

INTRODUCTION

Semiotics and Architecture: Ideological
Consumption or Theoretical Work
Diana Agrest and Mario Gandelsonas

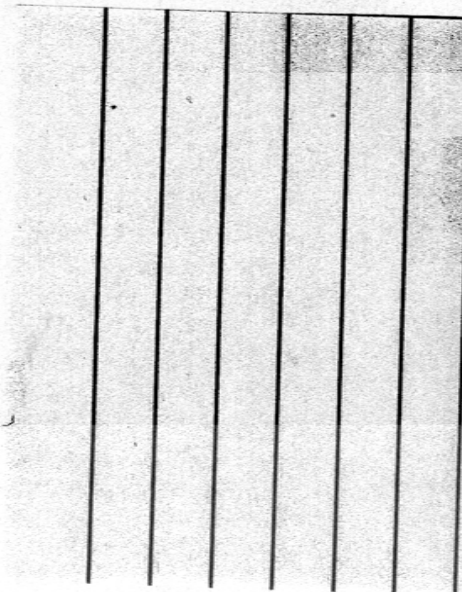
The postmodern period saw a revival of interest in meaning in architecture and a self-consciousness about the terms in which the discipline was described. These two issues coincided in the "linguistic analogy," the idea that architecture could be seen as a visual language. It was recognized in the 1960s that this common assumption needed further scrutiny with regard to the following question: to what extent is architecture conventional, like language, and are its conventions so widely understood that there exists a "social contract" vis-à-vis architecture? Both this article and the following, by Geoffrey Broadbent, emphasize the problems and potential of applying the linguistic analogy to architecture.

Diana Agrest and Mario Gandelsonas's essay condenses a longer article published in *Semiotica* entitled "Critical Remarks on Semiology and Architecture." Appearing in 1973 in the first volume of *Oppositions*, the journal of the Institute for Architecture and Urban Studies, the version of the essay reprinted here set a high standard for critical discourse. It evidences the influence of Marxism and of linguist Ferdinand de Saussure's work in Agrest and Gandelsonas's formulation of a theoretical position. Educated in architecture at the University of Buenos Aires, the two studied structural linguistics in Paris in the late 1960s—a time of great student activism. Roland Barthes's influence is also evident in their theoretical work (ch. 13); one example is the idea of "reading" the city, which Gandelsonas investigates in *The Urban Text*.

Agrest and Gandelsonas are careful to distinguish between the current interest in communication theory and semiotics; the distinction lies in the object of study of each field. Semiotics (roughly synonymous with semiology) is the science of the different systems of linguistic signs. It is concerned with the nature of signs and the rules governing their behavior within a system. Semiotics is thus involved with *signification*, or the *production of meaning*, which is accomplished

via the relation between the two components of the sign: the signifier (such as a word) and the signified (the object denoted). In contrast, communication theory deals with the use and effects of signs, with their function and reception by people involved in the transmission of a message. Agrest and Gandelsonas note that confusion regarding this distinction has led to some questionable applications of semiotic theory by architects and critics.

The authors see semiotics as a way to deepen the understanding of the production of meaning in architecture. They suggest that semiotics be conceived as part of a larger project, and not simply as an unmediated importation of concepts from an outside discipline. Thus, semiotics might be useful as a weapon against ideology, or "adaptive [architectural] theory," which allows the perpetuation of the economic and political status quo. Agrest and Gandelsonas hope that *critical* theory, devoted to the production of knowledge on architecture and to the critique of ideology, will replace this adaptive norm. (The critique of ideology reappears in Manfredo Tafuri's essay in chapter seven.)



DIANA AGREST AND MARIO GANDELSONAS
SEMIOTICS AND ARCHITECTURE
IDEOLOGICAL CONSUMPTION OR THEORETICAL WORK

Theories of architecture and design have largely been oriented towards the perpetuation of the fundamental structure of Western society, while seeking at the same time to maintain design as a valid operation within this established order. The authors challenge this adaptive role of architectural theory through their analysis of the absorption of semiotics as a "theoretical blockade," and argue that theory can only be considered a production of knowledge when its ideological basis is totally transformed.

