

FROM SEMANTICS TO SEMIOTICS. COMMUNICATION OF ARCHITECTURE

Anna P. Gawlikowska

Post-doctoral Assistant, Laboratory for Energy Conversion, Department of Mechanical Engineering, Swiss Federal Institute of Technology (ETH), Sonneggstr. 3, 8092, Zurich
E-mail: gawlikowska@lec.mavt.ethz.ch

Motto:

The building is a narrative, and the narrative of the story consists of experiences, events and transformations until its destruction.

T. Markus 1993

Abstract

Communication of architecture is a multi-dimensional phenomenon, with elements of message decoded only by a limited group of experts, and the general message understood by the vast audience. These two categories are compared within the paper to semantic and semiotic message systems, derived from dialectic interpretation of meaning, as a function of understanding and consciousness. Further investigation of verbal and non-verbal communication leads to recognition of similarities with architectural discipline. Ability of meaning transmission through space is then analysed in context of limitations of human perception and understanding. Formal discursive communicative methods of architecture are described as semantic, whereas non-formal communication are described as semiotic, along with phenomena of grammar and genius loci. This leads to description of both ability and limitations of spatial communication.

Streszczenie

Przekaz architektoniczny jest zjawiskiem wielowymiarowym, z pewnymi elementami przekazu czytelnymi wyłącznie dla ograniczonej grupy specjalistów i ogólnym przekazem rozumianym przez ogół odbiorców. Te dwie kategorie odniesiono w artykule do semantycznego oraz semiotycznego systemu przekazu. Formalne, dyskursywne metody komunikatywne architektury są opisane jako semantyczne, podczas gdy metody nieformalne opisywane są jako semiotyczne, wraz z aspektami gramatyki i genius loci. Te dwie metody komunikacji rozumiane są jako funkcje rozumienia oraz świadomości, wywodzące się z dialektycznej interpretacji znaczenia. Dalsze badanie komunikacji werbalnej i niewerbalnej przeprowadzone w artykule prowadzi do odkrycia podobieństw z architekturą. Zdolność do rozumienia przekazu za pomocą przestrzeni jest następnie analizowana w kontekście ograniczeń ludzkiej percepcji i rozumienia. Analiza ta prowadzi do opisu zarówno potencjału jak i ograniczeń przekazu przestrzennego.

Keywords: semiotics, semantics, meaning, verbal communication, non-verbal communication, symbols, perception of space

Słowa kluczowe: semiotyka, semantyka, znaczenie, komunikacja werbalna, komunikacja niewerbalna, symbole, percepcja przestrzeni

INTRODUCTION – SYMBOLS & COMMUNICATION

„Communication is dynamic, constantly changing and shifting in response to the total situation” (Anderson 1959). In this open definition, architecture is society's response to changing circumstances – of cli-

mate, economical situation, outer and inner relations, current belief and knowledge system. As such, architecture is a form of communication. Architecture can be understood as a language (Forty 2000) or grammar

(Eco 1986, Marcus & Cameron 2002), that use symbolic communicates to construct built reality of its users and observers. This characteristic locates architecture and constructed space as an area of communication, which is „symbolic process whereby reality is produced, maintained, repaired and transformed“ (Carey 1988). Since architecture helps to construct social reality, it is located in the media domain, that selectively reproduces meanings, and is not objective but interpretative (McQuail 1983). In order to understand relations between communication and architecture, the social semantic and semiotic models of communication shall be adapted to the context of architecture and urban design.

Symbol and sign are means of communication, transmitting information through concept representations by a more essential and expressive means. Their function depends on the system of symbols they are embedded in. They can be understood as intended by the senders discursive embodiments of message, or in broad non-discursive sense as elements of human thinking process and conscious reality. In many cases, the symbol has no literal meaning, but refers to a system of meanings.

In the broader definition of the symbol, images are the symbols „by which things we understand, remember, consider“ (Langer 1942). Symbol is an effect of symbolic transformations, created through abstract synthesis, ordering the chaos of experience. *The need of symbolization* is one of the basic human needs, and creation of symbols is a primary and basic human activities (Langer 1942).

Communicative function of the symbol is possible if both parties share a common system of symbols. This system contains a set of formal categories, that allow grouping of messages into classes, clarification of inter-relationships, and rules allowing construction of complex messages. Each medium, also architecture, has its own, specialized codes. In interpretations of the meaning there are two trends:

MEANING AS A FUNCTION OF LANGUAGE, ONLY WITHIN THE DISCOURSE CATEGORY

Symbols understood as consisting of two linked elements - signifier and the signified. In this interpretation the signifier holds an arbitrary, rather than natural, relationship to what is symbolized, and a symbol has no inherent meaning (De Saussure 1916). In this sense „communication occurs in those situations in which a source transmits a message to a receiver with conscious intent to affect the latter's behaviour“ (Miller 1966).

MEANING AS A FUNCTION OF CONSCIOUSNESS – PERCEPTION AND EMOTIONS

„Non-discursive symbolism is based on an assumption, that there is an area outside the thought, including other types of meaning, and that the art is symbolic by nature and its meaning can be analyzed“ (Langer 1976). In this broad sense, all human behaviour has meaning: „it is not possible not to communicate“ (Watzlawick et al. 1967). Forms perceived by the senses, are particularly suitable for expression of ideas, which cannot be expressed using the spoken language. The concepts of space, produced on the basis of information provided by the senses of perception and touch, cannot be understood completely in a discursive manner.

There is no limit to the development of symbolic meanings, since the metaphor allows expression of new abstract forms. The symbols that embody the basic ideas of life and death, man and the world, can be sacred to the community, because many of its members do not distinguish between allegory and the subject. Joy is often being focused on these symbolic artefacts, because they communicate an idea and a value. An example of positive treatment is the reaction of tourists in vicinity of symbolic object like the Statue of Liberty.

