

THE QUALITATIVE SYSTEMIC ANALYSIS IN THE CONTEXT OF QUALITATIVE RESEARCH METHODS

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Abstract

Alex Mucchielli in the University of Montpellier developed the qualitative systemic analysis. In this communication, we intend to present the principles of this methodological approach in human and social sciences. We believe that this qualitative approach is innovative in the context of qualitative methods and allows a new perspective in the analysis of the communication processes in social organizations. The main operations of the systemic qualitative method are the iterative definition of the framework, the identification of the recurrences and *circular causalities*, and the modeling of relations/social exchanges. These operations aim to find the sense/meaning of a social exchange system. The logic of the system, found by an approach that respects all the validation process in the qualitative methods, is important to clarify the specificity of the research in human and social sciences. In fact, qualitative research is one of the scientific achievements that are most relevant in the comprehension of the dynamics of human interaction.

Keywords: Qualitative systemic analysis, qualitative methods, qualitative modeling, circular causality, recurrence

Introduction

The qualitative methods in social research are multiple and, as they emerge from different epistemological paradigms, they have theoretical similitudes and differences. In the framework of the constructivist paradigm the qualitative systemic method of Alex Mucchielli adopts a methodological approach that leads to understanding the structure and functioning of social phenomena and human behaviour.

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The first operation in this systemic analysis is the building of a framework (*cadrage*), which corresponds to what is called "sampling" in other qualitative methods. The delimitation of the field of analysis is made from the point of view of the actors correlated with the observed relational networks.

The second operation consists in identifying the recurrences in the relations system. These recurrences are listed as a "form of exchange". (Mucchielli, Alex, 2006). This intellectual process combines the seeking of similarities with the categorization, despite not awarding meanings to the actions of the actors in the system¹² at this stage.

The third operation is based on seeking *circular causalities* and on the process of seeking totalities. The researcher must answer the question: "What is the collective concern shared by the actors that *builds* the relations system?" (Mucchielli, Alex, 2006)

This research, by comparison and by generalizing the induction of this *challenge* (*enjeu*), provides the key for the interpretation explained by modeling. The modeling of relations/exchanges (fourth operation) depicts a scheme of the significance of each *exchange* (formal categories) developed by the actors in a more global context.

By modeling relations/exchanges (fourth operation) we put, into an explicit scheme, the significance of each *exchange*. To do this, the investigator must make not only an intellectual work of *contextualization*, but also an interpretation of the emergent sense/meaning of the relations (Mucchielli, Alex, 2006).

For the qualitative systemic approach, the research of the *general framework* of significations system is the fundamental to a comprehensive understanding of human actions. This constructivist approach allows, by modeling the interactions and by the analysis of *circular causalities*, to open new perspectives for the analysis of relational and communicational systems.

A new approach to Palo Alto

To Alex Mucchielli, it is necessary to overcome the methodological framework of Palo Alto in the communications analysis: "*Watzlawick, Helmick-Beavin and Jackson did not develop an accurate method to build and then study the communications systems. The analysis that they propose is close to the text analysis.*" (Mucchielli, 2006:54).

The aim of the qualitative systemic approach is to develop an accurate procedure and method by modeling the significant exchange system

¹² A first version of this text was presented in the IX Conference of the European Sociological Association "European Societies or European Society", Lisbon, ISCTE-IUL, 02-05 September 2009.

between the actors of a social system (in micro, mezzo and macro levels). The systemic analysis emphasizes the shape of the exchanges that are generated by the participants in a communication system that allows putting into evidence the rules of the game that construct the system itself.

To Alex Mucchielli, Palo Alto's interaction analysis was not sufficient to define the implicit rules of the exchanges system and that is why he proposes a new approach that he named *qualitative systemic analysis*. This hybrid approach (phenomenological, grounded theoretical, structural, and systemic approach) is based on epistemological qualitative principles, explained in many texts and conferences by Alex Mucchielli.

The principles of the qualitative systemic analysis

To build a comprehensive model of reality, the qualitative systemic analysis adopts five (or seven) principles of the communications analysis principles: 1- the systemic postulate; 2- the principle of the levels in the observation and the frame working; 3- the primacy of the systemic context; 4- the principle of the circular causality; and 5- the principle of the homeostasis. In the communications field, there are two more principles. 6- the nature of the communications identifies the significant exchanges between the actors in a system. 7- the principle of the recurrence of the interactions emphasizes that we need to understand the origins of recursive interactions that generate structural games between the social actors.

