

Structuralism: An Alternative Methodology for the Architectural Historian

by Frances Schmitt

Le discours structuraliste en tant que méthode d'analyse critique se veut une alternative à la dialectique Hégélienne. Alors que ce second modèle d'analyse propose un mode d'investigation chronologique où styles, mouvements, personnalités déterminantes et influences sont clairement identifiés, le théoricien structuraliste, lui, formule son analyse architecturale en termes d'entité culturelle. Toute construction est donc soumise à un système d'équilibre où chaque donnée du cadre économique, politique, culturel, typographique ou scientifique viendra contribuer à l'articulation du projet architectural. C'est donc ce processus de conception (et non pas son expression finale) qui oscille entre deux pôles, la cause et l'effet, les conditions du milieu et leur intégration architecturale, que l'historien structuraliste veut cerner.

Unlike Hegelian art history, structuralist art history does not aim for a history with names, styles, schools, or geniuses as categories, but rather for one of ideological contradictions. It neither traces personalities, building influences, semantics nor the unfolding of the 'zeitgeist', nor does it bracket history chronologically or on the basis of stylistic affiliations. Structuralism proceeds solely on the grounds of how architecture functions as a problem solving process. It is the history of ideologies and accounting for the expression of these ideologies in concrete reality. A number of important hypotheses about the nature of culture and architecture are basic to the structuralist approach to history. These hypotheses are exemplified by the following structuralist writers:

All the intellectual activity of a given period obeys the law of a certain code of knowledge.

Michel Foucault

All cultural activity may be understood as communication. This communication may have many forms including sound, gesture and symbol.

Umberto Eco

Architecture as a product of cultural activity communicates through a unique language, (based on representation, symbol, space, plan, etc.). This language can be understood by the architect, the client and the user.

Christian Norberg-Schulz

Architecture as a product is determined by the problems of the building process itself. This process is governed by the rules of the period. These rules which define the code are not rules of style or technology but the rules of the ideology of the culture.

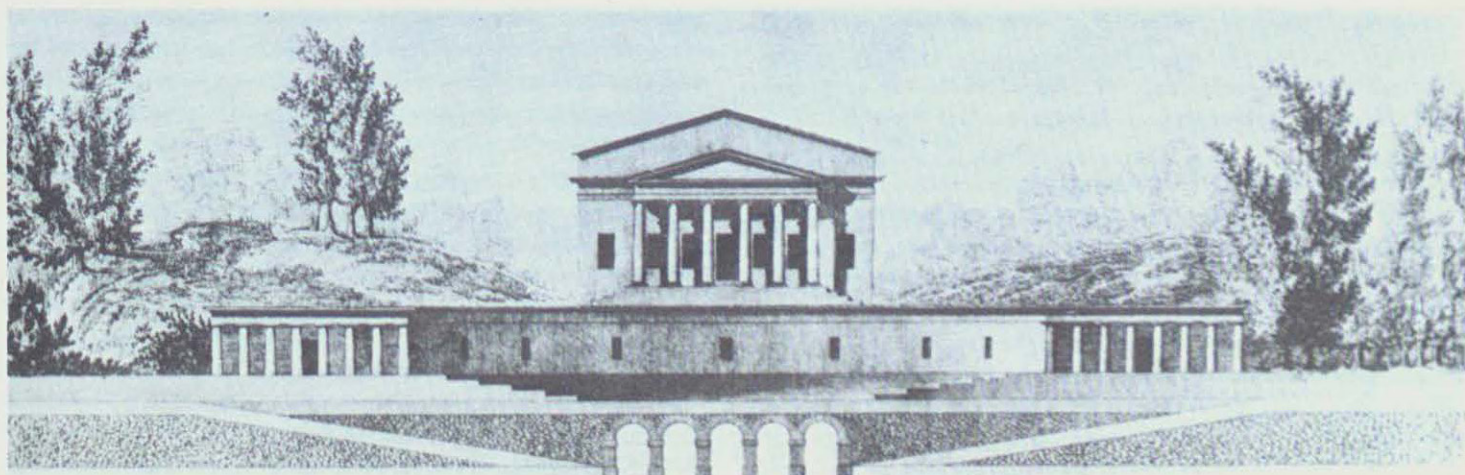
Demetri Porphyrios

The structuralists define architecture as a cultural product. A building may be seen as a solution to certain environmental problems posed by economic, political, cultural, topographical and scientific elements - the problems and the solutions are always in flux. The structuralist historian is concerned with the relationship between the problem and the solution and in order to study this relationship the historian has to analyze the process of building; he is not concerned with the building as a final expression of that process. To objectively investigate the question, "Why has a building, from a particular period, a particular form?";¹ a new method to describe a building had to be developed in a logical and structured way.

