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LOOKING FOR MEANING IN ARCHITECTURE: GETTING CLOSER TO LANDSCAPE SEMANTICS

*Architecture derives its meaning
from the circumstances of its creation;
and this implies that what is external to architecture –
what can broadly be called its set of functions –
is of vital importance.*

Alan Colquhoun, "Postmodernism and structuralism"

Ferdinand de Saussure, the acknowledged father of structural linguistics, laid solid foundations for the study of language. By approaching language scientifically as a formal sign system, he introduced the dimension of structure (syntax) and the dimension of meaning (semantics), binding signs and their components together by rigid structural connections and proving semantic relations between signs and the objects they denote.¹ His huge contributions to the field have been summarized as follows: "Language is no longer regarded as peripheral to our grasp of the world we live in, but as central to it. Words are not mere vocal labels or communicational adjuncts superimposed on an already given order of things. They are collective products of social interaction, essential instruments through which human beings constitute and articulate their world."² Ferdinand de Saussure is also regarded as one of the founding fathers of structuralism and semiotics, the science which is based on the concept of the *sign/signifier/signified/referent*. Moreover, his ideas are still crucial shaping not only the contemporary linguistic thought but also influencing many other fields such as psychology,

¹ Ferdinand de Saussure's ideas were collected in the famous book *Cours de linguistique générale* published posthumously in 1916 by Saussure's former students Charles Bally and Albert Sechhay on the basis of the notes taken during lectures in Geneva.

² R. Harris, *Language, Saussure and Wittgenstein*, Routledge, California, 1988, p. ix.

sociology, or anthropology. Since 1960s the semiotic theory has been applied successfully in the field of architecture, especially in North and South America, France, and Italy.³

Indeed, the 1960s indicated a turning point in the field of architecture challenging architects to re-define the notion of function and opening a new paradigm in the perception of meaning in architecture and landscape. Structuralism with its primary assumption that “phenomena of human life are not intelligible except through their interrelations” and a deep conviction that “relations constitute a structure, and behind local variations in the surface phenomena there are constant laws of abstract culture” provided a new framework in search for meaning.⁴ Indeed, the application of structuralism in the study of architecture seems to be perfectly justified for it has always been created at the crossroads of different disciplines of arts. Being a complex product of history, culture, and traditions, the analysis of architecture relies on a multi-layered and comprehensive approach to grasp the meaning it conveys. Structuralism emphasizing that “there are no independent meanings” but rather “many meanings produced by their difference from other elements in the system” refers to semiotics to a great extent.⁵ As Philip Rayner observes: “semiotics and structuralism are so closely related that they are said to overlap – semiotics being a field of study in itself, whereas structuralism is a method of analysis often used in semiotics.”⁶ Consequently, when in the 1960s architects resorted to semiotics – “a study of everything that can be used for communication: words, images, traffic signs, flowers, music, medical symptoms, and much more”⁷ – it was with a view to getting to the “sphere of meaning of architecture” through the exploration of its “semantic layer”⁸.

In his famous essay *Function and Sign: Semiotics of Architecture* Umberto Eco, an Italian semiotician, proves that architecture is a “particular challenge to semiotics” arguing that if “semiotics, beyond being the science

³ See K. Nezbit (ed.), *Theorizing a new agenda for architecture: an anthropology of architectural theory 1965–1995*, Princeton Architectural Press, New York, 1996, pp. 32–33.

⁴ S. Blackburn, *Oxford Dictionary of Philosophy*, 2nd edition revised, Oxford: Oxford University Press, 2008, <http://www.pdfbook.co.ke/details>.

⁵ E. Seiter, “Semiotics, Structuralism and Television”, in R. C. Allen (ed.), *Channels of Discourse: Television and Contemporary Criticism*, University of California; USA, 1992, p. 22. <http://books.google.pl/books> assessed 30.10.2012.

⁶ P. Rayner et al, *Media Studies – The Essential Resources*, Routledge, New York, 2004, <http://books.google.pl/books> assessed 30.10.2012.

⁷ E. Seiter, op. cit., p. 22.

