

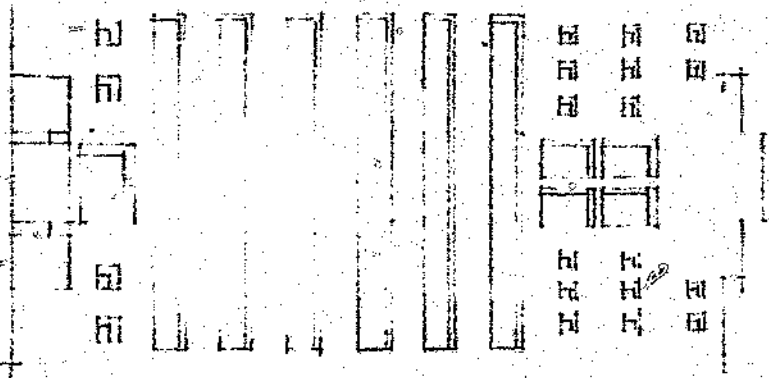
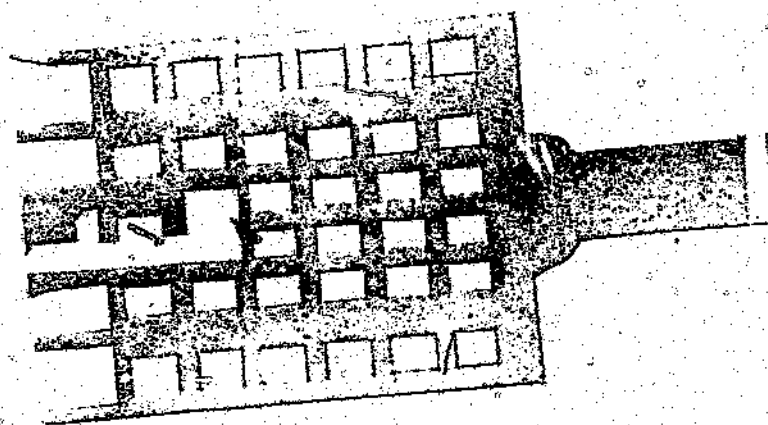
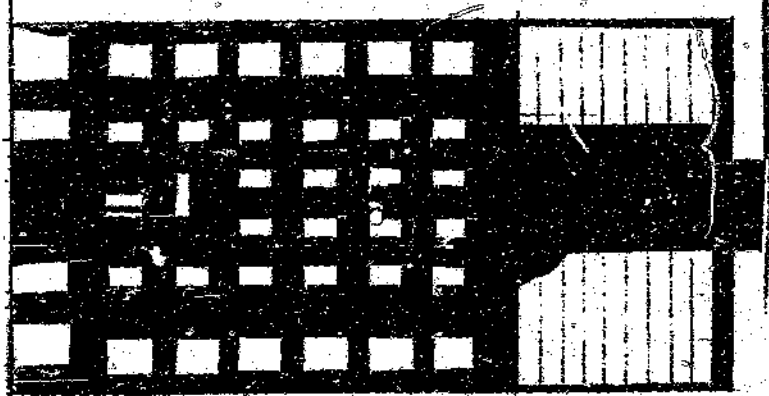
ARCHITECTURAL SEMIOTICS

A CRITICAL ASSESSMENT OF THE WORK OF DIANA AGREST AND MARIO GANDELSONAS

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**A thesis submitted to the Faculty of Architecture, University of the Witwatersrand,
in fulfilment of the requirements for the Degree of Master of Architecture.**

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ABSTRACT

Since the late 1950's, research into architecture by many theoreticians has focused on its capacity to convey meaning. As well as traditional approaches to this question, mathematics, communication theory, semiotics, discourse analysis and deconstructive criticism have been used.

The work of Diana Agrest and Mario Gandelsonas in the 1970's drew on a number of sources from the broader semiotic field to analyse architecture as a system of meaning. They focused on the processes involved in this aspect of architectural production.

This dissertation examines their thesis, in order to ascertain whether the semiotic approach adequately explains how meaning is conveyed in architecture.

DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Architecture in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

Lindsay Jill Bremner

October, 1991.

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PREFACE

The choice of subject for this thesis began when studying towards a Master of ~~Architecture~~ ^{Architecture} Degree at Princeton University, New Jersey in 1982 when I had the privilege of attending Anthony Vidler's "Theory of Architecture" course. This introduced me to the debates surrounding the question of meaning in architecture.

This question was pursued in the theory courses I developed at the University of the Witwatersrand, Johannesburg, 1984 - 1991, which involved extensive research into the structuralist and post-structuralist positions on meaning. Out of this I made contact with Dr Jean Pierre Delaporte, then lecturing in the Comparative Literature Department at the same university. This contact introduced me to the wealth of semiotic discourse - Eco, Barthes, Althusser, Lacan, Kristeva, Foucault. At this time, my attention was drawn to the work of Diana Agrest and Mario Gandelsonas, who had been examining architecture from a semiotic perspective since the early 1970's. This thesis is the result of my reading of their work.

Over the four years I have been writing it, weekly or near weekly discussions with Dr Delaporte have proved invaluable. Friends in America - Michele van Deventer and Ann Pendleton have given assistance in assembling data. My supervisors, initially Professor Dennis Radford, and lately Professors Glen Mills and Reingard Nethersole have given valuable assistance. To all of them I owe my grateful thanks.

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INTRODUCTION

This thesis examines the semiotic project of Diana Agrest and Mario Gandelsonas produced in the 1970's and early 1980's, which analyse architecture as a system of signs through which meaning is conveyed.

It must be noted that my thesis is a study of a specific body of semiotic work. It does not set out to examine the broader scope of semiotic analysis in the field of architecture, but focuses on Agrest and Gandelsonas' project¹.

As in all semiotic studies, the model adopted by Agrest and Gandelsonas for their study of architecture was that of natural language, along the lines proposed by Ferdinand de Saussure. They were influenced by subsequent developments in structural linguistics, particularly that of the French School of Semiotics.

My examination of Agrest and Gandelsonas' work has been carried out with the question in mind of whether indeed a semiotics of architecture is possible. Can the semiotic approach adequately explain how meaning is conveyed in architecture? If so, of what aspects of it? In what respects does architecture function as a properly formed sign system?

1

Umberto Eco (1968) produced one of the first attempts to develop a semiotics of architecture. Others who have analysed architecture from a semiotic perspective have been R. de Fusco and M.L. Scalvini (1969), E. Garroni (1972) and F. Choay (1965). Agrest and Gandelsonas' work draws on this tradition. Subsequent developments in deconstruction in architecture (e.g. Eisenman 1984, 1985, 1986) owe much to these semiotic forerunners.

In my thesis:

Chapter 1 outlines the basic concepts of semiotics for the architectural reader.

Chapter 2 outlines the central arguments in Agrest and Gandelsonas' thesis, with which the South African reader is probably unfamiliar, due to limited access to the publications in which it appeared.

Chapter 3 details a number of accounts of the concept of metaphor used by Agrest and Gandelsonas in their explanation of meaning in architecture.

Chapter 4 discusses Agrest and Gandelsonas' project in the light of what has gone before.

Chapter 5 assesses the value of Agrest and Gandelsonas' semiotics for architecture.

1. WHAT IS SEMIOTICS ?

Semiotics, as defined by its founder, Ferdinand de Saussure in his Course in General Linguistics (1916), is the modern science of signs. It studies any objects or practices which convey meaning. These might be images, gestures, garments, musical sounds, or, in the case of this thesis, architecture and other buildings.

Roman Jakobson, a leading linguist, defined semiotics at the opening of the First International Congress of Semiotics in 1974.

Semiotics, Jakobson said, is the science which examines the basic relation of sending or referring back, where something stands to somebody for something else in some respect or another (see Eco 1985:176). Semiotic objects are recognised as all cases in which physical objects stand to someone for something else. In addition, semioticians hold that whenever we make sense of things in this way, it is because we have configured them as part of a system of signs. Semiotics is the study, not of isolated signs, but of signifying systems - discourses or languages with which society communicates.

The semiotician, as opposed to the linguist, studies how it is possible for non-linguistic systems to convey meaning. The French semioticians - Metz (1969), Todorov (1972), Barthes (1983) et al. carried out studies of a number of cultural systems. Literature, photography, painting, comic strips, cinema, fashion etc. were all subjected to semiotic analysis. Claude Levi- Strauss' work (1973) on systems of kinship and myth similarly widened the semiotic field.

The semiotician's model for these analyses is that of natural language, as proposed by Ferdinand de Saussure.

The great novelty of de Saussurian linguistics in relation to its predecessors was the division of language into two parts - its systematic and its executive aspects, 'langue' and 'parole'. 'Langue' is the system which orders the units of which a language is built up, making meaningful communication possible. 'Parole' is the individual side of language, in which the rules of langue are put to use.

1. *LANGUE*

Barthes (1967:14) describes langue as language minus speech. It is the institutional and systematic aspects of any language, and, by extension, any communication system which the semiotician isolates for study. De Saussure identified langue in the following way:

Language (the langue) is a well defined object in the heterogeneous mass of speech facts. It can be localised in the limited segment of the speaking circuit where an auditory image becomes associated with a concept. It is the social side of speech, outside the individual who can never create nor modify it by himself; it exists only by virtue of a sort of contract signed by the members of a community ... language ... is a system of signs in which the only essential thing is the union of meanings and sound images, and in which both parts of the sign are psychological ... Language is a system of signs that express ideas.

De Saussure 1959:15)

De Saussure limited his object of study to langue, a distinction his successors have rigorously adhered to¹.

1

This is what distinguishes structural linguistics from other approaches to language such as generative transformational linguistics, communications theory, discourse theory, or other theories of enunciation of speech acts. These criticise the absence of the notions of the subject or history in the structural approach.

If the study of language set by de Saussure is followed for buildings, it must be to construct the langue of building, the system in which material built objects are associated with meaning. If considering real buildings in this way, the problem is relatively simple - how is it possible for built objects to convey meaning? However, if one is studying architecture, one has to take into account the different substances used in architecture for communication - architecture as written about, architecture as drawn and architecture as built. It is probably necessary to subdivide architecture into three systems and clearly define which system one is studying for, depending on the substance, the system is differently articulated. The first problem for a semiotic of architecture is thus a definition of which architecture is being studied.

In Agrest and Gandelsonas' study, this object is defined in general terms:

We consider not only buildings, but also the writings that precede or follow these products and the diagrams or the graphic code of representation, which in the system architecture are considered non-significant. The notion of architecture as it has been defined does not co-incide with our theoretical object. For example, buildings or other material-built structures excluded as non-architectural are considered within this approach.

(Agrest and Gandelsonas 1973:262)

Their project embraces all aspects of architectural practice - writings, drawings and buildings, as well as the buildings making up the rest of the built environment.

However, as will become clear, their work implies that written architecture is the most significant when one is examining architecture as a sign system, while non-architectural buildings are distinguished by the lack of such a discourse.

Semiotics is to be distinguished from communication theory. The study of communication analyses the carrying of meaning (its use and effects), rather than its nature and structure. Agrest (1978:86) remarks that the notion of communication did not even appear in de Saussure's framework, precisely because it is a different problem from that which he set himself. Communication theory is the study of how signs are sent and received. Semiotics is the study of what signs consist and of what laws determine them (Agrest 1978:86).

An important distinction is to be made between semiotics and sociology. While sociology seeks to relate practices and the products of those practices to real social conditions, semiotics describes objects which, from beginning to end, are imaginary (Barthes 1983:9). A sociology is directed towards real objects and practices, a semiotics towards a set of collective representations. At no point does it relate these to their social origins. It simply studies the ordering of the systems in which collective representations are possible.

Semiotics then is based on de Saussure's proposition that any language is both a system and an act, and that the two can be isolated and studied separately.

The characteristics of langue isolated by de Saussure for natural language form the basis of semiotic analyses of other sign systems. These are - *syntagm*, *paradigm*, *arbitrariness*, *value* and *convention*.

(i) SYNTAGM AND PARADIGM

Syntagm and paradigm (also known as system) are the two planes of language along which relationships between linguistic terms develop. The plane of the syntagm is a combination of signs, which, in Barthes' words, has "space as a support" (1967:58). In articulated language, this space is the chain of speech, which determines that two elements cannot be pronounced at the same time; each term derives its value in opposition to what precedes and follows it.

The plane of the paradigm is the plane of associations. Units of language which have something in common are associated in memory to form groups in which various relationships can be found e.g. an affinity of sound (education, saturation) or an affinity of meaning (education, schooling) (see Barthes 1967:71).

These two planes are united by a close relation, expressed by de Saussure in an

architectural analogy (fig. 1).

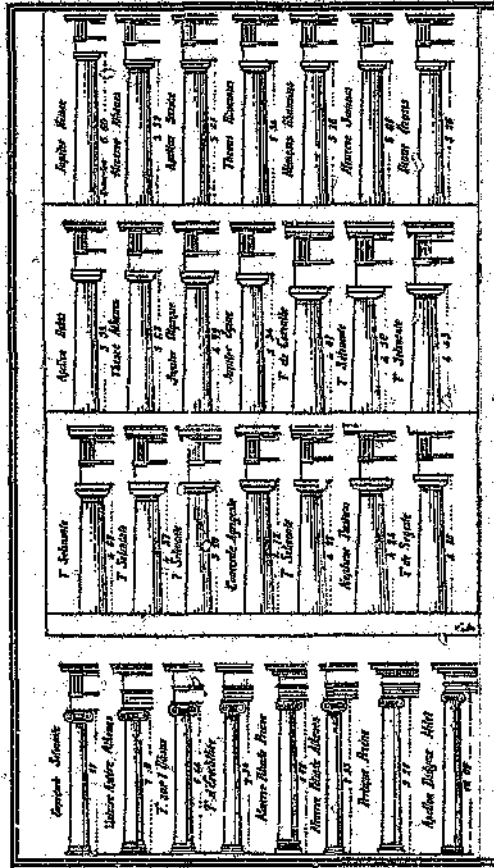


Figure 1: Comparison of Doric and Ionic Columns from antiquity (Planat, undated In: Tzonis and Lefaivre, 1986)

Each linguistic unit, says de Saussure (see Barthes 1967:59), is like a column in a building. This column is in a relation of contiguity with other parts of the building, for instance the architrave (syntagmatic relation); however, as a column, it evokes comparison with other architectural orders, for instance, the Ionic or Corinthian; this allows a potential relation of substitution (paradigmatic or associative relation). The two planes are linked in such a way that the syntagm cannot develop except by calling on new units taken from the paradigmatic plane and vica versa. Language is built up of successive layers of syntagmatic and paradigmatic relations.

This analogy is interesting for it indicates that building is structured according to rules which resemble those of language. However, a number of differences should be noted:

i) *A building, being three dimensional and subject to both structural and functional constraints, comprises two interlocking systems. The one is the system of construction, which proceeds vertically, the other the system of use, which is experienced horizontally. Both are subjected to constraints not applicable to language. The structural system is limited by the necessity of overcoming gravity - one built element supports or is supported by another. The functional system is limited by the necessities of use. Both are constrained by non-arbitrary limits.*

The paradigmatic fields of these two systems are defined as the elements of building which the choice of an element excludes i.e. which cannot be used on the same part of the building at the same time. The paradigm of construction refers to the elements of building, the paradigm of use to the spaces configured by such elements.