The structural methodology of architectural history is based on the theories of structural linguistics - these theories were introduced in Prague in 1929.² They were originally proposed as a radical and innovative methodology for the study of language. Traditional linguistics was seen as too narrowly focused on analyzing isolated facts and linear historical development. The same criticism has been made against traditional architectural analysis.

Broadly defined, structuralism is the study of the elements which constitute a linguistic system and, more importantly, of their mutual relationships. The relationships between the elements form the structure of the system. The focus of structuralism on the relationships and not on the elements themselves came out of the notion, expressed by Michel Foucault,³ that the elements themselves were, in reality, arbitrary.

The application of structural methodology to all disciplines, including chemistry, psychology, biology, economics and architecture is based on the supposition made by Levi-Strauss that all aspects of human culture may be interpreted as systems of signs. One person alone has no culture. When two people come together their first action is to communicate



through sound, symbol or gesture. In other words, culture is communication.

Structuralism, in this sense, has the same boundaries as semiology, "To communicate is to use the entire world as semiotic apparatus."⁴ And the structuralists use semiology in order to describe and analyze the building process. However, while the semiologist focuses on the psychological effect of the signs on the behavior, roles and moods of the users, on the intentions of the client and on the expression of the architect through sign analysis, the structuralist focuses on the rules that have allowed the signifiers to be appropriate to the problem the building is attempting to solve. Some structuralists believe that semiological analysis alone has not been able to explain architecture sufficiently.⁵

For instance, Austrian architectural critic Rudolf Kohoutek blames the degeneration of architecture, to a level of discourse which is wholly concerned with the consumption and articulation of sign and media, on the development of semiotics. He states that:

*Some architects may consciously design with these semiotic tools but others may see their selection of building elements as quite logical and consistent... Post-Modernism designates architecture as a language-making it presumably less austere and better fitted to the aesthetic tastes of the general public and more individualistic than the predominant mass-produced architecture which used the industrial aesthetic.*⁶



With this criticism in mind, structuralists who take this position are opting for an absolute rejection of the idea of a semiotic value in architecture. Demetri Porphyrios clearly lays out the methodological approach that the structuralist historian must follow. The first task is to identify the underlying principles of design and execution. These formative rules which make it possible for any building to be produced, they call the building's 'problematic'. The problematic is revealed through the study of the plans, sections, elevations, spatial relationships, decoration, materials, proportions and composition of the building.⁷ After isolating these principles the central question is, "What is the ideology which allows for these principles to be conceived of in the first place?"⁸

The ideology or 'field of knowledge' in which the architect is operating must be defined in order to answer this question. The ideology consists of man's perception of the total interrelationships of all aspects of his culture. So the historian is faced with the megalomaniacal task of studying a culture in its entirety. Once the culture has been analyzed, and this analysis includes all the disciplines such as economics, philosophy, science, politics, etc., he must then determine which discipline dominates or determines the building process.

After discovering the design principles and the governing rules of the age, the historian attempts to map out where and when these concepts reoccur in history and how they change from one architectural discourse to another. This map may be neither confined to one geographic area, nor does it necessarily exist in only one time period. For example, modern eclecticism follows the same principles as late 19th century Austrian architecture because in both situations economics is the determining rule for the building process; ornament is tacked on because it is seen as an architectural extra in the budget and not an essential element of the building.

The periodization of architectural history will thus be based on these ordering and signifying principles.⁹ In the studies of Rob Krier we can see the manifestation of this approach - he is exploring the notion of typologies. This is a very different approach to architecture from the Hegelian one.