In the last twenty years the production of "theories" of architecture and design has dramatically accelerated in a way that emphasizes the particular role of architectural theory as it has been continuously developed over five centuries. The function of these "theories," now as always, has been to adapt architecture to the needs of Western social formations,¹ serving as the connection between the overall structure of a society and its architecture.² In this way architecture has been modified to respond to *changing* social demands; architecture thereby *becoming* assimilated to society through "theoretical" operations. The corresponding changes introduced by "theory" into architectural practice serve to perpetuate the basic structure of the society and at the same time maintain architecture itself as an institution within Western social formations.³

In a previous article⁴ we established the process of production of knowledge as a theoretical project which is aimed neither at adapting architecture to the "needs" of the social formations nor to maintaining the architectural institution as we know it. At this juncture one is concerned with *theory* in a strict sense, as opposed to the adaptive "theory," which we call *ideology*.

Ideology can be seen as a certain set of representations and beliefs—religious, moral, political, aesthetic—which refer to nature, to society, and to the life and activities of men

in relation to nature and society. Ideology has the social function of maintaining the overall structure of society by inducing men to accept in their consciousness the place and role assigned to them by this structure. At the same time it works as an *obstacle* to real knowledge by preventing both the constitution of theory and its development.

Its function is not to produce knowledge but to actively set itself against such production. Ideology in a way alludes to reality, but it only offers an illusion of this reality.⁵ The summation of Western architectural "knowledge" in its entire range, from commonplace intuition to sophisticated "theories" and histories of architecture, is to be recognized as ideology rather than as theory. This ideology has explicitly claimed to serve the *practical* needs of society, by ordering and controlling the built environment. Nevertheless, we hold that the underlying function of this ideology is in fact the pragmatic one of both serving and preserving the overall structure of society in Western social formations. It serves to perpetuate the capitalist mode of production, and architectural practice as part of it. Thus, even if ideology affords knowledge of the world, it is a *certain* knowledge, which is limited and distorted by this overriding function.

We propose that there is a need for a theory, which should be clearly distinguished from the adaptive "theory" or, what we call here architectural ideology. In these terms architectural theory is the process of production of knowledge which is built upon a *dialectical* relationship with architectural ideology; that is, it grows out of this ideology and at the same time is in radical opposition to it. It is this dialectical relationship which distinguishes and separates theory from ideology.

In opposition to ideology, we propose a *theory* of architecture, which is necessarily placed outside ideology. This theory describes and explains the relationships between society and the built environments of different cultures and modes of production.⁶ The theoretical work uses as its raw material no real or concrete things but beliefs, notions and concepts regarding these things. These notions are transformed by means of certain conceptual tools, the consequent product being knowledge of things.⁷ Architectural ideology, considered as part of a bourgeois society and culture, provides part of the raw material on which the conceptual tools must be brought to work.

The relationships between theory and ideology might be viewed as a continuous struggle where ideology defends a type of knowledge whose major effect is the preservation of existing social systems and their institutions, rather than the explanation of reality. There have been many examples in history of this relationship. Ptolemy's theory of the universe, which corroborated Biblical texts, was supported by the Church for centuries against any other models which could explain more accurately the same reality. In opposition, Copernicus's theory was the result of a conceptual mutation within such an ideology. He literally destroyed Ptolemy's notion of geocentrism, and he separated his theory from this ideology by "projecting the earth into the skies."⁸ In return, the condemnation of Copernicus by the Church through its attempt to suppress a new concept of the world where man was no longer the center of the world, and where the Cosmos was no longer ordered around him, shows another aspect of this struggle. The theoretical ideology, which originally opposed the Copernican conception, finally *absorbed* it to reaccommodate the theoretical structure. In this process of dialectical relationship between theory and ideology two different stages must be distinguished: the first is that of *productive transformation*, when the ideology is initially transformed to provide a

theoretical basis; the second is that of *methodological reproduction*, when the theory is developed as an entity separated from ideology. In this sense, Copernicus's studies correspond to the first stage, where the theoretical work consists essentially in the subversion of a given ideology.

In architecture, we have yet to see a Copernicus to introduce the first stage of theoretical explanation. Indeed we have only recently begun to perceive the need to analyze the relationships between theory and ideology.