⁸ J. Krenz, *Ideograms of Architecture between Sign and Meaning*, Bernardinum, Pelpin, 2010, p. 17.

of recognised systems of signs, is really to be a science studying all cultural phenomena as if they were all systems of signs – on the hypothesis that all cultural phenomena are, in reality, systems of signs, or that culture can be understood as communication – then one of the fields in which it will undoubtedly find itself a challenge is that of architecture.”⁹ According to Eco, the link between architecture and semiotics is obvious because “most architectural objects do not communicate, but function.”¹⁰ Consequently, since one of the basic questions for semiotics to face is whether “it is possible to interpret functions as having to do something with communication”, the perception of architecture relies profoundly on the semiotic point of view for only through semiotics it is possible “to describe other types of functionality, which are as essential but which a straight functionalist interpretation keeps one from perceiving.”¹¹

Emphasizing the role of function in architecture, Eco distinguishes between *primary functions* (which are denoted) and *secondary functions* (which are connotative).¹² To illustrate the logical connection between function and codes in architecture, the author employs the term “architectural codes and subcodes” which are further explained as follows: “architectural signs as denotive or connotative according to codes, the codes and subcodes as making different readings possible in the course of history, the architect’s operation as possibly a matter of ‘facing’ the likelihood of his work being subject to a variety of readings, to the vicissitudes of communication, by designing for variable primary functions and open secondary functions (open in the sense that they may be determined by unforeseeable future codes) – everything that has been said so far might suggest that there is little question about what is meant by code.”¹³

Therefore, functions rely on the codes which are organized according to their types. Eco distinguishes between different types of codes in architecture: 1) *technical codes* (dealing strictly with the art of engineering); 2) *syntactic codes* (typological codes concerning articulation into spatial types); and 3) *semantic codes* (relations established between individual architectural sign vehicles and their denotative and connotative meanings).¹⁴ These

⁹ U. Eco, “Function and Sign: the Semiotics of architecture”, in N. Linch (ed.), *Rethinking Architecture a reader in Cultural theory*, Routledge, London, 1997, p. 182. available online: <http://books.google.pl/books> and <http://kotarox.com/547/Eco.pdf>.

¹⁰ *Ibid.*, p. 182.

¹¹ *Ibid.*, p. 190–195.

¹² *Ibid.*, pp. 190–195.

¹³ *Ibid.*

¹⁴ *Ibid.*

codes make a *communicative system* which conveys meaning (or rather meanings) after being subjected to a *variety of readings*. The author deliberately employs the plural form (*readings*) for it indicates both a multi-levelness and complexity of the system made by codes and their meaning the addresses are to discover.

Although this might suggest an open character of the architectural discourse and its capability to generate different interpretations, Eco concludes that the codes “would amount to little more than lexicons on the model of those of iconographic, stylistic and other specialized systems, or limited repertoires of set constructions.¹⁵” Hence, the role they have is strictly defined: “they establish not generative possibilities but ready-made solutions, not open forms for extemporaneous ‘speech’ but fossilized forms – at best, ‘figures of speech or schemes providing for formulaic presentation of the unexpected (as a complement of the system of established, identified and never really disturbed expectations), rather than relationships from which communication varying in information content as determined by the ‘speaker’ could be improvised.”¹⁶ This leads Eco towards the assumption that “the code of architecture would then constitute a rhetoric in the narrow sense” whose interpretation reveals the hidden semantic potential.¹⁷

Eco’s conviction as to the importance of semiotics in interpreting the meaning in architecture has largely been shared by a group of leading architects representing the Cracow University of Technology. Professor Krystyna Dąbrowska-Budzilo elaborates on Eco’s concept of architecture seen as a sum of codes stating that the primary task of the architect is not only to read and decode the structure of the environment (that is, to analyse the architectural discourse), but also to encode the landscape with the help of semiotics (to create the architectural discourse). She maintains that the meaning of spacial systems and buildings becomes visible especially while referring to certain historical periods.¹⁸ Highlighting a complex character of architecture, Dąbrowska-Budzilo claims that meaning (symbols) in architecture developed as a result of religious, philosophical, literary or cultural trends which shaped the ideas beyond the formation of landscape and led towards the appearance of objects with certain features: totally different cultures are rooted in certain archetypes comprised by common elements

¹⁵ Ibid.