In Hegelian thought, the architect "in the very act of creating simply represents the *idea* or *zeitgeist* in sensuous corporeal form."¹⁰ In contrast, architecture for the structuralist represents the peoples' vision of themselves. Their conscious and unconscious collective knowledge is translated into concepts and principles. The final built form does not necessarily express a notion of *higher spirituality* but may indeed express *economic considerations*. This conclusion is somewhat closer to the Marxist view of architecture which tried to secularize Hegel's thesis by replacing the supremacy of the spirit with that of matter. However, while the Marxist view of history does not allow for deviation within a culture from the dominant ideology, the structuralists look for concurrent and opposing ideologies. The architect is controlled by his cultural ideology because it determines the rules which underlie the principles of his design. (Marx believed that art is only occasionally ideologically based and that this connection is apparent only when there is an overt class conflict or dominance which demands that the autonomy of art is neglected in favour of a moral philosophical or political message).¹¹ These ideologies exist within the boundaries of all aspects of human culture - the architect functions within these boundaries. His discourse is on this field of knowledge, which includes the economics, politics, tectonics and themes of his own time. The rules which govern the expression of this discourse are unknown to the architect. The structuralist attempts to find these objective laws which govern human activity, "in order to understand how human beings in western culture have attempted to express or make sense of what is other about being human".¹²

In this attempt to reveal the intentions behind architecture, a profound knowledge of all disciplines is necessary. Without this solid understanding of a world view of the structure of beliefs that constitute the foundation of thought and action, any speculation about the meaning of architecture becomes superficial.¹³

Most traditional historians have tried to explain buildings by relating them to a cultural context and by revealing their relationships to other buildings, styles and movements. Some historians have attempted to deal with ideas, but only through the veil of their own ideologies.

Rafael Moneo in his article "The Contradictions of Architectural History" states that:

*Architectural history is so overlain by contradictory interpretations that, 'any attempt to a linear, continuous reading of history', now seems absurd. Structuralism has opted for a different methodology which views the history of modern architecture as a fragmented ruptured discontinuous reality. It suffices to pursue a theme, a school or an architect but it is not necessary to fit all the pieces of the historical puzzle together.*¹⁴

Frampton's critical history applies some aspects of structuralist methodology. He classifies architects by the symbolic codes or principles they use - hence such headings as ideology and representation, or abstraction and empathy. Architects as different as Louis Kahn and Buckminster Fuller are found in one classification. His history does begin to allow for contradiction and concurrency in that he allows for more than one ideology to exist within one time period. The problem with the structural analysis of history (and Frampton himself admits he was unable to achieve a truly structuralist understanding of his material)¹⁵ is that it demands too

much of any one person.

Tafuri, in his "Theories and History of Architecture" states that:

The true problem is the identification of a structure specific to a period of history and in order to define it the historian will have to hypothesize a unity... he must try to discover intrinsic analogies between such overtly disparate phenomena as the arts, literature, movements, etc. This effort, laudable in itself, is virtually impossible for one man to handle and he will inevitably have to rely on secondary information and no man can resist the temptation of either ignoring or slightly deflecting such lines as refuse to run parallel.¹⁶

One of the few historians who have come close to producing a totally structuralist work is Erwin Panofsky. Levi-Strauss calls Panofsky a 'great structuralist' because he is:

A great historian and also because history offers him, at the same time, an unrivalled source of information and a combinatory field in which truth of the interpretations can be tested in a thousand ways. His is the marriage of history, sociology and semiology.¹⁷

The value of approaching architectural history by the structuralist method may be that:

1. It allows the historian to include buildings and theories that contradict the dominant trend of a certain period without destroying the fundamental logic of his theory.
2. It helps the architect to understand why he is using certain forms, why they are appropriate and what they mean.
3. It is attempting to develop a descriptive method of analyzing architecture that is not based solely on interpretation but on a logical empirical structural method.¹⁸

A thorough history of architecture using structural methodology and semiotic tools is a long way from being written, but this methodology does offer an alternative way of studying all cultural phenomena. In his article, "Classicism is Not a Style", Demetri Porphyrios attempts to analyze classicism in structural terms.

Classicism is seen as an ideological approach to form and not as a set of stylistic elements (i.e. columns, capitals, cornices and pediments). Orthodox modernism and the architecture of Greece both express a classical ideology. The Greek temple has become a universal image of civilization. Architects of orthodox modernism such as Rietveld and Le Corbusier used pure geometries in the belief that they too would be universally understood. Both architectural discourses express the idea that 'civilized men speak the same language'.