1. VERBAL AND NON-VERBAL COMMUNICATION

Qualification of architecture as communication is possible, depending on the definition of communication. Saussure's definition for example, which assigns every sign to a determinate signified (De Saussure 1916), would be too formal for majority of meanings embodied by space (Baudrillard 1972, Barthes 1967).

Some scholars of architecture (Tschumi 1975, Eisenman 1971) have noticed a division between space known intellectually and perceived through senses. This division follows the pattern, which can be translated into verbal and non-verbal category. In architecture, this division can be translated into two groups, following previous meaning categorisation: (1) formal & discursive and (2) non-formal & non-discursive.

(1) Formal & Discursive: meanings of architecture, as a function of language, are understandable by a narrow group of experts, familiar with architectonic discourse, as well as meanings understandable by a larger cultural group on the basis of their previous education. Scholars recognize grammar of formal visual language and are able to read the whole conception of the design, whereas the large public is accustomed to various styles and patterns of architecture and their rules. Therefore, larger public can occasionally be able to predict the forms and recognize rules of space (Lawson 2001).



Fig. 1. Spatial symbol of political power – spread construction of Palace of Parliament (originally People's House), 1984-1997, Bucharest, Romania



Fig. 2. Communication of openness through architecture: transparency of the law courts architecture communicates openness. Design: Sir R. Rogers, Bordeaux

(2) Non-formal & non-discursive: meanings understandable by larger audience on the basis of their sensory experience within spatial realm, their emotions and on natural perception patterns (Fergusson 1849, Hegel 1835). Many experiences are not analytical and can be rather described as a part of unconscious process, for example perception of verticality or horizontality.

Wittgenstein has compared architecture to gesture, which has a meaning in cases it has been created purposefully. According to him, lack of building expressiveness qualifies it as craft, not as an art (Lawson 2001, Wittgenstein 1942). The gesture though does not have to be intentional, enlarging the area which should

be qualified by architecture – described by non-verbal communication phenomenon, which is particularly interesting, once not intended.

Non-verbal communication can be understood as the wordless communication. Speech may also contain non-verbal elements (e.g. voice quality, emotion, style, rhythm, intonation and stress). Written texts also have nonverbal elements (e.g. handwriting style, words arrangement) (Ashalatha, undated). All communication is largely non-verbal, and depending on which study there are different assessments of the role of non-verbal communication. According to studies by A. Mehrabian for example, body language accounts for 55% of a first impression; 38% comes from tone of voice; 7% comes from actual words (Mehrabian & Ferris 1967, Mehrabian & Wiener 1967). In the opinion of other scholars even 75% of communication is described/seen as non-verbal (Trompenaars and Hampden-Turner 1997).

In this context, communication of architecture to large audiences, which do not follow the formal discourse, falls largely into a non-verbal category, allowing architecture to maintain a lot of communication capacity. Since non-verbal cues are important when communicating feelings and attitudes, these are the two most important areas, which architecture can utilize for communication, not basing on formal education.

Similarly as the body language, spatial arrangement comes in clusters - understanding the whole cluster is more reliable than decoding individual elements. Further similarities between the two disciplines include:

- Message cultural dependency;
- Meaning ambiguity (individual gestures/built elements can indicate more than one thing);
- Impact on behaviour (attitude can follow body position, social behaviour pattern can follow the building communication characteristics);
- Influence on the judgment of message receiver.

Not only the rules of non-verbal and spatial communication overlap, also the way in which architecture communicates is often similar to a certain extend the human non-verbal communication. For example, body position, which is characterized by taking space (e.g. spread limbs, straight head and back, large personal distance), communicates dominance and control. Similarly architectural structures, characterized by large distances and spread construction, as well as vertical composition, create automatic association of control and dominance over space (Fig. 1). Basic body language messages, consisting of open or closed position can be also compared with architectural structures communicating openness and transparency (Fig. 2), versus the ones which are closed and controlled.

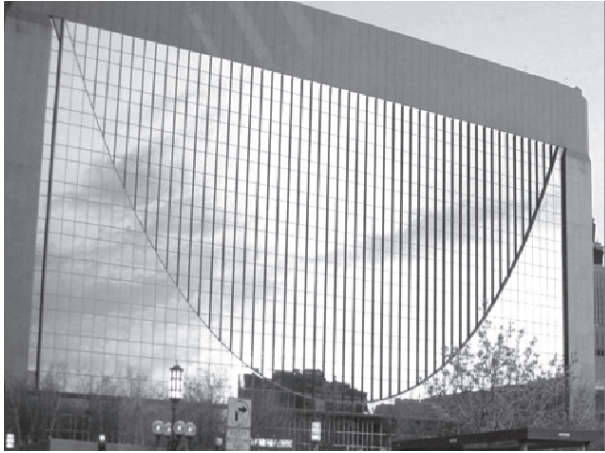


Fig. 3. Marquette Plaza building with composition features corresponding to smile. Minneapolis

Length of approach to a building or a room is another similar measure – just like in the study of dominant violent criminals, whose personal distances are proven to be up to four times larger than of people, who committed no crime (Hildreth et al. 1971, Garner 1962, Lawson 2001), the dictators in history usually operate from office spaces difficult to approach and with a large degree of control (Markus 1993).

Social distances which are important social communication features, indicating the degree of relationship between human beings, in some architectural and urban cases are an underlying reason for the chosen structure and composition. For example, distances above four meters do not have a socializing effect – and for this reason monumental squares, are often used in dictatorship political systems. Facial gestures such as smiling are universal human communicative signals that can be related to corresponding signals in architecture (Fig. 3).