Building is thus an interlocking system of two paradigmatic and syntagmatic articulations occurring at right angles to one another (fig. 2).

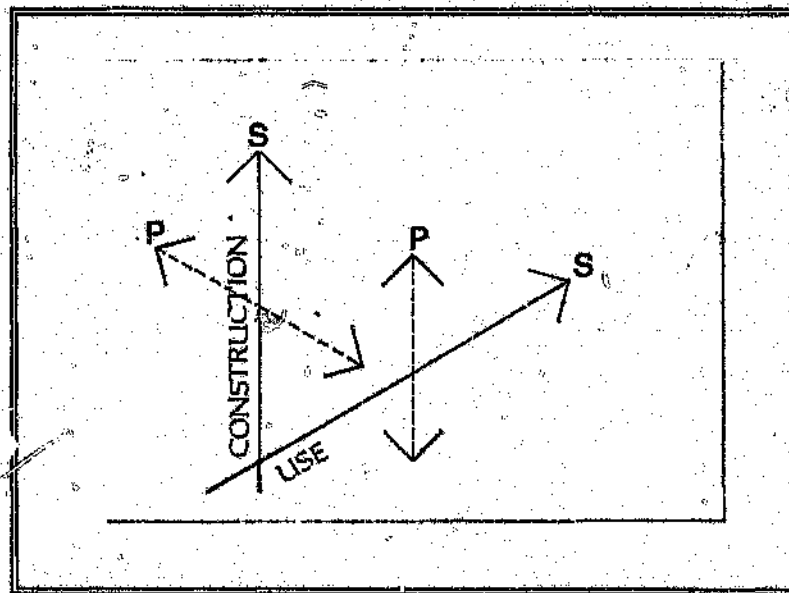


Figure 2: The paradigmatic and syntagmatic axes of building

ii) *ARBITRARINESS AND VALUE*

Traditional semantics, which studied meaning in language, considered meaning to be inherent to words i.e. something a word is supposed to have by virtue of the concept associated with it (see e.g. Ogden and Richards 1923).

De Saussure proposed that meaning, the association of word with concept in language is entirely arbitrary. It is to be distinguished from that to which a word refers in the world (the problem of reference).

Starting from the fact that in human language the choice of sounds is not imposed on us by 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.

(Barthes 1967:50)

The traditional relation between form and meaning becomes an arbitrary relation known as signification, internal to a sign itself (ie. between signifier and signified) (fig. 3).

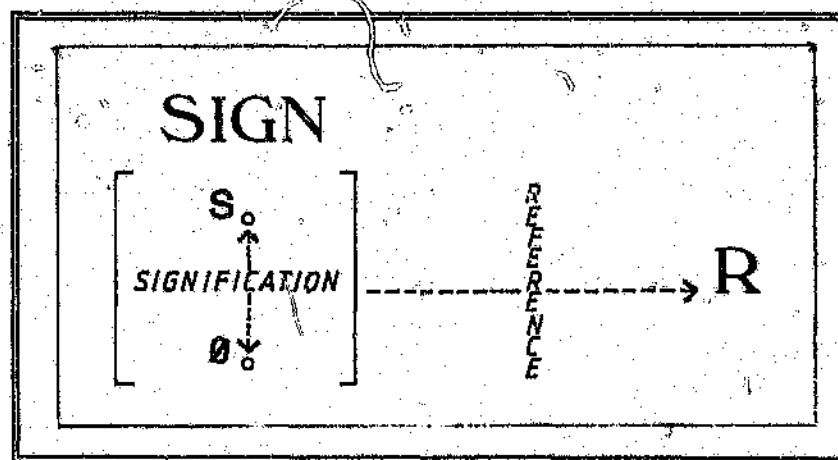


Figure 3: Signification and Reference

This notion of arbitrariness is a difficult concept when applied to building, for, as has been argued, the articulation of building as a system occurs within non-arbitrary limits. However, within these limits, arbitrary and culturally derived choices of elements are possible. In this respect, building is an arbitrary semiotic system.

Meaning is however, never the property of an isolated sign, but a consequence of its relation to other signs. Signs take on meaning according to their value in a system of signs.

To explain this, de Saussure used an economic analogy (see Barthes 1967:55). For a sign or an economic value to exist, argues de Saussure, one must be able to exchange it for a dissimilar thing (work and wage) and also compare it with similar things (50 dollars and 100 dollars). In the same way, a word must be exchangeable for an idea, and also compared with other signs for meaning to exist. Meaning lies in the twofold relation of signification and value. It is never the property of an isolated sign, but the result of the relative value of one sign to another².

(iii) CONVENTION

Meaning is fixed in such a system of relations by convention, i.e. when the relations between linguistic units are limited to certain combinations, conventionally maintained.

The notion of convention is difficult when applied to architecture. In Agrest and Gandelsonas' view, it makes the whole concept of language a problematic one:

Even if it is possible to see the language as a complex system of underlying rules, and therefore to compare it with the explicit and

²

In Merleau Ponty's (1962) conception, the terms of language are engendered only by the differences between them.

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 the langue - they are not finite, they are not organised 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.

(Agrest and Gandelsonas 1973b:98)

This problem was addressed by Barthes (1967:31). It relates to the origin of a signifying system. Where a system is elaborated by a deciding group, be it a highly qualified technocracy, as in the case of architecture, or a more diffuse and anonymous group, as in the case of mass produced artifacts, its signs are really and truly arbitrary, not conventional, as is the case with language. They are a consequence of particular, not general institutional activity. However, this does exclude the concept of langue from being applied to them, as indicated by Barthes (1983) in his analysis of the system of fashion.

2. CODE

The fixed combinations of a language are sometimes referred to as codes. The codes of a language are the conventions which set limits to the operations of langue.

This notion of code is a highly ambiguous one, introduced into structural linguistics by Trubetzkoy (1957) and Jakobson (1962). Here it was proposed that language comprises units of sound which, at a pre-linguistic level, sustain purely differential relations. It is built up when these units are ordered into species (or paradigms) and combined in sequence (or syntagms). Meaningful language arises when the units and their combinations are coded or limited to certain fixed combinations. Codes sanction or exclude possible combinatory relations in the interests of a social function, communication.

The notion of code thus accounts for the conventional or social side of langue. It does not explain its systematic aspects. However, Barthes (1967) argues that, within a pure de Saussurian framework, it is possible to identify code with langue. However, this was disputed by Helmslev (1959), on the grounds that the conventions of codes are explicit, of language implicit.

To me, this distinction is important to maintain in a semiotics of building or of architecture. The system of building, structured by gravity and use, is different from a code of building which is a particular set of built elements repeated by convention or institutional practice. In architecture, code would... identified with style - the choice and combination of certain elements in a fixed manner.

In Agrest and Gandelonas' semiotic, the notion of code seems problematically interchangeable with that of langue:

An analysis of the nature of a system of signs or a system of signification must begin with the development of the most important element in the model, namely the notion of code. An indirect way of expressing the need for the notion of code is to state that the sense is never an intrinsic property of the message ... information seen as the meaning of a message depends upon the possibility of being able to select from a repertory of other possible messages and combinations according to certain rules.

(Agrest 1978:215)

In this quote, it seems to me that system would have been a more appropriate term for the idea being expressed. The notion of code in architecture should be reserved for the fixed combinations of elements or elements and meanings, and the rules for their combination.

3. PAROLE

So much for langue. Parole, the side of language which actualises meaning by drawing on the institutionalised store of the language, does not, in structural linguistics, add anything to what can be known about language or its properties. While nothing enters language without having been tried in speech, no speech is

possible if it has not drawn on the store of language.

In Agrest and Gandelsonas' semiotic, parole or individual architectural works are similarly evidence of the system in which they are configured. The architecture they examine is the system in which individual meanings are produced.

4. LATER DEVELOPMENTS

Having outlined the basis of semiotics, subsequent developments in the field are important to understand in relation to Agrest and Gandelsonas' thesis.

With the intervention of psychoanalysis into the field of language through the work of Jacques Lacan (see for e.g. Lacan 1970), the notion that language as a system is articulated through a signifier which exceeds its conscious use began to predominate semiotics. It launched a series of critiques on its own object, the sign, itself.

On the one hand, signs began to be seen as transitory couplings of expressive and content-units able to be differently coupled in different systems or in different contexts in the same system. On the other hand, the existence of a transcendental subject (a person) outside of language began to be questioned. People began to be seen as a permanent dialectic of conscious and unconscious signifying practices (Laing 1978:100).

One of the leading exponents of the new semiotics, Julia Kristeva distinguished two modalities of signification - the "semiotic" and the "symbolic" (1985:216). By "semiotic" she referred to the primary organisation (in Freudian terms) of drives; in other words, a state of language anterior to the word, the "before-sense-production-of-sense" (Laing 1978:100). By "symbolic" she referred to the functioning of the sign and its predications, a matter of language as a system of

meaning. The interaction between these two modalities was seen to be active in both the construction of language and of persons as social beings in the world. This interaction became the subject of semiotic study.

In Agrest and Gandelonas' work, an initial critical analysis of the production of meaning in architecture is undertaken. Here the model is the sign and the code. Thereafter, a semiotic of the broader built environment is undertaken, where "unconscious" signifying processes are uncovered. I would see architecture and the broader built environment in Agrest and Gandelonas corresponding loosely to the symbolic and the semiotic modes in Kristeva.

It is important to note that a semiotic approach to architecture is different from traditional theoretical approaches to the question of architectural meaning in that it attempts to explain how rather than what meaning is conveyed by architectural form. No particular meaning, but rather the processes by which such meaning is produced is isolated:

to work at the level of meaning (communication) is to work within the field of infinite combinations and partial changes. To work at the level of production is to work at the level which produces meaning ... it implies intervention at the level of the process rather than at the level of the product.

(Agrest and Gandelonas 1973a: 266)

This distinction is important to bear in mind.

To sum up:

1. *Semiotics is the modern science of signs. It studies how signs produce meaning in society.*
2. *It is based on the premises of structural linguistics, which proposed that language produces meaning in a system organised by paradigm and syntagm,*

arbitrariness, value and convention.

3. *These rules result in certain fixed combinations or codes, which maintain language's communicative function in society.*
4. *In the course of the development of semiotics, it was proposed that language's communicative form (the sign) is preceded by certain operations which determine its manifestation. These became the object of semiotic study.*
5. *These premises form the basis of Agrest and Gandelsonas' semiotic of architecture.*

2. SEMIOTICS AND ARCHITECTURE - AN OVERVIEW OF AGREST AND GANDELSONAS' MODEL

My thesis examines the development of Agrest and Gandelsonas' architectural practice over the period 1972 - 1980. I refer to 10 written publications and a selection of architectural projects. This chapter will outline the central arguments of their approach to the problem of meaning in architecture, which formed the basis of their practice.

This problem is approached from a number of perspectives:

- 1) In opposition to existing semiotic practice (1973a, 1973b)
- 2) Within a general theoretical ideology (1973, 1973a, 1973b, 1977)
- 3) As attributed to built form by architectural codes (1972, 1973, 1973a, 1973b, 1975, 1976, 1977, 1980)
- 4) As a production outside of architectural codes (1973a, 1976, 1977, 1980)
- 5) As a transformative strategy of design (1976, 1977, 1980, 1980a, 1980b, 1980c, 1980d, 1980e, 1983, 1984, 1984a, 1984b)

1. IN OPPOSITION TO EXISTING SEMIOTIC PRACTICE.

Agrest and Gandelsonas begin their semiotic project (1973a, 1973b, 1975) by clarifying its terms in relation to two texts - Semiology and Architecture by Charles Jencks and La Dimension Amoureuse in Architecture by George Baird (Jencks and Baird, 1970).

For Agrest and Gandelsonas, these texts i) fail to understand the importance of the concepts of arbitrariness and value to any semiotic discussion, and ii) fail to distinguish between the concepts of communication and signification.

They thereby perpetuate a pre-semiotic view of meaning, in particular of the relation between built form and functional meaning. A natural linkage is proposed by Jencks (1970) between form and function, function being considered inherent to form rather than systematically attributed to it (Agrest and Gandelsonas 1973a:257).

This notion is obviously contested by Agrest and Gandelsonas as inconsistent with a semiotic perspective. They propose instead that even the identification of built form with functional meaning is systematic ie. it arises when a form-function couple is situated in relation to other form-function couples in a particular system.

An example of this is given by Gandelsonas (1975:45), who imagines a person coming from Mars and visiting homes in both Africa and Europe. He or she recognises in both European and African homes common elements - apertures in walls. In Europe, one kind of aperture allows the passage of inhabitants (the door), and others allow the passage of light and air (windows), whereas in Africa, a single element conveys all three functional meanings. The meaning of an element would thus be different in the two contexts.

This example indicates that meaning, even functional meaning, is not an intrinsic property of a built element, but rather depends on its value in relation to other elements in a system.

Agrest and Gandelsonas thereby establish the terms of their semiotic project.

2 *WITHIN A GENERAL THEORY OF IDEOLOGY*

Following from this discussion of the apparent, though misconceived naturalness of the meaning of built form, a central theme in Agrest and Gandelsonas' thesis emerges - that of the necessity for clarifying the distinction between architectural ideology and architectural theory (1973b)¹

With the notion of architectural ideology, Agrest and Gandelsonas refer to the normative theory which, since the Renaissance has attributed meaning to built form and articulated the process of design (Agrest and Gandelsonas 1973a:270, Gandelsonas 1975:40). Agrest and Gandelsonas argue that this kind of theory has always presented the meaning of form as self-evident, natural and universal, to conceal its socio-historical base.

The function of such theory is said to be an ideological one. It both adapts architecture to changing social conditions and preserves it as a distinctive institution (Agrest and Gandelsonas 1973b:94).

Architectural theory, in the sense in which Agrest and Gandelsonas use the term, is situated outside of such normative texts. It explains how they operate. Semiology, the study of different sign systems, is, in Agrest and Gandelsonas' view, guaranteed a privileged perspective in this regard (Agrest and Gandelsonas 1973a:259). It is argued that it alone can explain how normative theory is constructed. When its central notions (arbitrariness and value) are used to critique architectural theory, it is able to provide a model and a strategy for a "scientific" (in its Althusserian sense) architectural discourse (Agrest and Gandelsonas 1973b:97).

¹ This draws on the work of Althusser (1977) who saw ideology to be opposed to science. For Althusser, ideology formulates false problems whose solutions are already produced outside of the process of knowledge. Science on the other hand produces its own scientific facts through a critique of the ideological facts produced by previous ideological practice.

3. *AS ATTRIBUTED TO BUILT FORM BY ARCHITECTURAL CODES*

In Agrest and Gandelsonas' analysis, written architecture or architectural theory is the core of the architectural system of meaning. It gives built objects a meaning by expressing it in natural language. In the architectural system, buildings "communicate" concepts, both in a similar way to the signs of natural language, and through natural language. The architectural sign is a hybrid (Agrest and Gandelsonas 1973a:264), comprising a non-linguistic signifier (a building or a built element) and a linguistic signified (a concept, articulated in language) (fig.4).

