

University of West Hungary
Sopron

Theses of the PhD Dissertation

THE MIMESIS IN ARCHITECTURE

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Sopron

2007

I. THE ANTECEDENTS OF THE DISSERTATION

From the second half of the 1990's the number of those buildings, which stepped out of the forms of modernism, have increased. The straight walls were replaced by curved surfaces, while the perpendicular ones left behind the orthogonal system. Parallel to these changes, beside function, structure and materials, the architects' attention have been more and more attracted by the results of the sciences, Physics, Biology and of course Philosophy. As a result of the so called digital revolution, architectural design has also been conquered by computers. What's more, from the status of sheer technical devices, computers have become 'assistants' in the process of designing in many cases. All these made it gradually possible for the architectural forms to venture on an expedition that previously could only be done at the time of the construction. All these contributed to the appearance of a significant number of buildings of arched or curved volume that could relate to the forms of nature and the outside world more and more distinctly. Before long critics and theoretists recorded this phenomenon on the basis of form. Such expressions as biomorphic, zoomorphic or antropomorphic architecture revived. However, these expressions related to architecture on the basis of form. If we organise this formal relation on common philosophical basis we can firmly state that behind the different zoo-, bio- or antro- forms there exists an expression very well known in art history, that of mimesis. The existence of soft forms and formal inspirations taken from nature is not a completely new phenomenon in architecture. The phenomenon has simply been exaggerated by technological development. Therefore the examples of completed buildings and of those still under construction draw our attention, beyond the formal relations, towards a deeper uniformity concerning content. This uniformity concerning content can be described as mimesis or, in a wider sense, as an attitude to the techniques of creation.

II. THE MIMESIS IN ARCHITECTURE

The history of art is the history of conventions. At the centre of this tradition is the relationship between current artistic work and nature Reality). Interpretations of this relationship have differed starkly at various periods in history, but floating in the background throughout has been Aristotle's definition of the final purpose of art: mimesis. By this maxim, the meaning of art is the reproduction of reality. Architecture, however owing to the

technical and tectonic constraints of the building, has never been able to adopt mimesis as its core program

Unlike the directness of a panel picture or sculpture, architecture could only display relationships to "environment", "nature" or "reality via codes known only to the initiated. The tectonic message of palm-tree column capitals, the column body bulging for strength, the reed bundle imitating column, or the stone adaptation of carpentry joints in the Doric order is a blend of jargon and visual information that really can only be interpreted through prior learning. In architecture, then, Aristotle's interpretative maxim of art, mimesis cannot be such a thoroughgoing theoretical program as is in painting or sculpture. Architecture's mimetic capability, free of ideology, is at base exclusively technology-dependent. In our days is this technology available, and represented on significant works: freed by new ways of using materials, architectural invention takes its cue from natural phenomena and adopts ready-decoded, recognizable biomorphic allusion. In a word, mimesis. This brief essay may be summed up in the thesis that:

The technical revolution of our time has projected a part of architectural works into a new era in which, fundamentally breaking from modernist tradition, it has adopted mimesis, the maxim of fine arts since the beginning as its program. This new architecture is MIMETIC ARCHITECTURE.

Beyond the acceptance of this thesis the aim of this work is to create a structure out of the mimetic phenomena in architecture.

III. THE AIMS OF THE DISSERTATION

The dissertation examines architectural mimesis or, in other words, one possible aspect of the relation between architecture and reality. This aspect is the art theoretical maxim of mimesis, copying or imitating in more general terms. In this respect the dissertation is not a thesis in the sense that it does not intend to have *architecture as such* accepted as a mimetic form. It does not wish to take sides whether or not architects should be mimetic, either. The primary aim of this dissertation is to allow for a new type of classification of architectural creations by applying the model of mimesis. The secondary aim of the dissertation is to define and classify architectural creations along the line of a chosen cross-section. This cross-section or model of interpretation is, in this case, mimesis. As a characteristic part of art theory mimesis-as-a model- attempts at creating permeability between the discussions of art theory and architecture.