The parallels between body language and communication of space can be brought even further – to zoosemiotics with their various gestures, mimicing and physical limitations, like perceived waveles. For example some animals reposition themselves to follow the gaze cue when faced with a barrier blocking the view (Range & Virányi 2011). In architecture the geometric gaze following phenomenon is used in design, where lines directing the view are used as compositional elements. Another example can be found in the warning signals domain – some animals that look like predators are instinctively avoided. Also some architectural features are designed to use warning signals - for example the spikes upon doors (Fig. 4) give them a „painful” look, providing psychological barrier. Frill-necked lizard’s collar makes its look a lot larger and scarier than it is in reality (Fig. 5). This can be compared

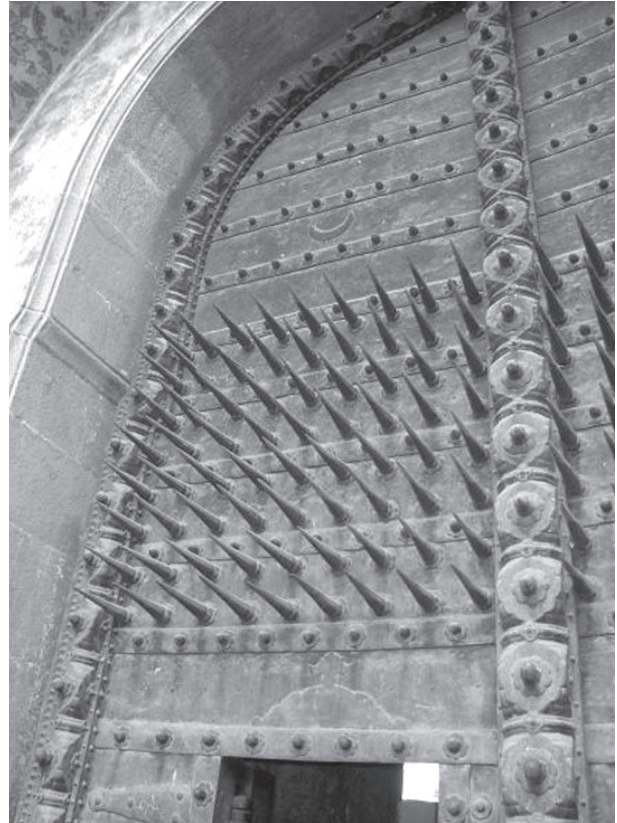


Fig. 4. Door design using warning symbols of spikes. Maratta Fort, Pune, India



Fig. 5. Frill-necked Lizard with characteristic features, making its look larger

with building frontal facades, designed to be much larger and more elaborate than the building located behind them (Fig. 6 and 7).

2. PERCEPTION & UNDERSTANDING OF SPACE

Perception has an important impact on spatial ability to communicate. Some of the spatial characteristics are perceived stronger, than others (Rose 1995), for example red colour is used as a warning signal, since it is more visible than the blue, indicating background. It has been observed that subjects working in red offices



Fig. 6. Frontal façade view

Example of building façade, making the building look larger than it is in reality. San Michele in Foro Church, Lucca, Italy

had higher levels of stress and anxiety (Kwallek and Lewis 1990), leading to enhanced performance. In order to emphasize importance of form in space certain compositional elements can be adapted. Vertical or horizontal lines which are perceived as particularly important can be used, or symmetric composition which



Fig. 7. View at the back of façade.

San Michele in Foro Church, Lucca, Italy

is considered as interesting and communicating focal points can be adopted (Lawson 2001) (Fig. 8 and 9).

Repetition of spatial elements make them non distinguishable and this results in their disappearance from perceived image. The short-term memory, being able to carry up to seven items, puts a limit on the amount of architectural elements, which can be used



Fig. 8. Architectural design

Example of perceived focal point and attention centre basing on spatial symmetry.

Dome of the Rock Temple Mount, Old City, Jerusalem



Fig. 9. Urban setting

Example of perceived focal point and attention centre basing on spatial symmetry.

Dome of the Rock Temple Mount, Old City, Jerusalem



Fig. 10. Perception & architectural design: short-term memory limitation leading to limitation of the front portico column repetition to six. Reichstag, Berlin

in foreground (Lawson 2001) (Fig. 10). This repetition memorization phenomenon takes into account a still observer, but the memorization patterns are largely dependent also on speed of perception.

In contrast to the discursive language, presentation of architectural forms occurs largely at the same time. They provide synthesized and condensed meaning, which can be very abstract, but it will be remembered much better than the verbal communication. This advantage of communication through space occurs due to the characteristics of human memory loop, which is about 2 seconds long. An example can be provided by the correlation between the time required to pronounce the numbers in different languages and the memorization of number sequences – the speakers of the languages, with shorter names for digits memorize the sequences more successfully, providing an evidence for importance of synthesized communication (Dehaene in: Gladwell 1976). In this context, the communicative ability of architecture has been largely impacted by time-scale transformation, related to mobility causing increased speed. Sharp reduction of time spent in observing the individual buildings from the perspective of fastly moving transportation means has occurred in comparison to the level of detail, which could be experienced by pedestrian observers, or horse-drawn carriage passengers from renaissance period. This occurrence has caused detail compression, lead-

ing to limited communication ability of architecture and space devaluation (Stein 1977).

