indivíduos desenvolve.

A exterioridade é uma característica marcante do fenómeno da informalidade urbana, cuja contribuição das partes na sua conceção tem um papel crucial, não obstante o facto de a individualidade não ter relevância na sua afirmação, os meios de comunicação têm sido analisados na perspectiva das representações, com destaque para a televisão, que, tendo em vista seu grande alcance, pode ser considerada um dos principais agentes do processo de orientação da formulação de representações sociais. Tringalli ressalta que essas representações entram em circulação e constroem um verdadeiro “ambiente simbólico”, dentro do qual se processa o pensamento: “um discurso se faz antes de outro discurso e supõe um discurso posterior que pode ser imediato ou retardado ou ficar em aberto. Isso acontece em razão da matéria do discurso ser dialéctica” (TRINGALI, 1988, p. 19).

Neste sentido, Durkheim vem destacar o conceito de representação coletiva, afirmando que o que as representações coletivas traduzem é a maneira pela qual o grupo se enxerga a si mesmo, nas relações com os objetos que o afectam; o mundo é feito de representações, sendo elas que permitem entender o comportamento dos grupos sociais, como eles se pensam e quais são as suas relações com os objectos que os envolvem. Ora, o grupo está constituído de maneira diferente do indivíduo, e as coisas que os afectam são de outra natureza. Representações que não exprimem nem os mesmos sujeitos, nem os mesmos objetos, não poderiam depender das mesmas causas.

As representações coletivas são o produto de uma imensa cooperação que se estende não apenas no espaço mas também no tempo. Para fazê-las, uma multiplicidade de indivíduos cooperam - interagem entre si - misturam e combinam suas ideias e sentimentos e principalmente seus atos. As representações sociais são expressão da consciência coletiva. Por serem mais estáveis do que as representações individuais, as representações coletivas são a base de onde se originam os conceitos, traduzidos nas palavras do vocabulário de uma comunidade de um grupo de indivíduos.

Reportando-se concretamente às formas como a mídia representa a informalidade habitacional urbana, importa evidenciar que essas representações são, maneiras de interpretar e comunicar, mas também, de produzir e elaborar conhecimentos. Segundo Moscovici (1978) as representações “são conjuntos dinâmicos, cujo status é o de uma produção de conhecimento e/ou informação (MOSCOVICI, 1978, p.50, o grifo é nosso).

As representações sociais se modificam ou se actualizam dentro de relações de comunicações diferenciadas. Dessa forma, a mídia é responsável pela estruturação de sistemas de informação que visam comunicar, difundir ou propagar determinadas representações. Podemos dizer que a principal diferença entre o conceito de representação social e outros conceitos é sua dinâmica e história específicas, ou seja, as representações sociais estão associadas às práticas culturais, reunindo tanto o peso da história e da tradição, como a flexibilidade da sociedade contemporânea. Segundo Moscovici, representações são como estruturas simbólicas desenhadas tanto pela duração e manutenção, como pela inovação e constantes transformações (MOSCOVICI, 1978, p. 67).

A mídia enquanto meio de comunicação de massa abre espaços para múltiplas abordagens, centradas na questão da interacção entre a representação colectiva da informalidade habitacional, nas distinções entre opinião pública e massa, passividade ou interactividade dos distintos receptores. Neste sentido, as representações colectivas da informalidade habitacional na periferia urbana da cidade da Praia é o reflexo das representações que os meios de comunicação de massa veiculam, e, seguramente, essas representações são históricas e culturalmente construídas pelas colectividades societárias. As representações sociais são “um conjunto de conceitos, frases e explicações originadas na vida diária durante o curso das comunicações interpessoais” (JODELET, 1984). Segundo a

definição apresentada por Jodelet, são modalidades de conhecimento prático, orientadas para a comunicação e para a compreensão do contexto social, material e ideológico em que vivemos. São formas de conhecimento que se manifestam como elementos cognitivos - imagens, conceitos, categorias, teorias, mas que não se reduzem apenas aos conhecimentos cognitivos. Sendo socialmente elaboradas e compartilhadas, contribuem para a construção de uma realidade comum, possibilitando a comunicação entre os indivíduos (JODELET, 1984, p.64).

Com o presente estudo sobre as representações sociais da mídia sobre a informalidade habitacional urbana, pretendemos contribuir para o resgate de um grupo social e o seu *modus vivendis*, explicitando os múltiplos sentidos e significados dos modos de vida e das práticas sociais da periferia. Com isso, pretendemos fornecer subsídios para a uma releitura sobre o papel da mídia na veiculação de informações sobre as populações residentes nos bairros informais da Cidade da Praia.

As representações sociais se modificam ou se atualizam dentro de relações de comunicação diferentes. Dessa forma, a mídia, é responsável pela estruturação de sistemas de comunicação que visam comunicar, difundir ou propagar determinadas representações. Podemos dizer que a principal diferença entre o conceito de representação social e outros conceitos é sua dinâmica e histórias específicas, ou seja, as representações sociais estão associadas às práticas culturais, reunindo tanto o peso da história e da tradição, como a flexibilidade da sociedade contemporânea, delineando a teoria de Moscovici como estruturas simbólicas desenhadas tanto pela duração e manutenção, como pela inovação e constantes transformações (MOSCOVICI, 1978, p. 67).

Perante as constantes e permanentes transformações sociais em diferentes domínios da vida social, os meios de comunicação de massa se tornam instrumentos fundamentais na produção da nova coesão social, na medida em que lidam com a disseminação de representações sociais que fundamentam a própria compreensão que os grupos sociais têm de si mesmos e dos outros, ou seja, a visão social.

James Carey retratou no seu livro “*Communication as Culture*” 1989, a tese segundo a qual a média como instrumento de transmissão de informação a comunicação mediática representa a forma de vivência cultural. Na acepção de Carey:

“Comunicação é o processo através do qual mensagens são transmitidas e distribuídas no espaço para controle das distâncias e das pessoas [...] comunicação é o processo simbólico por meio do qual a realidade é produzida, mantida, reparada e transformada” (CAREY, 1973, p. 3).

Ademais, ele assegura que a representação social “é uma forma de conhecimento, socialmente elaborada e partilhada, com um objetivo prático, e que contribui para a construção de uma realidade comum a um conjunto social” (Idem, p. 22). Interrogar a realidade a partir do que se diz sobre ela, utilizando-se da categoria de representações sociais, nas palavras de Porto, significa assumir que elas:

a) embora resultado da experiência individual, [...] são condicionadas pelo tipo de inserção social dos indivíduos que as produzem; b) expressam visões de mundo objetivando explicar e dar sentido aos fenômenos dos quais se ocupam, ao mesmo tempo que, c) por sua condição de representação social, participam da constituição desses mesmos fenômenos; d) em decorrência do exposto em “b”, apresentam-se, em sua função prática, como máximas orientadoras de conduta; e) em decorrência do exposto em “c”, admitem, nos termos de Michaud (1996), a existência de uma conexão de sentido (solidariedade) entre os fenômenos e suas representações sociais, que, portanto, não são nem falsas nem verdadeiras, mas a matéria-prima do fazer sociológico (PORTO, 2002, p. 34).

Pelo contrário, apenas alguns indivíduos, grupos ou segmentos societários se constituem em protagonistas desse processo. Os demais, que formam a maioria, apenas consomem conteúdos mormente padrões e valores que não produziram. Importa ressaltar que poucos deixarão de admitir que a mídia, em suas diferentes facetas, mas com claro predomínio dos meios televisivos e jornais, tem protagonizado de modo crescente essa função pragmática de explicar o mundo e produzir significado para fatos e acontecimentos sob a forma de representações sociais.