Unfortunately this Utopian vision of modernism was lost and the concept of a universal egalitarian civilization was transformed into the ideology of 'conciliatory culture'. Porphyrios suggests that the ideology of industrial capitalism (our present dominant ideology) turned universal egalitarianism into universal consumerism.

This new ideology has, unfortunately for us, no collective ontological myth. An ideology without a mythology leaves a culture barren. The cultural crisis of our era is apparent in the frantic searching for novelty and cultural symbols by Post-Modern architects. This false reconstruction of culture is manifested in built form in two ways. Firstly, in the work of groups, like Archigram, whose aesthetics are made out of service and functional elements of industrial kitsch and, secondly, in the Post-Modern school of signs and symbols stolen from classical and vernacular architecture, which uses

these elements for the fast and easy consumption of culture.²⁰ The Post-Modern rhetorical figures of speech are not used in order to incite us to reflect and thereby gain knowledge of our situation but rather to satisfy our appetite for culture in the way McDonald's satisfies our appetite for a good meal.

Prophyrios calls the rule governing capitalist architecture the 'Principles of the Decorative Shed'. The ruling discipline in our epoch is economics. The building process is dominated by economic concerns and the "budget for architecture is divided into three layers - pragmatics, technics and semantics - all three independent budgets can be shifted around in a game which is aimed at minimum cost".²¹

Prophyrios suggests that to free the architect from this economically dominated ideology, so he can satisfy his society's yearning for an authentic culture, the architect must:

...slowly construct an ontology of building that would contain a mythology of the building process itself. This would be a return to classical ideology which understands classicism not as borrowed stylistic finery but as an ontology of building.²²

Working within a classical ideology the architect can, avoid the pitfalls of Post-Modern pluralism because it may throw light on the architect's reasons for doing what he does by going beyond what architecture shows in order to examine what it hides.²³

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J. Coplans, Andy Warhol

Notes

1. Christian Norberg-Schulz, *Intentions in Architecture*, (M.I.T. Press, Mass. 1981), p. 23.
2. See David Robey's introduction to structuralism in *Structuralism: An Introduction*, (Clarendon Press, Oxford, 1972).
3. Herbert Dreyfuss, *Michel Foucault* (University of Chicago Press, Chicago, 1983).
4. Robey, p. 59.
5. Manfredo Tafuri, *Theories and History of Architecture*, (Harper and Row Pub. Inc., New York), p. 176.
6. Kenneth Frampton, Ed., "A New Wave of Architecture", (Published by *Architecture and Urbanism*, Cat. 13, March 26 - May 3, New York, 1983). From the essay by Rudolf Kohoutek, "Architecture Beyond Eclecticism", p. 25.
7. Demetri Porphyrios, *Notes on the Methodology of Architectural History: "Notes on a Method"*, *Ad Magazine* #51, 6/7 Ed. Demetri Porphyrios, p. 95 - 104.
8. *ibid.*
9. *ibid.*
10. *ibid.* Gombrich, *Hegel and Art History*, p. 82.
11. *ibid.* Stephen Morawski, *Marxist Historicism and the Philosophy of Art*.
12. Christian Norberg-Schulz, "Heidegger's Thinking on Architecture", *Perspecta* 20 (MIT Press, Cambridge, Mass. 1983), p. 62 - 68.
13. See Carlos Perez Gomez, "The Potential of Architecture as Art" (from *A.D. Magazine*, #52, 7/8, London, edited by Papdakis), p. 55.
14. *ibid.* Rafael Moneo's article, "the Contradiction of Architectural History", p. 54.
15. Kenneth Frampton
16. "I have to admit that on both accounts I have been as consistent as I would have like to have been, partly because all the material has not been studied to the same degree of depth", p. 8.
17. Tafuri, p. 203.
18. *ibid.* (see reference for an explanation of Panofsky's relation to Cassirer, who introduced the possibility of seeing architecture as an independent "universe of discourse... with its own meaning that can be understood starting from the structural laws inherent to it"), p. 184 - 7.
19. Norberg-Schulz, p. 23.
20. Demetri Porphyrios, ed., "Classicism is Not a Style", (*Arch. Design*, London, AD 5/6, 1982) from an essay by the same title, p. 51.
21. Demetri Porphyrios, "Classicism is Not a Style", p. 53.
22. *ibid.* p. 56.
23. *ibid.*
24. Tafuri, p. 176.