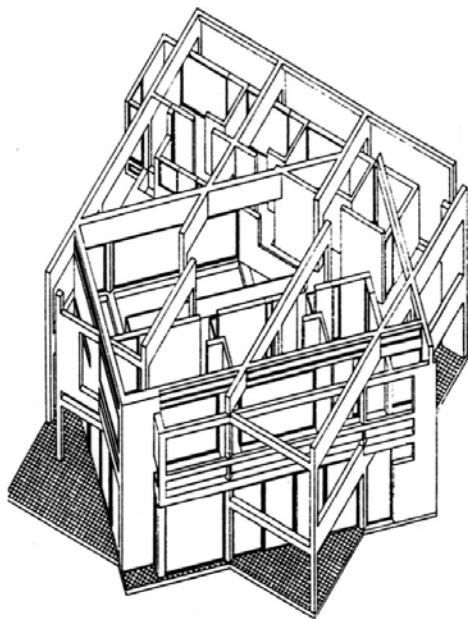
Other characteristics of human perception, which should be taken into account in spatial design, include field of vision, since there is a higher accuracy in the central piece of retina, allowing detection of detail (Lawson 2001). It is important to note, that the perception of space in real time produces fragmentary audio-visual material and is a sum of experiences (Porter 1997, Forty 2000), or subconscious usage of sequential montage in perception of historic buildings (Eisenstein 1938).

Some examples mentioned above illustrate the importance of bodily experience in perception of architecture (Porter 1997), which fits to the previously described category of non-formal and non-discursive communication. They also allow the formal transition of meaning, but it requires also an additional element of understanding (Fig. 11). The symbol is customary, it's meaning and understanding is often limited to a particular culture or social group symbolic relation is a relation based on conventional relationship between concepts, and is usually limited to a particular culture.

Since symbols may have many levels of meaning, addresser has to select and combine them in a way that limits the range of possible meanings. This can be achieved by using metalingual contextual codes, which in the area of architecture could be chosen material, nature of the medium, architectural style, etc. Additionally, the process of literal interpretation transformation into metaphor or allegory can be supported by providing references and clues. Due to this reasons, symbolic communication to be successfully understood requires skilful decoding on the side of the receiver. This is pos-



Fig. 11. The notion of impossibility of understanding the modern city - a painting metaphor. By A.P. Gawlikowska



1(c). House III, 1970

Fig. 12. Eisenman's deconstruction using dialectic of presence and absence: House III

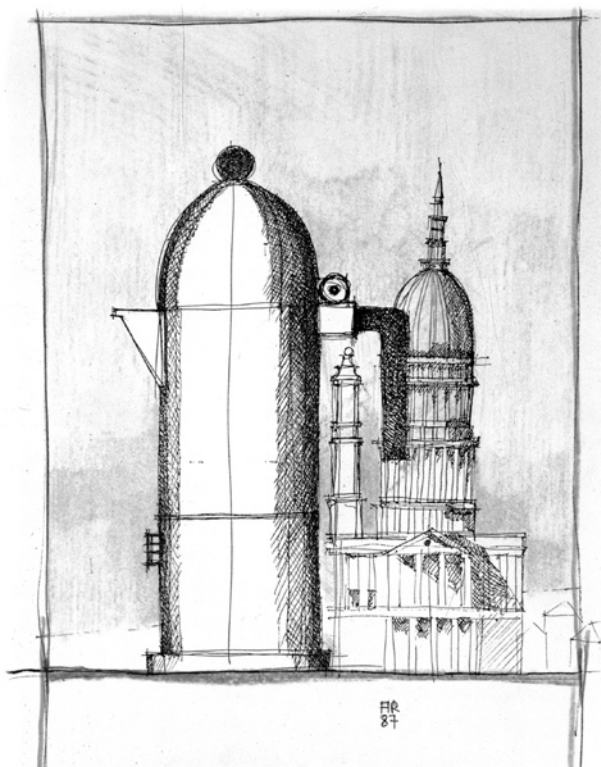


Fig. 13. Rossi's typological transformation of stylistics, sketch of expresso machine, basing on the form of architectural renaissance dome

sible, if the receiver knows the code (which, apart from symbols can include the grammar and the context).

The issue of understanding draws the borderline for defining architecture as a communication tool. To a certain degree architecture carries formal characteristic of semantic code, understood by a limited group of receivers, familiar with architectural discourse. This characteristic locates architecture in realm of classically understood communication, defined as „the process by which we understand others and in turn endeavour to be understood by them” (Anderson 1959). On the other hand, levels of architectural communication, understood by large audiences, can be categorized as semiotic, since they deliver their meaning, basing on much less formal background information requirement.

3. ARCHITECTURE AS COMMUNICATION MEDIUM

Architecture by its specific nature carries a meaning (Kurytowicz in: Norberg-Schulz 1999). Meaning is the process of connecting objects, events and beings with signs (Dorfles 1959), but since architecture is built primarily to serve a function (Eco 1997), its communication requires usage of symbolic transformation. This ability, which enables generation of analogies and metaphors, permitting transmission of complex meanings, despite the difficulties associated with the need to fulfil its utilitarian function allows architecture to communicate. Architecture uses visual symbols and elements (rhythm, material properties, lines, shapes, colours, proportions, etc.), which provide an array of communicative elements, possible to abstract and combine. They are, like language, able to articulate.

The various levels of meaning carried by architecture can be divided into discursive and non-discursive. In this context it is interesting to further recognize (1) the *formal* and (2) the *non-formal* communication types, which can be assigned to architectural and urban forms.

1. The **formal** discursive communicative methods, used by the spatial design can be defined as a part of **semantics**, which studies the denotation generated by discourse. The discursive messages, transmitted by architecture by relying on the internal communication code, will at large extend be limiting the message transfer to the group of architects and art critics, acquainted with the historical and contextual elements and references carried by architectural forms. The original designs of Eisenmann's deconstruction (Fig. 12) and Rossi's typological transformation (Fig. 13) have been addressing the issues of architectural symbolism understood initially by the limited group of receivers. But with time and formal repetitions

in other design objects, they have entered the realm of social communication and cultural canons.

