PARADIGM OF THE URBAN SPACE SEMIOTICS

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Abstract. The urban space unites two parallel dimensions in its substance – the inner human one and the real physical one. While interpreting this thesis, we proceed from the semiotic perspective via an analysis of the source of the town’s semiotics by approaches which allow creation of a global basis of pertinence in the comprehension of the urban space as a context which unites reality and ideas. In that way, searching for their place and function in the system of symbols, that is, determining the elements which make the semiotic structure of the town and influence man’s perception of material environment is the main task of this paper. The analysis has shown that the presence of urban signs leaves its spatial imprint on the authentic identity of the physical structure, but that there are also contemplative elements which found the notion of town. What we are talking about here are the lifestyle, culture, tradition, social relations, politics, ideology, technical praxis, technological achievements, economic trends, social practices. It is precisely the synergy impacts of these elements and geometric appearances of the physical structure that, as we have concluded, make the semiotic structure of the urban space. Man perceives this synergy by means of strength of his own being, while articulations of the functional spaces and signs of the town’s architecture, each of them marked by their inner energy, enable him to reassert himself as a spiritual being.

We are convinced that the approach to the reflections about the urban space semiotics that has been shown in this paper, can make a contribution to the understanding of the general urban experience, as well as a contribution to the general theory of urban design.

Key words: urban space, semiotics, sign, context

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1. INTRODUCTION

We can understand the urban space in a wider context as a group of the individual integrities of physical structures, of built and non-built areas of the town. As such, it is a product of urbanization, that is, society's needs which keep changing permanently and by means of this they influence changes of the urban form so that the aforementioned form can accept development and growth. That means that the urban space is also, except for being determined by the transformations of physical structure through time, determined by cultural, traditional, political, ideological, economic and social parameters of social changes. When unified, these changes make a basic characteristic of the urban space and are perceptively legible in the experience of the town. Or in other words, it is possible to understand the urban space as a physical interpretation of time transformations of the social context that are expressed through a personal identification and closeness of man to his material environment.

In this respect, we can speak about the existence of two parallel dimensions – man and the town. Their existences are mutually conditioned and imbued by overlaps of the inner-human and the real-physical and they boil down to a dialogue between man and his material environment. In order to establish this dialogue, a system of signs is necessary, the signs which result (in a creative act of shaping the urban space) in visible design achievements in the geometric appearances of the physical structure [1].

The understanding of a dialogue between man and his urban material environment therefore proceeds from the semiotic perspective and faces a question of sign arbitrariness. The signs appear in all the aspects of human communication and represent a system by means of which the nature of material phenomena – things or objects – is being transformed into abstract ideas [2] in order to assign a meaning to them (signs). And it is possible to understand ideas or a „set of virtualities“ [3] only within a frame of some context, that is, „ways in which the signs are constructed (framed) by different discursive practices, institutional organizations, systems of values, semiotic mechanisms“ [4].

Since the context as a system of signs was not given per se but is constructed, man's individual reaction to the perceived material environment is (in the same way) not determined by the characteristics of that environment only, but also by a way in which it is perceived. The perception itself is determined by a previous experience, needs of the observer, attitudes, a system of values, culture, motives, disposition, design, so the same urban space is experienced in different ways as well as differently influences man's behaviour. Therefore, the perceived material environment is not always real and dependent on a personality at the same time, because every man experiences physical environment in the way his own being allows him to [5].

Therefore, the urban space is determined by semiotic aspiration within the concrete reality of the town, the latter being thoroughly imbued by overlaps of the physical and the experienced along with an incessant „desire for clarity“ [6] of moves-interventions which are, apart from images and pleasure spots, their reality. Álvaro Siza [6] thus confirms our view that „(...) a dialogue with the environment and with the urban space conquers the view, in the same way that an intimate relation with biographical episodes ensues from notebooks with sketches and survives secretly in the realized works (...)“.

By emphasizing once more the attitude that the town is a phenomenon and a complex of reality and ideas, of determinants each of which belongs to another pertinence field and
for which one needs to find a place and function in the system of symbols, we open the main question of this paper: Which system of signs makes a semiotic structure of the urban space and how does that system influence the human perception of the immediate material environment? We believe that the answer to this question, given through reflections about semiotics of the town, exposed in the continuation, can make a contribution to the understanding of the general urban experience, as well as a contribution to the general theory of the urban design.

