ARCHITECTURAL NARRATION – INTERPRETATIONS, SPECULATIONS OR EMPIRICAL FACTS?

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By way of introduction

The discussion of signs and symbols in architectural theory and practice has a long history, even though many contemporary authors seem to consider it a novelty associated with the postmodernist philosophies of the late 20th century. But in fact the idea that architectural forms are capable of carrying meaning goes a long way back.

The origins of the broadly understood concept of meaning can be traced back to antiquity. Meaning is present in the teachings of Plato and his school of thought, as well as in Vitruvius, whose famous treatise discussed a narrative concept of an anthropomorphic origin of architectural orders as a metaphor of human body and character. Thus, Vitruvius introduced the notion of representation – an idea that architectural form should be a reference to something, and not just a functional construction. One could argue this was the first articulate attempt at symbolising through architectural form and it marked a turning point in the history and theory of architecture, since the idea of representation and therefore of symbolisation effectively shaped the further evolution of this field.

In the Middle Ages, Plato's ideas faded away into oblivion, making room for the mystic symbolism of the divine light. Light, which must penetrate the interior of the house of God, lies at the heart of the concept of the Gothic cathedral. This idea can be found in the legacy of mediaeval scholars, e.g. John Scotus Eriugena and Saint Dionysius the Areopagite. The spatial structure of a Gothic cathedral, particularly the idea of hierarchic accumulation of its elements, is a reflection of mediaeval scholastic theology which culminated in Thomas Aquinas's *Summa theologiae*. This analogy (the metaphor of theology) was first discovered by Erwin Panofsky. Undoubtedly, however, these sophisticated philosophical concepts remained largely unknown at a time when the ability to read and write was a rare attribute even among royalty, let alone simple folk.

Renaissance brought back Plato's philosophy, which resurfaced in a modernised form as Neo-Platonism, with its idea of the architectural object as a model (metaphor) of the universe designed by a Creator according to the principles of mathematics, which should therefore also apply to sacred architecture. Renaissance architecture explored at least two kinds of symbolism: anthropomorphic symbolism and geometric symbolism. Both had originated in Greek and Roman antiquity, and both considered the church to be a representation the City of God (*Civitas Dei*) and its interior to be an image of Heavenly Jerusalem.[1] It must, however, be emphasised that philosophical systems such as Neo-Platonism, from which stemmed the architectural ideas of the Renaissance, were only known to narrow circles of an intellectual elite – the humanists, and among them the most prominent architects of the time, for example Brunelleschi or Alberti. It can hardly be argued that the artistic vocabulary they employed should have been understood by their non-educated lay contemporaries. The late Italian Renaissance style known as Mannerism used such an extravagant variety of complex symbolic means of expression that they could only be comprehended by the most eminent humanist scholars. Those less acquainted with the artistic language of symbols of the time had recourse to special lexicons and manuals published for their sake.[2]

With the coming of Baroque the two architectural imageries – anthropomorphism and geometrisation – did not lose momentum but instead were intensified by the general tendency to dramatise the human experience (*teatro del mondo*, *the spectacle of life*, *teatrum sacrum*). This concept treated human life as a staged show, while architecture and urban planning needed to provide a stage for people to play their

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[1] Ch. Norberg-Schulz, *Znaczenie w architekturze Zachodu*, Murator Wydawnictwo, Warszawa 1999.

[2] C. Ripa, *Ikonologia*, Wydawnictwo Univeritas, Kraków 2011.

roles on like actors in a theatre. For better emphasis and stronger persuasive impact, the ancient art of rhetoric was revisited, to provide means of effective argumentation and efficient expression of one's thought. This is how certain figures of speech, with their particular interpretations, pervaded architecture and enhanced its persuasive power to influence onlookers – a feature which gained exceptional importance at the time of Counter-Reformation.

The Age of Reason brought a seemingly revolutionary change – a return to archetypes and the symbolism of purification. The treatises of French architects such as Cordemoy or Laugier, as well as the visionary designs of Ledoux and Boulle followed Vitruvius in that they proposed cleansing architecture from the influences of different styles and returning to the idealised, archetypical formula of the primitive hut. Yet in fact, architecture never fully dropped its historic attire, though it did become simpler in order to express more visibly the essential message of the time – especially the social, ideological, political and religious notions which were not altogether part of the actual function of buildings. Architectural "disguise" resurfaced to prominence in the 19th century with the French concept of *l'architecture parlante* and caused a genuine outpour of different ideas in this context. This exuberant profusion was cut short by the ideology of proto-Modernism of the English Arts and Crafts movement in mid-19th century and later on by the early Modernism of the early 1900s, expressed in Adolf Loos's 1910 manifesto *Ornament and Crime* (published in French in 1913). While Modernism rejected the symbolism of the previous periods, it replaced it with a new one, using e.g. marine or machine imagery. Art Nouveau and Expressionism abounded in symbolic and allegoric representations, which became a principal means of artistic expression at the time. The metaphoric and symbolic quality of the subsequent phases of Modernism took over and blossomed, mirrored in aphorisms such as "A house is a machine for living in" or concepts such as organic architecture (F. L. Wright).