Ao abordar determinado fenômeno social, pensando em habitações informais na periferia da Praia, a mídia ao mesmo tempo que apresenta e representa este acontecimento ou fenômeno, mediados por sua versão dos fatos, está silenciando outros. Antes de se concluir por uma intenção maquiavélica da mídia, com o premeditado objetivo de distorcer ou ocultar fatos, vale ressaltar que está em questão, de um lado, esse efeito de evidência acima mencionado, o qual constrói a notícia como realidade. De outro, o fato de a mídia ser um campo de lutas, conflitos, interesses, concorrências, de busca por posições e disputa por hegemonia, que se expressam interna e externamente ao campo (BOURDIEU, 1996). Internamente, a concorrência entre as grandes cadeias de empresas midiáticas não se situa unicamente na dimensão das disputas econômicas, mas também, e sobretudo, na disputa da produção simbólica.

Entretanto, é nessa dupla dimensão material e simbólica que se define a luta por hegemonia, considerando que está em questão uma mercadoria grandemente precíval - a notícia. Nesses moldes, ao considerar a mídia como quarto poder, diabolizam-na ou, ao contrário, divinizam-na, pensamos que esta não exclui completamente o potencial de conhecimento, atuação e escolha dos atores sociais, os quais, e de acordo com o que Giddens sublinha na sua obra *A constituição da sociedade*, (2003):

“são sujeitos com capacidades reflexivas e cognoscíveis, fazem escolhas, ainda que sejam relativas, pois que submetidas e articuladas às desigualdades materiais e simbólicas e aos jogos de poder vigentes nas sociedades” (GIDDENS, 2003, p. 58).

Deste modo, importa frisar que é na disputa pelo poder desse campo marcado por tensões, confrontos e acordos que os diferentes meios disputam o espaço midiático e constroem sua especificidade. Ademais, buscam fazer a diferença, definir seu peso relativo em meio a um espaço de grande homogeneidade, a qual está situada em dois níveis: o do conteúdo – as fontes são quase sempre as mesmas e só ganha relevância midiática o que já for pautado como notícia – e o da forma – há todo um aparato de linguagem, de rotinas produtivas do jornalismo, de economia do tempo, do espaço e da imagem para que um fato seja alçado à condição de acontecimento e ganhe todas as mídias.

Segundo Mary Jane Spink (2000), os conteúdos expressos pelo indivíduo, que são essencialmente heterogêneos, traduzem o pensamento, o senso comum de um dado grupo social. Neste sentido, Jodelet (1984) entende que o sujeito, construtor das representações sociais, é um sujeito social, o que na sua fala:

“Significa dizer, fora o caso em que tratamos da gênese das representações sociais, um indivíduo adulto, inscrito numa situação social e cultural definida, tendo uma história pessoal e social. Não é um indivíduo isolado que é tomado em consideração, mas sim as respostas individuais enquanto manifestações das tendências do grupo de pertença ou de afiliação na qual os indivíduos participam” (JODELET, 1984, p. 36, apud SPINK, 2000, p. 120).

Importa deixar presente que a mídia não é a realidade em si, tal e qual ela é, mas a representação dessa realidade, com fragmentos recortados e remontados do cotidiano. Em outras palavras a mídia não representa a periferia da cidade da Praia de forma objetiva, ao

contrário das teses defendidas na defesa da imparcialidade, verifica-se que o texto jornalístico é pleno em parcialidade, há a presença autoral do jornalista e toda sua carga ideológica e cultural e da empresa para qual trabalha. A imparcialidade “transformou-se em mito e vem permitindo aos veículos de comunicação camuflar a tendenciosidade das notícias veiculadas” (TEIXEIRA, GOMES & MORAIS, 1999, p.01). A mídia se transformou em instrumento fundamental na produção da nova coesão social uma vez que lida com a reprodução e a disseminação de representações sociais em escala planetária.

A comunicação enquanto instrumento poderoso na transformação da visão social possibilita a separação da representação social com a realidade. A liberdade de representações com relação à realidade coloca questões sobre os efeitos da globalização da tecnologia para os grupos sociais minoritários ou excluídos e também para as comunidades da periferia urbana. Cotidianamente, o ser humano é envolvido por informações, através de imagens e sons que, de uma forma ou de outra, tentam criar, mudar ou cristalizar modos de se posicionar perante o mundo e persuadir os indivíduos. A comunicação, sob a perspectiva da representação social, é um fenómeno segundo qual uma pessoa influencia ou esclarece outra que, por sua vez, pode fazer o mesmo em relação à primeira. É um fenómeno básico e universal de influência recíproca, fazendo parte de um processo mais amplo, que divulga informação, através da difusão de conhecimentos.

Conclusion

Para a realização da presente pesquisa, propomo-nos recorrer ao processo da documentação para a recolha das informações. Deste modo, tivemos como metodologia a análise qualitativa e como estratégia a técnica da análise de conteúdo para descrever e interpretar as informações indispensáveis à compreensão do nosso objeto de estudo.

A escolha dos jornais *A Semana*, *Expresso das Ilhas* e *A Nação* justifica-se por duas razões: por um lado, deve-se ao facto dos mesmos serem alguns dos jornais mais antigo da nossa praça de comunicação, no que concerne à imprensa escrita. Por outro lado, o fator cronológico define-se como essencial para a presente pesquisa, isto é, devido ao tempo da existência no mercado de comunicação estes vínculos nos fornecem informações mais precisas tanto em termos de qualidade quanto em quantidades, e desta forma possibilita-nos uma leitura comparativa das informações. O período de 2002 a 2012, período de tempo lato (uma década) nos permite aferir a visibilidade do tema. Este período e a análise dos três jornais, nos permite fazer um estudo comparativo do discurso da mídia sobre a informalidade habitacional na periferia urbana da cidade da Praia.

Neste sentido, toda a construção da parte empírica do nosso estudo apresenta as seguintes unidades: Unidade de amostra: As Representações Sociais da Mídia sobre a informalidade Habitacional Urbana na Cidade da Praia; Unidade de registro: periferia, comunidade informal, habitação informal, representação social, média, construção clandestina, pobreza urbana, informalidade urbana, Bairros da periferia da Praia. Portanto, estes são os conceitos que serviram de orientação na nossa análise. E a Unidade de Contexto: Primeira página do jornal, que apresenta o tema mais relevante da cobertura jornalística sobre a informalidade habitacional.

Concluimos que a informalidade habitacional na cidade da Praia é determinada pelo contexto histórico e social e por esta razão, ela configura características específicas e *sui generis* que se demarcam de outras informalidades que têm sido abordadas pelas pesquisas da sociologia urbana, sobretudo na América Latina, na Ásia e na África. A informalidade habitacional na cidade da Praia começa a se configurar desde os primórdios da formação da sociedade Cabo-verdiana, marcada pelo signo da escravatura e, mais especificamente, com a formação da Cidade da Praia, caracterizada, na sua origem, pela fuga ao fisco, pela procura de lugares mais seguros em relação à invasão dos piratas e cossários e, mais recentemente,

pelo êxodo rural e pela migração das populações das ilhas periféricas do arquipélago de Cabo Verde. Deste modo, a Cidade da Praia foi crescendo, expandindo-se pelos subúrbios periféricos, fora do controle das autoridades governamentais e autárquicas que, via de regra, são responsáveis pelo ordenamento do território e pela regulamentação do *modus vivendi* da urbanidade.

Fugindo-se ao controle das autoridades, foram surgindo os bairros informais, marcados pela ausência de políticas públicas promotoras de um desenvolvimento e crescimento urbanístico sustentáveis, com todas as consequências decorrentes da informalidade habitacional, designadamente, dificuldades de acesso a loteamentos legais para a construção de habitações próprias, dificuldades de acesso à água potável, energia eléctrica, saneamento básico, transporte público, cuidados básicos de saúde, educação, etc.