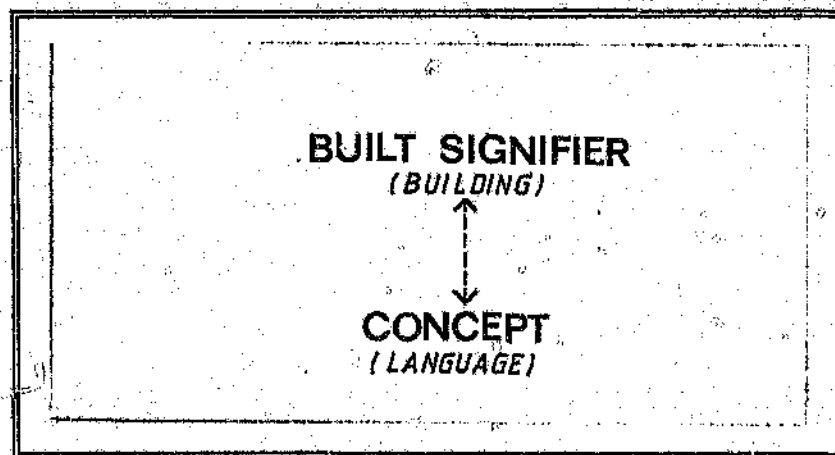


Figure 4: The Architectural Sign

This situation is challenged by Agrest and Gandelsonas. They argue that the fixing of the meaning of built objects in a particular architectural code denies their specific economy as a sign system (Agrest and Gandelsonas 1973a:265). They ask whether the production of the meaning of built form can be freed from the restriction of linguistic codes - is it possible to construct the system in which built form signifies, outside of codes of language, and therefore outside of institutional constraints (1973a:264)?

This becomes the central question which their work addresses.

4. AS A PRODUCTION OUTSIDE OF ARCHITECTURAL CODES

Agrest and Gandelsonas propose that, indeed, this condition already exists, in the so-called "non-designed" built world (Agrest and Gandelsonas 1977:111). This term refers to any part of the built environment which does not originate in a practice of architectural design; in other words, where meaning has not been normatively established, but oscillates between a variety of coded systems.

Agrest and Gandelsonas move from an analysis of the architectural system to a "productive reading" of the built world (1977:113). The term "productive reading" refers to a reading of built form which produces meaning as an open-ended chain of associations. Agrest and Gandelsonas also call it "C-D" (configuration/delimitation), the "practice of production of signification in the configuration of place" (1973a:262). It is argued that this practice exhibits the underlying operations which produce meaning in the built environment, and which are concealed in architecture by linguistic codes.

5. AS A TRANSFORMATIVE STRATEGY OF DESIGN

This productive reading of the built environment instigates a new practice of architecture for Agrest and Gandelsonas. It is critical of a normative approach to architectural design which attributes specific meaning to form. Instead it draws on typologies from urban and architectural contexts and transforms them by subjecting them to operations which, instead of reducing meaning, open it. The sedimentations of meaning which come down through an architectural and an urban tradition are thereby both accepted and called into question. By refusing the production of an object unified and reduced with respect to its meaning, it is argued that the extent to which tradition naturalises ideology will be exposed.

A number of projects were generated out of this approach. Many were submissions to prestigious international competitions at the time e.g. Housing Project for Roosevelt Island, New York (1975) (Agrest and Gandelsonas 1976a, 1980d); Project for the Renewal of the Area of La Villette, Paris (1976) (Agrest and Gandelsonas 1980e); Project for La Defence, Paris (1983) (Agrest and Gandelsonas 1984b). Others were theoretical and didactic e.g. Proposal for a Suburban Centre, Minneapolis (1976) (Agrest and Gandelsonas 1980b, 1983)) Park Square, Boston (1978) (Agrest and Gandelsonas 1984a). A single built work, Building 1 Urban Fragments Project, Buenos Aires (1977-82) (Agrest and Gandelsonas 1980c, 1984), marks their engagement with the speculative urban market.

To sum up:

1. *Agrest and Gandelsonas' explanation of how meaning is conveyed by built objects centres on the concepts of the arbitrariness and systematicity of meaning.*
2. *In examining the architectural system, they conclude that meaning is conveyed within normative, prescriptive codes which limit the operations of the system. These codes are established when the relation between form and meaning is articulated in natural language.*
3. *Agrest and Gandelsonas then examine the non-architectural built environment as a system of signs. It is proposed that this system exhibits the operations which produce built objects as signs prior to them taking on a value in a coded system such as architecture.*
4. *This instigates a practice of architectural design which challenges*

autonomy of the system in which architecture has traditionally been produced.

3. METAPHOR IN AGREST AND GANDELSONAS

A central concept in Agrest and Gandelsonas' work is that of metaphor. In this chapter, I elaborate on three concepts of metaphor used in their work:

1. From Barthes (1967).
2. From Jakobson (1960).
3. From Tel Quel (1960-1971).

1. ROLAND BARTHES (1967)

In his Elements of Semiology (1967), Roland Barthes argues that any system of signification (Barthes 1967:89) consists of a plane of expression, or signifier (E) and a plane of content, or signified (C), and the relation between them (R) (fig.5).

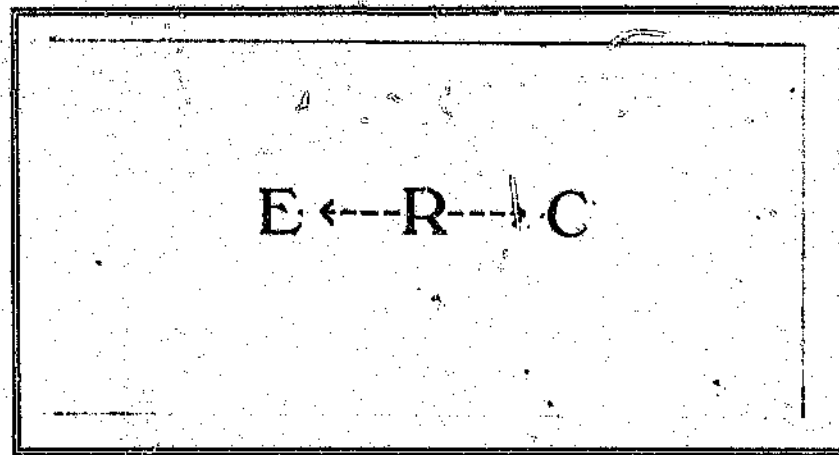


Figure 5: A System of Signification (Barthes 1967)

Barthes asks what would happen if such a system become a mere element of a second system of signification i.e. become either its plane of expression (E) or plane of content (C). What we would then be dealing with is two systems

of signification which are imbricated but out of joint. This may happen in one of two ways, constituting either a connotative system or a metalanguage (fig.6, fig.7).

(i) *CONNOTATION* (fig 6)

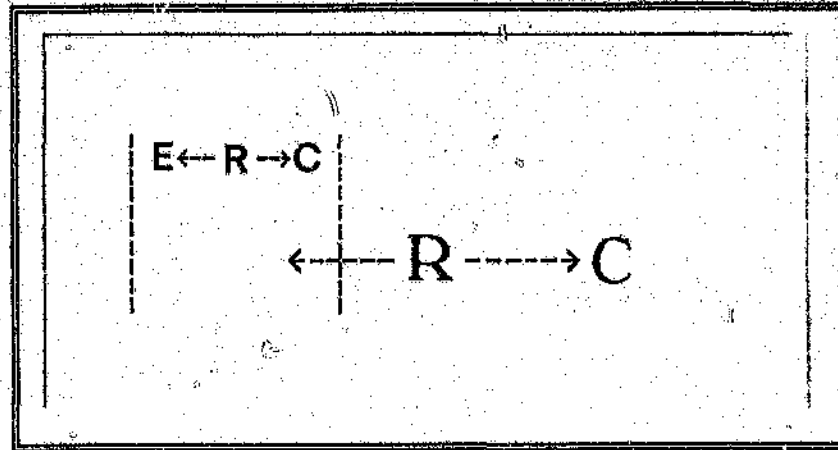


Figure 6: ○ A Connotative System

Connotation occurs when a first system of signification becomes the plane of expression of a second system (Hjelmslev 1959). Using no new signifiers, connotation extends the meaning of existing signs. Its system is metaphoric - it condenses two levels of meaning into one sign.

Conceived of in this way, metaphor is a combination of literal (denotative) and non-literal (connotative) meanings. In most cases, connoted meanings, as argued by Barthes (1977:48) are abstractions, pure paradigms, presented in the syntagm of denotation. They are abstract socio-cultural values which have no means of expression other than through the signs of the denotative system, which thereby "naturalises" them. It "innocents the semantic artifice of connotation" (Barthes 1977:45), while being itself unavoidably caught up in

connotative associations¹.

Meaning in a connotative system is a result of the combination of denotative (first level) and connotative (second level) signification. The total signification of a message is the result of a constantly moving turnstile between denotative and connotative messages. An expression is alternatively presented as meaning-in-itself and as a form or signifier of another content.

(ii) *METALANGUAGE* (fig.7)

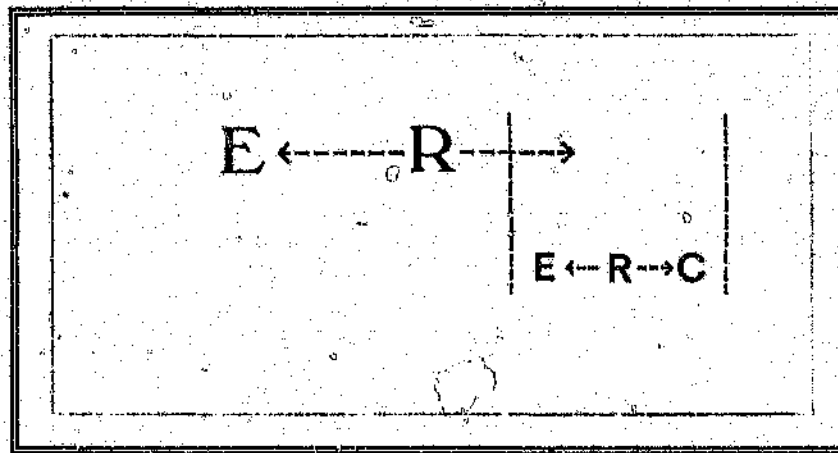


Figure 7: A Metalanguage

When the signs of a first system become the plane of content of a second system, a metalanguage has been established (fig.7). This is the case when language takes over a system of already signifying objects to describe or explain it.

¹.

This model formed the basis of structural approaches to the question of the relationship between ideology and representation systems. Ideology was proposed to be the form of the signifieds of connotation, while rhetoric the form of the connotators (Barthes 1967:92).

The significance of this analysis for architecture is, in my view, far reaching, as will be argued. The architectural system is an abstract one, connoted through the syntagm of building, but formulated in the language of architectural theory. It is a combination of connotative and metalinguistic systems. This conception of the architecture is, in my opinion, the only one which allows for it to be investigated as a system. It differs however considerably from Agrest and Gandelsonas' model, as will become evident in the ensuing chapters².

2. JAKOBSON (1960)

As will be remembered, Jakobson (1960) proposed that meaning arises in language when the relations of paradigm and syntagm which characterise linguistic systems are coded or limited to certain fixed combinations. Codes are the mechanism of langue which sanctions or excludes possible combinatory relations in the interests of communication.

This model is applicable to literal, information bearing language. Poetic language on the other hand, is characterised (Jakobson 1960) as literal misuse of linguistic operations. The operations of paradigm (selection) and syntagm (combination) correspond to two relations - resemblance and contiguity, located on orthogonal axes. The difference between poetic and literal language lies in the distribution of the operations and the relations across the two axes. In literal language, selection and resemblance coincide on the paradigmatic axis, combination and contiguity on the syntagmatic, whereas in poetic language, these operations and their corresponding relations are dislocated and displaced (fig.8).

².

This view of the architectural system corresponds loosely to Barthes analysis of an advertising image (1977). In other words, buildings signify analogously to advertising images.

Barthes argues that three messages are conveyed by advertising images - firstly, denoted messages, in which the scene represented is identified; secondly, connoted messages, abstract ideas with which the scene is associated; and thirdly, linguistic messages, made up of the text in and around the image. This both draws attention to certain elements of the image by naming them and also fixes the associations which the creators of the advertisement wish to make.

In the same way, buildings convey a denoted message - they can be identified in literal functional terms; however, already constituted as signs in this way, they may connote a range of socio-cultural values. Both levels of meaning can be described in language, which, while technically constituting a metalanguage, is itself caught up in rhetorical processes.

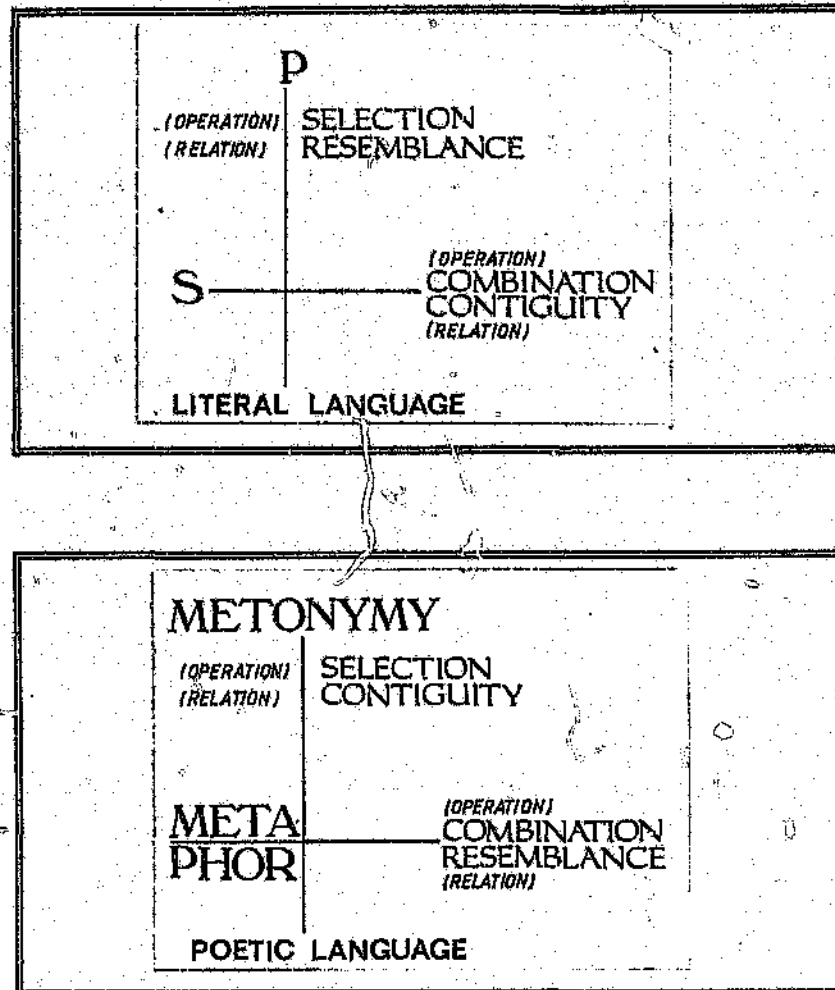


Figure 8: Literal and Poetic Language

Metaphor combines on the basis of resemblance e.g. "bottleneck", while metonymy selects on the basis of contiguity e.g. "the Crown" (for the King/Queen).