Anthropomorphism was revived in Le Corbusier's Modulor, while geometrisation (albeit now employed to symbolise the achievement – or pursuit – of technical perfection and devoid of any trace of transcendence or mysticism) became one of the icons of modernist architecture. The early and then mature vocabulary of Modernism evolved towards its late phase, when symbolic representation was used to convey meanings that are important in the era of developed capitalism of global corporations in order to emphasize their status and social dominance.[3]

Postmodernist philosophy at the core of architectural discourse

The history of meaning in architecture did not, therefore, begin with Postmodernism, but dates back far beyond and spans over more than 2000 years. One could risk a statement that if certain contemporary authors who write about meaning in architecture went so far as to acknowledge this indisputable fact, the cognitive perspective underlying their reflections would not be so greatly distorted. Without placing these issues in a broad historical context, or at least briefly discussing their origins, many contemporary publications seem superficial and incomplete. As a consequence, the contribution of postmodernist philosophy in shaping contemporary architectural ideology is only too often greatly overestimated.[4]

At its most extreme, postmodernist philosophy questions the sheer cognoscibility of reality, and sometimes even its very existence. The idea is not new, since similar notions were entertained by Socrates ("I know that I know nothing") and Descartes ("I think, therefore I am"). It has led many postmodernist philosophers to deny the role of science and to doubt whether it can foster true and relevant knowledge. This rejection of science as a cognitive tool pertained especially to humanities, which were accused of being unable to explain and advance the understanding of the spiritual phenomena that are the essence of culture. Judged equally

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[3] A. Niezabitowski, *O estetyce awangardowej architektury lat 1922–1939 w ujęciu percepcyjnym i poznawczym*, [in:] *Oblicza modernizmu w architekturze*, ed. R. Nakonieczny, J. Wojtas-Swoszowska, Wydawnictwo Śląsk, Katowice 2013, p. 236–248.
[4] I am using the word "ideology" to denote a certain architectural axiology. Another word of similar connotations could be "doctrine"; both are, however, light years apart from scientific knowledge *sensu stricto*. In discussing the importance of this philosophy as a methodological principle one needs to take account of two fundamentally different aspects. One is the very postmodernist philosophy as such, which is essentially a combination of many, sometimes mutually opposing trends; the other is the extent to which these philosophical concepts have been understood and assimilated by architects who profess to be postmodernists.

useless were the research methods employed by life sciences. This profound epistemological pessimism did not resonate with most of the scientific community of the modern era and went on to be wholly dismissed with the coming of the Age of Reason and, subsequently, Positivism. Having been so embraced by generations, evidence-based science and reason found room to flourish and ultimately attain the level of advancement we are witnessing today. The "cognitive tools" proposed by postmodernists found few enthusiasts and were never assimilated by what we now call mainstream science or hard science. They were disregarded as impracticable since they did not foster certainty and knowledge (Greek: *episteme*), but conjecture and belief based on speculation (Greek: *doxa*), which by their very nature are completely unverifiable. The principal tool of postmodernist thinkers was hermeneutics, i.e. the art of interpretation or, in other words, of discovering hidden meaning. The central idea of this approach is the so-called hermeneutic circle, which postulated that one's understanding of a whole can only be established by reference to the individual parts and one's understanding of each individual part cannot be established otherwise than by reference to the whole – a classic example of a vicious circle.

Unlike hermeneutics, over the centuries mainstream science has developed a number of effective methods of doing research and verifying the findings so generated.[5] The ultimate test of these methods is technology, which – without science – would never have gone beyond simple machines. Contemporary science, accompanied by technology, has provided us with cognitive tools without which human civilization would remain at a prehistoric level, dominated by magic and mystic rituals. These tools have served to widen our horizons to an extent simply unimaginable to our predecessors, and have enabled us to embark on an intellectual journey both to the minuscule mysteries of matter and to the unthinkable vastness of space.

While one might feel indebted to Postmodernism for the discovery of the role of symbolic meaning in culture (*homo symbolicus*), it must be conceded that this discovery was only an illusory one, for it actually stated an obvious truth, much like the

discovery of Monsieur Jourdain, the main character in Molière's play *Le Bourgeois Gentilhomme*, who learns with some astonishment that all his life he has been speaking prose. We do, however, owe postmodernism one indisputable contribution, namely the thorough study and deeper understanding of symbols as one of the most important features of human thought. Man is, after all, also capable of logical reasoning (*homo logicus*), and this is how the development of science was possible in the first place.

An important aspect of the ahistorical approach in the study of symbols and signs in architecture and postmodernist philosophy is how they are received by the community of architects, especially the academic circles which profess themselves to be opinion-makers. One might have the impression that in many cases this reception appears quite superficial, and only restricted to absorbing some common notions such as structure, deconstruction, discourse, narration, sign, symbol, transgression, transfiguration, transposition (to name just a few of the many available "trans-es") etc., which are acquired by architecture without any deeper reflection on their sense and applicability. This makes this fascination with postmodernism seem more of an intellectual trend rather than a cognitive approach which uses this philosophy to create effective and usable instruments of thought.

The main trends in research on meaning in architecture

The problem of meaning in architecture can be addressed in a number of approaches:

1) The semiotic (semiologic) approach, which originated from language studies, including structuralist linguistics (Ferdinand de Saussure, Charles Peirce, Charles Morris, C. K. Ogden, I. A. Richards, Umberto Eco, Donald Prezoisi and others);

2) The cultural communication approach, which also builds on linguistics, but puts more emphasis on the social functions of the communication process (Roman Jakobson);

3) The non-verbal communication approach, based on the sociological theory of symbolic interactionism (with reference to built environment,

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[5] One such method is the well-established practice of repeating an experiment many times by different teams at different institutions all over the world; another example is falsifiability

of hypotheses, which means that a theory can be invalidated by only one fact to the contrary which is proven beyond doubt.

particularly Amos Rapoport, Martin Krampen or Henry Lefebvre);

4) The cognitive psychology approach, with particular emphasis on psycholinguistics, including discourse and research on human narration, also addressing the role of cognitive patterns, stereotypes etc.;

5) The environmental psychology approach, focusing in particular on the study of built environment, including particularly the issues of environmental aesthetics (Jack Nasar, Edward T. Stamps, Linda Groat and others);

6) The anthropo-cultural approach, the anthropology of architecture (Nolt Egenter);

7) The literary studies approach, inspired particularly by literary criticism (Charles Jencks, Geoffrey Broadbent and others);

8) The phenomenology approach, which puts emphasis on the analysis of an individual's own subjective experience, namely introspection (Marcel Merleau-Ponty, Roman Ingarden, Thomas Thiis-Evensen, Juhani Pallasmaa);

9) The humanist cultural discourse approach, tremendously popular in the academic circles of lecturers and architecture teachers.