IV. THE STRUCTURE AND RESEARCH METHOD OF THE DISSERTATION

Mimesis, as an approach allows free scope of any kinds of strategies of theoretical work to be defined. Thus, the approach consists of two parts. The first part presents the concept of mimesis from a philosophical point of view. It elaborates on the origin of the word and on the differences of the shades of meaning –of copying and imitating. It also displays the magical origin of the concept and the process through which it became an artistic program. On presenting the artistic and architectural history of mimesis the dissertation also expatiates on the marginal fields where mimesis is no longer applicable. The history of mimesis, that is, can be divided into the examples of architectural mimesis and artistic mimesis. When assessing architectural mimesis the dissertation differentiates between atropomorphic traditions and scientific traditions.

The second part classifies buildings according to mimetic types. It also displays a mimetic scale which demonstrates the mimetic intensity of the creations. In this system mimesis is not a program but a model. We can better understand the aim of this dissertation through the following demonstrative parallel: the dissertation sets out to investigate what happens to the volume of the buildings represented by iron filings and steel-wool if we place a magnet inside with the word 'mimesis' written on it. How does this modify the set? What kind of correlations can be deduced from the picture?

The major lesson of this dissertation is that mimesis, in the set of architecture, is not a mere intellectual adventure. Having applied it for contemporary as well as historical cases, mimesis presents us with such a well structured picture of architecture that it proves, in itself, the relevance of the system or model, namely mimesis.

This structure comes into being as a result of a method of classification through which the dissertation categorises everything a house can mime. Naturally, the subject of mimesis can be any kind of 'world component'. Nevertheless, according to the number of the examined cases, the characteristic examples and the recurring motives, it is possible to set up well distinguishable categories which are flexible enough to cover the phenomena of mimesis.

The mimetic judgement of architecture, however, is always two-directional. There are houses which are judged to be mimetic by the public and are mentioned as living organisms independent of the intention that the architect had in mind. Opposite to this is the phenomenon when public opinion merely perceives the walls while the building –in compliance with the architect's intention- is in some kind of mimetic relation with the world. Thus buildings which were judged to be mimetic and buildings which were intended to be mimetic often fall into different categories. For the demonstration of this duality the dissertation proposes the scale of mimetic perception and mimetic intention. While the mimetic categories were set up according to the subject of the imitation, the scale of mimetic perception and mimetic intention functions along the line of a different cross-section. It organises houses in accordance with the recipient's interpretations on the one hand and with the architect's intentions on the other, that is to say, the scale displays examples of intentional and operational types of mimesis.

V. THESESES

Thesis 1.:

The consequence of technical development has projected a part of architectural works into a new era. It has adopted mimesis, the maxim of fine arts as its program since the beginning. This new architecture is mimetic architecture.

Mimetic architecture is seeking a direct formal connection to the world and the environment. The significance of this search is that.

Thesis 2.:

The definitions and interpretations of mimesis in contemporary psychology can be extended into the realm of architecture. This procedure connects architectural integration with psychological assimilation and creative adaptation.

Thesis.:2.a

The concept described in psychology is creative adaptation. In the course of this process humans adapt gradually to the unknown environment. Humans' adaptation to the environment is a reversed mimetic process through which humans become assimilated to the environment.

Thesis.:2.b

The architectural process of assimilation to the environment is twofold. In the first phase, during the process of creative adaptation the architect assimilated to the environment creates a building which is a psychological example of an assimilation to the environment. The house in this case is described by twofold mimetic connection. One relates it to its creator, or to be more precise, to the frame of mind accepting the environment, the other relates it to the environment.

Thesis 3.:

According to the history of ideas shifting from faith to reason, from spiritual to substantial, the interpretation of mimesis also changed. In this process the historic anthropomorphic tradition has been followed by the contemporary scientific tradition.

Thesis.:3.a

A phenomena detectable in the history of architecture was that early Renaissance authors, primarily influenced by Vitruvius, explained the forms of architectural elements, for example that of a column, with the help of antropomorphic relations.

Thesis.:3.b

The antropomorphic explanation of architectural elements like the form of a column were replaced by scientific explanations as a result of growing independence of sciences by the second half of the 18th century. Therefore, as Vitruvius has it the flutings of Ionic column are the depiction of the pleats of a garment covering a woman's body, while the same is explained by science with the help of arguments using plastic art and optics.