¹⁶ Ibid. p. 195.

¹⁷ Ibid.

¹⁸ K. Dąbrowska-Budzilo, “Zapis krajobrazu i sposób jego oceny” in B. Szulczewska & M. Szumański (eds.), *Horyzonty architektury krajobrazu. Język architektury krajobrazu*, Wieś Jutra, Warszawa 2010, pp. 39–50.

(signs) revealed by the architectural objects, e.g. gates being a boundary, patio being a central point, or a road being an axis. These forms refer to landscape of a multiple scale: the city, sacred place, apartment, house, etc. Especially elaborate are signs connected with the place of worshipping the dead which are ubiquitous in all cultures. Similarly, the symbol of power is profoundly exhibited in architecture revealed by a certain type of construction reflecting the economic and social status of the place.¹⁹

Professor Dąbrowska-Budziło states that the application of the methods from the field of semiotics in the perceptions of landscape allows for a comprehensive and complex recording of its features. Referring to the language of signs, one can notice that it serves to establish the codes of landscape perception and landscape encoding.²⁰ However, the author highlights that these codes are not universal being directed to addressees of different professions, interests, likes or even psychological profiles.²¹ What is more, signs that are used in landscape architecture to record the information regarding a given area could be misunderstood by a recipient who has no architectural background. To avoid this misinterpretation pictograms²² are used. Being universal, that is legible and easy to acquire, they perfectly express landscape features, forms and content.

To arrive at universal pictograms, it is necessary to generalize the landscape features, which is realized through simplification and identification, the principle conditions for making logical associations. By using this method, through a variable combination of pictograms referring to different features a synthetic way of landscape recording becomes possible. Putting theory in practice, Dąbrowska-Budziło suggests the method of landscape recordings and their analysis to help the addressee easily decode the environment by making associations. The author introduces the landscape model which is a kind of landscape image composed of the physiognomic features of landscape. Such a model is defined by the determination of form – signs, presented by pictograms, connected with natural and cultural topography, as well as the type of the building, the character of composition, etc.²³

Hence, pictograms record the form of landscape on the basis of their

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Jacek Kranz in his book *Ideograms of Architecture between Sign and meaning* (2010) elaborates the idea of ideograms seen as the medium on the way towards revealing the meaning in architecture.

²³ K. Dąbrowska-Budziło, *Treść krajobrazu kulturowego w jego kształtowaniu i ochronie*, Politechnika Krakowska, Kraków, 2002, p. 116.

ability to transmit the form and present the landscape features making the recorded information legible and easily absorbed. Thus, each of the signs making a pictogram can be compared to a language sentence making a symbol. Each sign corresponds to certain landscape features and, when combined with other signs, it makes a complete landscape picture – a syntymatic chain. In this way various types of landscape can be presented as a special combination of symbols, reflecting a legible image of the given area. However, they do not make a sum of the individual content elements but their synergistic effect.²⁴ A different selection of features is presented in a different combination of pictograms resulting in different types of landscape or, in other words, landscape models.²⁵



Figure. 1. An example recording of the city structure. A detailed plan of the building quarters is presented through pictograms to symbolize the type of urban layout²⁶

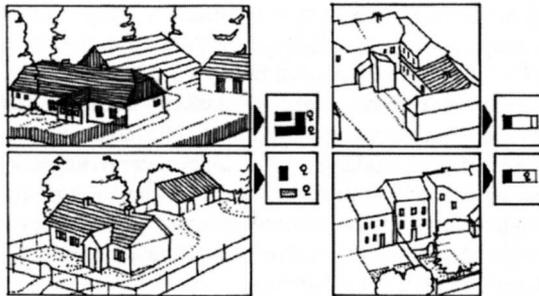


Figure. 2. An example recording of the types of building. Perspective views and pictograms symbolize the type of building and surrounding countryside²⁷

²⁴ Ibid.