2. SEMIOTICS AND URBAN SPACE – THEORETICAL FRAMEWORK

The basic thesis of semiotics – the theory of signs and their use – is antirealistic. It refers to the meanings which are expressed in a language, code or some other form of representation. It contrasts through the two aspects of meaningful expression – the syntax, construction of complex signs from the simple ones and the pragmatics, a practical use of signs for the purpose of interpretation of individual circumstances or contexts [7; 2; 8].

As we emphasized earlier, signs take on meanings within a certain system only, that is, a context in which they appear. The logical construction of that system can be studied in three ways: (1) syntactics, as the relations between signs regardless of their relation to reality, (2) semantics, as the relations between signs and reality, that is, the signs and the signified and (3) pragmatics, as the relations between signs and the user which includes psychological and sociological factors of intentions and reached goals. All three interpretation aspects of the symbol systems make together semiotics or in science – the theory of signs [9; 10].

Charles Morris [9] stresses the fact that all three described dimensions of semiotics are mutually connected and only in that way point at the sign meaning in its entirety. He also says that the meaning was neither added to the semiotic description, nor is it subjective, but that the meaning can be objectively studied by means of semiotics. He argues that the rules for the use of signs in contemporary life were not precisely formulated, but that they have characteristics of a habit or tradition.

Mieke Bal and Norman Bryson [8] also argue that man’s culture consists of signs and is formed by signs, while people who belong to a certain cultural milieu intend to understand their meaning. It is precisely the determination of factors which are included in the process of creation and interpretation of signs, as well as the detection of conceptual tools by which their final meaning is encompassed within a certain cultural and spatial context, that is the essence of semiotic system of reading the values (see Fig. 1).

Thus on the Fig. 1 we see that the picture of the subject is not the subject itself, but its experience, that is, the interpretation in which we first see it and then represent via a language form so that he can become reality. Or further on, the mandala (see Fig. 1b) is an energetic picture which, in the symbolic way, represents a transformation of illusions into the condition of discovering the nature of things, on the basis of which both the objects and human beings come into being. As such, the mandala is expressed via a sign of perfect symmetry in relation to the four cardinal and four secondary points of the compass. Or, it is possible to attain a successful linking of the sign and the content via pictograms (see Fig. 1c), where the sign is a symbol at the same time, i.e. has a conventional meaning and the picture itself is the content, because its meaning is general and understandable. And finally, the entire physical structure of the town can be represented via a symbol (Brasilia – a bird;
see Fig. 1c), as an approach to the design that enables reading an organization quality of the town space, that is, its pattern, while man's interpretations of that meaning can be characterized as the culture of experiencing town, typical of some climate, tradition, history or ideology.

![Image](image1.png)

**Fig. 1**  a) René Magritte: „This is not a pipe”; b) mandala: geometry of the perfect symmetry as a sign of the transformation of illusions into the existence reality; c) pictograms: linking of sign and content to the final meaning; d) Brasilia: entire physical structure of the town symbolizes a bird (Source: author's archive)

The urban cultural and spatial context allows perception of symbolic messages in defining the space and interpretation the meanings of geometrical expressions of the functionality design, while shaping physical structures. Thus, the semiotics can here denote structural theoretical study of meanings and modelling of physical spaces in sign systems of the town's architecture. In relation to this, a physical expression can contain (in the field of a semiotic meaning): (1) a relation of a sign and objects or objects' situations, real or possible ones and (2) a relation of a sign and mental signs which are accepted as concepts [1]. The signs do not possess their own meanings here, but their sum makes interpretations in a valorization of the urban space. That is to say, we understand the urban spatial context as a group of signs of the town's architecture, subject to subjective human interpretations of its meaning. Determination of a final sense of the urban space is conditioned by man's subjectively determined value systems, semiotic mechanisms and different discursive practices.