Thesis 4.:

The moment of mimesis, regardless of its accuracy, does not manifest in the whole, but only in some details of the architectural object. The partial mimesis, regardless of the intensity of connection, cannot be detected on the volume and facades.

The three most characteristic cases of partial mimesis include baseplan mimesis, constructional mimesis and mimesis of details. Baseplan or code mimesis means that only the baseplan of a building resembles an element of the world. In constructional mimesis the structure of the building imitates the formation of a bearer also existing in nature. Mimesis of details refers to the cases of sculptural decoration and of sculpture. Characteristic examples of mimesis of details can be traced in historic architecture especially within the Romanesque and Gothic style.

Thesis 5

The types of architectural mimesis can be systematized. I determined classes and subclasses within the system. The classification is based on the things that architecture can make the object of mimesis.

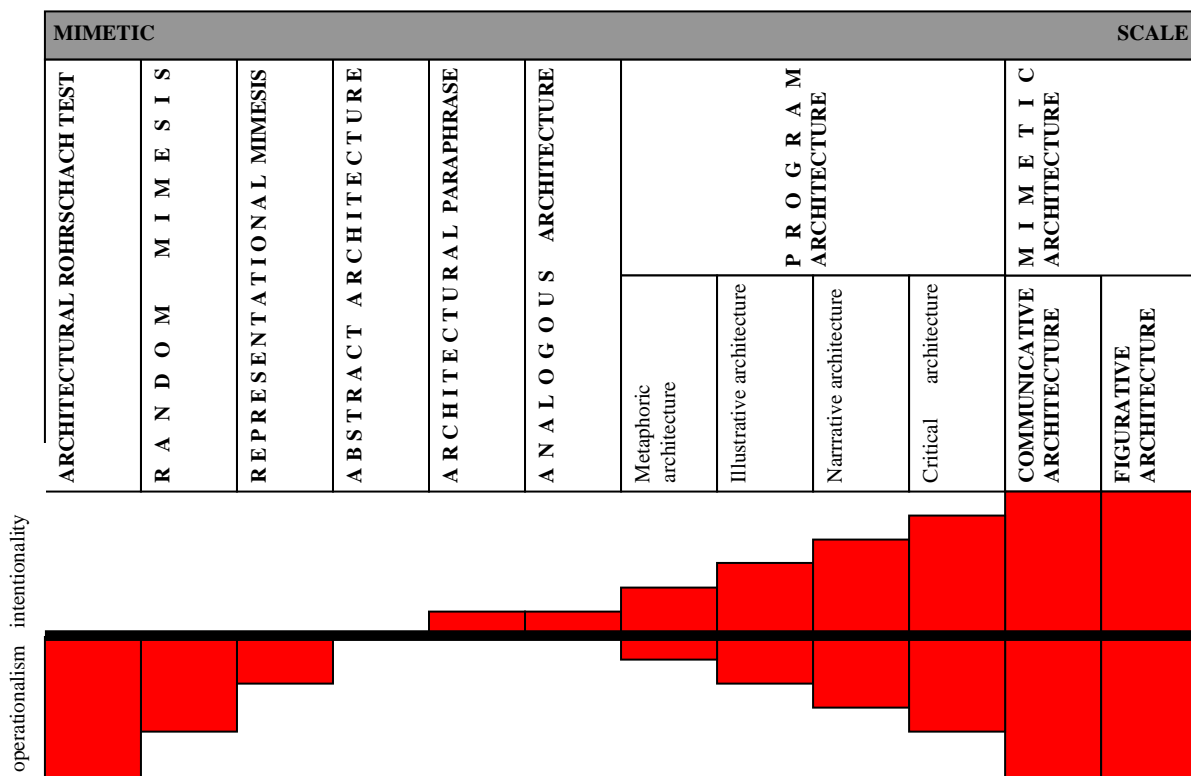
This system differentiates between the cases of environmental, artistic, scientific and psychological mimesis. In environmental mimesis the building becomes assimilated to the environment. Artistic mimesis presents contemporary and historical cults of styles, and displays how different styles and fashions were followed. Scientific mimesis defines the mimetic connection between architecture and natural sciences and humanities.