²⁵ Ibid., p. 41.

²⁶ K. Dąbrowska-Budziło, *Treść krajobrazu kulturowego w jego kształtowaniu i ochronie*, Politechnika Krakowska, op. cit., p. 116.

²⁷ K. Dąbrowska-Budziło, op. cit., p. 116.

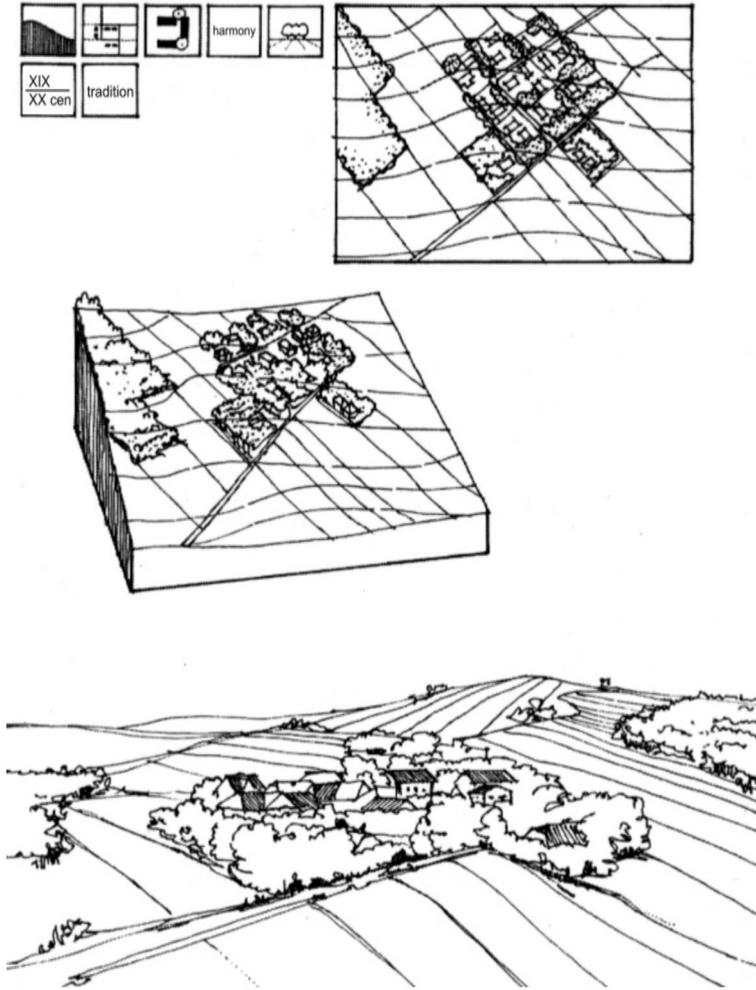


Figure. 3. An example of a graphical recording of the landscape features with the use of codes (pictograms) reflecting the characteristics of the individual landscape components²⁸

A multi-layered character of urbanism was highlighted by Kevin Lynch, another famous urban planner, whose revolutionary *Image of the City* (1960) brought a new dimension in the perception of the city. In the book, which was a result of a five-year study on how urban users perceive and organize information as they navigate through cities, Lynch describes how city users orient themselves in the environment. Using three American cities as

²⁸ K. Dąbrowska-Budzilo, op. cit., p. 371.

examples (Boston, Jersey City and Los Angeles), Lynch reports that users understand their surroundings in consistent and predictable ways, forming mental maps with five distinctive elements: *paths* (the streets, sidewalks, trails, and other channels in which people travel); *edges* (perceived boundaries such as walls, buildings, and shorelines); *districts* (relatively large sections of the city distinguished by some identity or character); *nodes* (focal points, intersections or loci); *landmarks* (readily identifiable objects which serve as external reference points).²⁹ He defined these as follows:

PATHS (familiar routes followed) – *are the channels along which the observer customarily, occasionally, or potentially moves.*

E.g. – streets, walkways, transit lines, canals, railroads

EDGES (dividing lines between districts) – *are the linear elements not used or considered as paths by the observer. They are boundaries between two phases, linear breaks in continuity.*

E.g. – shores, railroad cuts, edges of development, walls

DISTRICTS (areas with perceived internal homogeneity) – *are medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer mentally enters ‘inside of,’ and which are recognizable as having some common identifying character.*

E.g. – center, midtown, its in-town residential areas, organized industrial areas, trainyards, suburbs, college campuses etc.