Several architectural ideologies have had a more or less systematized appearance, which has been emphasized through the ambiguous title of "theory." In recent years this ambiguity has been accentuated by several pseudo-theoretical developments that use models from different fields, such as mathematics, logic, behaviorism, or philosophy. When these models are applied, they introduce a superficial order while leaving the basic ideological structure unchanged. This introduction of models from other fields is to be regarded as ideological consumption, and may be witnessed as temporary fashion at the level of technique.⁹ *But the consumption of theories, which can be considered in themselves tools for the development of theory on architecture, acts as a special form of ideological obstacle, which we call theoretical blockade.*

Many theories pretending to be theory in a strict sense are in fact the precise opposite. They function as an *obstacle* to theoretical production. But the many "semiotic theories of architecture" which have been produced in recent years, serve only to consume a theory of semiotics—that in our opinion might provide a range of tools for the production of knowledge on architecture. They constitute the essence of a theoretical blockade.

This transposition of linguistic and semiotic concepts to the field of architecture only maintains architectural ideology. Such a procedure cannot be confused with a theoretical process which must be based on the critique and subversion of the ideological notions. In our opinion, semiotics can help in this critical task, as an important tool for the *production of knowledge*, only if we understand the semiotic concepts in relation to a general semiotic theory and not as isolated formulas. This implies that semiotic concepts related to a semiotic theory must be distinguished from similar concepts related to other theoretical fields. For example, while the concept of "code" belongs both to semiotics and communication theory, it performs a different role in each theory. Most present uses of semiotics fail to develop explicitly the distinction between notions belonging to different theoretical fields—semiotics, communication theory, and traditional semantics—which they use in a random and arbitrary fashion.

One aspect of theoretical blockade seems to us to arise in a situation when those responsible for developing "theory" neither distinguish nor relate with sufficient precision distinctly different discourses whose epistemological base and orientation is patently divergent. This can be seen in the existing confusion in the use of the notions of communication and signification. To understand more clearly the nature of this confusion one can look at George Baird's "La Dimension Amoureuse in Architecture."¹⁰ Baird writes, for example, "In the most modern sense of the distinction, the *langue* of a social phenomenon is considered to be its 'code,' and the *parole* its 'message.' In some respects, this distinction is the most interesting because it introduces into semiology a number of precise mathematical techniques of analysis, commonly grouped under the name

'information theory.'"¹¹ The confusion here is that *langue* and *parole* are related to the notion of signification, and code and message to the notion of communication. *Langue-parole* and code-message can only be cross-linked in very few and exceptional cases. The confusion between these two notions produces a situation where there is no clear definition and distinction made between communications theory and semiotics considered as a theory of signification. This problem can be seen in another statement by Baird where these two theoretical fields are again considered to be interchangeable: "Taking its cue from [Claude] Lévi-Strauss's structural anthropology, modern *semiology* looks on all social phenomena as communication systems; not only the obvious ones...but also...architecture."¹²

If semiotics is to become an important tool for the development of architectural theory, it would seem important to clarify the distinction between the notion of *communication* and the notion of signification, and their particular relevance for architecture.

Semiotics, the theory of the different systems of signs, is considered to be only a first stage towards a future general theory of ideologies.¹³ In this present stage semiotics not only can provide models, but it can also suggest theoretical strategies in our battle against a specific ideology, architectural ideology.

In the definition of semiotics as given by [Ferdinand de] Saussure,¹⁴ the notion of *communication* does not appear for the precise reason that it is a different and distinct phenomenon from *signification*. The study of the phenomenon of communication, which analyzes how signs are sent and received, differs from and cannot be confused with a study which analyzes "what the signs consist of" or "what laws determine them."¹⁵

The notion of communication in fact is related to a characteristic that is common to all systems of signs; namely that they provide a means for communicating between individuals. In contrast, the notion of signification depends on the particular internal structure within a given cultural system, such as that appointed to architecture, cinema or literature. The particular structure of such cultural phenomena stems from their *existence* as social institutions and not from their *use* by individuals. In architecture, for example, the particular signification of Japanese buildings is related to the internal structure of an architectural system of signs which is determined by the social and cultural context, and not by their functional use, which is similar to the use of buildings in other cultures, i.e., shelter, gathering, etc. In other words, the notion of communication is related to the function and use of a system whereas the notion of signification indicates internal relation within a system. Communication is concerned with the *use* and *effects* of signs, while signification is concerned with the *nature* of signs and the *rules* governing them.¹⁶ This difference implies, first, that even if we understand the factors which are part of the process of communication, we may still not know anything about the nature of signification itself; secondly, that since signification depends on the specific nature of the different systems of signs, it has to be redefined for each different semiotic system according to the way its internal structure works and according to what makes each internal structure different. This, then, is precisely the subject matter of semiotics—to consider the different semiotic systems as devices which produce signification, and to determine how this signification is produced.