Formal articulation uses such means as *closed* or *open*, *width* and *narrow*, *dark* and *bright*, *horizontal* and *vertical*, *connected* and *separated*, *dominating* and *balanced*, etc. Semantic sense of architectural expression is transited through „*the game lines, solids, colors, materials in the visual arts or game ideas, the idea of tension and release, speed and stopping*” (Langer 1976). Rhythm is a prototype of architectural structures, as a symbolic essence of life. The basic architecture of the compounds in tension and relaxation, and these relationships result in forms of architecture. The formal articulation of architecture should be read in a specific urban context, with its openings, centre, axis, vision direction, as well as linked to stylistic and functional characteristics of the given object. These artistic and design means, understood metaphorically and symbolically, are able to transmit meanings.

The exemplary symbolic organization of space (Norberg-Schulz 1999) include: *centre and road* (in Christian world the road is designed towards the altar, symbolizing Christ – the goal of Christianity); *road* (in the eastern religions the process is the goal by itself, and therefore shrines are designed basing on circulation around the common centre); *centre* – the importance of symbolic centre, which is space concentration and the specific organization, was present throughout most of the architectural styles. Appropriate closing of the place will have social implications – feeling of group togetherness, and focus on the common goal. After a brief departure from the desire to symbolize, observed in the functionalist architecture, there was a return to the idea of centre in the pluralistic style. In this understanding of communication „*architecture is a gesture. Not every purposive movement of the human body is a gesture. And no more is every building designed for a purpose architecture*” (Wittgenstein 1942).

2. The **non-formal** and *non-discursive* connotation transmitted by architecture as a field of **semiotics**, which studies meaning of communication. This category of communication locates architecture as a metaphor rather than a language (Forty 2000), and sees it as an interactive, not fully autonomous phenomenon (Eco 1997), which is to be lived not to be read (Lefebvre 1974). Within the field of semiotics, especially pragmatics is the area well fitted for architectural design, since it studies the context of meaning, and the linguistic knowledge of the receiver (May 1993). Area of pragmatics is especially applicable, both in case of urban design, where the meaning of singular architectural building is often within its context, an in case

of architectural design, where functional, historical, social and political considerations have an impact on the final form, which cannot be therefore abstracted (Markus 1993 and 2002). The non-discursive communication of architecture is more linked with real world situations and experiences. It also uses emotions and atmosphere to communicate, it is therefore a medium used to transmit easy-to-decode messages through architectural forms. Human feelings find their expression in abstract art forms more easily than in the language, therefore non-discursive architecture is able to reveal the nature of feelings with accuracy hard to reach for the discursive language. The drawback of the non-discursive, semiotic message transmission is its reliance on the observer's reception capacity and interpretation (van Eyck 1961), making the ability to understand architectural objects partially subjective. Moreover, according to G. Hegel, architecture is only half-articulated mean of expression – it cannot fully express the idea, therefore it uses symbolism to transmit messages (Scruton 1979). But on the other hand, semiotics has cardinal importance in transmission of meaning through the modern built environment, since the contemporary architects gradually make less use of elements, which can be qualified as symbolic.

Less literal meanings, provided by the built environment transform the notion of **language** in architecture from *text* into **grammar** (Durand 1802-5, Eco 1986, Forty 2000, Markus 2002). Architecture understood as grammar has been illustrated as combination of various elements using a set of principles (Sullivan 1906, Summerson 1963, Alexander 1977, Jencks 1977, Ching 1979, Mitchell 1990). These elements can be recombined, depending on the practical and emotional needs, basing on the Chomsky-like syntax (Chomsky's 1965, Eisenman 1971) of distinction into *surface* (recognized by the senses) and *deep* (recognized by the mind) elements, through which architecture creates meaning. This division of communication types is strongly related to *formal* and *non-formal* meaning categories. Theory, categorizing architecture as grammar is for example space syntax, created by B. Hillier and J. Hanson. It points at natural tendency of urban areas to create centre of motion, characterized by density of activity. Spatial integration in this system is described as the distance from the centre of the network and the degree of interconnectedness (Hillier & Hanson 1996).

The role of architecture transmitting universal meanings is particularly important in the context of contemporary society, characterized by pervasive change and the increasing speed - „*la societe des flux*, which does not recognize any permanent, universal order or

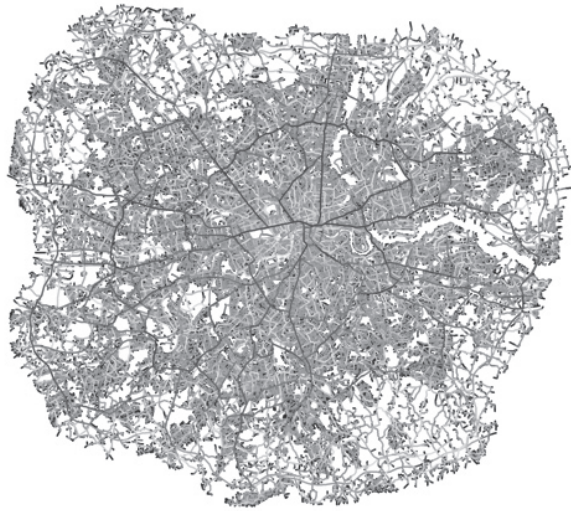


Fig. 14. Spatial integration of London, using space syntax theory.

