LANDSCAPE INFOGRAPHIC DESIGN

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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 Enviromental 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.

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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
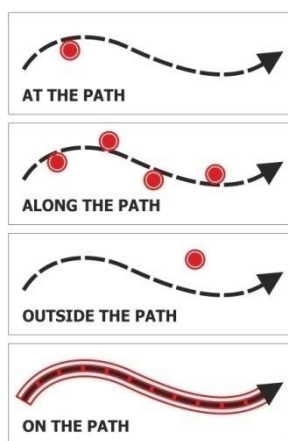- on the path - linear elements of landscape infographics that form the path

Fig. 1 - The typology of elements inforgraphic 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.
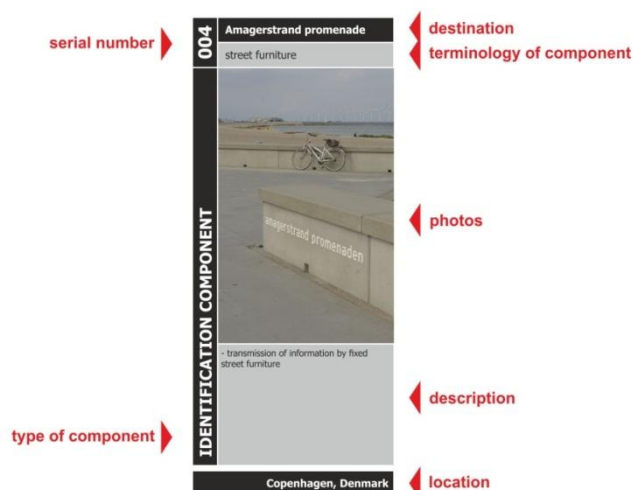
Fig. 2 - The diagram of orientation entities used in the multiple layers of the urban structure (authors, 2014)

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.

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