LANDMARKS (point of reference) – *are another type of point-reference, but in this case the observer does not enter within them, they are external. They are usually a rather simply defined physical object which makes one orient oneself.*

E.g. – building, sign, store, or mountain

NODES (Center of attraction that you can enter) – *are points, the strategic spots in a city into which an observer can enter. The nodes may be simply concentrations, which gain their importance from being the condensation of some use or physical character, as a street-corner hangout or an enclosed square.*

E.g. – primary junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another.³⁰

²⁹ K. Lynch, *The Image of the City*, The MIT Press, Massachusetts, 1960, pp. 36–90. pdfbook http://interactive.usc.edu/blog-old/wp-content/uploads/2010/08/Image_of_the_City.pdf assessed 30.10.2012.

³⁰ Ibid.

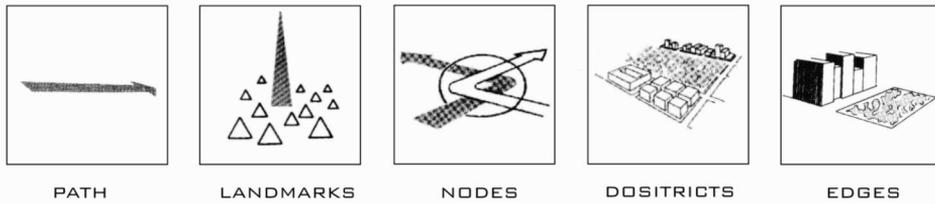


Figure 4. Pictograms indicating individual elements of the city space³¹

Lynch's investigation into the principles of navigating in the city led him to believe that citizens (consciously and subconsciously) search for a clear structure, that is the necessity of a memorable and logical visual order in man's surroundings. *Imageability* and *legibility of form* become important attributes sought not only by urban designers and architects concerned with the issue of meaningful communication but also by citizens, the users of the city. Thus meaning of the city is located in the distinctiveness of paths, edge, district, landmark and nodes.³² Urban designers as well as city dwellers are to discover the meaning of the environment they create and they are part of. What is more, the communication of meaning consciously or unconsciously relates to one's history; meaning creates a link with history, which gives "intelligibility to buildings and cities within a culture".³³ Lynch underlines a complex character of the city where each element corresponds to another one making a total. He also highlights the deep meaning each city conveys with its past memories and experiences: "Looking at cities can give a special pleasure, however the commonplace the sight may be. Like a piece of architecture, the city is a construction is space, but of a vast scale, ... perceived only in the long spans of time... At every instance, there is more that the eye can see, more that the ear can hear, a setting of view to be explored. Nothing is experienced by itself, but always in relation to its surroundings, the sequences of the events leading up to it, the memory of its past experiences..."³⁴

In his search for meaning in the city Lynch, however, does not make clear references to language and semiotics. According to him, meaning is created by the users and results from the complex outcome of history, culture, traditions and surroundings. For him, the city communicates the meaning without speaking the language for language is becomes either insufficient or unnecessary. The city is fully capable of serving representation and making

³¹ K. Lynch, op. cit., pp. 46–90.

³² Ibid.

³³ K. Nezbitt, op. cit., p. 44.

³⁴ K. Lynch, op. cit., pp. 40–90.

communication through other means. Language with its boundaries is just a step towards a clear perception of the city: “Indeed, language, whether as speech or as writing, may now often be seen as ancillary to other semi-otic modes: to the visual for instance. Language may now be ‘extravisual’.”³⁵ Nonetheless, the location of meaning remains a core element of Lynch’s vision of the city.