Saussure's procedure for defining semiotics, linguistics, and linguistic signification demands examination both as a device for the discussion of ideological notions and to

establish the heuristic value of semiotic concepts and procedures as a tool for the production of a theory *on* architecture. In Saussure, language itself is subsumed by the notion of semiotics. The definition of linguistics requires a simultaneous definition of semiotics. Saussure defines semiotics (*semiologie*) as the science of the different systems of signs and the study of "langue" (the system of language) as the study of only one of the various semiotic systems. He then defines the concept of "sign" (the units of the system) as a double entity composed of a "signifier" (the acoustic image) and "signified" (the concept). Following this, signification is defined as a relation, internal to the sign, linking signifier and signified. He then demonstrates the arbitrary character of signification in the sign and shows how it is determined by another relation—the relationship between signs external to the signs themselves, which Saussure calls *value*.

With this definition Saussure opposes the concept of signification in traditional semantics. In traditional semantics, as shown, for example, in the semiological triangle of [Charles Kay] Ogden and [Ivor Armstrong] Richards, it is the particular conjunction of a form and a meaning which gives rise to the word; that is, meaning itself is considered as inherent to the word.¹⁷ For Saussure, on the other hand, words only take meaning according to their place within language considered as a semiotic system; that is, the word has no inherent meaning in itself. Saussure is opposed to the thesis of inherent meaning, where the meanings of the components of language mirror their content, or in other words, where language is seen as a representation of a thought that exists before or independent of any linguistic realization.¹⁸ Saussure postulates language as being a device—and not a mirror—for communication. This device is seen as a system of signs, which in turn is structured upon an internal, arbitrary relationship. As [Roland] Barthes remarks: "Starting from the fact that in human language the choice of sounds is not imposed on us by the meaning itself (the *ox* does not determine the sound *ox*, since in any case the sound is different in other languages), Saussure had spoken of an *arbitrary* relation between signifier and signified."¹⁹ Instead of considering this relation—as determined by *thought*—Saussure considers it as the result of a social contract. "The association of sound and representation is the outcome of a collective training."²⁰

The consideration of architecture as a system of signs has theoretical validity if it is used as a negative conceptual tool; that is, only when notions such as *arbitrariness* or *value* are used for a critique of architecture as an ideology. Saussure defines arbitrariness as a tool to oppose and criticize the ideological conception of language as representation. This thesis of arbitrariness allows Saussure to do away with the representative thesis about the nature of language. Because he understands language as a system which is not determined by its content, he establishes the conditions for the definition of an autonomous, theoretical object of linguistics: the *langue*. The importance of arbitrariness in language rests not only with the notion itself, but with the introduction of socio-cultural hypotheses in linguistics that replace the naturalistic hypothesis. The concept of arbitrariness has not yet been introduced in semiotic theories of architecture, just as the distinction between traditional semantics and semiotics has never been made in architecture.

Traditional semantics makes explicit an implicit conception of meaning which has served as a basis for architectural ideology from classical treatises to the functionalist approach. In the sense of traditional semantics, *objects* in the environment have been

understood to have *inherent meaning*. Traditional semantic concepts therefore only reinforce and maintain architectural ideology in its function as an obstacle to the production of knowledge. The conception of inherent meaning is incompatible with the semiotic conception of meaning as determined by system. Because of this, important semiotic concepts such as arbitrariness and value are lost. It is also difficult to establish the notion of arbitrariness in architecture because it contradicts ideological notions, such as function or expression, which are understood to be naturally communicated by architectural objects, as if their meanings were inherent to objects. To postulate the linkage between object and meaning as arbitrary, implies a denial of the supposed natural linkage between the function and the form of an object, which in turn exposes its socio-cultural nature. That is, to attribute a certain function to an architectural fact implies an underlying *convention*. In other words, an architectural object is understood as such, not because it has a certain inherent meaning which is "natural" to it, but because meaning has been attributed to it as the result of cultural convention.