It is more of a pan-humanist reflection on architecture, inspired by certain trends originating from Postmodernism. Another trend, called Space Syntax, uses analytical and mathematical methods based e.g. on the graph theory, axial map analysis and isovists (Bill Hillier, Julienne Hanson, Sophia Psarra and others). In the coming years the above list will need to be updated to include neuro-aesthetics, an approach which is rapidly developing within the field of neuroscience (Vilayanur S. Ramachandran, Semir Zeki and others).

Architects writing about signs and symbols usually tend to adopt approaches 7 and 9, i.e. those inspired by literary studies, literary criticism and humanist cultural discourse. These approaches are not rooted in mainstream science and their influence is more peripheral. Especially humanist cultural discourse employs methods of argumentation that could be called rhetorical tactics.[6] These include: naming (labelling), association, analogy, story, graphic images, appeals to group identity, dividing (polarisation) and integrating, and authority. These

are therefore very distant from the logic of evidence-based reasoning such as deduction (inference by reasoning from the general to the specific) and induction (deriving general principles from particular facts or instances), which are the foundations of the modern scientific method. Rhetorical tactics rather belong to the logic of persuasion and rhetoric which mostly appeal to human emotions and evades quantitative measurement.[7]

General remarks on the architectural narration discourse

The main thesis in publications written by architects on the problem of meaning, albeit poorly articulated and rather blurry, is the one stating that the meaning carried by architectural objects takes the form of stories – narratives – about matters which are of importance to people. They develop into entire semantic structures where signs and symbols are interrelated in specific ways. This makes it possible to convey more complex meaning. As the central point for their reflections on the matter, authors tend to choose sacred architecture and memorial sites, i.e. commemorative architecture. Analysis of the narration of other types of architectural objects is rarely undertaken, and sacrum prevails in writings on the meaning in architecture.

However, symbols as means of artistic expression are present in many types of architecture, e.g. buildings associated with arts and culture (museums, theatres, music halls, cinemas), seats of governments and justice authorities, headquarters of corporations, office buildings or banks, to name just a few. For this reason selecting just a narrow group of religious and commemorative objects as representatives of "meaningful architecture" is rather unjustified.

Unfortunately, when discussing narration in architecture authors often disregard the problem of form, especially in terms of aesthetics in its traditional sense as a discipline of philosophy which deals with beauty. Still, it is quite inconceivable not to touch upon the issue of form when discussing meaning because it is precisely the form that is the physical carrier of meaning. On the other hand, today's understanding of aesthetics is broader and the discipline itself has considerably expanded its

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[6] L. Groat, D. Wang, *Architectural Research Methods*, John Wiley & Sons, Inc., Hoboken, New Jersey 2013.

[7] In humanities, tools such as measurement scales, indexes and typologies (and in the analysis of meaning – e.g. semantic differential) have a long and well-established history.

focus and deals with four basic fields: 1) sensory aesthetics, which focuses on perception as a source of aesthetic experience, 2) formal aesthetics, which concentrates on the structural order of objects as a foundation of aesthetic experience, 3) symbolic aesthetics, which accentuates the hidden meaning of a work whose interpretation is a source of satisfaction, and 4) intellectual aesthetics, which is oriented towards philosophical reflection on the aesthetic aspect of how the environment influences people.[8] From the foregoing it clearly follows that meaning in architecture, and in particular the problem of narration, pertains to architectural form, and most notably to its expression understood as conveying particular meanings. This places the issue of meaning, signs and symbols, and – consequently – architectural narrative in the field of symbolic aesthetics.

Differences between literary and architectural narration

The above categorization of the issue at hand can be challenged as obsolete, which is why in architectural discourse an alternative is proposed, based on a new discipline in humanities: narratology. Narratology deals with the study of narrative as a fundamental form of literary expression, and in that it borrows from literary studies. Promising as it seems at first glance, this alternative harbours many potential pitfalls and challenging obstacles. It is controversial, since it is based on frail foundations, among them the assumption of there being a close analogy between architecture and language, especially in its most sophisticated forms such as literature and even more specifically – poetry. Comparison between the two reveals, however, more differences than similarities. Both these fields are arts and both use meanings, but this is probably where similarities end. Products of architecture, besides meeting some core requirements such as functionality, durability, safety etc., must also meet the requirements of cultural expression, that is convey – through form – certain social meanings. These meanings can be roughly divided into denotational meanings and conotational meanings. The former refer to the recognition of the function of the object perceived and

answer the question: what is it? The latter are built on the subjective relationship of the onlooker with the object perceived and answer the question: what is it to me? Hence, this second type of meaning is highly emotional, based on different associations, attitudes, even prejudices and entails evaluation processes of a very personal nature.

Contrary to architecture, literature is not an applied art, but a "pure" one, whose fundamental function is social communication. Its most popular form is a narrative, which can be purely fictional or can refer to actual past, present or future events taking place along an internal timeline, which may or may not coincide with real time. The structure of a narrative is therefore diachronic – or sequential – by nature. Moreover, it does not need to be perceived visually as written text, but aurally as well, as is the case e.g. with audio-books. The fundamental glue that binds a narrative together is time, which is why literature is considered a temporal art, and in this context it is similar to music or cinematography.