The systemic postulate emphasizes that the phenomena don't exist alone and must be considered in interaction with other of the same nature. The principle of the levels and the frame analysis determine that the phenomena, in order to be understandable, must be observed in delimited frame. That frame defines the actors and the issues to consider. The primacy of the system context highlights that the meaning of a social action is given by the context formed by the system itself. The principle of circular causality states that a phenomenon is integrated in a complex system of mutual implications of actions and retroactions. The principle of homeostasis defines that all systems have their own rules and functions that generate a global logic that allows for its own reproduction. When the qualitative analysis is applied to the communication phenomena, we must also apply two other principles: first, the principle of the nature of the communication, which emphasizes that the communication must be presented in a category of significant exchange. This form must be put into the model by the generalization of the several concrete contents that were observed and that have the same meaning. Second, the principle of the recurrence of the interaction games that postulates that, in groups and organizations, the communicational phenomena can be presented as scenarios or as repetitive and recurrent *games*. (Mucchielli, A.2004: 44).

The method: the search for the global meaning of the system

The fundamental steps in the qualitative systemic analysis are linked with the main principles. The first step (linked with the second principle) leads to the definition, by the research problem, of a pertinent level of observation (the non-immediate level) (cf. Flick, Uwe 2005, 49-51). The second step (linked with the first principle) conducts to an identification of the elements of the system (actors). The first and the second steps allow for the construction of the framework analysis of the research to happen.

The third step (from the sixth principle) is developed in articulation with the previous step, and is related to the systemic modeling. The communications in the model are the recurrent and significant ones. The fourth step is integrated in the previous one. As we build the systemic modeling, we try to reconstruct the circular causalities and the determining “game rules” in these circular causalities. The fifth step (from the sixth principle) is the interpretation of the data organized in the systemic modeling, in order to find the global “game”, the logic of the system. The sixth and last step: through the modeling, the explanation of the circular causalities, the logic formulation of the game, we can discover the “issues” (profound problems of the actors and their implications in the system). This analysis permits to define the hypothesis for the intervention to change the system. This step is essentially inferential. It is here that we can understand the “issues” as well as the strategies of the actors. (Mucchielli, A.2004: 44-45).

The qualitative modeling

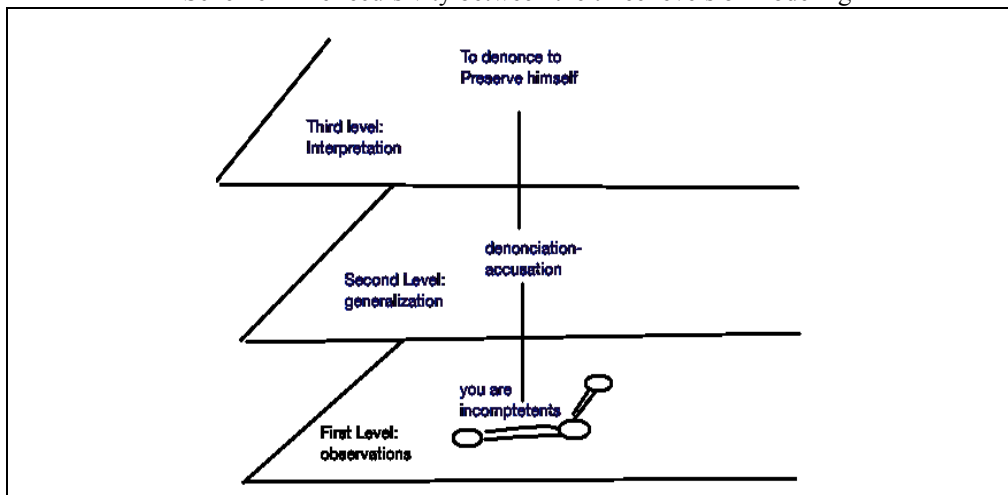
The qualitative modeling, in communication sciences, leads to the interpretation of the meanings of the interactions of the actors in a social system. To achieve the interpretation by the construction of a model, Mucchielli defines three levels of analysis, as explained in the introduction: the level of the concrete observation of the communications (where the facts are described); the level of the generalization of the communications (where the facts are put into categories) and the level of the interpretation of the meanings (where the implicit and explicit logic of the system is revealed). To go from one level to another, the researcher needs to go up and down because the reformulation of the exchanges in the superior level is done through the comprehension of multiple data of the inferior levels. These different epistemological levels lead to the inference of the global meaning of the system.