This analysis of the arbitrary linkage between architectural object and function or other meanings invalidates the notion of function as the unique determinant of the form of the object. It also invalidates the idea of meaning as inherent to the object. Consequently, it is necessary to modify the traditional notion of meaning. The consideration of meaning introduced in a theory of architecture through the notion of *arbitrariness* must oppose ideological notions such as function or inherent meaning. The fact that these two notions serve as an obstacle for the introduction of arbitrariness explains, first, why there has been no suggestion for its application to the field of architecture and, second, why a notion such as *motivation* has been introduced instead. For example, Charles Jencks, in "Semiology and Architecture," says, "this is perhaps the most fundamental idea of semiology and meaning in architecture: the idea that any form in the environment or sign in language is motivated, or capable of being motivated."²¹ Such a notion perpetuates the understanding of the built environment as a result of functional demands, or as communicating a meaning which is determined by what has "motivated it." This merely reinforces ideological views which emphasize the natural or causal character of architectural form while denying its conventional and socio-cultural nature. The notion of arbitrariness which shows that the form-function pair cannot be explained in itself, indicates the necessity to explain it in terms of its relationships with other pairs within a system of conventions. In general, we can say that if any sign would be an imitation of what it represents, then one could explain it in itself, without the necessity of its having a relation with other signs in a system. But as this is not the case, we must investigate the nature of this relation.²²

As we said above, the relationship between signs, which links them within a system, is defined by Saussure as *value*. It is possible to say that with the notion of value Saussure breaks from traditional semantics into the field of modern linguistics. Here meaning is no longer an intrinsic property of an isolated sign; rather, it is defined by the differences or the relation of values that are established between signs within a formal system of relations: the *langue*.

For the definition of value Saussure compares language and economics: "For a sign (or an economic 'value') to exist...it must be possible, on the one hand, to *exchange dissimilar* things (work and wage) and on the other, to *compare* similar things with each

other. That is, one can *exchange* five dollars for bread, soap or a cinema ticket, but one can also compare this five dollars with ten or fifty dollars, etc.; in the same way, a 'word' can be 'exchanged' for an idea (that is, for something dissimilar); but it can also be compared with other words (that is, something similar): in English the word mutton derives its value only from its co-existence with *sheep*; the meaning is truly fixed only at the end of this double determination: signification and value.²³ Value, therefore, comes "from the reciprocal situation of the pieces of the language." It is even more important than signification. "What quantity of idea or phonic matter a sign contains is of less importance than what there is around it..."²⁴

Is it possible to construct a system in the domain of objects using this semiotic procedure? We think it is. However, we think the definition of that system requires a series of methodological precautions.

First it is necessary to define the specific characteristics of the "architecture" with which we are going to deal. In other words, which "architecture" are we going to deal with in terms of its situation? Is it Western architecture or Indian architecture? Or are we going to define architecture by a time sequence, such as Renaissance or Modern? A comparative analysis of the concept of value within Western architecture, with the concept of value within other systems of the same culture (the natural language, for example) might be helpful in determining some specific characteristics of architecture. What should be avoided in this analysis is the mechanical application of the model of language to architecture—an operation which has occurred in several semiotic studies. The mechanical application of this model, which was specifically developed for language, to other semiotic systems, such as architecture, only acknowledges the recognition of what is similar to language on the ideological level but does not define the *differences* in inner structure between language and the other semiotic systems. Even if it is possible to see the langue as a complex system of underlying rules, and therefore to compare it with the explicit and implicit systems of rules in architecture, architectural rules are determined by a certain sect belonging to a determined social class, while the langue is the property of everyone in general and no one in particular. These architectural systems of rules do not show any of the properties of those of the langue—they are not finite, they are not organized in a simple way, nor do they determine the manifestation of the system. Moreover, architectural rules are in a constant state of flux and change radically.