Architecture, on the other hand, is an applied art as opposed to pure art. Its ontological status is not temporal, but spatial. It exists as if "frozen in time", and occupies space, which is its binding agent (empty space) and material (occupied space) at the same time. Architecture is perceived primarily with the sense of sight (some 90% of the information), while the other senses play a more auxiliary role. As Susanne Knauth Langer rightly points out, "static visual forms are not discursive," since they do not present their constituents successively, but simultaneously, or synchronously.[9] An architectural structure is essentially not an event or a series of events which follow one another over time; it can be analysed on a very fundamental level in terms of parameters such as: feature, condition (constant parameters), event, and process (variable parameters). A feature is a physical quality, such as shape, colour, texture etc.; a condition is a set of features that characterise an object at a given point in time when these features remain constant. An event is a change of the condition (features), and a process is an ordered sequence of events.[10] To analyze an architectural object in terms of a process, there must be intentional and substantial changes

[8] J. Lang, *Urban Design: The American Experience*, John Wiley & Sons, New York 1994.

[9] S. K. Langer, *Nowy sens filozofii*, Państwowy Instytut Wydawniczy, Warszawa 1976.

[10] Z. Kleyff, T. Wójcik, *Systematyka problemów architektury i budownictwa*, cz. 5: *Narzędzia w architekturze i budownictwie*, Instytut Urbanistyki i Architektury, Warszawa 1966.

happening in the physical structure of that object within some limited time when the object is being perceived – this never takes place in normal circumstances.

Perception of architecture is a process, and takes time. To be able to perceive an object, the observer must change locations and take in its different parts one at a time, which has led some to wrongly classify architecture as a temporal art next to literary narration. There have been attempts to corroborate this interpretation of the spatial perception process as part of the space syntax approach, which focuses on the perception of subsequent fragments of space, without combining them.[11] A synthesis of all these fragments in one's imagination to obtain an image of the whole will produce a simplified outline – a cognitive map of the item being imagined, reflecting the most fundamental aspects of its morphological structure.

The same basically applies to urban systems. It makes it rather difficult and ungrounded to analyze urban structures as narratives of sorts, and especially to refer to cognitive maps in this context. It must be noted that both Tolman's mental maps and Lynch's research into the perception of the city which was based on that concept were oriented on facilitating spatial orientation. Lynch's objective was to define urban space design principles that would make such space perceptively legible and comprehensible, and therefore easily memorisable. The concept drew from gestalt theory and cognitive schemata, so any resemblance to a narrative will necessarily be purely metaphorical.

The semiotic debate over the process of semiosis, i.e. assigning, transferring and reception of meaning, is still ongoing in architecture, contrary to linguistic, where the problem has at least been addressed and to some extent resolved. The smallest meaningful units in language are called morphemes and function independently as words or are bound as parts of words.[12] Words are combined, according to certain established rules called syntax, into clauses or sentences. Sentences can in turn form higher-order linguistic forms – texts, which can be narratives (though naturally not all texts are[13]). Other syntactic rules govern the way texts in general, and narratives in particular, should be constructed.

Evidently, the only common denominator of linguistic and architectural structures is their hierarchic structural "granularity", i.e. their makeup as complexes of a variety of interrelated constituents of different ontological status, particularly in relation to time and space. The smallest units are contained within larger units, which in turn make up larger and larger ones, just as sounds are parts of syllables, syllables form words, words build sentences and sentences combine into texts. Recognizing this "granular" hierarchical structure in buildings is a more challenging task.[14] The core characteristic of architectonics understood as the "creation" of space is the coexistence and juxtaposition of substance and emptiness, not sound and silence.

Distinguishing the fundamental units of spatial articulation and the mechanisms that govern it is a complex and underinvestigated problem.[15] The question remains: what is the smallest meaningful

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[11] B. Hillier, J. Hanson, *The social logic of space*, Cambridge University Press, New York 1984; S. Psarra, *Architecture and Narrative. The Formation of Space and Cultural Meaning*, Routlege, London and New York 2009.

[12] Words are made up of even smaller units, but these do not carry any meaning; they are called phonemes (in speech) or graphemes (in writing). The branch of linguistics that deals with the structure of words is called morphology. Each word in a language has a meaning assigned to it – sometimes more than one – which is described in dictionaries of a given language. It remains unclear how particular meanings came to be associated with particular words, since the form of the latter is usually rather arbitrary (both in spelling and pronunciation). It seems conceivable, however, that it must have been done by way of some kind of a social agreement, as a result of which meanings became relatively fixed for relatively long periods of time. This agreement must be abided by; otherwise social communication would have been impossible or tremendously difficult.

[13] E.g. a user manual of a dishwasher or a drug leaflet are not narratives.

[14] Sound articulation which lies at the core of speech is remotely different from spatial articulation which is the foundation of architecture. Sound is a vibration of a resilient medium in space that travels in the form of waves. They can be conjoined in a seamless, unarticulated manner so as telling one from another is difficult, or in an interrupted way which allows to see the "division lines". This is the way sounds are produced in music or in speech, and this is what we call articulation. In architecture, articulation is effected through differentiating space by saturating some of it with matter (substance) and leaving other parts of it unoccupied (emptiness), along with the entire spectrum of in-between states such as hollow forms, perforated partitions etc. Portions of material can be combined in a continuous or discontinuous way, coherent or incoherent. Continuity results in solids, discontinuity – in empty interiors and openings.