If we remember Jakobson's distinction, we shall understand that any metaphoric series is a syntagmatised paradigm, and any metonymy is a syntagm which is frozen and absorbed in a system; in metaphor, selection becomes contiguity, and in metonymy, contiguity becomes a field to select from. It therefore seems that on the frontiers of the two planes that creation has a chance to occur.

(Barthes 1967:88)

Poetic operations literally misuse language. They are not to be confused with paradigm and syntagm. Rather they are an affront to linguistic reason.

This model is used by Gandelsonas (1972) in his analysis of Michael Graves' work, a text which, in my opinion, is one of his most significant (see pp.36-38).

Jakobson speaks of discourses of a metaphoric and metonymic type, in which one or other model predominates (see Barthes 1967:60). For instance, the works of Romanticism, Symbolism or Surrealist painting are predominantly metaphoric, while Realist writing and the heroic epics are metonymic. Within this classification, Agrest and Gandelsonas align architecture with metaphoric model.

3. *TEL QUEL* (1960-1971)

The semiotic model developed by Agrest and Gandelsonas for architecture closely parallels the model developed by those affiliated to the journal *Tel Quel* for literature³. While many aspects of the *Tel Quel* project are adopted by Agrest and Gandelsonas, the two most pertinent are contained in the concepts of a "science of the signifier" (Barthes 1977:167) and "textuality" (*Tel Quel* 1968:7). In these, metaphor is conceived of as a process whereby language, and hence meaning is transformed.

(i) *A SCIENCE OF THE SIGNIFIER*

Tel Quel's polemic is directed against representational realism in literature, which uses language as a "set of signs which represent a world outside itself" (Van Zyl 1988:307). In it, writing submits to the referential function of language. In *Tel Quel's* view, this compromises, in the interests of communication, the systematic principle established by de Saussure. The

³ *Tel Quel* was a journal published in France in the 1960s and 1970s. During the 25 years of its publication, it covered a wide range of concerns, from the literary to the political, and was instrumental in launching a number of experimental writings. Writers such as Pleyhet, Baudry and Ponge, as well as theorists such as Barthes, Foucault, Sollers and Kristeva contributed to the journal. It has since been replaced by the journal *Infini*.

autonomy of language as a system is undermined. The function of literature should, in Tel Quel's view, be to investigate language as an autonomous, self-referential system⁴.

In this neo-formalism, signs no longer refer to a world outside of the system of signification (the system is that to which they refer). Literary practice is located prior to the production of sense, in the "scene of the before-sense-production-of-sense" (Laing 1978:100). In this way, the de Saussurean principle of value was taken to its radical conclusion.

Much of this formulation can be traced back to the work of Jakobson, outlined in the previous section, as developed by Lacan in his paper "The insistence of the letter in the unconscious" (1970). In this paper, Lacan proposes that the structure of language which exists prior to an individual's entry into it, is the structure of the signifier, which is always at work in the construction of meaning. Its structure is an unconscious one, whose laws are those of metaphor and metonymy. By this, Lacan means the superimposition of signifiers which occurs in metaphor, and the veering off of meaning which occurs in metonymy. In metaphor, any two signifiers can be conjugated, except for the additional requirement of the greatest possible disparity of the images signified; in metonymy, a signifying part is taken for a whole, involving the displacement of meaning from one to another. Even in literal, information bearing language, these two laws operate, if unconsciously. Lacan refers to them as "the two slopes of incidence of the signifier on the signified" (1970:119).

By means of these two principles, Tel Quel carried out its investigation of the signifier and the infinite deferment of the signified, in a form of experimental writing known as "écriture" (see below).

⁴ Tel Quel's project echoes the theories of the Russian formalists, whom they were responsible for making accessible in France.

Agrest and Gandelsonas' practice of the "productive reading" of the city is comparable to this form of writing.

Lacan (1970) related these laws of the signifier to the operations of dream work. The same structure, says Lacan, persists in the dream as that through which the signifier is analysed and articulated. Dreams function by distortion. In them signifiers slide under signifiers, according to the laws of condensation (metaphor) and displacement (metonymy).

In Agrest and Gandelsonas' reading of it, elements of the city similarly function as a dream. They have importance only as signifiers, to be acted on by "unconscious" processes in a reading which reveals their "latent content".

(ii) Textuality

Tel Quel's literary practice took the form of a kind of writing known as "écriture", involving a non-expressive, non-representational experimentation with language. Instead of representing the world outside of writing, écriture operated within a "fold interior to language" (Carusi 1987:56). It aimed to offer no positive knowledge, but rather to critique representation⁵.

Écriture was "textual" practice which articulated the functioning of the "text" within it. This notion of "text" was described by Foucault (1968) as:

the form of a discursive articulation, functioning within each work as well as from one to another, (in a) relation of isomorphism. Isomorphism in the space of literary language does not imply a vision of the world ... but rather is the form of a fold interior to language.

(Carusi 1987:56)

⁵ Écriture produced a crisis of readability, brought on by the critique of the forms of exchange underlying representation. Here a parallel with Marx's critique of political economy was proposed. The word as a communicational entity was argued to be structured along the same lines as the commodity, the form of exchange in capitalist society. A critique of exchange in representation underlay the political commitment of Tel Quel. This critique was operated by the "text" of écriture.

The notion of "text" describes the irreducible infiltration of a text by previous texts in an "intertextual" articulation. The text has no grammar, but, in Barthes words (1977:160), is "woven entirely with citations, references, echoes, cultural languages ... which cut across it in a vast stereophony".

The more radical of Tel Quel's followers claim that this condition underlies every sign and every reality:

The sign, as such is constituted as originally intertextual. Because prior texts reside in present texts - that is, in their signifiers - no text is ever fully self-present, self-contained or self-sufficient: no text is closed, total or unified. The forces of intertextuality ... fundamentally infiltrate the operations of the sign, disallowing any notion of pure or nonintertextual textuality.

(Leitch 1983:98)

Of importance to note is that the destruction of metalanguage or theory (language about language) is implicit in the notion of the text. Textual activity constitutes its own theory, by demonstrating it.

Écriture as a specific mode of production is itself a science of theoretical practice which coexists with scriptural practice. In order for it not to be subsumed under ideology, écriture must be maintained strictly within the borders of its own scriptural/theoretical practice, that is, it must elaborate itself as the 'science' of its own system of functioning ... It implies the complete overturning and undermining of this concept (literature), and of its very status as an object which may be grasped as the object of another discourse.

(Carusi 1987:54)

Drawing on Tel Quel, Agrest and Gandelsonas apply the notions of "text" and "intertext" to the language of architecture. Architecture is taken to be textual in that its practice involves the production of a built text traversed by previous built texts and architectural discourses, which it rewrites and is written by (Agrest and Gandelsonas 1980:34). Architectural texts are always part of a larger set of texts with which they are designed to engage in dialogue (Agrest and Gandelsonas 1980:35).

As will be seen, the consideration of architecture as text, and its practice as writing affects the relationship between the theory and practice of architecture. The boundaries that separate criticism from practice are reduced. The traditional critical status given to theory becomes operative in design itself - design is a process of critically evaluating and transforming existing texts.

To sum up:

Agrest and Gandelsonas draw on a number of ideas of metaphor in their analysis and production of architecture:

- 1. Metaphor is connotation, the secondary meanings connoted by built form. Its structure can be analysed.*
- 2. Metaphor enables existing codes of architecture to be transformed. Its operations can be analysed.*
- 3. Metaphor is an unconscious process, a law, which operates in the construction of meaning prior to its being established in a particular code. This process transgresses existing codes of practice and can be activated to transform them.*

4. *AGREST AND GANDELSONAS' SEMIOTIC MODEL FOR ARCHITECTURE*

Agrest and Gandelsonas' project is an attempt to explain the production of meaning in architecture, on the basis of the premises of structural linguistics previously outlined. It aims to produce knowledge of architecture as a system of signs.

The architecture they examine does not conform to a traditional definition. Instead of a few buildings normatively defined as architectural by institutional rules, Agrest and Gandelsonas adopt Eco's definition of architecture (1968) as the whole man-made environment (see Agrest and Gandelsonas 1977:97).

In their examination of this system, Agrest and Gandelsonas make an initial distinction between functional meaning and other meanings. Gandelsonas (1972:72) proposes that function is the primary or denoted meaning of built form. It is the most direct, broadly understood meaning of the built environment, representing the capacity of form to signify its own function. In this sense, it is a message without a code, understood in a direct relation to its referent.

Nevertheless, while the functional message associated with a form might be uncoded, it might convey very different meanings in different contexts (see Gandelsonas 1975:45). As argued by Barthes (1967:42), the possibility of an absolutely denoting object-message is no longer possible. Function can only be understood within a context which cannot be explained by simple function alone. Use is inevitably semanticised. This means that it becomes intelligible

in relation to the other terms of a socially constructed system of meaning¹.

The examination of this sign system requires an initial methodological separation of traditional architecture (buildings, graphic representations and writings) and the built environment at large.

1. *MEANING OF ARCHITECTURE*

(i) *CODES*

The architectural system is governed, in Gandelonas' view (1975:45) by the construction of codes of meaning in which different materials or substances are combined.

A code, it will be remembered (Jakobson 1962) is a selection of certain fixed combinations of all the units of which a language could possibly be comprised. In architecture, codes define the relationships between

- a) physical or geometric categories i.e. between different formal shapes and
- b) physical or geometric categories and other cultural categories, which might be economic, sociological, political, psychological, aesthetic, or technical etc.

They bring these together in a systematic relationship of signs and meanings.

¹ Barthes (1967:41) remarks that objects of everyday use, while not being essentially signifiatory, are inevitably used by society in a derivative way, to signify something. Non-signifiatory objects are virtually inconceivable, Barthes (1967:42) suggests that to discover a non-signifying object, one would have to imagine one which bore no similarity to an existing model whatsoever. Even if the meaning of an object corresponds to its use, this is not to be mistaken as of the order of denotation, but rather corresponds to a "(disguised) semantic institutionalisation" (Barthes 1967:41) - the meaning is caught up in connotative structures in which it is overdetermined by additional cultural values.

However, as in all functionally based symbolic systems, this signification of use plays a crucial role. It constitutes the articulation point of an abstract system of values and a nature, Barthes (1983:217) suggests that its consequence is an "ethics of signification". The ethical underpinnings of functionalism in architecture lie here.

Taking a section from one such code, Alberti's Ten Books on Architecture (XII:1:17) (1955), Gandelsonas (1975) analyses the way it constructs meaning with respect to apertures (fig.9):

	I WINDOW		II INTERNAL DOOR		III EXTERNAL DOOR	
	VISUAL ACCESS	PHYSICAL ACCESS	VISUAL ACCESS	PHYSICAL ACCESS	VISUAL ACCESS	PHYSICAL ACCESS
PRIVATE	+	-	-	+	-	+
PUBLIC	-	-	-	-	-	+

Figure 9: Analysis of Alberti's Code for Apertures in Buildings (after Gandelsonas 1975)

Gandelsonas breaks the text down into its component units, each of which is represented in the above diagram. Each of these represents a signifying unit in Alberti's code, establishing a specific relationship between physical categories and socio-cultural categories.

Subsequent architectural codes saw the legitimization of certain combinations excluded from the Albertian code eg. 6 (the glass door) (fig.10). This capacity for change of codes in the architectural system is made possible by the arbitrariness of the relationship between signifier and signified in its signifying units.

	+	-	-	+	-	-	-	-	+	+		
1	-	-	2	-	3	+	-	4	-	5	-	
	-	-	+	-	-	+	+	+	+	+	+	
6	+	+	7	+	8	-	+	9	+	-	10	+
	+	+	+	-	+	+	ALBERT'S CODE = 1,2,8 GLASS DOOR = 6					
11	+	+	12	+	13	+						+
POSSIBLE COMBINATIONS IN THE CODE OF APERTURES												

Figure 10: The Glass Door in relation to Albert's Code for Apertures

Transformations of a code involves metaphoric operations in the sense defined by Jakobson described in the previous chapter. They involve an "incorrect" association of form and form or form and meaning in relation to an existing code.

Gandelsonas (1972) discusses the work of Michael Graves in this light. Graves, in for example his Hanselman House (1967) (fig.11) juxtaposes architectonic elements and ideas, which, according to existing codes, are mutually exclusive.

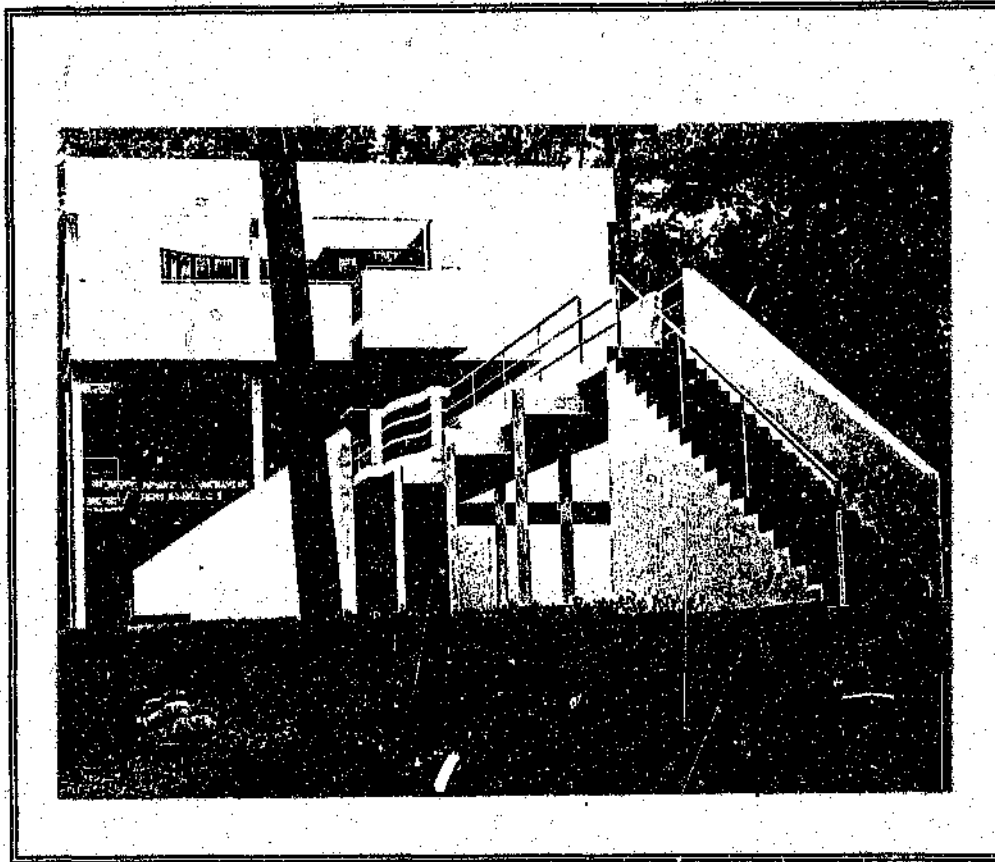


Figure 11: Hanselman House (Michael Graves)

For example, Graves superimposes an idealised plan of the building onto an interior wall of the house, thus neutralising the traditional opposition between plan and elevation, the architects line of vision when making the plan and the users line of vision when perceiving the wall (fig.12)

Similarly, in his treatment of the entrance to the house, a complete cubic volume of the house has been removed and re-established as a separate component of the building. The displaced volume extends the building's section to the external facade, thus revealing certain internal aspects. The opposition between internal void and private use and external solid and public use, traditional in architecture, is hereby confounded (fig.13).