„Man lives in two worlds – the inner one and the outer one – the inner that is in human heads, idolum or the world of ideas. That is a subjective world which man uses in order to
shape his behaviour“ [11]. In the context of our topic, idolum points at the impression of man's identity which „hovers“ between the constructed and non-constructed (urban) space, creating pragmatical situations to its own experience of existence. Its contours of the existence world sometimes respond to the thing that we consider to be a town ergonomically and hodologically, but it possesses also its own meanings, completely independent of the material environment. „Pseudo-environment or idolum is a foundation for the outer world“ [11], because semiotic meanings of the urban spatial context pass from imagination to reality and become firm facts transposing themselves through a picture, design, plan, sound.

Therefore, we are dealing here with the town and the understanding of the sense of its development and existence because, as Muhamed Hamidović says [12], „that is the space of possibilities of unlimited diversity of actions and essences of living, where a necessary moment of creation is not that important as the continuity of producing needs of human happiness is. It is subjected to the place of universal happenings (...) a power of spirit, culture, economics, art of producing and happiness of survival.“ That is to say, the town is a hub of people, every civilization and some authentic culture.

3. FORMATIVE ELEMENTS OF THE URBAN SPACE SEMIOTICS

Our original argument that the urban spatial context is a system of signs which allows perception of semiotic messages in the artistic articulation and the shaping of town's architecture commands a need to determine elements which make that phenomenon. In these efforts, we shall here firstly refer to by this time a famous study of the urban semiotics of Kevin Lynch [13] which is obligatorily quoted by those who intend to deal with this topic.

In the study The image of the city, Lynch intended to study a visual character of the American town by analyzing the image that citizens have about it. His researches are mainly concentrated on the special visual quality of the physical structure – apparent clarity and legibility of the urban landscape. We mean by this term the ease by which parts of town are recognized and organized into a coherent system. And a step by which Lynch approached himself to the determination of the town-planning sign is naming of elements which structure the human environment. In relation to this, Lynch says that the world can be organized around a group of focal points or can be divided into regions; each of them can have a name assigned to it. Although these systems are different and a number of possible indications that individuals use in order to differentiate their world is inexhaustible, they give interesting explanations about the means we use, in order to determine our place in the urban ambience. For the most part, those examples look like a reflection of formal categories of typical elements of the physical structure, via which we can (like with an instrument) divide the town's picture into edges, roads, quarters, junctions, characteristics.

On the other hand, author Françoise Choay [14] re-examines the way in which town's legibility is organized (about which Lynch speaks) and notices that experience shows that we are not to reflect on this topic in terms of physical structure's elements, but in terms of the urban form. In this respect, she says that one town must be structured on a neutral basis and determined by the dynamism of some number of signifying elements which vary depending on topography, population, its composition and interests, while the richness of the picture is thus reflected in the diversity of signs that make it. Choay further says that we keep forgetting the fact that a constructed ambience in which man moves has a specific
quality to be a signifying one, while the intentions of a town builder must be clear in order to be understandable to the inhabitants. She argues that neither being trained in the plastic art, nor the geometry knowledge can explain the concept of legible design. Only man's experience ensued from residing in a town can do this. Unlike Lynch, who lingers on the immediate and elementary meanings of the urban space, Choay argues that it is necessary to focus on the integration of systems of the immediate and complex meanings of the town.

Reservations that Choay has for Lynch's theory of semiotics of the urban spatial context are in accordance with our attitude about this topic as well. Namely, different elements of the town (in a wider context – constructed and non-constructed spaces, marked and neutral elements, presence and absence of the sign) together make one system. Each of these elements, although without its own autonomy, becomes significant precisely through being connected with others. And that connection is determined by a series of rules which refer, by merging with elements, to all the aspects of life in the town, from culture, tradition, social-political-ideological relations, economic trends, different social practices. Or in other words, physical structure and totality of social behaviour together make the semiotic structure of the urban space. In the continuation, we shall give a survey of our standpoint of the semiotic relation thus established.