The role of semiology in the perception of the city was highlighted in the post-modern period through such works as Roland Barthes’s *Semiology and Urbanism* (1967) who suggests reading the city as a text. Barthes, a devoted semiotician, lists complex requirements for a contemporary architect to “sketch a semiotics of the city”: the architect “must be at once a semi-ologist (a specialist in signs), a geographer, an historian, an urbanist, an architect, and probably a psychoanalyst.”³⁶ This wide range of disciplinary qualities places the city as an object of a multidisciplinary study. In his article Barthes seeks to apply semiology to urban landscapes and even find the possibility of “urban semiology.” He introduces the term “urban semiology” to remind the reader of historical relativism in the conception of signifying space. He argues that we need “to understand the play of signs, understand that any city is a structure, but that we must never try and we must never want to fill in this structure.”³⁷ Barthes discusses Tokyo as an exceptional example of urban semiology. Finally, the author suggests the application of a linguistic model of meaning derived from structured relationships between objects in the city: “a city is a fabric... of strong elements and neutral (nonmarked) elements, ... (we know that the opposition of the sign and the absence of sign, between full degree and zero degree, is one of the major processes in the elaboration of meaning).”³⁸ Once again, semiology meets landscape and urban architecture allowing us to get closer to its complex semantics and Barthes remains confident that these systems are strongly interwoven.

Driven by the necessity of a multidisciplinary and complex encounter, the post-modern period was rich in the attempts to rediscover the potential of architecture through semiology. Contemporary architecture in its search for meaning refers to the laws of language, looking for the analogies between the structure of language and the structures of landscape. Hence,

³⁵ G. Kress and T. van Leeuwen, *Multimodal Discourse: The Modes and Media of Contemporary Communication*. Arnold, Ronald, 2001, p. 46.

³⁶ R. Barthes, “Semiology and Urbanism” in *Structures Implicit and Explicit*, VIA 2, 1973, p. 155.

³⁷ Ibid.

³⁸ Ibid.

landscape can be recorded and read out through signs which, being collective products of historical, social and cultural interaction, communicate how human beings constitute and articulate their world. The essence of architectural forms derives from its multi-layered character in which a semantic layer remains one of the most essential levels and the meaning in architecture can only be reached through the multiple modes of communication as well as through language. As Kate Nezbitt has put it, “semiology [...] offers architects a glimpse of the full semantic potential of architecture.”³⁹ Consequently, semiotic decoding of architectural forms fulfils many roles. Umberto Eco proves that it facilitates the reading and interpretation of the hidden meaning. Krystyna Dąbrowska-Budziło underlines the role of pictograms to make the landscape models legible and universal, whereas David Lynch shows that meaning in landscape enhances our movement within a space and enables citizens to make use of its numerous functions in a more comprehensive manner. Thus, a semantic analysis becomes an essential element in the communication process between landscape architects and the addresses they are designing for. For, as Michael Foucault has rightly grasped it, “the essence of knowledge is not to see, but to interpret.”⁴⁰

S U M M A R Y

The post-modern period with its negation of absolute truths and a necessity to search for the very essence of existence introduced numerous attempts to get to the “sphere of meaning” through the exploration of the “semantic layer” in the field of architecture. Indeed, semiotics, a study of signs, seemed to offer ready-made tools in that bold pursuit to “read” architecture and get to the meaning it conveys. This paper presents how semiology has been used in architecture to record and encode landscape forms and content. Landscape can be recorded and read out through signs which, being collective products of historical, social and cultural interaction, communicate how human beings constitute and articulate their world. Semiotic decoding of architectural forms fulfils many roles: firstly, it facilitates the reading and interpretation of the meaning hidden in landscape; secondly, through the use of pictograms landscape models become legible and universal, and lastly, the application of semiology in architecture enhances our movement within a space and enables citizens to make use of its facilities.

³⁹ K. Nezbitt, op. cit., p. 164.

⁴⁰ M. Foucault in M. Dvorak, *Ernest Buckler: Rediscovery and Reassessment*, Wilfrid Laurier University Press, Canada, 2001, p. 9. <http://books.google.pl/books>.