[15] A. Niezabitowski, *Architectonics. A system of exploring architectural form in spatial categories*, "ArchNet-IJAR, International Journal of Architectural Research", Volume 3, Issue 2, July 2009, p. 92–129.

unit in architecture? Can the analogy with language be extended so far as to isolate from an architectural object the equivalents of words that make up "sentences" and "texts"? Assuming that these articulation units would be the basic construction elements such as walls, ceilings, vaults, roofs, columns, beams, windows, doors, stairs etc. – one might conclude that indeed they do carry very specific meaning at the level of denotation; they "mean themselves," or they "are what they are," that is their meaning is tantamount to their function. These meanings have become fixed in our collective consciousness and are passed on as part of the socialization process to serve social communication. Conotational meanings are much more challenging, since they entail symbols rooted at the same time in denotational meanings. At this level, the fundamental problem is recognizing the relations between physical features of articulation units (such as shapes, dimensions, colours, textures etc.) and their capability for conveying meaning of some specific symbolic pertinence.

Analysis of construction elements or sets of construction elements in architecture reveals them to be three-dimensional geometric forms made of specific materials, capable of becoming means of articulation for empty space by providing it with divisions, i.e. substantive differentiations. These elements do not have any specific, fixed meanings assigned to them, so they cannot be considered in architecture what words are in language. They are manifestations of certain features rather than carriers of specific information, and in this sense there are more symptoms than signs.[16] This makes them all the more unlikely to be capable of forming a universally comprehensible "architectural sentence," let alone an "architectural narrative". Since there is no universally established code for conveying meaning in that way (no "dictionary" or "syntax", to use the language metaphor again), the message an architect is trying to transmit may not be received as intended if the relevant interpretation key is not provided along with it.

A literary story (narrative) is a structural and systemic sequence of events happening along a time axis which is always directed one way – from the past to the future. Two different stories cannot be told at the same time, even if the actual events took place simultaneously. This is an absolute and unconditional law that allows us to capture the connections between events and infer from them the essence of the story, its content, which is identical regardless of the audience. In a literary work, interpretation – discovery of any hidden meaning – happens on a higher level of perception and requires a fair amount of knowledge and experience.

Absorbing literary texts (read or listened to) must therefore be considered a process wholly different from the perception of spatial structures. Perceiving architecture consists in a sequence of visual images, three-dimensional fragments in space which are not events but fixed conditions of certain physical features. The spatial relations between objects are much more complex than temporal relations between events, and are determined by position in space. In a row of columns there can be no temporal relations between the columns, only spatial ones such as distance, order, or angle. All the columns in a row exist simultaneously and synchronically, but each of them occupies a different place in space. A spatial object has no internal timeline similar to that of a literary work – it can only be *perceived* over time.

When thinking about a structure, one imagines a whole whose elements are somehow interconnected. But relations between spatial elements are not analyzed in terms of narratives and a structure cannot be just a loosely composed set of elements like signs and symbols. The notion of "narration in architecture" is purely metaphorical, and cannot be understood literally. The metaphor is based on the premise that both architecture and language convey meaning. But what is the cognitive use of a metaphor based on such poor foundations? Is it not enough to evoke the universally acknowledged assertion that architecture is capable of symbolizing certain notions of different degrees of abstraction, and therefore of creating symbolic structures, often very complex ones, as is the case with religious or commemorative architecture?

In publications dealing with the problem of narration in architecture reference is often made to "semantic forms" of different ontological status.[17]

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[16] J. Sławińska, P. Łepkowski, *Struktury znaczeniowe w architekturze współczesnej*, [in:] "Studia Estetyczne", v. XVI, Warszawa 1979.

[17] A. M. Wierzbicka, *Architektura jako narracja znaczeniowa*, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2013.

These are on the one hand items that are tangible and palpable, such as a road, an edge, a gate, water, a mountain, a tower, an altar, a stone, a tree. On the other hand, there are generalisations of concepts referring to space and the way it is perceived by senses; these are e.g. a passage, allotment, light, verticality, central point, axis, view, or even more general notions such as nature and building material. A third group is geometric figures: circle, square, triangle. Of all these elements only six are object made of a specific material which can contribute to spatial articulation: the gate, the tower, the altar, the mountain, and the tree. The other notions have no potential of this sort and are highly unlikely to function as carriers of meaning equivalent to words in a language.

According to contemporary cognitive psychology, the presence of signs and symbols in architecture stimulates the process of creating mental constructs of objects and directs one's attention towards their functions. This process cannot, however, be called narration. Conceivably, one might use the symbols present in an object and one's own associations that they inspire to build stories, but this is mere speculation and should be studied in a more systematized way in a representative group of people with the use of the research methods established in social studies (interviews, questionnaires etc.). If such research were to identify types of architecture viewers, this would make it analogous to the studies on the reception of music.[18]

Many authors who tackle the problem of architectural narration are evidently inspired in their writings by philosophical approaches. Yet the question of whether narration is indeed present in architecture would probably be more readily answered by using another tool, namely phenomenological analysis. In this particular context, a reference should be made to the work of Roman Ingarden who devoted a lot of his writing to studying the experience of architecture.[19] More recently, the issue of phenomenology of architecture was addressed by architects Thomas Thiis-Evensen and Juhani Pallasmaa, who used the method of phenomenologic analysis.[20] The ideas of Norberg-Schulz,

while indeed very sound, are frequently quoted in literature merely as references to a classic authority and are seldom revisited or re-evaluated in search for ways of putting them to practical use. In spite of its weaknesses, the phenomenological approach is inspiring, and at the very least more concrete and comprehensible than the musings of many postmodernists.