3.1. Influence of the creative-culturological context on the urban space semiotics

Culturological paradigm of semiotics is, in terms of notion, an essential element for following a process of designing urban spatial structures, in which theoretical introduction of the notion of the sign depends on a culturological pattern and on elasticity possibilities of some social community in order to carry out a necessary implosion within its own framework. One does not expect a process of including the sign in the town's life on a theoretical or ideal plan only, in the frames of planned phases of a designing process, but also on the practical, historical and aesthetically-perceptively-semiotically determined level, via realizations of designs-concepts and their transposing in the synthesizing real spatial area.

A need arose here to identify semiotic values, often severalfold coded in conditions of the contemporary comprehension of the urban space. Regarding that it is multiple-meaning, the integration of social practices and urban spatial structures thus demands an analysis of different levels of influential factors, from cultural, social, political, economic to those which are purely technical-technological, which all together implement general and schematized criteria that satisfy demands for the spiritual fulfillment of man. A question of codification and identification of the good in relation to the bad, the acceptable in relation to the unacceptable, legible in relation to the illegible are the elements and a question of cultural vitality of the milieu in which the signs arise, that is, depend on the maturity of some society in a culturological sense (see Fig. 2).

The comprehension of the urban spatial context as a symbolical-culturological landscape determined its influence on the observer-user, consumer of space, culturologically conscious, pragmatically and economically committed, who actively participates in the shaping and perception of their semiotic structure. This synergy of man and town make them all consumers of the space [1]!

We conclude that the urban spatial context which gives linguistic metaphors to the society can also feed a new cultural model, realized in its visual-aesthetic quality, as a relation which is possible to be called semiotic-culturological landscape. This landscape
(in the codes of development) possesses a pragmatic relation of man's behaviour towards a realized design of his existential environment and is legible as a way of copying ideas into the real space. Supported by traditional understandings of certain cultural milieus of the existential life of man, to the achieving of total harmony and aspires at establishing the harmony between man and town's criteria.

3.2. Influence of social-political-ideological relations on the urban space semiotics

The urban spatial context not only reflects the attitudes of those who envisaged it and those for whom it was materialized, but actively shapes human behaviour, because it sometimes expresses (with its spatial manifestations) certain political commitments. It is therefore possible to understand social, political and ideological meaning of the urban space as condensed pictures of the current social reality, because it is possible to interpret via architecture the iconic signs of social status and symbols of different ideologies. Such pictures, in the hierarchized compositions of the seducing decor are monumental and representative, they illustrate in man's awareness the principles of state's external, internal and cultural policies (see Fig. 3).

It is visible that the urban context is a place of spatial articulations of ideological, political, social and cultural influences and its meaning unveils itself via a metaphorical connection of semiotic implications of these elements to the town. The interpretation of decisions about the signs' treatment in the urban space cannot be therefore understood independently of social and political institutional guidelines, in the same way as the interpretation of semiotic meanings cannot be separated from those guidelines or historical context.

Socio-political ideological system of influences on the urban space unambiguously influence man's perceptive-semiotic experience of the town. These mutually complementary social perspectives have impact on man to accept elements of physical structure like a semiotically coded interpretation of his own reality. A town-planner's ability to show the influence of institutional macro and micro processes is evident therefore in the experience that is lived through the urban space context by neutral individuals. That means that man's understanding of town's semiotic messages needs to be unified via a perspective design of all the elements:
social, political, cultural and ideological, because they contextualize the elements which shape the urban pattern space structures and indicate that man is a social subject who shapes his own realities and meanings. That is to say, material world of the town is subject to experiencing and the semiotic interpretation of users, so in that way it becomes a cultural representation of social relations [1].

3.3. Influence of economic trends on the urban space semiotics

The time we live in is characterized by global economic trends which "have both destructive and developing impact on the town. Those processes imply a concentration of people, goods, services and favourable chances. However, parallel with the new possibilities which brought centralization and economic growth (...)" [15], consequences which also appear (among other things) – in the form of (in)adequate use of the urban construction space. Because of that and in the contemporary economic milieu, neither is the town deprived of the global economic development's influence. Thus, town-planning and architecture with their disparate appearances and semiotic manifestations in the transformational contexts (with other ones) also illustrate economic trends within some social community.