Marcados pela ausência das autoridades e do Estado providente, os bairros informais da Cidade da Praia, foram-se expandindo sob o signo da “clandestinidade”, da exclusão e da marginalização, carregando consigo o estigma da violência urbana, da pobreza e da miséria sociais e espirituais, transportando tudo de ruim que pode tipificar a dinâmica das cidades pós-industriais e pós-coloniais.

Foi a partir deste cenário que tivemos, no presente trabalho de pesquisa, a preocupação de estudar a informalidade habitacional urbana na Cidade da Praia, com o intuito de compreender as representações sociais da mídia sobre a informalidade urbana na capital do país, tendo presente, sobretudo, as informações deturpadas que a comunicação de massa veicula sobre as periferias urbanas, nas quais revela o descompasso entre as expectativas e as dinâmicas próprias das comunidades informais e a ordem social emanada das autoridades governamentais e autárquicas que mais servem para penalizar e excluir as comunidades informais dos “direitos da contemporaneidade”.

Os resultados da pesquisa têm demonstrado que as representações sociais da mídia sobre a informalidade habitacional na Cidade da Praia não traduzem a realidade que se vive nas periferias urbanas, veiculando, quase sempre, informações estereotipadas e estigmatizantes sobre essas “comunidades imaginárias”, enfatizando o supérfluo e ignorando o essencial e o existencial. A pesquisa permite constatar que as comunidades informais, para além dos múltiplos problemas que enfrentam, e que tipificam o drama das periferias urbanas pós-modernas, são também comunidades criativas e inovadoras, que a cada dia reinventam novas formas de vida e de subsistência, apesar da marginalização a que foram votadas pelas autoridades públicas.

São essas formas de criatividade que provavelmente a mídia acaba por ignorar, e fá-lo por vezes de forma confessada e subtil, revelando-se, assim, uma tendência perigosa que se presta mais aos interesses das hegemónias do que às reais expectativas, interesses e necessidades das comunidades informais. Neste sentido, entende-se que a mídia, enquanto instrumento de mediação entre os diferentes interesses dos sujeitos e das instituições sociais que configuram as comunidades sociais, poderia desempenhar um papel mais transparente, na veiculação de informações que beneficiassem os interesses das camadas sociais mais vulneráveis e desfavorecidas do tecido social cabo-verdiano.

Os resultados da pesquisa revelam uma comunicação de massa mais interessada no sensacionalismo típico das sociedades neoliberais, que se coloca ao serviço da classe dominante, detentora do capital económico, e menos interessada com a sua verdadeira missão de promover a mediação comunicativa em prol da equidade de condições de vida e da justiça social. Neste sentido, constatamos que as representações da mídia sobre a informalidade urbana na Cidade da Praia, não reflectem a comunidade real, com os seus problemas, que urge soluções por quem de direito. As representações da mídia retratam comunidades virtuais e imaginadas, recriadas a partir do imaginário social da classe média e das elites

portadoras do poder político e económico, habitantes dos bairros formais e padronizados, comunidades “em conformidade com a lei”.

Denota-se que na maioria das vezes, os programas e projectos emanados das autoridades, servem mais aos sensacionalismos político-partidário. Empreendidos sobretudo nos períodos eleitorais, as iniciativas políticas em favor dos bairros periféricos, quase sempre improvisados, fogem aos padrões legais do planeamento urbano, em virtude de estarem mediadas pela “caça aos votos” dessas comunidades. São portanto, iniciativas descartáveis e líquidas, empreendidas na calada da noite, e, portanto, ilegais e verdadeiramente “clandestinas”. Dentro desta ótica da imoralidade político-partidária, as comunidades informais das periferias urbanas da Praia estão eternamente condenadas à “clandestinidade”.

A informalidade urbana na Cidade da Praia é também o reflexo do drama do crescimento urbano desenfreado que perpassa as cidades pós-modernas e pós-industriais, sobretudo nos países do cone sul. Apesar da Cidade Capital de Cabo Verde não ser tão populosa como as grandes metrópoles pós-modernas, ela transporta consigo quase todos os problemas imanentes a essas metrópoles, mas configura igualmente outras especificidades estruturais, por vezes mais difíceis de solucionar, o que torna a sua configuração de periferia urbana um caso *sui generis* na plataforma universal da informalidade habitacional urbana.

São essas especificidades que a mídia e as autoridades públicas cabo-verdianas precisam captar, sob pena de se tornarem irreversíveis, os graves problemas que afectam as comunidades oriundas das periferias urbanas da Praia. Como se pode concluir, os habitantes das periferias são também pessoas criativas e inovadoras e essas habilidades precisam ser capitalizadas em novas formas de se lidar com as periferias, permitindo assim que os segmentos sociais das periferias participem activamente nos projectos direccionados para a melhoria das suas condições de vida e de existência. Portanto, eles devem ser os principais sujeitos de intervenção e de mudança do seu *modus vivendi*. Não se pode pensar a periferia, excluindo e ignorando os sujeitos que habitam as periferias.

References:

- ALSAYYAD, N. “Squatting and Culture: A Comparative Analysis of Informal Developments. In: Latin America and the Middle East,” *Habitat International*, no. 1 1993.
- ARON, Raymond. *As etapas do pensamento sociológico*. 4º Ed. São Paulo: Martins Fontes, 1993.
- BAYAT, A. From Dangerous Classes to Quiet Rebels: *Politics of the Urban Subaltern in the Global South*, *International Sociology*, 2000.
- .*Street Politics: Poor People's Movements in Iran*. New York: Columbia University Press. *International Sociology Vol.*, 1997.
- Activism and Social Development in the Middle East'*, Discussion paper prepared for World Social Summit, Geneva, August, 2000.
- .“Globalization and the Politics of the Informals in the Global South.”In *Urban Informality. Transnational Perspectives from the Middle East, Latin America, and South Asia* , ed. 2004.
- BOURDIEU, Pierre. *Questions de sociologie*. Paris, Minuit, 1984.
- . *Sur la télévision*. Raisons d'Agir, Paris, 1996.
- CASTELLS, M. *The Urban Question: A Marxist Approach*. Cambridge, Mass. : MIT Press, 1977.
- . *A Sociedade em rede*. V. 1. São Paulo: Paz e Terra, 2002.
- DURKHEIM, Émile. *As formas elementares da vida religiosa*. São Paulo: Abril Cultural, 1987.
- . *As regras do método sociológico*. 13 Ed., São Paulo: Companhia Editora Nacional, 1987.

- . Objectividade e identidade na análise da vida social. In: FORACCHI, Marialice Mencarini, MARTINS, José de Souza. *Sociologia e sociedade: leituras de introdução à sociologia*. São Paulo: LTC, 1977.
- FOUCAULT, Michel. *A arqueologia do saber*. Rio de Janeiro: Forense, 1995.
- GIDDENS, Antony. *A constituição da sociedade*. São Paulo, Martins Fontes, 2003.
- GOFFMAN, Erving. *Estigma*. Rio de Janeiro: Zahar, 1975.
- HART, K. Informal Income Opportunities and Urban Employment in Ghana, *Modern African Studies*, 1973.
- . Everyday Form of Peasant Resistance, *The Journal of Peasant Studies*, 1986.
- JODELET, D. *Representações sociais : um domínio em expansão*. In: JODELET, D. (org.). *As Representações sociais*. Rio de Janeiro: EdUERJ, 2002.
- . La representación social: fenómenos, concepto y teoría. In: MOSCOVICI, S. (ed.). *Psicología social*. Paris: Press Universitaires de France, 1984.
- KELLNER, D. *A cultura da mídia*. Bauru: EDUSC, 2001.
- MAUSS, M. *A expressão obrigatória dos sentimentos*. In: OLIVEIRA, R. (org). Mauss: antropologia. Coleção grandes cientistas sociais. São Paulo: Ática, 1979.
- MOSCOVICI, S. *Comunicação apresentada ao Colóquio sobre as Representações Sociais*. Paris, EHESS, 1979.
- . *El Psicoanálisis su Imagen y su Público*. Trad. Nilda Maria Fenetti. Editorial HUEMUL, Buenos Aires, 1979.
- . *A representação social da psicanálise*. Rio de Janeiro: Zahar, 1978.
- MOSCOVICI, S.; MARKOVA, I. *Presenting social representations: a conversation*. *Culture & Society*, v. 4, n.3, 1998.