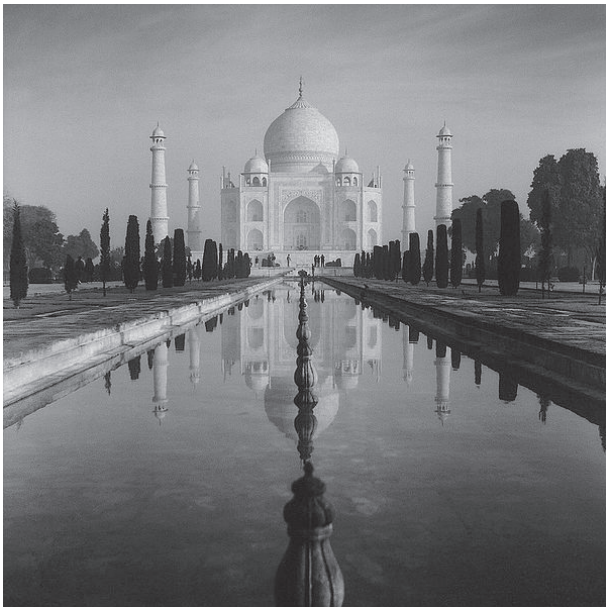


Fig. 15. Symbolic space, transferring emotions through atmosphere – Taj Mahal mausoleum – symbol of sadness, love, eternity and sensitiveness



Fig. 16. Example of space of “transcendental homelessness”.
Train station platform, Krakow

universal hierarchy of values” (Castels 1995). For this reason the modern society particularly needs stability, transmitted symbolically by „*significant stones*” (Schiller, 1795). „*The existential meanings are derived from natural phenomena (...) and are felt as order and character. Architecture translates these meanings into spatial forms*” (Norberg-Schulz 1999), which can be considered significant to the society. The significance of architectural objects related to high values and universal archetypes occurs, because in accordance to psychological research „*the mobile world that is not based on the repetition of similarities associated with a stable system, would prevent the development of man and not permit also to the real interaction between people*” (Piaget 1968). In this context architecture is essential to surpass momentary experience, providing symbols and anchoring memory.

Expression *genius loci* has originated from roman mythology, where it described the protective spirit of the place. In contemporary usage, *genius loci* refers to location's atmosphere. In modern architectural theory, expression has profound implications for place creation, falling within the philosophical branch of *phenomenology* (Norberg-Schulz 1980). The sense of beauty is created by various spatial means including creation of atmosphere, which can be referred to as specific *genius loci*, transmission of emotions or direction of behaviour. Through this means architecture can produce mental associations, deeply anchored in the recipients' memory. By creation of specific, thought-provoking atmosphere, architecture can cause reflection in its observers, and in contrast to literal representation, allows to transfer universal values. The example of space transferring meanings of sadness and eternity through created atmosphere is the Taj Mahal mausoleum (Fig. 15).

Communication through architecture occurs, even in case it is not intended: buildings, and infrastructural objects, which have been constructed with no embodied intentional message, create an atmosphere, and can dehumanize the surrounding space. The examples of such spaces are areas of *transcendental homelessness* built purely as efficient and functional structures (Krakauer, in: Leach 1997), which evoke user's emotions and feelings (Fig. 16).

Even if architecture is not a language in semantic sense, it carries semiotic metaphors, which by nature are incomplete (Forty 2000), but remain effective means of communication. Space has an ability to communicate universally through atmosphere and emotions, but depends on the ability of recognition of communication code by its receivers, once it comes to formal articulation. Architects often neglect signification of meaning

in their designs (Venturi 1966). But the meaning should be strongly considered as a part of the design process, due to the long-lasting and deep effect of space on human activity and mental reality (Gawlikowska 2011). The building narration is present throughout the whole lifetime of the object, and its semiotic meaning consists not only of the pure symbolic communication, but of all the elements of genius loci, which have built up in time, including events, new styles and transformations (Markus 1993). This time-related articulation does not have an ability to entirely delete all the previous meanings – architecture remains a witness to all its history, and gathers symbolic meaning derived from the events, which it has been facing. Due to the changes in social, political, urban and stylistic context it will partially change its meaning, with *collective memory* of the past engraved within the city monuments, providing urban structure (Rossi 1966). In time transformations change „*events and characters from the past feed into common repertoire of symbols (...) constituting system of meanings. Monuments are the material carriers of these meanings*” (Nijakowski 2006).

Meaning transmission through architecture can be effective through long time distances in comparison with other cultural communicative artefacts (Ricouer 1989). The spatial distance has also increased architectural communication capacity, due to informatization, which allowed architectural symbolic objects to reach global scale through mass-media, establishing a new *global place*, increasingly recognize people as familiar (McQuail 1983). The time and reduction of separation, as well as increasing connection/communication raised the built spatial symbols into global symbols of cities and countries, political and social systems, as well as lifestyles. Brands of cities and countries, as well as lifestyles became products, and entered into the market realm. They simultaneously entered into commercial culture domain, therefore their spatial symbolism became a subject of speculations and competition for audience. This process might bring back the spatial quality objectives, once the societies will become tired of aggressively served information and visual intrusion. This could have an effect of architectural design in the long-term perspective, in case these qualities will be selected as guidelines for the image of particular organization or institution.

CONCLUSION

Architecture and urban space have an ability to communicate. They carry characteristics of both formal and non-formal meaning transmission categories. Communication of architecture and urban space is limited by human perception (e.g. memory, field of vision,

perception of symmetry, time constraint), as well as understanding. The functional role of architecture and the need of symbolic transformation to decode some convoluted meanings bring additional difficulty to understanding of architectural symbolism. Architecture's role to transmit values, genius loci and stability has to rely on observers' reception and their interpretation capacity.

Understanding of built space semantic meaning is limited to a group of experts, minimizing ability of successful formal communication of some architectural elements to the vast audiences. Meaning of symbols is an element of this discursive category – their transmission requires previous education and experience of receivers. In postmodernism, the rational-linear understanding is not longer accurate, since there is no reliable organizing ideas about culture and society.

On the other hand, semiotic elements of architecture are able to communicate with large audiences, by usage of non-formal and non-discursive communication tools, like atmosphere, forms causing emotions, or naturally decoded symbols. This form of communication is perceived by senses, not by intellect, and it is experiential, as well as partially unconscious. Semiotic architectural meaning transmission can be compared with non-verbal social communication, making it especially suited for communicating feelings and attitudes. Moreover, non-verbal communication clues, as well as social distances phenomena can be compared with architectural and urban communicative methods. Architectural meaning cannot be decoded autonomously, it has to account for spatial surrounding, building function, history, as well as for the social and political system.