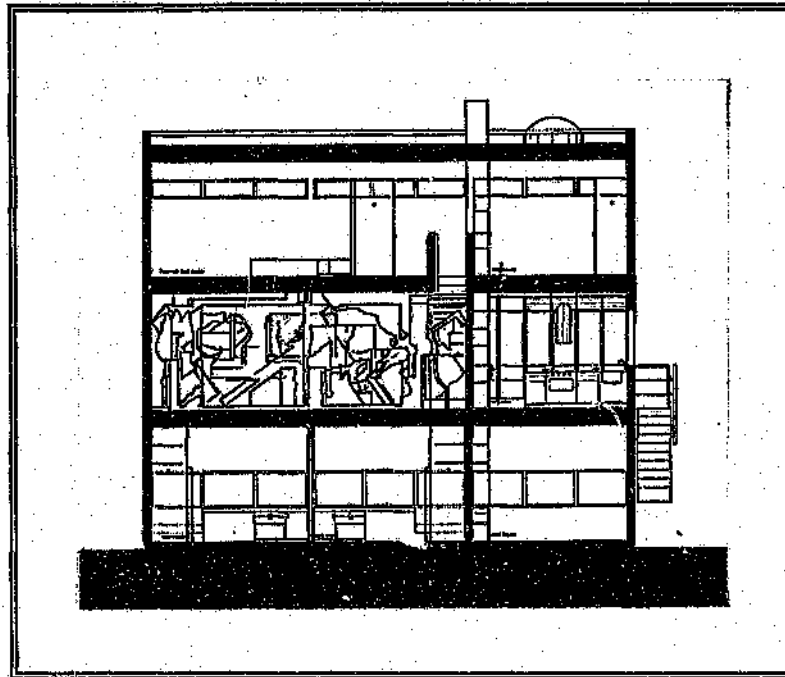


Figure 12: Section, Hanselman House

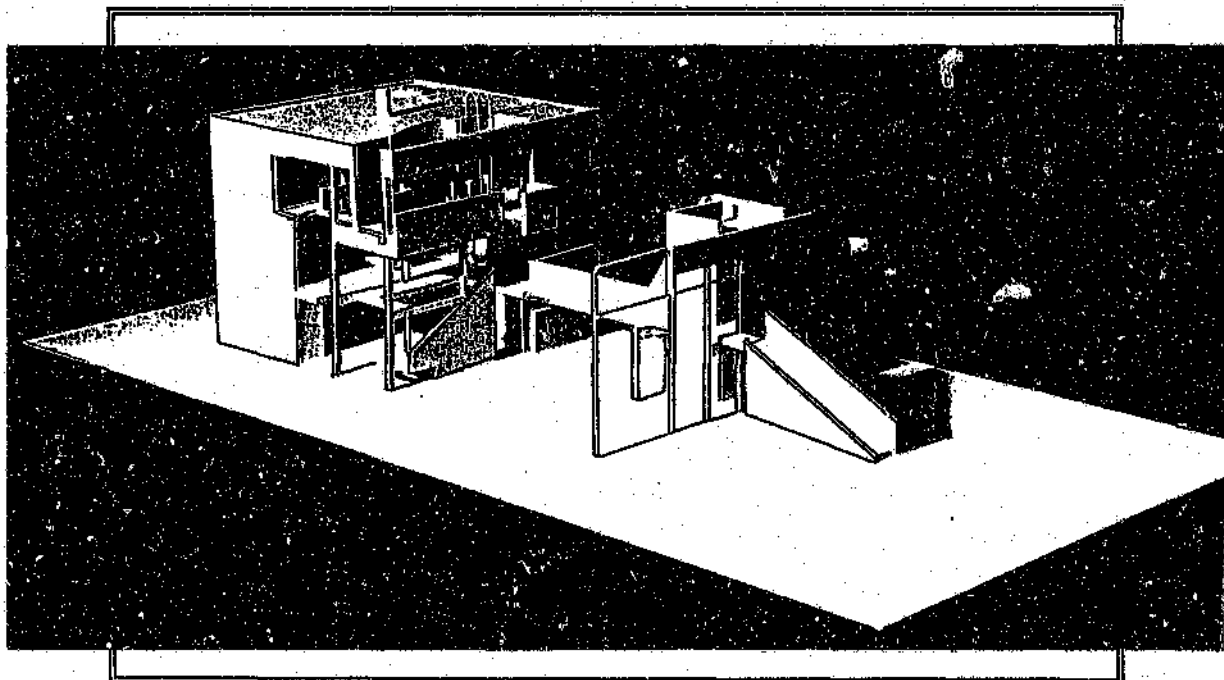


Figure 13: Volumetric Displacement, Hanselman House

Barthes (1983:204) refers to this process as "neutralisation". This describes the tendency in connotative semiotic systems, across time, for previously oppositional units of the system to be neutralised under the sanction of a single signifier or signified. So:

In the work of Graves, the architectonic order is upset through a particular use of metaphor. Instead of combining architectonic ideas according to the traditional architectural rules, which prescribe the selection of one element from a pair of oppositions, he shows, through expressing both elements of the opposition, the opposition itself.

(Gandelsonas 1972:74)

The codes of the architectural system are manifested in normative writings and written texts of architecture which fix meaning in an explicit written discourse. Renaissance treatises such as the above, and subsequent theories of architecture have normatively coded the relationships between built form and meaning. Since the Renaissance (Agrest and Gandelsonas 1973a:260, Gandelsonas 1975:45) when, simultaneous with the appearance of the architect, came treatises and codifications, these texts have established the institutional parameters of architectural practice. (Agrest and Gandelsonas 1973b:99).

While critical in establishing the parameters of architecture, however, words have the effect of causing their own role to disappear (Agrest and Gandelsonas 1973a:270). Meaning appears to inhere in form in an unmediated way. However, it is almost entirely arbitrary, and changes constantly, subject to the neutralising tendencies of the system.

(ii) *THE ARCHITECTURAL SIGN*

According to Agrest and Gandelsonas, the architectural sign is made up of a combination of signs of two or more signifying systems, one architectural, the others non-architectural. In its establishment, the constituent signs are reduced,

resulting in a coupling of an architectural element as a signifier to a signified from a non-architectural system, expressed in natural language (Agrest and Gandelsonas 1973a:264) (fig.14).

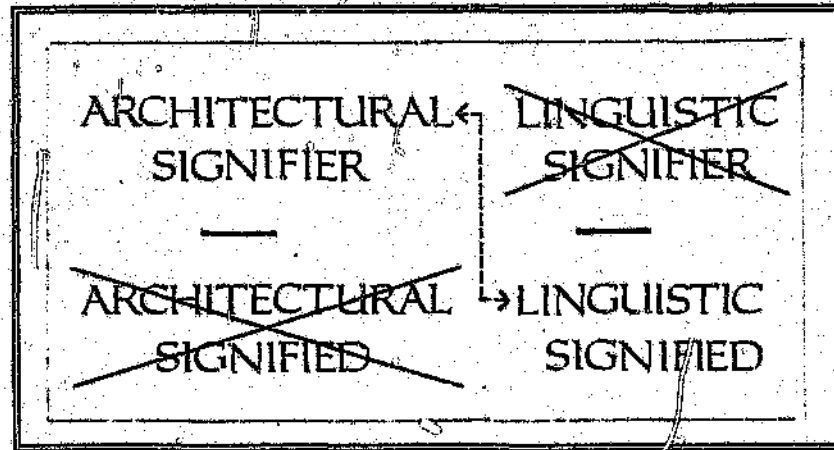


Figure 14: The Architectural Sign (after Agrest and Gandelsonas 1973a)

This is argued to produce two exclusions - the architectural signified (considered in formal terms) and the non-architectural signifier. As a result, an architectural signifier and a linguistic signified are linked - a built element becomes a metaphor for an idea (Gandelsonas 1972:74).

In the same way, architecture enters into combination with a range of other cultural systems. A sign from a non-architectural system is linked to a sign from the architectural system, as in the example illustrated above. In this way, it transfers its meaning onto the architectural signifier.

This way of representing the architectural sign would be strongly contested by Barthes who, in his analysis of the fashion system, argued that the different systems configured in that system are characterised by a dissymmetry (1983:29). Their signs cannot communicate directly with one another. Seen in this light, the architectural system is constructed in a motion of realignment between its component systems.

This can only occur when it is articulated in language, as it is in architectural writings.

Here real built objects are broken into their signifying units, $\emptyset$ being named in language. This is what Barthes calls the "terminological rule" (1983:7). By means of the continuous material of building, which has difficulty in signifying with any real precision, is analysed. Language carves building into a terminological system.

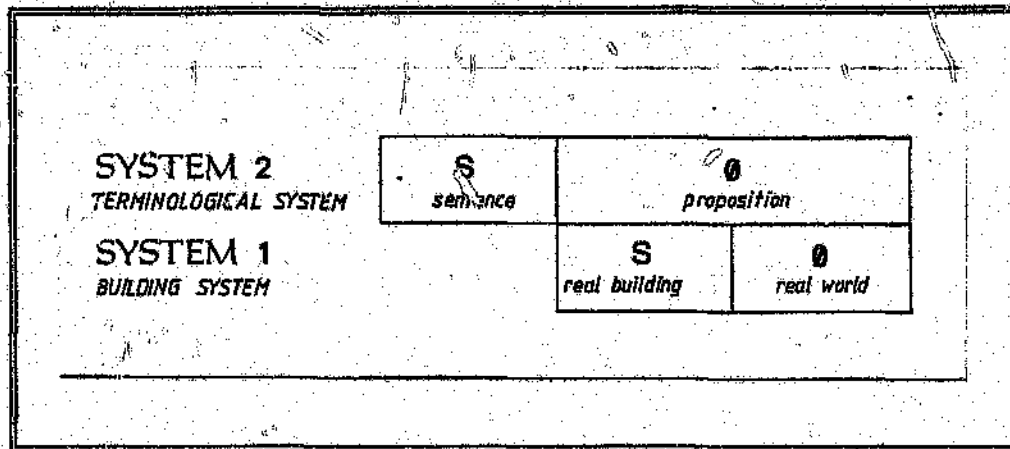


Figure 15: The Terminological System of Building (after Barthes 1983)

The signs of this terminological system, which denote instances in the real world, are then combined with associated meanings, in language, to form the signs of the system of meaning which we call architecture. In this way real buildings are associated with ideas in a systematic way and the abstract value "architecture" is connoted (fig.16).

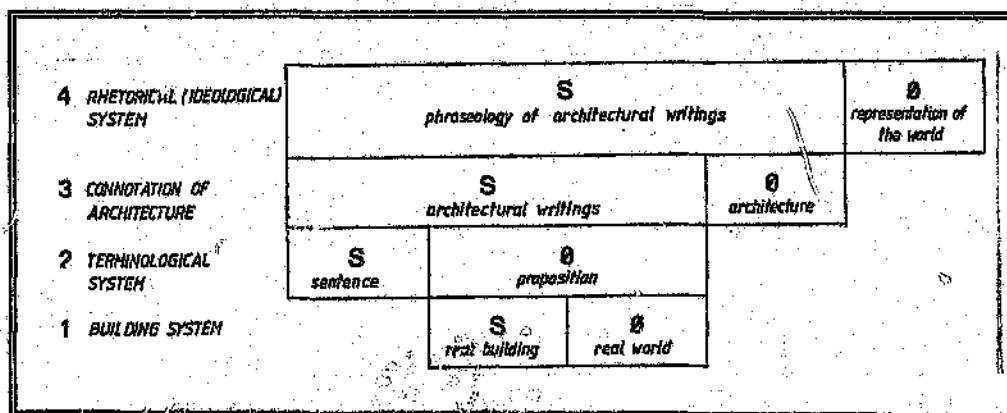


Figure 16: The Architectural System

Architectural signs then, are comprised of built form and meanings, mediated by language. However, this does not occur, as in Agrest and Gandelsonas' view, in a symmetrical relationship, but in a staggered relationship of systems.

Having made this point, Agrest and Gandelsonas' construction of meaning in Le Corbusier's Villa Savoye (1929-31)(fig.17) (Agrest and Gandelsonas 1977:107) becomes difficult to follow (fig.18).

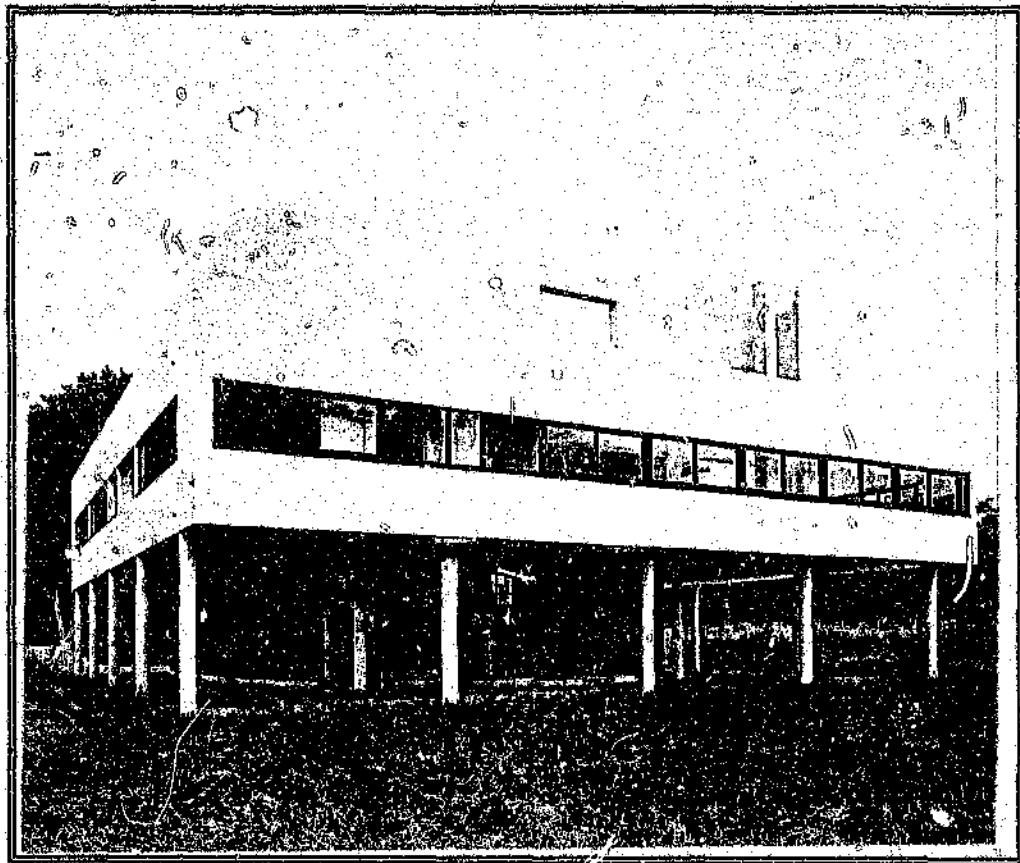


Figure 17: The Villa Savoye (Le Corbusier)

Housing	House	Window	Wall	
Code:	Inhabit	Passage of Light	Boundary, Protection	: etc.
Liner	Boat	Window	Decks	
Code:	Sail + Inhabit + Movement + Technology	Passage of Light + View + Seat + Sun	Promenade	: etc.
Meta- phor:	House Window	Liner Window Light + View Movement + Technology + ...	House Window Light + View + Movement + Technology + ...	