TOURISM ON THE AZORES AND MADEIRA ISLANDS: ISSUES OF PERIPHERAL AND DEVELOPMENT REGIONS

Sandra Dias Faria
Maria Teresa Borges Tiago
Flávio Gomes Borges Tiago
João Pedro Couto
University of Azores Portugal

Abstract

In general all governments, be they local or national, have a policy for tourism, whether it represents an active involvement or a laissez-faire approach. This strategic approach reflects in different areas concerning the support for human resource development and practices in tourism. As result of this human resource strategy the determinants factors of how employees fit a particular job in a particular organization at a particular location will vary. Regardless the relevance of this topic, few research works have been carry out in this domain. Therefore, in this paper, we briefly address the nature of tourism as a sector within the economy and identify the determinants of the human resources strategy evolution in terms of the key themes in this paper. Since the role of human resources in enabling tourism businesses is critical, this work discusses the theoretical implications and applications for meeting workforce challenges of tourism organizations, associations and destinations, especially those in remotelocations.

Keywords: Human Resources, Tourism, Destiny, DMO

Resumo

De um modo geral, todos os governos, quer sejam eles locais, regionais ou nacionais, procuram definir políticas e estratégias para o turismo. Estas podem originar um envolvimento ativo ou uma postura laissez-faire. Esta abordagem estende-se a diferentes áreas e reflete-se no apoio do desenvolvimento dos recursos humanos e das práticas no âmbito turismo. Como resultado desta estratégia, tenderão a variar os fatores determinantes de retenção e desenvolvimento e consequentemente o modo como os funcionários se encaixam um trabalho específico, numa organização, numa localidade específica. Não obstante a relevância deste tópico, poucos trabalhos de investigação têm sido realizados neste domínio. Neste trabalho, aborda-se brevemente a natureza do turismo como um setor relevante da economia e identificam-se os determinantes da evolução de estratégia de recursos humanos. Como o papel dos recursos humanos em permitindo que as empresas de turismo é fundamental, este trabalho discute as implicações teóricas e aplicações práticas que as diferentes abordagens acarretam para se enfrentar os desafios da gestão de recursos humanos nas organizações de turismo e destinos, especialmente aqueles que se encontram em locais mais remotos.

Palavras-Chave: Recursos Humanos, Turismo, Excelência, Destino

Introdução

Nos últimos anos, constatou-se uma relação intrínseca entre o sucesso da indústria de turismo e a gestão de recursos humanos (Liu & Wall, 2006). A evolução do paradigma do turismo conduziu à procura apenas de produtos turísticos, mas acima de tudo de experiências de turismo (Niininen, Buhalis, & March, 2007) e nestas os recursos humanos são um dos elementos críticos de sucesso (Wu, Morrison, Yang, Zhou, & Cong, 2014).

Muitos têm sido os trabalhos académicos que se debruçam sobre o modo como as organizações no geral gerem os seus recursos humanos no que respeita à formação, motivação e retenção (Nyberg, Moliterno, Hale, & Lepak, 2014). Porém, tal como o trabalho recente de Wu, et al. (2014) refere, é necessário procurar compreender como é que estes elementos podem ser valorizados em contextos distintos, em especial quando o turismo não se encontra numa fase de maturidade completa e é afetado pela sazonalidade da procura.

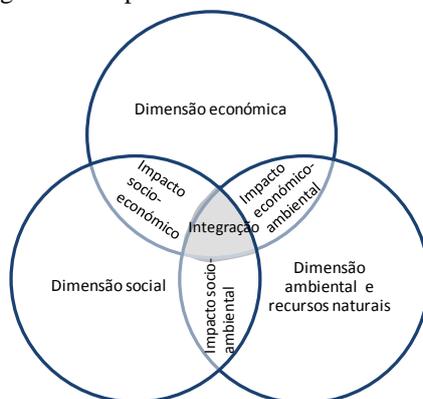
Para se compreender a importância dos recursos humanos na oferta turística de uma região periférica, como é o caso da Região Autónoma dos Açores, deve-se procurar identificar os modelos de outras regiões onde o turismo se encontra numa fase de maior maturidade. Porém, na maioria dos casos, os modelos que se encontram referenciados na literatura dizem respeito a regiões com contextos culturais muito diferentes, pelo que os resultados desta aplicação poderiam não refletir toda a complexidade do processo para a região em causa. Assim, sendo procurou-se aferir a existência de elementos comuns com a outra região autónoma portuguesa - a Madeira, pois esta tem uma matriz cultural e política mais próxima dos Açores e está numa fase de maior maturidade da sua oferta turística.

Este é um trabalho de investigação ainda em curso, pelo que este paper apresenta as primeiras referências encontradas e aponta alguns dos trilhos de investigação que deverão ser seguidos. Assim, este artigo foi estruturado do seguinte modo: a secção com maior predominância é a da revisão de literatura, onde se apresentam as principais correntes de investigação neste domínio; e, na última secção referem-se as principais considerações que surgem desta análise e enunciam-se os desenvolvimentos deste trabalho de investigação.

Revisão de Literatura

O turismo enquanto atividade tem ganho destaque nas agendas económicas e sociais dos governos, independentemente do nível governamental, bem como no domínio académico. Daí que o turismo é muitas vezes visto como motor do crescimento económico. E, este seu cariz pode ser reforçado a longo prazo através de investimento em infraestruturas e pelos impactos diretos e indiretos sobre as economias locais, quer pelo surgimento de atividades económicas conexas às principais, quer pelo aumento do emprego. A este respeito Cooper & Hall (2008) apresentaram um diagrama que procura congrega todos os impactos da atividade turística e que se apresenta de seguida:

Figura 1 – Impacto das atividades turísticas



Fonte: Adaptado de Cooper & Hall (2008)

De acordo com a UNWTO(2006), o desenvolvimento do turismo em destinos periféricos é considerado como um eixo importante para a redução da pobreza, permitindo que essas áreas consigam acompanhar os objetivos de desenvolvimento do novo milênio.

Hay and Morrison (2012), acrescentaram que o desenvolvimento do turismo em qualquer país é função da predisposição do governo para este tipo de atividade económica, bem como dos impactos que esta atividade tem na sociedade, na cultura e na economia local.

Para compreender o papel dos governos locais no processo de desenvolvimento do turismo, C.-I. J. McLennan, Ritchie, Ruhanen, and Moyle (2014) analisaram três regiões em diferentes fases do ciclo de vida da indústria do turismo e identificaram quatro dimensões críticas para o desenvolvimento do turismo numa região: (i) tempo; (ii) estruturas; (iii) espaço; e, (iv) empresas prestadoras de serviços. Todas estas dimensões podem ser influenciadas pelas políticas públicas e condicionam a atividade na indústria. Na dimensão tempo estão inclusos todas as medidas referentes ao processo de formação de recursos humanos, alteração da mentalidade dos habitantes face à atividade e adequação da postura local(C.-I. McLennan, Ruhanen, Ritchie, & Pham, 2010). As estruturas compreendem todos os elementos integrantes da cadeia de valor a jusante e a montante da atividade hoteleira e que compõe a experiência global do turista(Cooper & Hall, 2008). Por espaço entende-se todas as evidências físicas que promovem o processamento do serviço turístico. Por último, temos as empresas prestadoras de serviços que podem estar no local de oferta turística, ou no local de origem dos turistas. Nestas organizações, maioritariamente prestadoras de serviços, um dos elementos críticos de sucesso são os recursos humanos(Fernández-Pérez, Prado-Prado, & Comesaña-Benavides, 2014).