M I M E T I C M I M E S I S				
P R E - M I M E T I C C O D E D S T A T E	Mimesis of Details	P R I M A R Y E N V I R O N M E N T A L M I M E S I S	Antropomimesis	
			Faunamimesis	
			Floramimesis	
			Objectmimesis	
			Topographic mimesis	Artificial landscape independent of location
				Location dependent artificial landscapes
	Constuctional Mimesis	S E C O N D A R Y A R T I S T I C M I M E S I S	Data mimesis	Descriptive data
				Data generated by architect
			Diachronic mimesis	Cults of styles
				Folk art
	Baseplan Mimesis	T E R T I A R Y S C I E N T I F I C M I M E S I S	Synchronic mimesis	Fashion
				Style
			Cosmologic mimesis	Natural sciences
				Philosophical mimesis
Q U A R T I C P S Y C H O L O G I C A L M I M E S I S	A d j u s t m e n t	Manifesto		
		Architectural regulations		
		Tectonical mimesis	Depiction of different forces	
			Regionalism	

Thesis 6

Architectural imitation is dependent both on the intention of the artist and its detection by the spectator. I found that the ratio of mimetic intention and mimetic detection varies. I named the degrees of mimetic intention and mimetic detection and depicted them on a scale.

The two extreme states of the mimetic scale is the architectural Rohrschach test and figurative architecture. The state of architectural Rohrschach test is the state whereby a house that is not mimetic is judged to be mimetic by free association by its public. The creations of figurative architecture are acknowledged as a defined form of nature both by their creators and their public. Between these two extremes is stretched the realm of abstract architecture which is the marginal state of mimetic architecture. Its creations are not intended to be mimetic and no other forms are projected in them by the public, either.



Thesis 7

Colloquial language and speeches and writings on architectural works have always been rich in similes and metaphors. But the simile/metaphor is part of the language and not the architectural mimesis.

VI. THE LESSONS OF THE RESEARCH, THE POTENTIAL UTILIZATION OF THE RESULTS

The model of mimetic architecture has very clear borderlines. From the direction of artistic architecture the borderline is abstract architecture where the mimetic moment is not experienced either by the architect or the recipient. From the direction of folk architecture the borderline is spontaneous or instinctive architecture. Instinctive architecture is a primitive answer given by local materials to local climate and function. This solution cannot be assessed by the terminology of mimesis.

Although we declare our views on architecture with the help of similies and metaphors, this does not equal our stating that the meaning of an onion or piano shaped building would be 'onion' or 'piano'. The fact whether a house resembles something or not does not concern the readability of architecture. Architecture is not a transparent genre and as such cannot depict stories. The system of mimesis cannot alter this fact either.

Mimesis, however, turns buildings into media. The fact that a building represents something and this can actually be recognised proves that the building can, in certain questions and problems, act as an argument. With the use of its own devices the building as a medium is able to display something that originally was not an architectural problem. The mediating capacity of architecture is therefore a possible space of the techniques of creation related to the mimetic ability of architecture.

Architectural mimesis stands, to a certain extent, opposite individualism and creativity. For this very reason, artistic mimesis applied with moderation, or in other words, the following of standards can lead to the formation of architectural traditions which enhance the development of a formal language characteristic of a region.

In mimetic architecture creativity means posing the relevant and exciting questions. That is to say, what problems a creation should touch upon, or what part of life should be turned into the subject of mimesis. The possibility of creativity is hidden in the well-thought out answer, whereas banal architectural mimesis, as a result of its low budget, can very often end up as kitsch.