Figure 18: Meaning in the Villa Savoye (Agrest 1976)

Agrest and Gandelsonas argue that for this building to connote the values of ship (sail, inhabit, movement, technology), two different signifying systems, that of dwelling and that of ocean liner have been interrelated. By means of a functional similarity between the systems - both liner and house are forms of habitation -, a "metaphoric" relation is set up between the elements of "house" and values associated with "ship".

I would contest this analysis, and construct the metaphor thus (fig.19):

Terminologically speaking, the building represents a paradox - a building for land and sea. It neutralises the previous opposition between two signifieds and enables the values of both to be connoted. We are not dealing with a straightforward relation between the elements of a house and the values of ocean liners, but rather with a building which, on the level of experience, is both house and ship at the same time, connoting the values of both.



Figure 19: A Building for Land and Sea

It establishes relationships and associations other than those traditionally expected of a house - is being in this building like being in a house or on a ship? The elements of the building (the signifiers of the system), by their very arrangement, suggest both. Simply by having been on an ocean liner, someone experiencing the building would have access to its metaphoric content.

(c) LIMITS TO THE SYSTEM

Agrest and Gandelsonas suggest that the possibilities of the architectural system are limited by four factors: *technology, function, formal codes or conventions and language.*

(a) *Technology and Function*

Technology and function are properties of buildings which set limits to the architectural system (Agrest and Gandelsonas 1977:101). This refers to the fact that the conditions which govern building (structural and functional necessity) set non-arbitrary limits. Building does not yield purely differential terms for architecture as sound does for language. Architecture's terms are determined in relation to the pre-semiotic limits of gravity and use.

(b) *Formal Codes*

In addition to functional and structural requirements, the architectural system is further limited by formal architectural codes and conventions. These include those which are specific to design (graphic codes), those which are shared by a number of cultural systems (i.e. spatial and iconic codes) and those which, while crucial to another cultural system (eg. rhythm in music) participate in architectural code formation.

(c) *Language*

In the last instance, as has been suggested, language sets the limit to the architectural system. Through it, building is carved into a syntagm capable of being systematically articulated. In many instances, the signifying units of the architectural system correspond to units of building (window, wall etc.) but in many instances they do not (a brick could hardly be taken to be a signifying unit for instance). Only certain terms in the architectural system have a technological base. Others exist purely to distinguish one signifying unit of the system from another e.g. balustrade, handrail, balcony etc. Language translates technological facts into signifying possibilities.

These four limits to the architectural system - technological, functional, formal and linguistic - are challenged by Agrest and Gandelsonas. They see them as having come about in historical circumstances which necessitated the closure

of architecture as an institutional practice and a system of meaning (1980:37). Through their reading of semiotic theory, they see the possibility of exploring an architecture not limited by its current teleology.

They locate the architectural system in a broader physical and semiotic context - the built environment at large. It becomes merely one of many different cultural systems configuring the built environment. The "intertextual relationships" between these systems results in an opacity or non-reductiveness of meaning, (Agrest and Gandelsonas 1973a:267), which, for them, challenges the traditional formation of architectural objects.

2. *MEANING IN THE BUILT ENVIRONMENT*

(i) *BUILT ENVIRONMENT AS TEXT*

Agrest and Gandelsonas (1977:112) apply the notion of "text" to the built environment at large. For them, it is a complex social text which simultaneously configures a multiplicity of signifying systems. It has no single producer, nor is it an established rhetorical system within a defined institutional framework. Instead, it comprises a multiplicity of discourses which criss-cross one another in a heterogeneous signifiatory process.

It is therefore not possible to analyse the built environment in the same way as one would a single cultural system such as architecture, for its signifiers are caught up in many different systems simultaneously. Agrest and Gandelsonas devise a technique for its analysis which differs radically from their analysis of architecture. This involves a process of "productive reading".

(ii) *NON-DESIGN AND PRODUCTIVE READING*

The logic of the urban realm as a signifying system is termed "non-design" by Agrest and Gandelsonas (1977:111). Non-design is a system which violates the internal logic of separate systems and inscribes meaning in a highly

indeterminate way (Agrest and Gandelsonas 1980:37,1977:111).

It poses the problem of meaning as the "intersection of codes" (Agrest and Gandelsonas 1977:113) or "signifying chaining" (Agrest 1976:59) - how does one analyse the process by which meaning is inscribed when it is not singular, but complex and dynamic?

"Productive reading" is the technique proposed by Agrest and Gandelsonas (1977:113) to examine this system. A productive reading is an interpretation of the built environment which does not decipher meaning, but cuts through it, retracing the mechanisms by which that meaning was produced.

The built environment as the object of reading is a set of fragments or "units of reading" articulating a number of systems. (Agrest 1976:59). Beginning from a signifier of departure in such a unit, the various systems in which it is articulated are read. The reading traverses the chain of signifiers of one such system, until one of them becomes another signifier of departure, opening the reading towards another system. These signifiers which open to other systems are called "shifters"² (Agrest and Gandelsonas 1977:115). They allow meaning to be displaced from one system to another, making the production of different readings of the built environment possible (Agrest and Gandelsonas 1977:116)³

2

This notion of the shifter is adopted from Jakobson (1957) and Barthes (1983), where it is used to explain the point of connection between a coded and an uncoded level of signification; "the clearest example of the shifter is the personal pronoun. 'I' means the person uttering 'I'. Thus on the one hand, the sign 'I' cannot represent its object without being associated with the latter by a conventional rule... Consequently, 'I' is a symbol. On the other hand, the sign 'I' cannot represent its object without being in an existential relation with this object: the word 'I' designating the utterer is existentially related to his utterance, and hence functions as an index" (Jakobson 1957:2). Agrest and Gandelsonas' use of this notion diverges significantly from its original formulation in that they define the shifter as the point of articulation of two coded systems.

3

This is seen by Agrest and Gandelsonas as of major significance for architectural practice: "The modern movement's critique of classical language falls short of the idea of unity which this language presupposes. It is this failure which causes the modern movement to misrecognise the radical heterogeneity which characterises the logic of the urban order. And accounts for the lack of theoretical and iconic development, for the impasse at which the second third of this century finds itself" (Agrest and Gandelsonas 1980:37).

For instance, in the following example, a street cafe is linked to theatre by virtue of its physical configuration. This produces a number of readings which traverse gestural systems, systems of ritual, the system of cafes, of public places, and of streets. The initial fragment of the city observed is thus shown to be dense with meaning (figs.20-22).

The reading "decondenses" the signifiers of the built environment (Agrest and Gandelsonas 1977:115). It functions by means of the operations of metaphor and metonymy (Agrest and Gandelsonas 1973a:269). The shifters of a productive reading function as condensers, allowing for exchange between systems. Metonymy displaces a reading down the chain of signifiers of a single system. These operations are not concerned with fixing meaning, but with the linking of signifiers.

They are to be distinguished from the operations of the architectural system, which not only open, but also close meaning, reducing it to a single "metaphoric" signified. In non-design, metaphor and metonymy operate as expansive forces, similar to the condensation and displacement of the dreamwork. They produce a passage from the manifest to the latent level of the built environment, considered as a dream (Agrest and Gandelsonas 1977:115).

This expansive procedure explodes the unity of the built environment when seen from one particular cultural perspective, dissolving it into a broad network of meaning. An urban system can no longer be read as an isolated sign on the basis of an autonomous code. Rather,

its meaning is dispersed along the chains of its relations. Its mise-en-sequences, the linear relations of its sequential visions are violated by other relations which are independent of the syntagmatic logic.⁴

(Agrest and Gandelsonas 1980:37)

4

In many ways, this process resembles that adopted by Barthes (1970) in his reading of *Sarrazine*.

Figure 20: The Productive Reading (Agrest 1976)

The Productive Reading

The outdoor part of the "café-terrace" establishes the relationship *café/street* and is organized in terms of the opposition *sidewalk as passage* or *circulation/sidewalk as café*; another element in the sidewalk-circulation is introduced; people link the first opposition with the second one. Some people walk in the sidewalk/street; some people sit in the sidewalk/café. People are distributed in a field of objects that may be distinguished as objects for use and objects for background. Buildings are objects and façades; the background is a continuous façade; the façade of the café stands as a mediating element which because of its transparency creates a relationship between the exterior café or café/street and the interior café. The interior café repeats the same oppositions between people/objects and background/interior, which themselves now become mediators between exterior and interior in a reflection in which objects, sidewalk, people, street, and interior space are superimposed. . . .

The seats, which are distributed in rows and in which people are clustered, resembles a pit. This substitution produces a point of departure, from *café/street* to *café/pit*.

Café seats x *Pit seats*
Pit seats Theater

Background plane café x *Background plane scene*
Background plane scene Theater

readings may be produced:

The Gaze:

The gaze from the café as pit transforms the street into a scene and sweeps through the codes both of the café and the theater. Codes organize the gaze: the people from whom and to whom they are directed—Observer/Observed; the places from where and to where they are directed—Public/Private; the desire which generates them—Voyeurism/Exhibitionism. In their interrelation, places configure the gaze: frontal—oblique—sideview. Scene and pit are confused in a general scene where gaze and desire are structured and articulated together. The pleasure in the realization of de-

sire is generated not only at the visual level but also at the level of language in action: that is, discourse.

Discourse within the "theater" is fragmented, dispersed among various actors and spectators, articulating itself without either dominating or subordinating, with the body in action, with the gesture.

Gesture:

Gesticulating bodies form a chain with clothes as a second skin, regularizing the gestures of fashion which play a role in the marking and disguising of sex differences. Café, the domain of men, is incorporated in the city as theater, articulated with fashion, the domain of women, as costume. The two together transform the visual codes, which link café/masculinity and fashion/femininity, thereby confounding them.

The gesture is not only that of a static pose, but the multiform gesture of the body in movement, engaged in entries and exits from the scene.

Discourse and gesture configure the scene; meanwhile, time and volume perforate the plane of decoration and configure the space.

The scene in the streets:

The scene in the streets is in turn the explosion of the café/theater.

The street as a scene of scenes:

The street as a scene of scenes in turn projects into the café, opening it up to new paradigms and their codes.

The system of cafés:

Each café is not a café in itself but is part of a system of cafés, which speaks of its history, of its origins, of its transformations, thus establishing the paradigm of the café.

The system of the fragments of public places:

The café belongs to the paradigm of streets, plazas, monuments. In turn, each of these is not only physically

juxtaposed but also textually juxtaposed. This transforms these places into complex entities: *café—square*, *café—market*, *café—street*. The street is transformed into a new point of departure. We are again in the street, but now the street is a scene.

Street:

A scene in movement. The street is the scene of struggle, of consumption, the scene of scenes; it is infinitely continuous, unlimited in the motion of objects, of gazes, of gestures.

It is the scene of history.

It is a scene, but it is also what is behind the scene, what is not seen, or not allowed to be seen. When what is behind the scene is shown, it produces a demystifying effect, like that of exposing the reasons for the split between individual and social, between private and public.

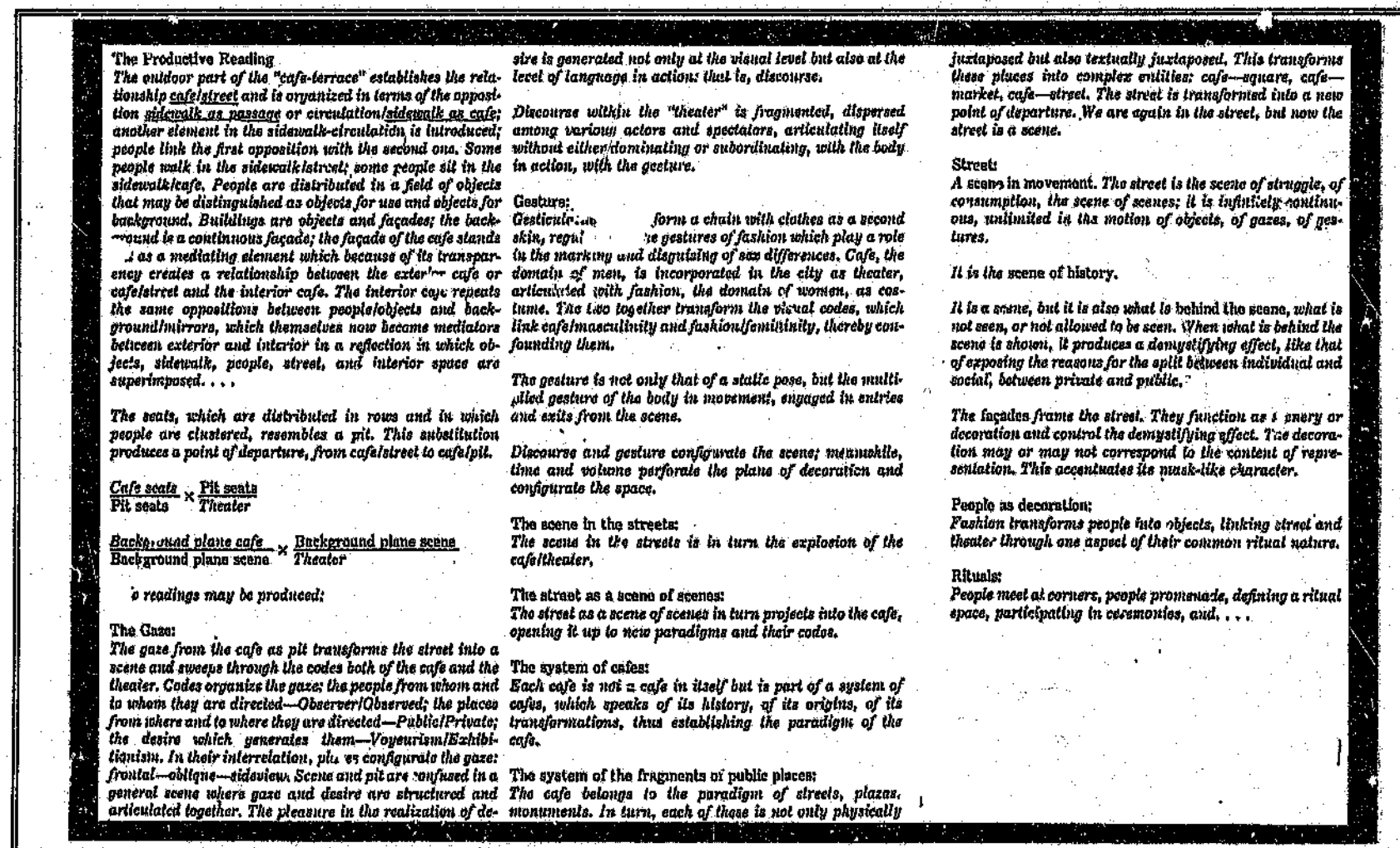
The façades frame the street. They function as scenery or decoration and control the demystifying effect. The decoration may or may not correspond to the content of representation. This accentuates its mask-like character.