Compreendem-se, pois, as referências à necessidade de se envolver a população local no desenvolvimento das políticas e da oferta turística(Seddighi & Theocharous, 2002). Porém, nem sempre se presta suficiente atenção aos meios e às capacidades da população local para responderem às oportunidades de turismo(Liu & Wall, 2006). Embora não haja muita literatura sobre os recursos humanos em turismo, a existente raramente está ligada a uma abordagem mais ampla de desenvolvimento do destino turístico.

Para se compreender melhor a importância destes elementos convém, em primeiro lugar, analisar os elementos constituintes do destino turístico e da cadeia de valor, através de uma revisão bibliográfica integrativa. Um procedimento desta natureza é particularmente útil quando se procura integrar os resultados de estudos distintos sobre questões mais emergentes e permite identificar os desafios para o desenvolvimento de estudos futuros.

Em 2006, Liu & Wall apresentaram evidências de que o planeamento do turismo deve considerar não só os visitantes, mas também os residentes. Estes autores sugerem que estes últimos devem ser considerados a dois níveis: (i) enquanto prestadores de serviços turísticos; (ii) enquanto indivíduos que terão de partilhar com terceiros os recursos do seu local de residência. Será neste primeiro ponto que iremos focalizar a nossa análise.

Vários são os trabalhos no domínio da psicologia organizacional que procuram compreender o que atrai os empregados, o que os faz querer sair ou ficar num emprego específico. Uma das referências principais neste domínio é o trabalho de Schneider (1987) que sugere a existência de um modelo atração-seleção-atrito (ASA), onde se procura explicar o comportamento dos empregados com base na sua personalidade e no ambiente de trabalho.

Para compreender o grau em que as pessoas se encaixam num emprego, grupo de trabalho e organização está relacionado com a capacidade de se atrair, selecionar e reter os trabalhadores conduziu a inúmeros estudos que analisam a variedade de fatores, que podem ser vistos como influenciadores e fazem parte do ambiente da pessoa(Solnet, Ford, Robinson, Ritchie, & Olsen, 2014).

No trabalho de Fernández-Pérez et al. (2014) são apresentadas seis dimensões que devem ser trabalhadas no âmbito da gestão de recursos humanos, de modo a tornar os

recursos humanos uma vantagem competitiva sustentável para uma organização: (i) envolvimento; (ii) seleção e recrutamento; (iii) formação; (iv) comunicação; (v) definição da função; e, (vi) remuneração e recompensa. Os autores referem que os recursos humanos podem ser o “segredo” mais difícil de imitar num negócio. Em especial, quando a organização consegue ter uma gestão que valoriza o alto envolvimento dos recursos humanos.

Como resultado da revisão de literatura efetuada e procurando integrar a dimensão governamental com as práticas de recursos humanos, chegamos à matriz que seguidamente se apresenta.

Tabela 2 – Estratégias governamentais e práticas de RH

Intenções empresariais	Formação de RH	Estratégia concertada	Especialização empresarial
	Retenção de RH	Enfoque especialização	Enfoque empresarial
		Focus	Laizer-faire
	Estratégia governamental		

Considerações Finais

Os estudos de recursos humanos no turismo, também referenciados como avaliações do impacto do emprego no turismo, são geralmente um reflexo das manifestações do turismo como um fator motriz ou estímulo do crescimento económico.

Porém, os recursos humanos afetos à atividade turística têm de ser analisados de forma mais ampla, por serem um dos fatores críticos de sucesso desta atividade de prestação de serviços (Fernández-Pérez et al., 2014).

Neste artigo, discutimos que o recrutamento, gestão e especialmente a formação e desenvolvimento de recursos humanos são preocupações vitais para o contínuo sucesso das operações da indústria do turismo, bem como para o contínuo desenvolvimento económico e social das regiões.

Assim, as empresas turísticas que procuram atrair, recrutar e reter funcionários qualificados em locais de turismo, especialmente em destinos remotos, devem procurar entendimento claro sobre os fatores de atração e retenção de capital humano qualificado. Neste processo, um dos fatores a considerar é a própria estratégia governamental local.

Neste domínio, é clara a necessidade de pesquisa adicional, tendo por base o modelo proposto. Uma vez que este pode fornecer considerações práticas sobre intervenções potenciais ou medidas que quando implementadas podem alterar o posicionamento da oferta turística de uma região.

Até porque, tal como referenciado anteriormente, algumas intervenções podem ser desenvolvidas pelas empresas de turismo per si ou enquanto associação de organizações num destino. Outras, porém, requerem intervenções que exigem uma coordenação entre a intenção empresarial e a ação governamental.

Acknowledgement:

Funding for this work is granted by FCT – CEEAplA, Research Center for Applied Economics.

Referências:

- Cooper, C., & Hall, C. M. (2008). *Contemporary tourism: an international approach*: Routledge.
- Fernández-Pérez, R., Prado-Prado, J. C., & Comesaña-Benavides, J. A. (2014). *Try to imitate this!* Paper presented at the INBAM 2014, Barcelona.

- Hay, B., & Morrison, A. (2012). Political Intervention in a National Tourism Event: The Politics of Homecoming Scotland.
- Liu, A., & Wall, G. (2006). Planning tourism employment: a developing country perspective. *Tourism management*, 27(1), 159-170.
- McLennan, C.-l., Ruhanen, L., Ritchie, B., & Pham, T. (2010). Dynamics of destination development: Investigating the application of transformation theory. *Journal of Hospitality & Tourism Research*, 1096348010390816.
- McLennan, C.-l. J., Ritchie, B. W., Ruhanen, L. M., & Moyle, B. D. (2014). An institutional assessment of three local government-level tourism destinations at different stages of the transformation process. *Tourism Management*, 41, 107-118.
- Niininen, O., Buhalis, D., & March, R. (2007). Customer empowerment in tourism through consumer centric marketing (CCM). *Qualitative Market Research: An International Journal*, 10(3), 265-281.
- Nyberg, A. J., Moliterno, T. P., Hale, D., & Lepak, D. P. (2014). Resource-based perspectives on unit-level human capital a review and integration. *Journal of Management*, 40(1), 316-346.
- Schneider, B. (1987). The people make the place. *Personnel psychology*, 40(3), 437-453.
- Seddighi, H. R., & Theocharous, A. L. (2002). A model of tourism destination choice: a theoretical and empirical analysis. *Tourism management*, 23(5), 475-487.
- Solnet, D. J., Ford, R. C., Robinson, R. N., Ritchie, B. W., & Olsen, M. (2014). Modeling locational factors for tourism employment. *Annals of Tourism Research*, 45, 30-45.
- UNWTO. (2006). Poverty alleviation through tourism: A compilation of good practices. Madrid.
- Wu, B., Morrison, A. M., Yang, J. K., Zhou, J. L., & Cong, L. L. (2014). Cracks in the ivory tower? A survey-based analysis of undergraduate tourism education and educators in China. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 14, 26-38.

ECOLOGICAL APPROACH TO INTIMATE PARTNER VIOLENCE ON INDIGENOUS MEXICAN WOMEN

Gloria Margarita Gurrola Peña

Patricia Balcázar Nava

Alejandra Moysén Chimal

Julieta Garay López

Esteba Esquivel Santoveña

Universidad Autónoma del Estado de México. Mexico

Abstract

Intimate Partner violence in indigenous populations has been little explored in Mexico, so the aim of this study was to explore the characteristics of violence that otomi women undergo in the State of Mexico. 50 women living in circumstances of intimate partner violence participated in the study and voluntarily agreed to take deep interviews. The ecological data analysis indicates the testimony of family violence during childhood, overcrowding, poverty and stereotypical and rigid gender roles as the main enhancers of violence against women in this community. The value of the ecological model was shown to recognize the social, familiar and individual characteristics that shape the generation and maintenance of partner violence in indigenous populations.