Even if architecture is not a language in semantic sense, it carries semiotic metaphors. Space has an ability to communicate through order, character, atmosphere and emotions, but depends on the ability of recognition of communication code by its receivers, once it comes to formal articulation.

BIBLIOGRAPHY

1. **Alexander C. (1977)**, *Towns, Buildings, Construction*, Oxford University Press, New York.
2. **Anderson M. (1959)**, *What is communication?*, "J Comm." vol. 9, no. 5.
3. **Ashalatha D.**, (undated), *Non-Verbal Communication* <http://www.svcetedu.org/OLD/hasdownloads/mba/NVC.pdf>.
4. **Barthes R. (1967)**, *Semiology and the Urban*, in Leach, N. (ed.) *Rethinking Architecture. A reader in cultural theory*, Routledge, London 1997.
5. **Baudrillard J. (1972)**, *For A Critique Of The Political Economy Of The Sign*, trans. Levin, C., Telos Press, St Louis, MO, 1981.

6. **Carey J.W. (1988)**, *Communication as culture*, Boston, Unwin Hyman.
7. **Castells M. (1995)**, *Les flux, les reseaux e les idenites:ou sont les sujets dans la societe informationnelle?*, in: Dubet, F., Wieviorka, M. (1995), *Penser le sujet, autour d'Alain Touraine*, Paris, Fayard.
8. **Ching F. D. K. (1979)**, *Architecture Form, Space and Order*, van Nostrand Reinhold, New York.
9. **Chomsky N. (1965)**, *Aspects of the Theory of Syntax*, MIT Press.
10. **De Sussure F. (1916)**, *Cours de linguistique générale*, ed. C. Bally and A. Sechehaye, with the collaboration of A. Riedlinger, Lausanne and Paris: Payot; trans. W. Baskin, *Course in General Linguistics*, Glasgow: Fontana/Collins, 1977.
11. **Dorfles G. (1959)**, *Simbolo, Comunicazione, Consumo*, trans. "Structuralism and Semiology in Architecture", in: Jencks, C., Baird, G. (ed.), *Meaning in Architecture*, Barrie and Rockliff: The Cresset Press, London 1969.
12. **Durand J. N. L. (1802-5)**, *Précis des leçons d'Architecture données à l'École polytechnique*, 2 vols, Paris, 1819.
13. **Fergusson J. (1849)**, *An Historical Inquiry into the True Principles of Beauty in Art, more especially with reference to Architecture*, London.
14. **Garner W. R. (1962)**, *Uncertainty and Structure as Psychological Concepts*, John Wiley, New York.
15. **Hegel G.W.F. (1835)**, ed. Hotho, H.G., *Aesthetics, Lectures on Fine Art*, trans. Knox, T. M., Oxford Clarendon Press, 1975, vol 2.
16. **Eco U. (1986)**, *Faith in Fakes: Travels in Hyperreality: Essays*, Trans. William Weaver, San Diego: Harcourt Brace Jovanovich.
17. **Eco U. (1997)**, *Function and Sign: the Semiotics of Architecture*, in: Leach (ed.), *Rethinking Architecture*.
18. **Eisenman P. (1971)**, *From Object to Relationship II: Giuseppe Terragni Casa Giuliani Frigerio*, Perspecta, vol. 13/14.
19. **Eisenstein S. M. (1938)**, *Montage and Architecture*, Assemblage, Dec. 1989.
20. **Forty A. (2000)**, *Words and Buildings: a vocabulary of modern architecture*, Thames and Huston.
21. **Gawlikowska A.P. (2011)**, *Architecture in the center of conflict. Threats to its identity*, Ph.D. Dissertation, Warsaw University of Technology, Warsaw.
22. **Gladwell M. (1976)**, *Outliers. The Story Of Success*, New York, Little, Brown and Company.
23. **Hildreth A. M., Detogatis L. R., McCusker K. (1971)**, *Body-buffer zones and violence: a reassessment and confirmation*, "American Journal of Psychiatry", vol. 127.
24. **Hillier B. Hanson J. (1996)**, *The Social Logic of Space*, Cambridge University Press, 1984, Bill Hillier, *Space is the Machine*, Cambridge University Press.
25. **Jencks Ch. (1977)**, *Language of Postmodern Architecture*, Rizzoli, NY.
26. **Kracauer S. (1997)**, *On Employment Agencies: The Construction of Space; The Hotel Lobby*, in: Leach N. (ed.) *Rethinking Architecture*, London, New York, Routledge.
27. **Kwallek N., Lewis C. M. (1990)**, *Effects of environmental color on males and females: a red or white or green office*, "Journal of Environmental Psychology", vol. 12.
28. **Langer S. (1976)**, *Nowy sens filozofii*, PIW, Warszawa.
29. **Lawson B. (2001)**, *Language of Space*, Architectural Press, Oxford.
30. **Lefebvre H. (1974)**, *The Production of Space*, trans. Nicholson-Smith, D., Blackwell, Oxford, 1991.
31. **Markus T.A. (1993)**, *Buildings & Power. Freedom & Control in the origin of the Modern Building Types*, London, Routledge.
32. **Markus T.A., Cameron D. (2002)**, *The Words Between the Spaces. Buildings and Language*, London, Routledge.
33. **May J. L. (1993)**, *Pragmatics: An Introduction*, Blackwell Publishers, Malden, Massachusetts.
34. **McQuail D. (1983)**, *Mass Communication Theory. An Introduction*, 5 Edition (2005), Sage, London.
35. **Mehrabian A., Wiener M. (1967)**, *Decoding of Inconsistent Communications*, "Journal of Personality and Social Psychology", vol 6 (1).
36. **Mehrabian A., Ferris S.R. (1967)**, *Inference of Attitudes from Nonverbal Communication in Two Channels*, Journal of Consulting Psychology, vol. 31 (3).
37. **Miller G. A. (1966)**, *Speech communication: A behavioral approach*, Bobbs-Merrill, Indianapolis.
38. **Mitchell W. J. (1990)**, *Logic of Architecture: Design, Computation and Cognition*, MIT Press, Cambridge, MA and London.
39. **Nijakowski L. M. (2006)**, *Domeny symboliczne. Konflikty narodowe i etniczne w wymiarze symbolicznym*, Wyd. Naukowe Scholar, Warszawa.
40. **Norberg-Schulz Ch. (1999)**, *Znaczenie w architekturze Zachodu*, Wydawnictwo Murator, Warszawa
41. **Norberg-Schulz Ch. (1980)**, *Genius Loci: Towards a Phenomenology of Architecture*, London, Academy Editions.
42. **Piaget J. (1968)**, *The Psychology of Intelligence*, Routledge and Kegan Paul, London / Littlefield, NY; in: Norberg-Schulz, Ch. (2000), *Existence, Space and Architecture*, Praeger Publishers, London, 1971.
43. **Porter T. (1997)**, *The Architect's Eye. Visualization and depiction of space in architecture*, E&FN Spon, Chapman & Hall, London.
44. **Range F., Virányi Z. (2011)**, *Development of gaze following abilities in wolves (Canis Lupus)*, "PLoS ONE" vol. 6 no. 2.
45. **Ricouer P. (1989)**, *Język, tekst, interpretacja*, Warszawa, PIW, in: Rewers E. (2005), *Post-polis*, Towarzystwo Autorów i Wydawców Prac Naukowych Universitas, Kraków.
46. **Rose D. (1995)**, *A portrait of the brain*, in: Gregory R., Harris J., Heard P., Rose D. (ed.), *The Artful Eye*, Oxford: Oxford University Press.
47. **Rossi A. (1966)**, *L'architettura della città*, trans. *The Architecture of the City*, MIT Press, Cambridge, Massachusetts/ London 1982.
48. **Schiller F. (1795)**, *Über die ästhetische Erziehung des Menschen*, Epistle Publication.