People as decoration:

Fashion transforms people into objects, linking street and theater through one aspect of their common ritual nature.

Rituals:

People meet at corners, people promenade, defining a ritual space, participating in ceremonies, and. . . .



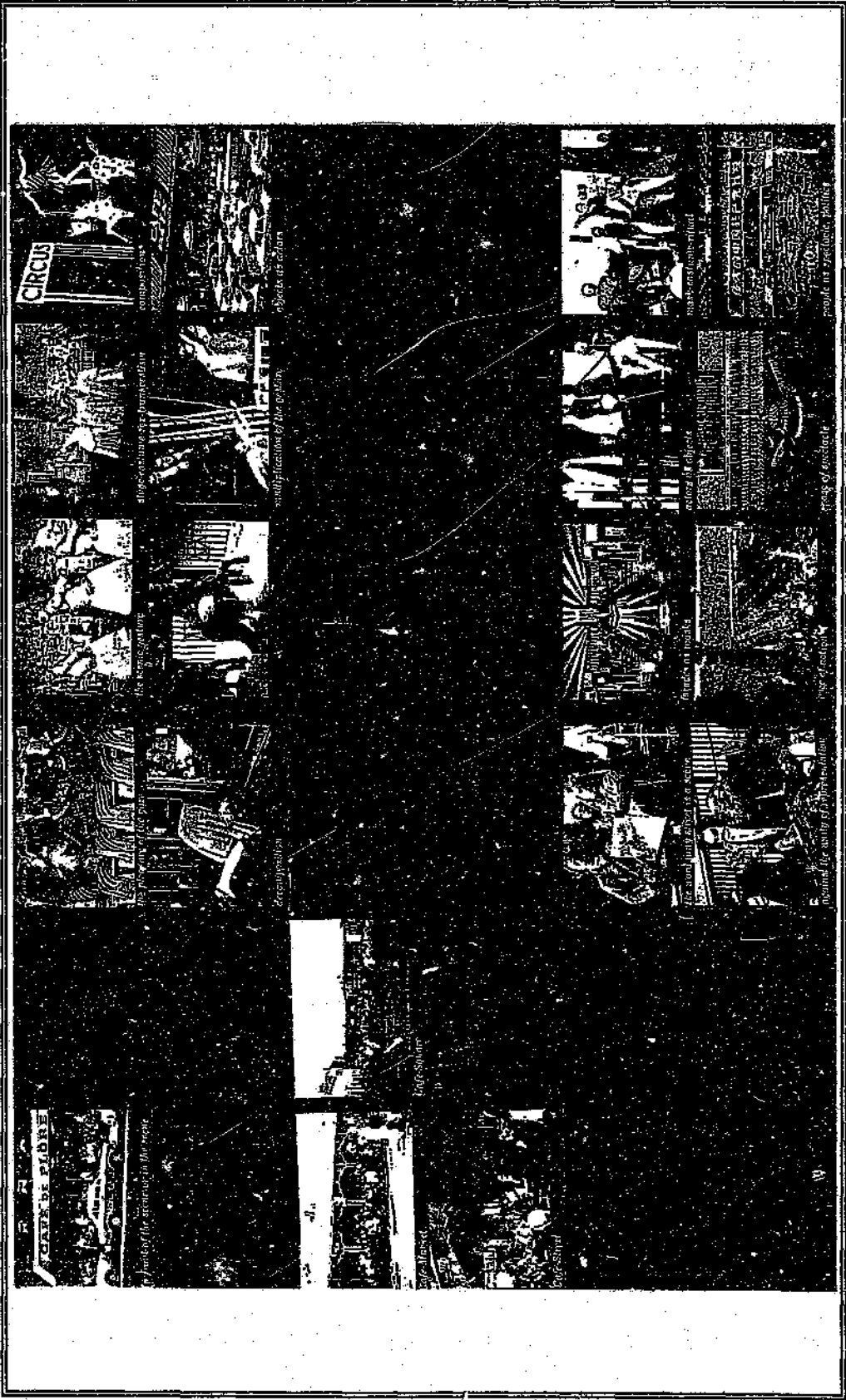


Figure 21: Cafe as Theatre

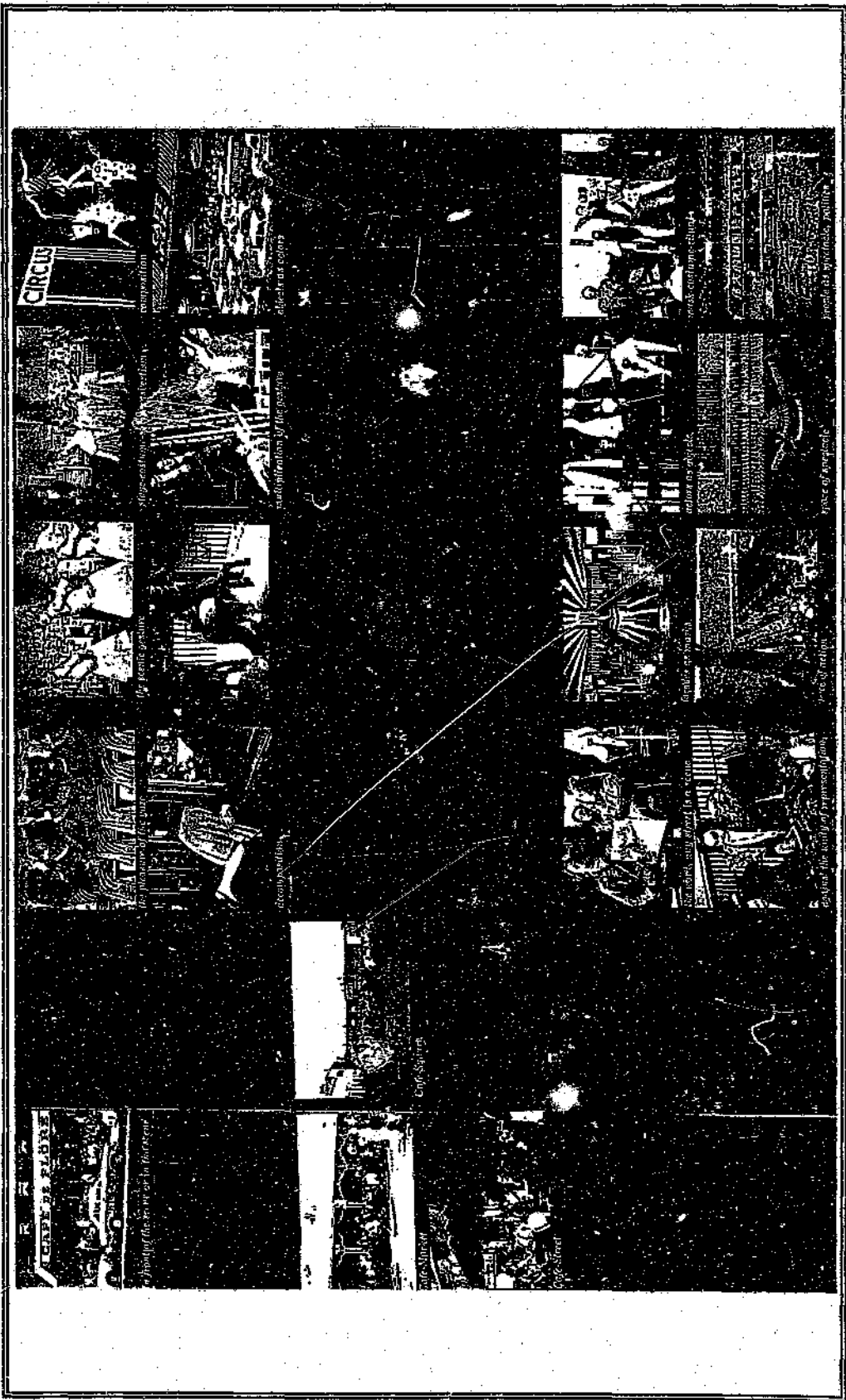


Figure 21: Cafe as Theatre

Non-design orders, permutes and displaces social codes. As it inscribes culture in matter, "it does not realise a work or a product with one single or overall meaning, but maintains the multivalence and dialectic of meaning in society" (Agrest and Gandelsonas 1973a:267). This dialectic is the result of generalised cultural processes, rather than the prescriptions of a particular institutional practice (Agrest 1978:219). Where design hides it, non-design leaves the exchange of meaning in an open-ended state.

3 NON-DESIGN AND ARCHITECTURE

The procedures of non-design are adopted by Agrest and Gandelsonas as a strategy for dissolving the limits of architecture. This involves the disruption of existing architectural and urban typologies along the lines of a productive re-
ding.

Kurt Forster (1984:42) called this process "typological dislocation" or chaining. Elements of built typologies are selected and then shifted and recast to produce open-ended and indeterminate readings. The process is terminated when the original fragments are no longer recognisable, when the memory of the past is lost (Agrest and Gandelsonas 1980:38). The type has been opened up, unfinished (Agrest and Gandelsonas 1983:37).

Two examples of this approach are worthy of examination:

i) *A HOUSING PROPOSAL FOR THE FRENCH MINISTER OF HOUSING (1975) (fig.23)*

In this project, Agrest and Gandelsonas, in collaboration with Rudolfo Michado and Jorge Silvetti developed a housing system capable of adjustment to a variety of urban sites.)

Design was explored as a process of reading - of selection, combination and transformation of forms and meaning. It was based on the notion of type. A

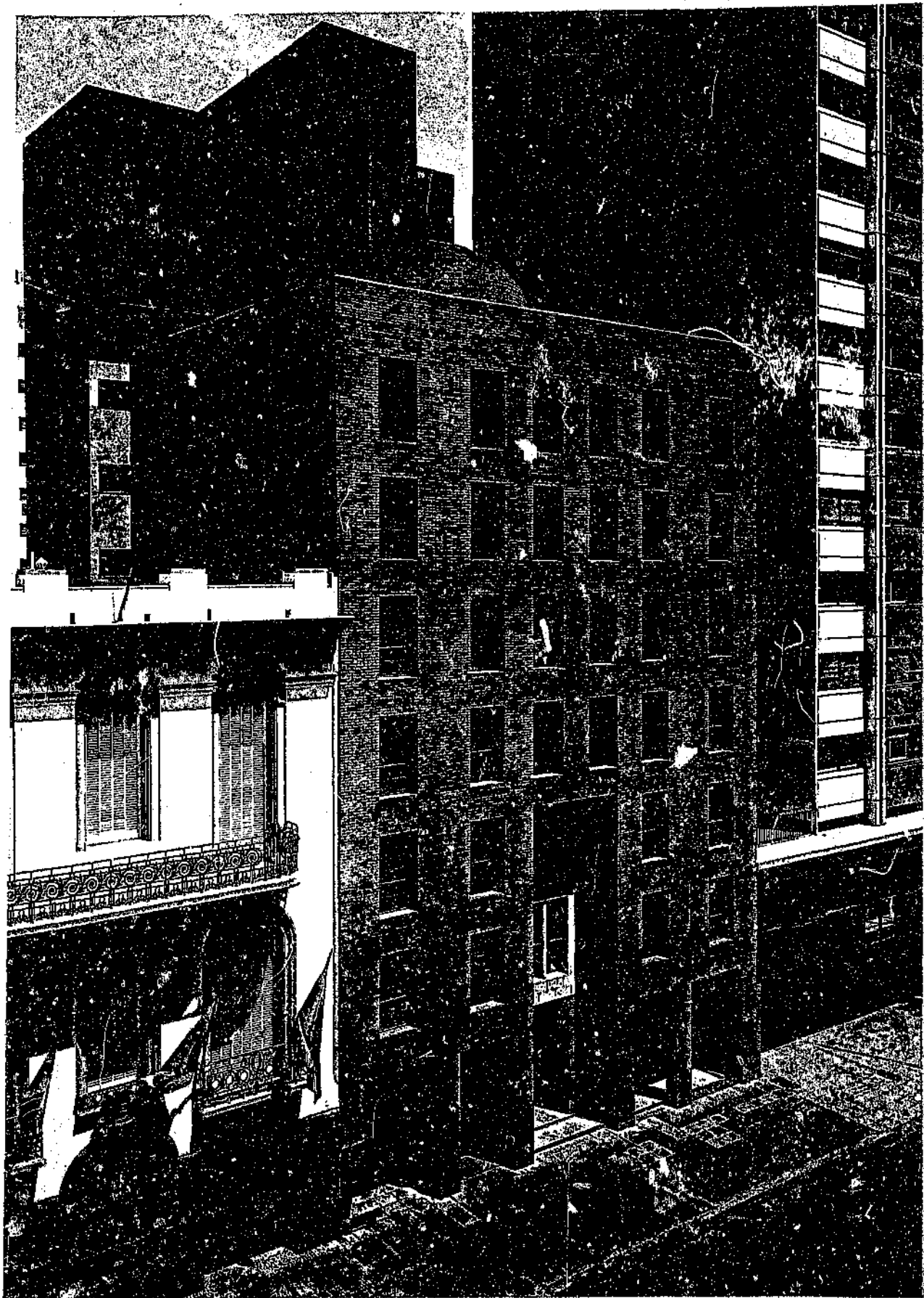


Figure 26: Urban Fragments Building 1 (Agrest and Gandelsonas 1984)

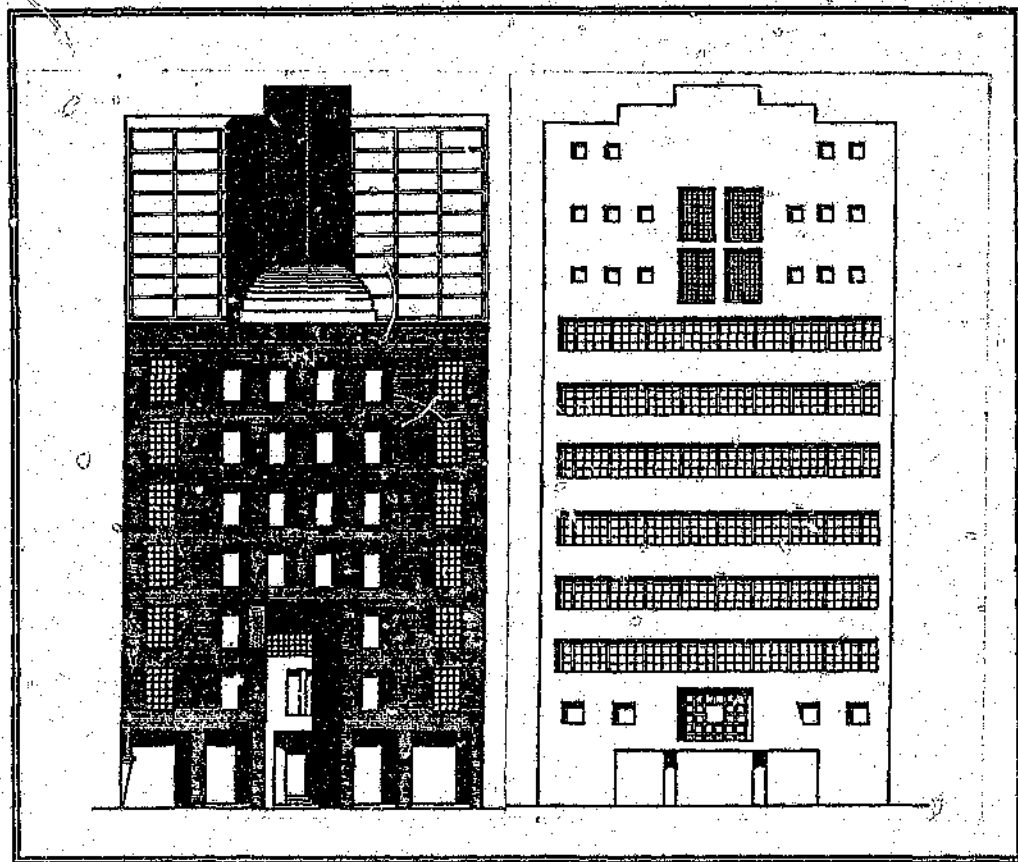


Figure 27: Front and Back Facades, Urban Fragments Building 1 (Agrest and Gangelsonas 1984)

The front lower building is a solid palazzo type, punctured with windows and an arcade at its base. A three storied porch marks its entrance. The second building is a taller modernist slab type with curtain wall and strip windows.