Mucchielli, in one of many examples of modeling, presents schemes of interactions that are linked by the logic of the interaction system. And he clarifies that the Palo Alto approach maintains the confusion between the social constructions made by the social actors (constructionism) and the

scientific methodology of the study of this constructions, which is constructivist. (Mucchielli, A., 2004:66-67)

One of the main examples of Mucchielli’s qualitative approach is present in the following scheme:

Scheme I The recursivity between the three levels of modeling



Source: Mucchielli, A. (2004:67)

In this scheme, we may see that the clause “you are incompetent”, in a context of the observation in the second level of generalization, fits the category of denunciation-accusation that is interpreted in the third level as a way to safeguard oneself in the context of the interaction. (Mucchielli, A. 2004:67)

The *logic of the system* found by the systemic qualitative approach is important to clarify the specificity of the research in human and social sciences. In fact, the qualitative research is one of the scientific achievements that is most important to comprehend the dynamics of human interaction and to interpret the meaning of human actions.

Conclusion

As a qualitative constructivist approach, the qualitative systemic analysis adopts a specific meaning of the *modeling* processes by defining formal categories and their meaning, in order to reveal the logic of the system (rules). In this process, we have an important dual epistemological rupture between the meaning for the actors and the meaning for the researcher. For Mucchielli, the Palo Alto approach needs to reach another level of interpretation and that is why he proposes the qualitative systemic analysis.

The validation of the results in this method is the same as with other qualitative methods: internal acceptance (the research and the results must be

accepted by the actors); completeness (one of the methods to achieve the completeness is the triangulation of the techniques and of the theories. The writing of the research diary is also important for reaching the completeness); saturation (the phenomenon that appears during a certain moment of a qualitative research, when the data that we have collected is not new); internal coherence (appeals for the research to be coherent and comprehensible by any researcher); and external confirmation (the acceptance of the research findings by the scientific personalities, experts and others researchers) (Mucchielli, A.1991:111-118).

This process of validation of the findings in qualitative research must be emphasized in the dialogue with the so-called positive sciences. As Alex Mucchielli says, “*the development of the qualitative research is the achievement of the fundamental progress in the definition of the specificity of the research in human sciences*”(Mucchielli, A.1991: 19).

References:

- Benoit , Denis &Perez, Frédérique (2006) *Interactivité constructive des relations humaines: L'éternel retours a Palo Alto* in Alex Mucchielli e Christian Bourion (org.) *Psychosociologie et systémique des relations dans les organisations*. Paris, Editions. Eska pp.77-141
- Berne, E. (1975) *Des jeux et des hommes*, Paris, Stock
- Flick, Uwe (2005) *Métodos qualitativos na investigação científica*. Lisboa, Monitor
- Gonçalves, Rolando (1997) *Comunicação, poderes e jogos nas organizações: Para uma abordagem sistémica qualitativa das comunicações*, em *Poderes, mobilidades e Comunicação*, Actas do VII Encontro de Sociologia dos Açores, 27 e 27 de Novembro de 2006). Ponta Delgada, Centro de Estudos Sociais (CES-UA)
- Le Moigne, J.L. (1990) *La modélisation des systèmes complexes*. Paris, Dunod
- Mucchielli, Alex (1991) *Les méthodes qualitatives*. Paris, PUF (Que Sais-je n°2591)
- Mucchielli, Alex (2001) *Les sciences de l'information et de la communication*. Paris, Hachette
- Mucchielli, Alex. (2004)*Approche par la modélisation des relations*. Paris, Armand Colin
- Mucchielli, A. (sous la direction de) (2004). *Dictionnaire des méthodes qualitatives en sciences humaines (2e éd.)*. Paris, Armand Colin
- Mucchielli, Alex. (2005) *Approches constructivistes*. Paris, Armand Colin
- Mucchielli, Alex (2006) *Psychosociologie et systémique des relations dans les organisations*. Paris, Editions Eska

- Paillé, Pierre & Mucchielli, Alex (2012, 3ed) *L'analyse qualitative en sciences humaines et sociales*. Paris, Armand Colin
- Poty, Max(2006) *Interactivité constructive des relations humaines: L'éternel retour a Palo Alto* em Alex Mucchielli e Christian Bourion (org.) *Psychosociologie et systémique des relations dans les organisations*. Paris, Editions. Eska pp.179-210
- Rosnay (de), J. (1975) *Le macroscope*, Paris, Seuil