The mechanical application of the model langue/speech to Western architecture reinforces architectural ideology by denying the differences between architecture and language and by ignoring the place of natural language in architecture.²⁵ Moreover, and perhaps more important, it denies that "something" which defines a major difference between architecture and language—that is, the creative aspect of architecture. In language the individual can *use* but not *modify* the system of language (langue). In contrast to language, the architect can and does modify the system, which is fabricated on a system of conventions. The result of applying in a mechanical way the concept of langue to architecture is that the fabricated, conventional character of the system is hidden, appearing instead as if it were natural, as in language. The model langue/speech does not explain but overlooks creativity in architecture. Creativity in architecture is a complex play of conservation and variation of shapes and ideological notions within certain determined limits.²⁶ In our opinion an analysis of creativity could more properly be based on

the notion of value. It must begin by using as raw material the ideological systems of rules which assign and maintain certain value relationships between shapes and meanings, for their design, use or interpretation. The description of the structure of these rules is a first necessary step of semiotic analysis, where the concepts and the adequate tools capable of overcoming specific ideological obstacles must be produced. This preliminary work of description, which is our immediate concern, must be distinguished, however from the *explanation* of the underlying system of rules which produce the ideological structure, a task which is our ultimate objective.²⁷

The discussion of ideological notions by means of semiotic conceptual tools comprises another problem which also must be faced. Ideology works as an obstacle to the production of theory, not only by virtue of the fact that it perpetuates ideological notions, such as function or inherent meaning, but also by virtue of the fact that it perpetuates traditional boundaries defining the various fields—ideological regions—such as literature, urban design, and architecture, where those notions function.²⁸ Ideological notions always imply an ideological region to which they belong, and conversely, any ideological region is built upon an apparently more or less systematized set of ideological notions.

What we call theoretical blockade is related not only to the misuse of semiotic concepts but also to a more general problem—a confusion between an ideological region and an object of study. The application of semiotic concepts to architecture, as we have indicated, supposes a semiotic theory and method being applied to architecture. In our view it makes little sense to build a semiotics of architecture, which presupposes a theory divided according to the existing divisions of painting, literature, cinema, urban design, architecture, etc. An ideological approach which identifies a semiotics of architecture implies the acceptance of the existing division of the above practices and denies the fact that such divisions have an institutional and conventional character. Consequently, the theoretical system or object of study is confused with real, concrete, and singular objects. This difference between theoretical and real object can be seen in social sciences such as linguistics or historic materialism. For example, the theoretical object of structural linguistics is not speech but the concept of *langue*, which is developed through the study of real objects—i.e. different languages. The theoretical object of historic materialism is not a given social formation such as France or England but the concept of *history*, which is developed through the study of different modes of production in real social formations. In a similar way the theoretical object of a semiotics of the built environment must be the development of an abstract conceptual structure which explains the production of signification in the configuration of the built environment, which in turn will produce knowledge of concrete objects such as Western architecture. The production of this conceptual structure requires conceptual tools which in the present initial stage do not exist and which must be elaborated according to *demands* of the theoretical work. This elaboration will be made on the basis of semiotic abstract concepts and semiotic theoretical strategies employed as heuristic devices. In our conception of theory, its ultimate *raison d'être* is the knowledge of concrete objects, in this case of the built environment in a certain time and place. But this knowledge is only a result of a process of transformation of notions belonging to an architectural ideology. A theory as production of knowledge, as we have indicated, is only to be developed through a

constant struggle with ideology. The production of knowledge can only be done by disassembling not only ideological notions but also through methodically erasing the boundaries separating different practices within a culture and through looking towards other cultures and situated at other points in time. Theoretical work cannot be realized from inside architectural ideology, but from a theoretical "outside" separated from and against that ideology. This must be the first step in the construction of a materialist dialectic theory of architecture as part of a more general theory of ideology.