Keywords: Women, indigenous, violence, ecological model

Nowadays, one of the most serious violations of women rights is violence against women by their intimate partners. Intimate Partner violence is a form of interpersonal violence and it is defined by the World Health Organization (2012) as "the behavior of the partner or former partner that causes physical, sexual or psychological harm including physical assault, sexual coercion, psychological abuse and controlling behavior"

On this regard, since the 90's, systematic research has been carried out in Mexico in the field of violence against women by their partners. However, there are significant knowledge gaps generated so far, among which the exploration of domestic violence in rural and indigenous communities is highlighted. There is evidence that there are certain regularities in the presence of the phenomenon in urban areas, but in rural areas and especially in indigenous communities, significant differences are envisioned (Valdez-Santiago, Gonzalez-Montes, Juarez-Ramirez and Terrazas-Mata, s/f).

Based on the foregoing, the National Center for Gender Equity and Reproductive Health (2009), considered the ethno-linguistic element to differentiate indigenous women and thus clarify their reports of violence. In the sample under study, five percent were women who speak an indigenous language, of which 31% reported living with current partner violence, 44% intimate partner violence for life and 60% violence some time in their life. A specific analysis of violence against women in some indigenous groups was published in the Survey of Health and Rights of Indigenous Women (ENSADEMI 2008) conducted by the National Institute of Public Health (2008). This survey was administered to 3, 972 women in indigenous areas of 6 states. The overall prevalence was 25.55% of which 21.09% is psychological type, 10.06 is economic, 9.83% is physical, 6.12% is negligence and 6.75 is sexual. It is worth clarifying that the prevalence and severity varies considerably from region

to region because as you can see, indigenous women and their partners as a whole are not a homogeneous group and living in different sociodemographic and sociocultural realities, but they generally share poverty and social backwardness.

According to Gonzalez and Vizcarra (2006), from the total population in Mexico, 7.5% speak an indigenous language, the Otomí is spoken in the country by 358, 575 people, representing 4.9% of the total population speaking indigenous languages. Among Otomi speakers, 37% are residing in the State of Mexico and the sexual distribution marks a process of feminization. Thus, Otomi women become an important group to explore partner violence without ignoring specific aspects of each location in this ethnoregion.

It is recognized that intimate partner violence is a complex and multifaceted problem, with biographical, psychological, social and environmental roots, for which there is no simple explanation. Thus, it is particularly important to investigate the types and aspects of partner violence that Otomi women live, because, according to the sociocultural characteristics in which they live, they are most exposed to the risk factors listed in the Ecological Model Factors Related to Gender-Based Violence.

In the first level called "individual", there are biopsychosocial factors underlying personal history. These characteristics of personal development that affect the response in the microsystem and mesosystem and increase the likelihood of becoming a victim of violence. Among the abovementioned items, there are characteristics such as age, gender, level of education, employment and income and exposure to violence in the family of origin. Regarding the latter, it is recognized that living in violent familiar environments, suffering or witnessing aggressions within the family may predispose people to suffer these types of events at some point in their lives (Olivares e Ichaustegui, 2009) . In this sense, the Otomi women from an early age witness violence by the father to the mother and even often suffer violence from their father in flesh, such violence is generally framed in the father's alcoholism .

In the second level called microsystem there is an immediate context in which violence occurs and generally refers to the current family environment. According to Heise (1998), violence occurs more easily in homes where men tend to exercise control over money and women's actions. In the Otomi communities, this previous situation is commonly encouraged by the mother in law, since in most cases, when couples decide to live together, they do so in their parents' house; through which they get the role of "watching" the wife's movements and expenses, and women even give them the power to violent reprimands. On this same level is substance use, especially alcohol, because as Lloret (2007) indicates, alcoholism may be a risk factor that favors the emergence of violence when combined with other macro-and micro-social determinants. At present it is estimated that alcoholism affects 70% of the Otomi population (National Commission for the Development of Indigenous Peoples, 2008).

At the mesosocial level, we can locate community contexts where individuals and families as well as the relationships established in neighborhoods develop. The elements involved are urban decay, overcrowding, poverty and lack of educational development. In this aspect, the Otomi population is organized in small communities with little or no urban services. Regarding education, the average is 5 years, [number missing] of them do not attend school, the latter being more pronounced in the female population. Regarding overcrowding and poverty, they seem to be a constant in the Otomi women given the habit of married women who go to live in the groom's parents' house (no ability to inherit or receive dowry from their family of origin), pursuant to the rules of the patrilocal settlement system (González and Vizcarra, 2006). These family groups are organized to survive; however, the vast majority of the economically active population (86.66%) live with two or fewer minimum wages (\$ 8 per day). Men are usually engaged in street trading outside the place, so

their economic contribution is not secure, while the wife weaves or embroiders napkins in addition to their domestic work, breed animals and replace the man in farm work to secure family food (INEGI, 2011).

The last level or macro level deals with inserts in the social structure such as social representations, the use of power and impunity among others. Apparently, in violence against women, there is an immense network of values and powers that interlock to maintain the patriarchal structure that is maintained and reproduced through customs, tracking moral precepts besides the lack of rights (INEGI, 2011), since in the Otomi families, if the firstborn is male, his residence at home is ensured and he will take care of the parents when they reach old age. Most importantly, the family heritage remains in the same family, this patrilineal and patrilocal custom is claimed in a report based on the land rights system.

Moreover, the assignment of gender roles is based primarily on the importance of workforce to achieve subsistence existence and ethnic retention. So feminine and masculine identities are constructed, which are assigned symbols and meanings. In this sense, girls are not women until they take the roles assigned to reproduce the workforce, which is usually linked to the care of the family as the unit of production including the property of men. Meanwhile, children acquire the male identity at birth through their strength for farm work, but also as providers and guardians of the household (González y Vizcarra, 2006).

The above points toward the need to deepen the understanding of the aspects of intimate partner violence that indigenous women undergo. That is why the objective of this study was to describe its aspects.

Method

Participants

We worked with 50 women who accepted to be interviewed and who live in a violent relationship with their partner.

Technique

Deep interview, which is a conversational tool that the researcher uses in order to understand the individual and their culture (Infante, 2002). The basis of analysis for this project are:

- Individual level: History of violence in the family of origin
- Microsystemic level: Development of intimate partner violence
- Mesosystemic level: Overcrowding and poverty
- Macrosystemic level: Social representations

Procedure

Women were called individually and once they signed the letter of consent to be recorded, they proceeded to conduct deep interviews.

Analysis of results

Data was analyzed through content analysis.

Results

At the individual level, it was found that all women living in situations of partner violence had witnessed violence between parents and were even victims of violence by parents or a close relative during their childhood, as shown by the following lexias:

Witness of violence

W24: "We were eating when I heard that my father began to insult my mom and he hit her and opened her forehead and we were listening to it, what I remember was the last time he got drunk".

W3: "My mom drinks, and also my dad, they argue and disrespect each other, and with rudeness, but we never saw any beating". W5: "I didn't like the way my parents got

along because they both drank a lot, that's why they had many conflicts". W7: "Well, my dad, ah, he got drunk more than anything, he drank and got there with my mom, he fought with her, hit her a lot, I was very little but it frightened me". W9: "I saw that my parents argued very often, I got to see hits only twice, my dad used to beat her".

Violence victim

W36: "My mom died when I was 9 or 10 years and I went to live with a brother who was already married and then his wife beat me a lot, I went to live with my other sister but also sent me to look after their animals and beat me, and then I told my other sister who was working, I told her to take me work with her, but she stole my money and beat me".

W45: "My mom hit me because I didn't lock up the chickens, she made me bleed and told me that he preferred a thousand times her animals over me, she would have preferred that I died instead of my twin brother".