Contemporary global free market often represents interests of large companies which sometimes do not match aspirations of the common people. Thus designing of the urban space, as a common frame of social, economic and cultural milieu, arises from a private desire to build spectacular ambiences or a desire to make profit. On the other hand, global economic trends are also present in countries which are not sufficiently economically potent to support radical spatial interventions. They mostly boil down to more modest technical-technological undertakings or to bigger ones, but which are carried out successively, again in harmony with the economic means those societies have at their disposal in the current moment. Regarding the semiotic structure of signs of the urban spatial context, the former can create in man extreme (positive or negative) reactions, while the latter can be a qualitative semiological-perceptive adding up of the existing urban ambiences (see Fig. 4).
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It is possible to reassert the establishment of a balance between the economic potency of a society and a design of the urban space, by respecting a style, culture and tradition in the town-planning architectural expression. On the one hand, one can here speak of the style as a global phenomenon, on which global awareness development and economic power of the nations (which have a role of being trend makers) considerably influence. On the other hand, one can speak of the style on the local level, a level of one nation or a political entity. However, an expected confrontation of outside influences of the global and the style (determined by a local economic power, state of awareness and public culture) is possible here. There is a danger in such conflict that the town admits its latent and financial dependence. Therefore, we can conclude that "the factors which contribute to the diversity, selectivity and change must have counterbalance in those which contribute to continuity, regularity stability and universality; so if any of these two groups of factors is missing, both life and growth are being endangered" [16]. That means that, within a short time segment, man, his mind and the ability of perceiving global transformations need to connect experiences of the past with future designs for the sake of continuity and cultural accumulation [1]!

3.4. Social practices and semiotics of the urban space

The semiotic substance of the urban context, as we have seen, is a result of specific characteristics of the concrete spaces, on whose physical structure the consequences of cultural, social, political and (global) economic trends reflect. If we add also to these attributes an another one – that the urban space is a place of an „aura“ that is assigned to it by man either subjectively or objectively, we shall understand that the experience of the physical structure of the town can be interpreted in harmony with human activities as well [17]. Therefore, if we accept as a sign for a guideline of the semiotic structure of the urban context also different social practices, we shall see that we encounter a space which lives in reality and a world of imagination at the same time. As such, it actually constantly produces and re-establishes itself.

We want to say that social groups with their different social practices use physical space and in that way, they assign a meaning to it. Here we have in mind public events, limited segments
of social life (limited both in terms of time and space), which have a certain topic and a certain purpose and which are strongly connected to the spatial context in which they are being realized [18]. Those can be group demonstrations, large or small performances, collective celebrations of important events, festivals, fairs, field-days, that is, all those events which initiate some new semiotic meanings of the concrete urban space. Thus, the physical structure offers a contextual frame for a plenty of narrations and practices, by means of which different interpretations of events are formed, but at the same time, the very context itself within which they proceed. That is to say, by encompassing a rich array of social practices, the urban space encourages heterogeneity in man's perception of its semiotic meanings (see Fig. 5).

Fig. 5 BBI Center (Sarajevo, B&H) – Different perceptive-semiological meanings of the same spatial context (Sources: www.percon.ba; www.scsport.ba; www.klix.ba [17th March 2016])

On the other hand, a semiotic interpretation of the urban space establishes itself also on the basis of relations between the private and the public. Here we speak of bigger and bigger, real or symbolic privatization of the public space, supported by different surveillance mechanisms which ultimately leads to the marginalization of some social groups and the stratification of town's space [19]. Those surveillance mechanisms appear in different forms: from distributed benches on which it is impossible to fall asleep, water sprayers which keep away unwanted guests, fenced public spaces and those locked ones (under police or video surveillance), to the use of precious materials when they are being shaped (see Fig. 6). These signs of a new social order and treatment of parts of the town's space clearly differentiate users and divide them into the privileged ones and the marginalized ones, that is, into the rich and the poor, natives and immigrants, the comfortably off ones and homeless ones, the healthy and the sick, into those whom the access is allowed to and those whom the access is not allowed to. Once again, it becomes visible that the semiotic meaning of the urban space is not constructed by the physical structure only, but is determined by different social practices. The public space which is inaccessible to certain people cannot even be called the

Fig. 6 Signs of social and spatial fragmentation (Source: author's archive)
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Because, the dimensions of closeness and isolation produce psychological barriers, discontinuity in the social regulation of behaviour within the public domain of the town and endanger self-determination of man as his basic category. The quality of being connected to the public space is personalized and implies perceptive seizing of a certain town territory, its freedom and unlimited use of unhindered social interaction [19].