Roman Jakobson's cultural communication model – attempted application in architectural communication

As one of the fundamental tools for interpretation research in humanities and social studies, Roman Jakobson's model of cultural communication might also be of use in analyzing the meanings communicated by architecture. The model features the following elements, interrelated with one another: sender, message, channel, code, context, and receiver. Depending on which of these factors is most accentuated, Jakobson distinguishes six fundamental functions of language, albeit if the communication process is to be interactional, then all of these factors must come into play. Thus, if the communication process is focused on the sender and his state of mind, thoughts and emotions to be expressed by his message, the dominant function is the expressive (or emotive) function. Where the focus is on the receiver, the conative function will prevail. Communication that accentuates the channel (medium) in order to keep the interaction between the sender and the receiver irrespective of the content of the message (information) being transmitted will serve the phatic function. The referential function is dominant when the factor of context (reference) is accentuated, and expressed usually by descriptions. Focusing on the code itself, the very system of signs that serves communication, is an expression of the sender's reflection on the principles of creating and combining elements of the code into meaningful units and is called the metalingual function. Last but not least, focusing on the message itself, with its structural, aesthetic, utilitarian and other features, is called the poetic function.

[18] T. Natanson, *Wstęp do nauki o muzykoterapii*, Zakład Narodowy Imienia Ossolińskich, Wrocław-Warszawa-Kraków-Gdańsk 1979.
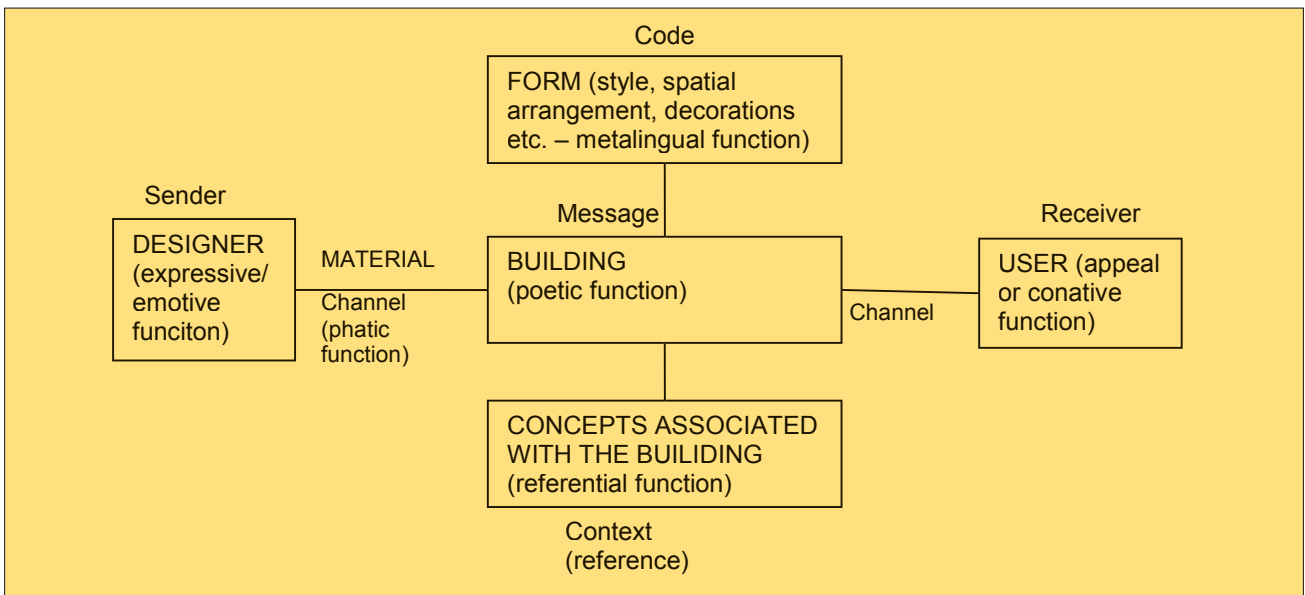
[19] R. Ingarden, *Studia z estetyki*, Tom drugi: *O dziele architektury*, Państwowe Wydawnictwo Naukowe, Warszawa 1966.

[20] T. Thiis-Evensen, *Archetypes in Architecture*, Norwegian University Press, Oslo 1987; J. Pallasmaa, *The Embodied Image: Imagination and Imagery in Architecture*, John Wiley & Sons, Chichester 2011.
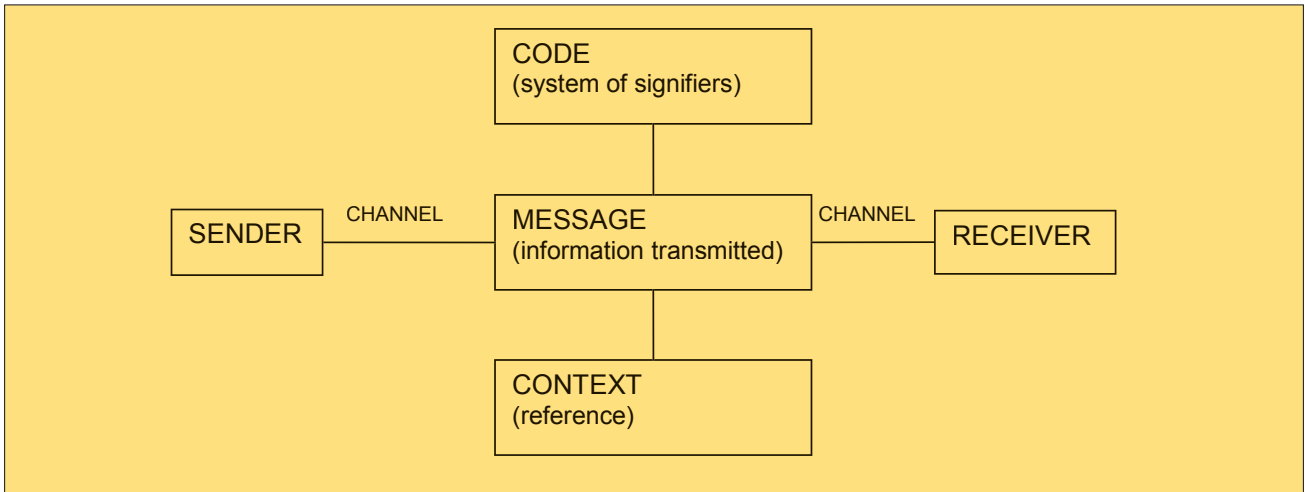
1. Communication according to Roman Jakobson