49. **Scruton R. (1979)**, *The Aesthetics of Architecture*, Methuen & Co. Ltd., London.
50. **Stein R. (1977)**, *Architecture and Energy*, Anchor Press/Doubleday, New York.
51. **Sullivan L. H. (1906)**, *What is Architecture?*, in: Sullivan L. H. *The Public Papers*, ed. Twombly R., University of Chicago Press.
52. **Summerson J. (1963)**, *The Classical Language of Architecture*, MIT Press.
53. **Trompenaars F., Hampden-Turner D. (1997)**, *Riding the Waves of Culture: Understanding Cultural Diversity in Business*, Nicholas Brealey, London.
54. **Tschumi B. (1975)**, *The Architectural Paradox*, in: Tschumi B. (1996), *Architecture and Disjunction*, MIT Press, Cambridge, MA, and London.
55. **van Eyck A. (1961)**, *The Medicine of Reciprocity Tentatively Illustrated*, "Forum", vol. 15, no 6.
56. **Venturi R. (1966)**, *Complexity and contradiction in architecture*, The Museum of Modern Art, New York.
57. **Watzlawick P., Beavin-Bavelas J., Jackson D. (1967)**, *Some Tentative Axioms of Communication. In Pragmatics of Human Communication - A Study of Interactional Patterns, Pathologies and Paradoxes*, W. W. Norton, New York.
57. **Wittgenstein L. (1942)**, *Culture and Value*, 2nd ed. von Wright, H., London: Wiley-Blackwell, 1998.

FIGURES SOURCES:

1. <http://studentsforliberty.org/blog/the-house-that-communism-built/>
2. <http://www.richardrogers.co.uk/render.aspx?siteID=1&navIDs=1,4,25,830&showImages=detail&imageID=1660&showParent=true>
3. <http://en.wikipedia.org/wiki/File:051907-011-MarquettePlaza.jpg>
4. http://upload.wikimedia.org/wikipedia/commons/0/0a/Gate_With_spikes.JPG
5. http://www.tumblr.com/tagged/frill-necked%20lizard?language=pl_PL
6. <http://goeurope.about.com/od/lucca/ig/San-Michele-Pictures-Lucca/Paragliding-over-San-Michele.htm>
7. <http://goeurope.about.com/od/lucca/ig/San-Michele-Pictures-Lucca/Paragliding-over-San-Michele.htm>
8. http://upload.wikimedia.org/wikipedia/commons/0/07/The_Dome_of_the_Rock.jpeg
9. http://en.wikipedia.org/wiki/File:Panorámica_de_Jerusalén_desde_el_Monte_de_los_Olivos.jpg
10. http://upload.wikimedia.org/wikipedia/commons/6/6a/Reichstag_Berlin_Germany.jpg
11. by Anna Gawlikowska
12. <http://www.jbdesign.it/idesignpro/Peter%20Eisenman.html>
13. http://www.die-neue-sammlung.de/press/hr_images/2010/allessi_pdm_2010/jpg/La%20Cupola_A%20Rossi_Skizze_3.jpg
14. Courtesy of Space Syntax Ltd., London
15. Photo: Amal Mongia 2007, <http://pl.wikipedia.org/wiki/Plik:TajMahalbyAmalMongia.jpg>
16. http://czarnota.org/gallery/albums/warszawa/zmiany/___Srodmiestcie/Dworzec_Centralny/2009_08_10_-_1017_-_Warszawa_-_Dworzec_Warszawa_Centralna_-_podziemia.jpg