VII. PUBLICATIONS

- „Postorganic Architecture.” in: *Emerging Identities East*. Berlin – Bratislava – Budapest – Ljubljana – Prague – Riga – Tallinn – Vilnius – Warsaw. Ed.: Kristien Ring, Deutsches Architekturzentrum, DAZ, 2005. 136-138
- „Wine Cellar: An Inspiring Source of Contemporary Architecture.” in: *Brick '06. The Very Best of European Architecture*. Brick Award 2006. Callwey Verlag. Munchen. 92-97.
- „Modele architektury węgierskiej w czasach prekształceń.” In: *Arhitektura Murator* 2005/02, p 72-73. Original English: „Beyond, Above, Around And After Modernism, Architecture in Hungary in The Time of Transition”
- „Form-Shape-Mimesis.” in: the appendix of *Utóirat - Post Scriptum A Régi-új Magyar Építőművészet* (Hungarian Architecture). 2005/4. V. volume 27. Issue 9-12.
- „The New Chapter of Post-Organic Architecture. About the New Building of Graphisoft Park.” in: *régi-új Magyar Építőművészet* (Hungarian Architecture). The cultural periodical of the Union of Hungarian Architects. 2005/3. 3-8.
- „From an Analogue to a Model.” in: the appendix of *Utóirat - Post Scriptum A Régi-új Magyar Építőművészet* (Hungarian Architecture) volume 2. Architecture and Science. Conference. 2005. November 3.-4. *On the topic of „Architecture-Science-Sensitivity”*. Volume 1. 2005/5. V. volume 28. issue 11-14.
- „A Dim Image in a Mirror. About the Extension of the City Hall in Budaörs.” in: *régi-új Magyar Építőművészet*. (Hungarian Architecture). The cultural periodical of the Union of Hungarian Architects. 2005/6. 3-8.
- „Illustrative Architecture” in: *Alaprajz* 12. volume, 1. issue, 2005. January-February, 12-17.

„About the Possible Consequences of a Change in Scale. Residential Building Including Several Flats in Mecset street.” in: *Alaprajz* 11. volume, 5. issue, 2004. July-August, 34-37.

„On the Borderline of Kitsch and High Art, Louis Comfort Tiffany and the Tiffany-glass.” in: *Alaprajz* 10. volume, 1. issue 2003. January-February 42-45.

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„Eco, Paper, Fashion, Furniture, Design, Paper Furniture.” in: *Alaprajz* 8. volume, 5. issue, 2001. July-August, 40-43.

„From Cheap to Attractive Plastic, Furniture Made of Plastic.” in: *Alaprajz* 8. volume, 8. issue, 2001. November-December, 42-45.

„Architecture of Objects, Semi-Detached House, Budajenő.” in: *Alaprajz* 9. Volume, 8. issue, 2002. November-December, 16-19.

VIII. LECTURES-CONFERENCES

Contramobility, When Time Stops. 10th of May, 2003. 1ab - 1. Architectural Biennale, Rotterdam. in: NAI (The Dutch Architectural Institute)

The City as an Eternal Spatial Conflict: Budapest at the Doorstep of a New Paradigm. Kulturjahr des Zehn. The Cultural Year of The Ten. Conference on the Urban Agenda of the Capitals of the Joining Countries. 12th of October, 2004. Berlin.

Opposite Phenomena – Public Spatiality and Private Materiality: Postorganic Architecture in Hungary. Emerging Identities East. Berlin – Bratislava – Budapest – Ljubljana – Prague – Riga – Tallinn – Vilnius – Warsaw. Symposium 'Position' 25+26 11. 2005 at the DAZ in Berlin.

Architectural Exaggeration (or mimesis?) Public discussion with Dezső Ekler in Ernst Museum. 2004. February 18. (about the event see:

Csontos, Györgyi: „Architectural dispute in the museum” in: *Alaprajz* 11. volume, 2. issue, 2004. March 10.)

Virus-architecture. Round-table discussion 2004. február 29. (A 38. workshop, Budapest, moderator: Bodó Balázs, organiser: Martinkó József.)

From an Analogue to a Model. Conference on Architecture and Science. Organised by Magyar Építőművészet (Hungarian Architecture) and the Faculty of Ybl Miklós College of the University of Szent István. 2005. November 3-4. About the event see: the appendix of *Utóirat - Post Scriptum A Régi-új Magyar Építőművészet* (Hungarian Architecture) volume 2. Architecture and Science. Conference 2005. November 3.-4. 2005/5. V. volume 28. Issue.

The Star Architect and the City. Congress organised by *ALAPRAJZ* on the 4th March 2006. Bourbon Hall, Budapest, XIV. district Ajtósi Dürer sor 19-21. Moderator. Participants: Z. Halmágyi Judit (EEA), Eltér István (MÉK), Reischl Gábor, (MÉSZ), Visy László.