W39: "My mom was very rude, I had the feeling she did not love me, she told my older brother not to help me, on the contrary, they got together to beat me".

Kidnapping of women

W14: "I didn't have a courtship, I was stolen, I came to town for the day of the dead, he said he would take me to work but I he took me to his house and his family and he would not let me out, and then the babies came and I stayed there".

W24: "He took me just like that, without me wanting to, let's say, as they say here, they rob you without your consent".

W36: "Once, he arrived drunk, grabbed me, took off my sweater and he wouldn't let me go, and although I screamed, no one would help me, he took me to his house, I did not want to leave, I said I don't love you and I don't know you, we had seen each other twice but night came and I was scared to go back to my sister".

Violence at courtship

W24: "He came and we were talking, maybe I said something that offended him or that made him beat me".

W9: "I wore soft makeup, but he said he didn't like it; and I loved him, so I stopped wearing makeup".

The man's family as instigator or aggressor

W24: "Once my husband beat me, my sisters in law were there and one of them got involved to support him, I told her not to get involved, because she didn't know what the problem was about, so my father in law started to yell at me as if I were the cause of everything".

W36: "My mother in law scolded me a lot, she was very cruel to me".

W2: "And then my mother in law supports her son, tells him that I shouldn't ask for too many things, that I spend a lot of money, that I only buy candy".

Intimate Partner violence

Psychological violence: W24: "He has a gun and several times threatened me with it, aiming at my chest or my head, he tells me he'll kill me if I intend to leave him". W36: "He always told me I was worthless, insignificant, and he kicked me out of the house". W1: "The problem is he threatens me with taking away my son".

Economic violence: W24: "Once he hit me really bad, I was bleeding all over, I went home to my parents, and the next day they were out and he came looking for me, and beat me out of the house". W36: "When he goes to work, he brings his money and sometimes gives me 100 pesos, but he pays beers for his friends, and when he doesn't have money, he asks for the money I earn from working". W39: "Since we live together, he's never bought me anything to wear". W1: "I always tell him, hey support me with this, the kid needs it, and he said he didn't have money".

Negligence: W14: "When the children were born, he wasn't there, I stayed with his parents and they didn't want me to go to the doctor, I had to give birth to two of my children at home". W36: "At 7 months pregnant, I told my mother in law that my back really hurt, she told me that I deserved it and she ignored me, I had to borrow money to go to the doctor but still lost my baby". W39: "He accompanied me when I got sick, he didn't cure me, he didn't come for me or took care of me".

Sexual violence W36: "He treated me like a thing he used and I said no, because it hurts, and on the contrary, he enjoyed it much more". M9: "When I told him I was pregnant of our third child, he told me he didn't want my stuff". W49: "He obliged me to have sex because it was my duty, if I didn't satisfy him, he got another woman".

Physical violence: W14: "I don't know what happened, once he hit my tooth, then the next time he hit my foot, but it didn't hurt so much because he was wearing socks". W36: "I lost a baby when I was seven months pregnant because of his beating". W45: "He yelled at me, shoved me, hit me, even beat me a lot, he was very aggressive". W39: "He hit me for the first time, because I had brought a sewing machine my dad had given me with the money I had earned working before, from that moment on, he started to get drunk on a daily basis and he didn't work any more, then he hit me and yelled at me".

A mesosystem level, it was found that levels of overcrowding in housing and poverty is an enhancer of intimate partner violence, as can be seen in the following lexias:

Overcrowding

W17: "My husband and my three children have been living with my parents in law and two sisters in law for nine years now". W2: "When we got together we went to live with my parents in law, also my brother in law and his wife and children, and we, as they didn't have a special room for kitchen, the food was made in the same room and we cooperated with expenses and therefore sometimes I put more money and my husband scolded me because I spent money". W3: "We went to his house but we had a lot of trouble, because parents in law and sisters in law usually get involved. One day my brother in law and his wife came, and then the children, then she said she was beaten and that they stole her things, since we were like this in a room and there was no other division, just a curtain, my mother in law believed her and argued with me".

Poverty

W1: "Sometimes I saw he went to Toluca for a month and he told me here you have 200 pesos, and I said go away with your 200 pesos, and he said buy milk and diapers for the child, and see if that's enough, he said no, that is what I can give you". W2: "it may be that I endure that and I do not buy anything, but not my kids, teachers ask them for materials or things like that and, well, as we have the opportunity, sometimes I don't have anything, well, he helps me then, so I thank him for this support, he has solved our economic problems and then no, I do not tell him that even the most necessary and basic things, like now the malnutrition issue due to lack of partner support, sometimes he gives you 20 or 15 pesos and you can't do anything". W7: "He goes to Mexico for selling, to Querétaro, sometimes he does good, sometimes he doesn't; so we carry on, but we'll never have money". "I weave napkins, cross stitch, but just to get out of trouble as they pay 180 for a dozen and it takes two weeks".

At macrosystem level, social representations that deal with the rights and roles of women and legitimizing the use of violence by men were found, as shown in the following lexias:

Women's rights W8: "At the beginning, my parents didn't want to send me to school because I was a woman and I was getting married, but then I went to primary school only".

Role of women W23: "Now that my mother in law came to live with us, well, she started again with her ideas about me not working, I hadn't raised animals before and all that,

but it was her suggestion that women must raise animals and plant land”. W28: “My mother in law then tells me, well, she says you must do everything she says, she says he is my son”. W33: “I tell him, well, if your mom told you to beat me and treat me like that, and that, and once he confessed that it was true, so I would obey him”. W39: “My mom told me when I went to live together, she didn’t want arguments, that I had the obligation of being good to my husband, that if my husband scolded me, I shouldn’t answer, or look at him or scold him back”.

Legitimization of violence: W2: “Well, because my family tells me why do you break up, if you wanted to live with him, well, you have to hold on, because I was decided to break up with him”.

Discussion and Conclusion

Qualitative data indicate that being a woman in the Otomi village involves sharing a history, a physical-social, space, experiences and expertise that, by being imbued with social representations, reproduce the dominant patriarchal order where the valuation of the genre sets procreation, submission, and obedience as constituent elements of womanhood. An example of this can be seen in the individual level analysis which highlights the fact that all women currently living partner violence, witnessed violence between parents or were victims of domestic violence. According to Heise (1998) these experiences are not required to live further violence, since it is still unclear the mechanism of experiencing and / or witnessing violence in childhood and suffer violence in adulthood. Despite this fact, there is evidence that these individual factors modulate the relationship with potential abusers and may impact the likelihood that the person is re-victimized (Grauerholz, 2000, Flood y Fergus, 2008).

An element shared by the individual level and the micro-element is that violence is practiced against the children or to the couple, most often performed under the influences of alcohol. Regarding this matter, Lloret (1998) indicates that alcoholism may be a risk factor that promotes violence when combined with other microsystemic and macrosystemic elements.

According to Heise (1998), male decision making, is an indicator of violence, for male abusers tend to exercise control over money and women's actions. An example of this in the present study, is also a micro level which is the immediate context in which violence occurs and is usually the family.

Given the importance the Otomi give to the fact that the couple has to agree to live together (Gallardo, 2010), it is particularly relevant finding that three women were stolen without their consent and in two cases without knowing the raptor, who later became their husband. Another interesting aspect is that even though in the Otomi culture there is no courtship as it is known in our culture, in the few cases where the couple manages to be or go out alone, there is evidence of psychological partner violence, mainly in the form of control of women’s personal grooming.

Courtship in this population is made hiding from the parents, so the couple has little time to get along; when the couple agrees on "joining", one night they go to the groom’s parents’ house. In subsequent days, the groom's parents visit the bride's family to warn them that she is already part of their family and also deliver a welcome package with beer, cigarettes, fruit and liquor as a way to formalize the union of the youngsters. In this regard, the results of this study are consistent with findings by Molinar (1997) in the sense that when the new couple is formed, they usually move in with the groom's family whereby women is incorporated to housework, which until then was responsibility of the mother and sisters in law. This step is particularly difficult for women because they are usually recipients of violence from mother and sisters in law, by not properly fulfilling housework (preparing corn, making tortillas and food, laundry and keeping the house clean). Likewise, parental

household tends to incite man to exercise corrective action usually violently towards his wife when they consider she is not doing her duty.