- 1 Social formation (*formation sociale*) is a Marxist concept denoting "society." "Social formation is the concrete complex whole comprising economic practice, political practice, and ideological practice at a certain place and stage of development." Louis Althusser, *For Marx* (New York: First Vintage Books, 1970), 251.
- 2 There are other functions of architecture and design theories to which we do not refer in this article, i.e., the theory that has the function of establishing a certain ordering of design operations within architectural practice.
- 3 Transformations in society introduce reforms that allow the existing system to survive. However, these are never real changes—since the structural relationships are not being touched—but are merely transformations of that system. For example, the development of the capitalist mode of production through various different stages—mercantilism, industrial capitalism, imperialism, etc.—has been based on a series of transformations achieved in different domains which did not in any way modify the fundamental class structure.
- 4 Diana Agrest and Mario Gandelsonas, "arquitectura/Arquitectura," *Materia, Cuadernos de Trabajo* (Buenos Aires: 1972).
- 5 To be more precise we should say ideologies (plural) even if in this article we refer to a particular ideology, bourgeois ideology.
- 6 This is only a partial definition related to the specific subject of this article: the relationship between theory and architectural ideology. This partial character stems from the fact that the important theoretical problem of the relation existing between architectural practice and the "unconscious" (Freud) has not been considered in this article.
- 7 We try to follow here the chapter "Methodology" in Karl Marx, *Introduction to Political Economics* recently elaborated upon by Althusser in *For Marx*. We consider these works a fundamental basis for any dialectic materialist approach to theory as opposed to any form of idealistic conception of theory. See Althusser's qualification of idealistic theory under the categories of "empiricism" and "formalism." We use the term theory, however, in such a way as to contrast it with what must now be considered only the Western conception of theory and to emphasize its present provisory character as only a stage in the development of a more general theory of ideologies.
- 8 Alexander Koyre, *La Révolution Astronomique* (Paris: Hermann, 1961), 16.
- 9 Diana Agrest, "Epistemological Remarks on Urban Planning Models," lecture, IAUS, New York, 1972.
- 10 Charles Jencks and George Baird, *Meaning in Architecture* (New York: Braziller, 1970).
- 11 Ibid., 82.
- 12 Ibid., 87.
- 13 Julia Kristeva, "Le Lieu Semiotique," in J. Kristeva, J. Rey-Debove, and J. K. Umiker, eds., *Essays in Semiotics* (The Hague and Paris: Mouton, 1971). See also Eliseo Veron, "Condiciones de produccion modelos generativos y manifestacion ideologica," in *El Proceso Ideologico* (Buenos Aires: Ed. Tiempo Contemporaneo, 1971).
- 14 Ferdinand de Saussure, *Course in General Linguistics* (New York: McGraw-Hill, 1966).
- 15 Ibid., 16.
- 16 Paolo Valesio, "Toward a Study of the Nature of Signs," *Semiotica* III, 2 (1971): 160.
- 17 John Lyons, *Introduction to Theoretical Linguistics* (Cambridge, UK: Cambridge University Press, 1968), 404.

- 18 Oswald Ducrot and Tzvetan Todorov, *Dictionnaire Encyclopédique des Sciences du Langage* (Paris: Seuil, 1972), 15–16.
- 19 Roland Barthes, *Elements of Semiology* (New York: Hill and Wang, 1968), 50.
- 20 Ibid.
- 21 Jencks and Baird, *Meaning in Architecture*, op. cit., 11.
- 22 This comparison does not refer to the similarities of form-function pairs and signs but to the similarities of the relationships between form-function pairs and the value relationships between signs. To take the concept of value for theoretical development in architecture can be justified not only on the basis of recent analyses which demonstrate its validity (Jacques Derrida, *De la Grammatologie* [Paris: Ed. du Minuit, 1967]) but also from Roman Jakobson's writings on metaphor and metonymy in R. Jakobson, *Essais de linguistique générale* (Paris: Ed. du Minuit, 1963). A similar position is taken by Christian Metz in various works on "the semiotics of movies."
- 23 Barthes, *Elements*, op. cit., 55.
- 24 Ibid.
- 25 Mario Gandelsonas, "Beyond Function," in preparation.
- 26 Mario Gandelsonas, "Linguistics in Architecture," *Casabella* 374 (February 1973).
- 27 Diana Agrest and Mario Gandelsonas, "Critical Remarks on Semiology and Architecture," to be published in *Semiotica* VI (1973).
- 28 Julia Kristeva, "Le Texte Clos," *Languages* 12 (Paris: Didier-Larousse, 1968). See also Jean Louis Scheffer's review of L. Marin, "Elements pour une Semiotique Picturale," *Semiotica* IV, 5 (1971).