2. Attempt at applying R. Jakobson's model to architecture

Analysis of Jakobson's model

When set against the process of communication in architecture, Jakobson's model presents some difficulties as regards the interpretation of its components. First of all, in most cases it is quite unclear as to who should be considered the **sender**: is it the designers, the investors, the construction companies, or all of them combined? After all, all these groups have some say, though not to the same extent, in how the building will ultimately be construed. Nor is it clear which of these groups, if any, harbours a conscious intention of inscribing any cultural message in the shape of the building. If such an intention does indeed come into play, it is probably only poorly articulated. A message of this kind will be undoubtedly more pronounced in buildings of cultural significance, such as museums, theatres, cinemas, music halls, memorial sites, churches etc., or in edifices housing the seats of governments. The message can also constitute an expression of the designer's artifice and creativity, as is the case with architects who value the graphic originality of their designs. At our present state of knowledge regarding perception and understanding of architecture, the idea that creators wish to communicate through their buildings certain socio-cultural notions or concepts independently of the technical, functional or economic considerations (expressive or emotive function) can at most be considered a hypothesis.

Another difficulty comes with the component of **context** (reference), which constitutes a set of all the concepts, thoughts, ideas and notions associated with the building and determining its utilitarian, technical, economic, artistic and aesthetic aspects. This information can be recorded in a number of ways: as descriptions, drawings, photographs, or merely in the consciousness of the sender as memories, images of imagination or cognitive schemas. The sender can make references to all or some of them, which gives him countless possibilities, but at the same time makes it virtually impossible to determine in an unambiguous way whether a particular reference is or is not made in a given case. Still, the referential (cognitive) function is of great importance in the communication process of architecture.

Another component of Jakobson's model that poses difficulties in this context is the code as a system of signifiers. Any attempt at defining it with reference to architecture is bound to be hindered by the lack of unanimity regarding the question of what signifiers are in architecture. According to the most prevalent view (e.g. Umberto Eco) a signifier – understood as an element which conveys meaning – can be any part of a building or edifice, regardless of its morphology (shape, size etc.) or physiography (texture, colour), and irrespective of the role it plays in the entire structural arrangement. Such a signifier can be a minor detail (window moulding, a pilaster) or a sizeable element (tower, dome, vault, roof, body, avant-corps, wing). It is also hard to pinpoint in architecture the equivalent of a morpheme – the smallest meaningful unit – or even the counterpart of a word. It might be a little easier to define the relations between the elements of a structure, i.e. the equivalent of syntax in language. These relations are spatial interactions between constituents, e.g. adjoining, passing through, encompassing, surrounding, flanking, surmounting, accentuating, dividing, joining etc.

Irrespective of all these difficulties, there are, however, certain morphological types of architectural elements as well as types and principles of combining them together that prevailed at some points in history and constituted stylistic codes which expressed the communication intentions of their creators and were generally easily recognizable owing to the socialization processes at work within a culture. They functioned not just as composition elements, but also as sets of particular details and motifs available (e.g. classical orders, tripartite division, lancet arches, wimpergs, tympanums etc.). In modern architecture these types of codes have been considerably reduced, and are practically non-existent. Still, all things considered, it is doubtful whether communication in terms of stylistics can indeed take the form of narratives. Stylistic codes are not metalingual, since they are not universal; quite the opposite, they are limited to a given culture or period in time.

The very central element of Jakobson's model is the **message**, which would be the architectural object. In this case, the onlooker is mainly influenced by the object's structural features, broken down into technical structure, morphological structure, artistic/aesthetic structure and functional structure. However, if one is to analyse the message in terms of the poetic function of communication, what seems to surface as the most pertinent aspect is the artistic or aesthetic structure, since it represents ordering the message in a way which is not strictly necessary for the sake of the object itself, but creates added value. This notion encompasses all that makes us prone to interpret an architectural object in terms of a work of applied art whose aesthetic value is both formal and symbolic, in which there is room for metaphor, rhetoric, poetics etc.

The least challenging of the elements of the model is **channel** and the associated phatic function, which describes the interaction between the sender and the receiver. In architectural communication, physical contact is made possible by the physical features of the material used. From this perspective, architecture should be considered one of the most complex messages possible, since it appeals not just to the one sense – sight – but also to the sense of touch, hearing, and even smell. Here too, however, one faces some interpretational difficulty, for in architecture the message is often sent at a time very remote from the moment of receipt.[21] One can hardly argue there is any kind of contact made and maintained between the sender and recipient of an architectural message.

Similarly, difficulty also arises with the appeal or conative function. The absence of the recipient at a specific time puts to question the interactivity

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[21] A. Kłoskowska, *Socjologia kultury*, Państwowe Wydawnictwo Naukowe, Warszawa 1983.

of communication in relation to architecture. But there are even bigger problems ahead – such as the unspecified nature of the addressee (receiver). The sender, i.e. the creator of an architectural object, is unaware of the preferences, beliefs, prejudices and predilections of the potential receivers, which is why he cannot expect them to behave in a certain way.