The women in this sample are often exposed to different types of violence. Within the psychological violence, which is the most prevalent, the recurring themes are restricting women's actions, criticizing their dress and physical appearance, and the threat of taking away the children in the event that the wife leaves or demands the husband. The humiliations and threats are typical of this type of violence forms, but the restriction of movement of women is particularly relevant as it connects with an element of the macrosystem which like a social representation indicates what may or may not make a woman in this culture. Married women can not leave without the permission of their husbands, if he is absent which is very common given the itinerant nature of his job, they should stay home and should not receive visitors. They don't have the same freedoms as men and their behavior is constantly monitored mainly by the husband's family as they live in the same home or at least on the same site (Gallardo, 2010).

Economic violence is strongly associated with an element of the mesosystem which is poverty and social representations encompassed in the macrosystem. Among the Otomi, there is a sexual division of labor where the greatest burden falls on women in a context where she should be devoted to the home and the man to his merchant activity. The women, in addition to biological reproduction, are responsible for the survival and welfare of the family so their workday goes through household chores, work in the field and embroidered napkins to sell. Thus, the economic contribution to the household is done unevenly, the man just enters part of the proceeds as he assumes no responsibility for financially supporting the family, however it is considered "head of household" what it means to have power over his wife and children. In contrast, women fully occupy their income for household expenditure, although its share is socially devalued because it is considered as simple "help" (Molinar, 1997).

Regarding negligence as a form of violence, we should consider the following facts: men forbidding women to seek medical help when they are sick, men not taking themselves to get help or forcing them to do housework while being sick. Due to the concept of disease held in the community, the construct of neglect is difficult to measure, because for them being sick is when their lives are seriously endangered and they have to go to a clinic to be hospitalized (Gallardo, 2010). Consistent with this, we found that many of the women reported that when they had been hospitalized for various reasons, their partners had not been with them or had not been held responsible for the costs, the latter falling in the women's family.

Sexual violence is manifested in the form of pressure to engage in sexual intercourse against the will of the woman on the grounds that if she does not, he has the right to find another woman to satisfy him. This shows the will of man to control women's sexuality and reassert his authority as a husband (INEGI, 2011).

Finally, Otomi women reported physical violence, although in all its forms it is potentially dangerous in this population can be considered a low hazard since there are no weapons or severe beatings. It is noteworthy that in national surveys physical violence appears second, while prevalence in this population is presented last. Regarding ENDIREH 2011 (INEGI, 2011), it is explained that although among indigenous-speaking women there is already a higher perceived incidence of violence, not even episodes that they considered normal for agreeing with some values, beliefs and declare customs that "naturalize" such violence.

At mesosystem level, overcrowding and poverty are included as triggers of violence. As mentioned above, traditionally the family unit was formed around the parental home as a single line inherits the land and all the male children have the right of usufruct of the crop. This, combined with the custom of the newly formed couples living, on average, five years in

his father's house, which consists of up to three bedrooms and home to three generations, brings overcrowding. Overcrowding is linked to the lack of suitable space in dwellings or the little privacy that limit the possibilities of harmonious coexistence among household members (National Institute of Women, 2006).

As for poverty, we have documented that people of Otomi living with four dollars or less (INEGI, 2011), which is complemented by the sale of embroidered napkins and collecting quelites, fungi and fruits wild by women. In this regard, Moreno (1999) reports that there are studies reporting the existence of a direct relationship between poverty and violence in the family, because of the stress conditions that occurs in the absence of basic goods.

Finally, at macro-level, we find the cultural values and social representations of gender that permeate society (Bronfenbrenner, 1977) which influence the mesosystem and the microsystem (Grauerholz, 2000). The theory of Social Representations framed building social imaginary about women, relationships and even violence in it. An example of this can be seen in the present data, which indicate that being a woman in this Otomi community marks a path already laid out for them characterized by the lack of educational opportunities, rigid and stereotyped roles that frame the way act and especially the obligation to stay with your partner if you live in violence. Regarding the latter it is clear that women are not supported and are persuaded by their families to continue their relationship since separating from her partner is socially considered "returned" with which breaks with the representation of submissive and obedient woman, also returning to the family home becomes a threat and rivalry for land inheritance (Molinar, 1997).

References:

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513-531. Doi: 10.1037/0003-066x.32.7.513.
- Centro Nacional de Equidad de Género y Salud Reproductiva. (2009). Encuesta Nacional sobre Violencia contra las Mujeres 2009. México: Secretaria de Salud.
- Comisión Nacional para el Desarrollo de los Pueblos Indígenas. (2008). Informe general de la consulta sobre alcoholismo y pueblos indígenas. México: CDI.
- Flood, M., Fergus, L. (2008). *An assault on our future: The impact of violence on Young people and their relationships*. Sydney: White Ribbon Foundation.
- Gallardo, P. (2010). Vínculos sociales, conflictos y equilibrio entre los otomíes de San Bartolo Tutotepec, Hidalgo. *Itinerarios*, 11, 9-34.
- González, F., Vizcarra, I. (2006). *Mujeres indígenas en el Estado de México*. México: El Colegio Mexiquense/UAEM.
- Grauerholz, L. (2000). An ecological approach to understanding sexual revictimization: Linking personal, interpersonal and sociocultural factors and processes. *Child Maltreatment*, 5(1), 5-17. Doi: 10.1177/1077559500005001002.
- Heise, L.L. (1998). Violence against women: An integrated ecological framework. *Violence Against Women*, 4(3), 262-290. Doi: 10.1177/1077801298004003002.
- Infante, P. (2002). La entrevista a profundidad según J, Spradley. Recuperado de: <http://www.entrevista-en-profundidad.html>.
- Instituto Nacional de Estadística y Geografía. (2011). *Panorama de la violencia contra las mujeres*. ENDIREH 2011. México: INEGI.
- Instituto Nacional de las Mujeres. (2006). *Violencia en las relaciones de pareja*. Recuperado de: http://cedoc.inmujeres.gob.mx/documentos_download/100924.pdf
- Instituto Nacional de Salud Pública. (2008). *Encuesta de Salud y Derechos de las Mujeres Indígenas*. Cuernavaca, Mor: INSP.

- Lloret, I. (2007). La violencia contra las mujeres en la pareja. En Gil, E., Lloret, I.(Eds). La violencia de género (pp. 39-53). Barcelona: UOC.
- Molinar, P. (1997). Vida cotidiana y salud en mujeres otomíes del Estado de México. Nueva Epoca, Salud Problema. 2(2), 36-45.
- Moreno, F. (1999). La violencia en la pareja. Rev Panam Salud Pública. 5(4), 245-258.
- Olivares, E., Inchaustegui, T. (2009). Modelo Ecológico para una Vida Libre de Violencia de Género en Ciudades Seguras. Recuperado de: http://www.conavim.gob.mx/work/models/CONAVIM/Resource/309/1/images/Modelo_Ecologico.pdf
- Organización Mundial de la Salud. (2012). Violencia de pareja y violencia sexual contra la mujer. Acta descriptiva N° 239. Recuperado de: <http://www.who.int/mediacentre/factsheets/fs239/es/>
- Valdez-Santiago, R., González-Montes, S., Juárez-Ramírez, C., Terrazas-Mata, B. (s/f). Los sistemas de salud frente a la violencia hacia las mujeres indígenas en las principales etnias de México. Recuperado de: <http://www.ciesas.edu.mx/lerin/doc-pdf/Valdez-26.pdf>.