4. Conclusion

While searching for the answer to the main question asked in this paper and that is: *The system of which signs makes the semiotic structure of the urban space and how does this system influence man's perception of the immediate material environment?*, we have analyzed the sources of the town's semiotics, making use of approximations, a group of (suggestive) approaches which allow one kind of global basic pertinence while comprehending the urban space as a system of reality and ideas. We have seen that in this context, we can speak of useful appearances of the physical structure in the way the town's space is organized, to which the presence of the urban signs leaves a spatial imprint on the authentic identity.

But the town is not only a group of derived geometrical statements of the physical structure, but there are also contemplative elements which found it. We are speaking of an invisible veil which covers town's structures, we are speaking of the way or life style in it, while perceptive-semiotic representation of the urban space is founded by technical praxis, technological cognitions and their economically enabled application, general ideological maturity in ripening of one civil society and its achieved cultural values. Synergy impacts of these elements, expressed in the complements of man's universal needs and in the ideas of a new level of socio-economic, cultural and social development, as we have concluded – they make a semiotic structure of the urban space.

The aforementioned implies that a series of different phenomena or processes gathered around the common phenomenon lend sense to the collective identity. In the context of this discussion, the common phenomenon, aside from the signs of town's architecture implicitly includes also a culturological, social, economic milieu and a way of expression, because the town is not only an entity of certain given conditions of the space, but it includes also another ones which will complete it. Here we can speak of the „association of ideas“ which constitutes experience and „can reconstitute outer connections only“ [20], because the original experience is inseparable from the identity of each individual town. Thus we can observe the urban signs as determinants of the town's identity, each of them (towns) being specific in its vocabulary of social life, authority, culture, knowledge and taste.

We have concluded that man, by means of his own being's strength, designer's intuition and the power of perception, gathers, sorts and filters facts of everyday world and projects one new kind of reality back into the outside world. That means that a projection of architecture's signs in the world of imagination offers freedom in a creative approach to the design of the urban space context for the purpose of achieving maximally functionally-semiotically acceptable articulation forms of human ambiences. We thus understand the semiotic structure of the urban space as a way of thinking, in which we follow our desires through a logically consistent series of pictures which are getting filled with colour and fade away, make us excited or leave us indifferent. We are free to conclude that the semiotics of the urban space encourages transformations of the material environment and mental structure of beings which live in that environment, creating thus synergies worthy of being considered vital for man's being.
We are convinced that the approach to the reflection on the urban space semiotics as shown in this paper, can make its contribution to the understanding of the general urban experience, as well as a contribution to the general theory of urban design.

REFERENCES


PARADIGMA SEMIOTIKE URBANOG PROSTORA

U svojoj supstanci, urbani prostor objedinjava dve paralelne dimenzije, unutarnju-ljudsku i stvarnu-fizičku. U tumačenju ove teze, pokazali smo da semiotička perspektiva, analizom izvora semiotike grada, pristupima koji dozvoljavaju kreiranje globalne osnove pertinencije u poimanju urbanog prostora kao konteksta koji ujedinjuje stvarnost i ideje. Tako je traganje za njihovim mjestom i funkcijom u sistemu simbola, odnosno, očuvanje elementa koji tvore semiotičku strukturu grada i utiču na čovjekovu percepciju materijalne okoline, glavni zadatak ovog rada.

Analiza pokazala je da prisustvo urbanih znakova daje prostorni pečat autentičnom identitetu fizičkog prostora, a ne samo da postoje kontemplativni elementi koji utemeljuju poimanje grada. Tako je, pristupom do stvarnosti materijalnih elementa, tvore se semiotička struktura grada, a u njoj se očituju i omogućavaju elementi kojima se odnose s semiotičkim osnovama, uz utjecaj fizičkih, socijalnih i kulturnih faktora.

Ključne reči: urbani prostor, semiotika, znak, kontekst