What all the foregoing discussion boils down to is that with regard to architecture and the ways it is perceived, communication processes – even though they do exhibit certain analogies to some similar processes in other aspects of human experience – are characterized by a remotely different, unique character of their own. With regard to architecture, the concepts and terminologies used in linguistic or literary analysis can only be used to some extent, as metaphors.[22] This pertains not only to Jakobson's model, but also to the notions of narration, rhetoric or poetic.

Narration as metaphor in architecture

Perceiving architectural objects through narration undoubtedly requires some initial knowledge on the part of the onlooker. But enforcing this requirement would cause architecture to become elitist, only to be understood and enjoyed by a narrow circle of initiates or connoisseurs. Low indeed would be the effectiveness of social communication where messages sent by the architect-narrator either fail to be deciphered altogether or are interpreted wrongly and contrary to the intention of the sender. Architecture, most notably the sacred and commemorative types, which are all about symbols, should be comprehensible to all. The architectural form of a church should not be a puzzle to the parish community. Impenetrability and exclusivity of architectural communication is a matter of professional ethics of the architects. To learn whether architectural objects are indeed considered messages about specific matters, empirical research should be undertaken, using for instance the methods and research tools used in social studies or environmental psychology. This research should also involve designers. Only then can the confrontation of the narrative intent of the architect with the interpretative responses of the target recipients furnish some empirical, testable, evidence-based knowledge on the problem of narration in architecture. Until the uncertainties discussed here are solved on the most fundamental level, little can be said on the subject of semiosis in architecture, and our understanding of it will be limited to scholars indulging in unrestrained discourse, persuasion and rhetoric.

If research into meaning in architecture is to meet scientific standards, the important question is whether it is evidence-based insight and represents what ancient Greeks called "episteme", or uncertain knowledge, based on conjecture, speculation and ideology, that is "doxa". The fundamental scientific standards and criteria must be identical in all disciplines of science, however vast the differences between their objects of study. Architecture and urban planning as a science is only in its infancy, an early phase of development which can be called pre-paradigmatic, because as yet it has no scientific paradigm.[23] What functions as its substitute – cultural discourse inspired by postmodernist philosophy – should be seen as reason for concern, since it is in fact nothing more than narration – story-telling about architecture from literary and philosophical perspectives sometimes masquerading as science proper. While drawing from humanities in architectural research seems interesting and quite promising from a cognitive point of view, it can also raise concerns when one realizes architecture by its very nature is closer to applied studies (design for instance) than humanities. Publications which are, in a sense, "narratives about architectural narration", fit into the so-called "talking theory" – the favourite essay-based form of architectural discourse, particularly popular in the academic community of lecturers and teachers.[24] What I have tried to argue here is that the proposition which is emerging in many papers regarding the existence of a phenomenon called narration in architecture is not a well-defined concept, but merely a metaphor based on an analogy between one thing being studied and another, well-investigated one. This is exactly what happens when the way meaning is conveyed in architecture is compared to literary narration.

Another metaphor of communication in architecture, one that can be dubbed "stage-design" met-

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[22] J. Sławińska, P. Łepkowski, op. cit.

[23] T. S. Kuhn, *Struktura rewolucji naukowych*, Wydawnictwo Aletheia, Warszawa 2001.

[24] P. A. Johnson, *The Theory of Architecture. Concepts, Themes & Practices*, John Wiley & Sons, New York 1994.

aphor, is the notion which used to be popular in Baroque and compared architecture to the stage of the theatre of life. The validity of this metaphor is confirmed in writings of many contemporary postmodernist architects, and it must be considered more accurate than the narrative metaphor in describing the actual character of certain currents in modern architecture, especially postmodernism.

Using metaphors in scientific discourse has long been considered inappropriate, or even downright wrong. This has changed drastically, however, in light of the latest findings in cognitive studies.[25] Research suggests that metaphors not only have explicative and didactic value, but they play an important role at every stage of scientific enquiry, especially in the initial phase (articulation and conceptualisation of the study area, formulating the research problem). In fact, metaphors serve as cognitive models, helping to develop scientific theories. In scientific modelling (metaphorisation) full similarity between items being compared does not need be assured. A classic example of a metaphor in science is Niels Bohr's planetary model of the atom, where the atom is presented as a planetary system with the planets (electrons) orbiting a sun (nucleus). While quite remote from the actual structure of the atom, by introducing the idea of a central nucleus and orbiting electrons this analogy does facilitate understanding of the complex issue of the structure of matter.

By this token, a metaphor is capable of relying only on a limited range of similarities between two items, as long as such similarities pertain to the most essential features of these items. The analogy between literary narration and that of architecture does not necessarily need to take account of things such as temporal linearity or sequence of events in order to be effective. What matters here are signs and symbols forming a unified system of interrelations, which simply happen to be temporal in literature, and spatial in architecture.

To conclude, metaphor can be used as a scientific model in architecture to facilitate understanding of the processes of semiosis and symbolisation, because it boasts a considerable cognitive value. It is tremendously important for societies to be able to visualise the key ideas that are most significant to them. Meaningful architecture stands out in built environment as a significant point of reference carrying symbolic meaning. Symbolism has been part of artistic expression since the dawn of time, and therefore any attempts at explaining the existence of symbols and metaphors in contemporary architecture using vague concepts derived from postmodernist philosophers like Derrida, Deleuze, Lyotard, Welsch and others is more of an "intellectual costume" than a valid research approach. The discussion of narration in architecture belongs rather to the field of architectural criticism, advanced, highly intellectual didactics and good journalism.

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[25] G. Lakoff, M. Johnson, *Metafory w naszym życiu*, Wydawnictwo Aletheia, Warszawa 2010; T. S. Kuhn, op. cit.

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