The two buildings are separated by a courtyard and connected by a sequence of elements in the public space which traverses it from front to back (fig.28).

At the junction between the two buildings, a small baroque double staircase leads the visitor to a piano mobile over the stores of the back building from where access is gained to the vertical circulation shaft. This stair reconciles the two buildings, but at the same time, its centralising function is at odds

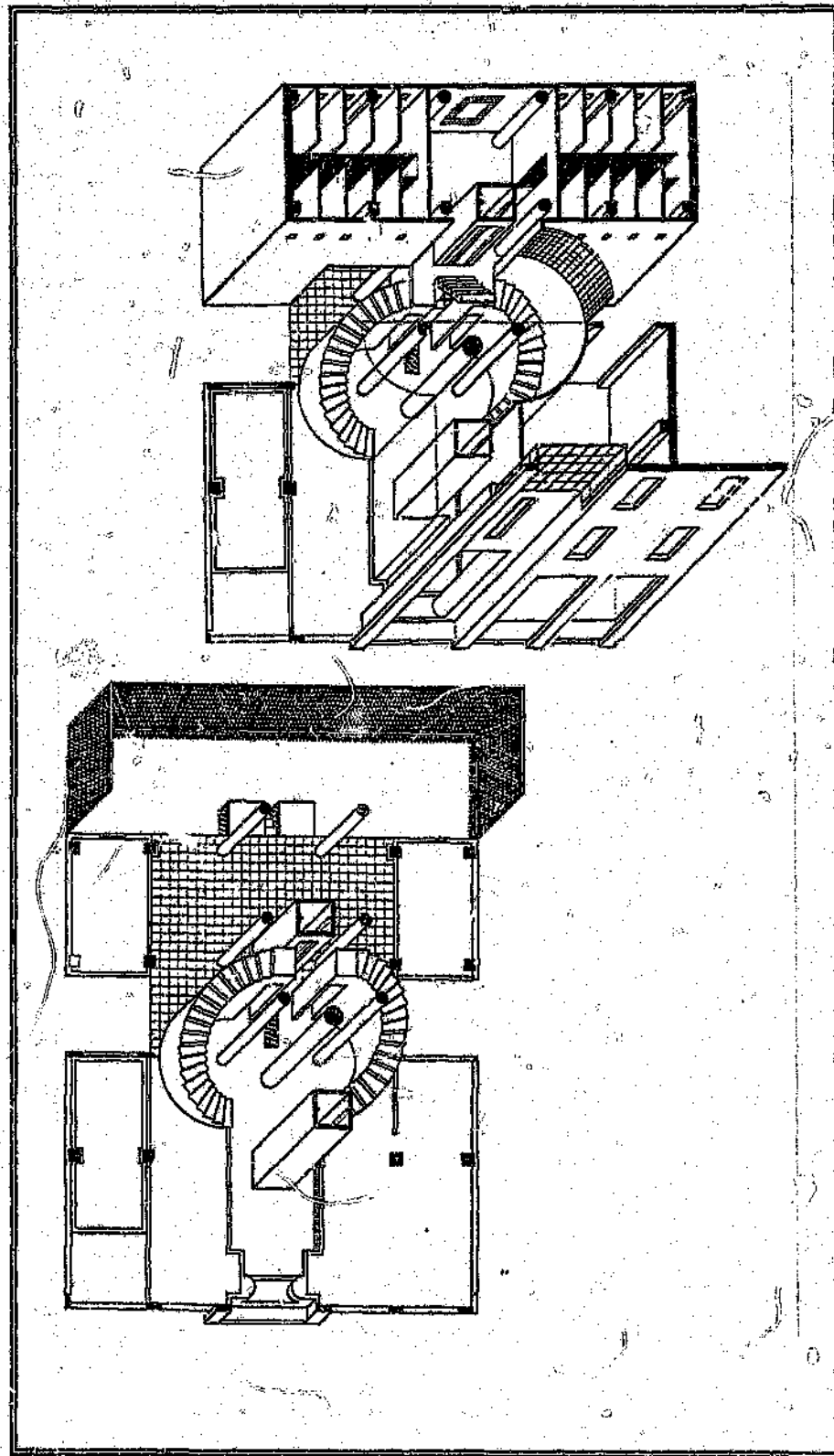


Figure 28: Axonometric showing articulation between "two buildings" at first and second floor levels (Agrest and Gandelsonas 1984)

with the narrow residual courtyard which it occupies. In addition, a huge circular column is placed on the central axis of the foyer, blocking any reading of spatial grandeur.

From this brief description, the building can clearly be seen as one in which different typologies are juxtaposed. Its ironic and dialectical qualities are obvious. It is evidence of the "critical" design process advocated by Agrest and Gandelsonas, and bears witness to a rigorous connection in their work between theory and practice. It will form the basis of my concluding statements regarding the outcome of their work for architecture.

To sum up:

1. *The architectural system is, in Agrest and Gandelsonas' view, characterised by a reduction of meaning. Architectural objects convey only certain meanings and not others by their being expressed in natural language. This language in which built form is associated with meaning is the medium in which the architectural system is constructed. It facilitates the formation of architectural codes, which govern the manifestation of architectural signs.*
2. *The structure of the architectural sign proposed by Agrest and Gandelsonas is, in my view, problematic. Instead of the symmetry they propose, I have suggested that the various systems in which it arises are combined in a series of connotative and metalanguage operations (see fig.16). While technically constituting a metalanguage, architectural writing is caught up in establishing the rhetoric of the architectural system.*
3. *Architecture, as traditionally practiced, is governed by a teleology which, like realism in literature, predetermines the manifestation of its system. This teleology is related to technical, functional, formal and linguistic limits.*

4. Through an analogous critique to that practiced by the Tel Quel writers for literature, Agrest and Gandelsonas attempt a "writerly" practice of architecture which challenges its former teleology. This reactivates the mechanisms which produce meaning in architecture outside of their manifestation in specific codes. Design becomes an articulation of the meaning occurring between various coded systems. This could be argued to accomplish for architecture what Tel Quel accomplished for literature.

5. CONCLUSION

AN EVALUATION OF AGREST AND GANDELSONAS' MODEL FOR THE PRACTICE OF ARCHITECTURE

Agrest and Gandelsonas' semiotic project looks at built form and asks how and why, when not directly caused by functional criteria, built form takes the form it does. It relates this to the problem of the production of meaning - in addition to answering functional criteria, built form conveys messages about the society which produced it, anchoring certain ideas which that society has about itself in space and time.

The view of the origin of built form which Agrest and Gandelsonas hold is not a new one - it can broadly be defined as historicist (Agrest and Gandelsonas 1977:103). Nevertheless, in distinguishing themselves from this position, they identify their problematic as the relationship of architecture to ideology (1977:103). They apply the basic principles of structural linguistics to an analysis of the operations of ideology in architecture.

1. ARCHITECTURE AND IDEOLOGY

For Agrest and Gandelsonas:

All cultural production, such as architecture, when articulated as the economic and political levels, manifests the way by which ideology is produced as part of a given social structure.

(1977:104)

It participates in mechanisms which have:

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.

(Agrest and Gandelsonas 1973b:94)

In their conception of it (Agrest and Gandelsonas 1973b:94), ideology is the set of representations and beliefs (religious, moral, political or aesthetic) which, at the same time as providing a certain knowledge of the world, maintain the social relations of a society. This refers to two aspects of ideology - firstly, to what it is (beliefs about the way the world is) and secondly, to its use (the maintenance of the social relations of society)¹.

To say that architecture is ideological practice is to refer to i) the sets of ideas which provide knowledge of it from practical, religious, moral, or aesthetic etc. grounds and are assigned to physical elements with a specific form (Gandelsonas 1975:45), and ii) to the function of such knowledge in the reproduction of the institutional boundaries of architecture (its social form) (Agrest and Gandelsonas 1973b:94).

It seems critical to ask what the relationship is between these two - between knowledge of architecture and the institutionally reproductive function of such knowledge. They are brought together, in Agrest and Gandelsonas' view, and here I would agree with them, in the language of the architectural system i.e. in the writings of those who practice architecture:

The mediating use of language (permits) the inclusion of the object in social life.

(Agrest and Gandelsonas 1973b:264)

The use of language in the phraseology of architectural writings (see fig.16)

¹ Agrest and Gandelsonas' conception of ideology draws on Althusser (1977), for whom ideology is not false consciousness, but an objective level of social reality. It is a system of representation whereby people live their relation to the world. It is profoundly unconscious, only intelligible through its structure, not as isolated image or representations. Its function is to secure cohesion among people and between people and their tasks. Individuals live in ideology by participating in certain practices within specific ideological apparatuses.

closes the meaning of the architectural text; it reduces the production of meaning to only one signification which seems natural and self-evident.

The writings of architects describe form by relating it to other ideas, be they functional, technical or abstract. In these writings, specific forms are identified and meaning or meanings attached to them. This "language" establishes certain buildings as "architectural" and others not. In other words, certain buildings connote the abstract value "architecture", if they correspond to the codes established in architectural discourse, while others do not. These codes perform the social function of setting limits to the activities of designers. They determine the way/s in which designers conceptualise, relate to, imagine and produce their work. In addition to establishing architecture as a distinct system of meaning, identifiable in a distinct set of built works, architects' writings thus secure a relation between those who practice architecture and their tasks. It establishes the ideas in which architects represent their work to themselves and through which they act in the social totality. This preserves the autonomy of architecture as a social practice in imaginary system of representation.

It is this which Agrest and Gandelsonas contest. For them, architecture cannot be considered an autonomous practice. Every architect is implicated in the political and social context of his or her work, and should be involved to some extent in the exposure of its ideological form. For them, this involves exploding the wholeness or completeness of the architectural system by locating it in a "textual" production of meaning, in which the operation of ideology to close the meaning of the text is refused.

This was achieved in their practice by:

- (i) *A new relation between architecture and the urban*

Architecture has traditionally stood apart from the broader urban realm as a specific system of meaning, produced in a specific practice. Agrest and

Gandelsonas, in conceptualising the individual architectural work as a text which is always part of a larger set of texts with which it engages in dialogue, radically challenged this position. Drawing on texts from both within the tradition of architecture, and from those traditionally excluded from it, the urban realm, they cancelled out the previously held distinctions between the two.

So, for instance, in Building 1 of the Urban Fragments project, a front block conforming to the typology of a building facing the street is combined with a back block that has the curtain wall and strip windows typically associated with a modern free standing tower (fig.27). This juxtaposition of scale and type mimics the juxtapositions which characterise development in the city at an urban scale.

This conceptualisation of their task challenged the ideological form of architecture in two ways:

- i) The traditional autonomy of architecture as a system of meaning was undermined. It was produced as a part of the functioning of the ongoing, open-ended process of the production of meaning in the built environment.
- ii) The architectural subject was no longer an individual designer, interpellated in specific ideological representations, but rather a subject participating in the broader ideological field of the urban realm. In this way, the separation between designers and other urban subjects was undermined.

(ii) *A new relation between theory and practice*

In an essay, "On Practice" Agrest and Gandelsonas (1980) argue that criticism and design have long been distinct and separate practices in architecture. Architectural ideas and forms have been produced in design and then

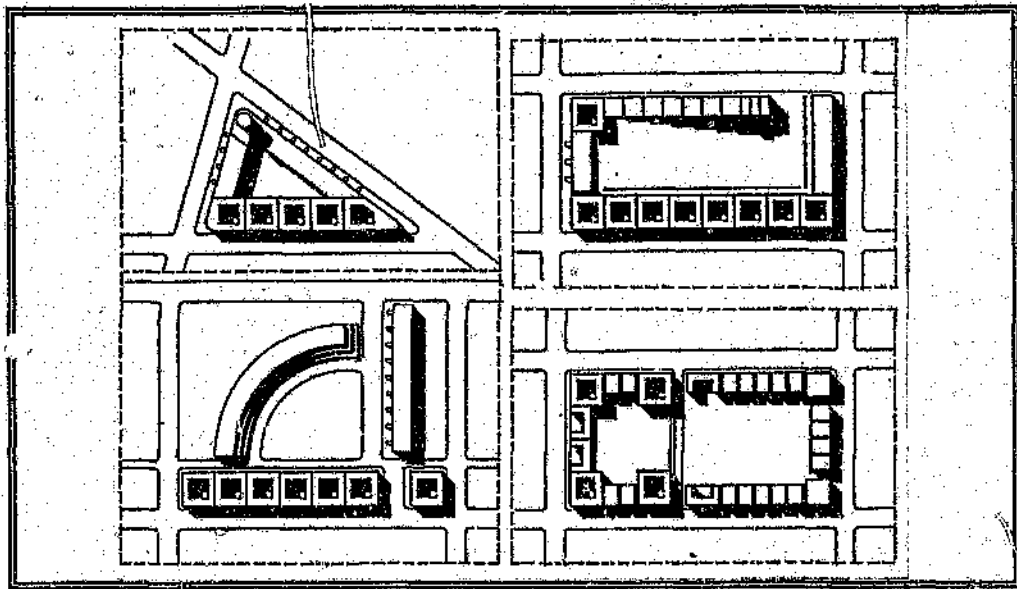


Figure 25: Possible Relationships between Building Type and Urban Configuration (Agrest and Gandelsohn 1980b)

(ii) *URBAN FRAGMENTS BUILDING 1: BUENOS AIRES (1977-82)*

In collaboration with Jorge Feferbaum and Marcelo Naszewski (fig.26)

This building was one of three designed for different locations in Buenos Aires. It deals with the issue of context as something resulting from cultural and economic determinants and building codes. The building is considered a fragment of a discourse established among buildings in a city by juxtaposition, accumulation and reference.

The building is typically urban - it occurs between two party walls. It was conceptualised as two buildings, one set in front of the other, partly in response to set-back regulations, partly to the idea of typological juxtaposition (fig.27).

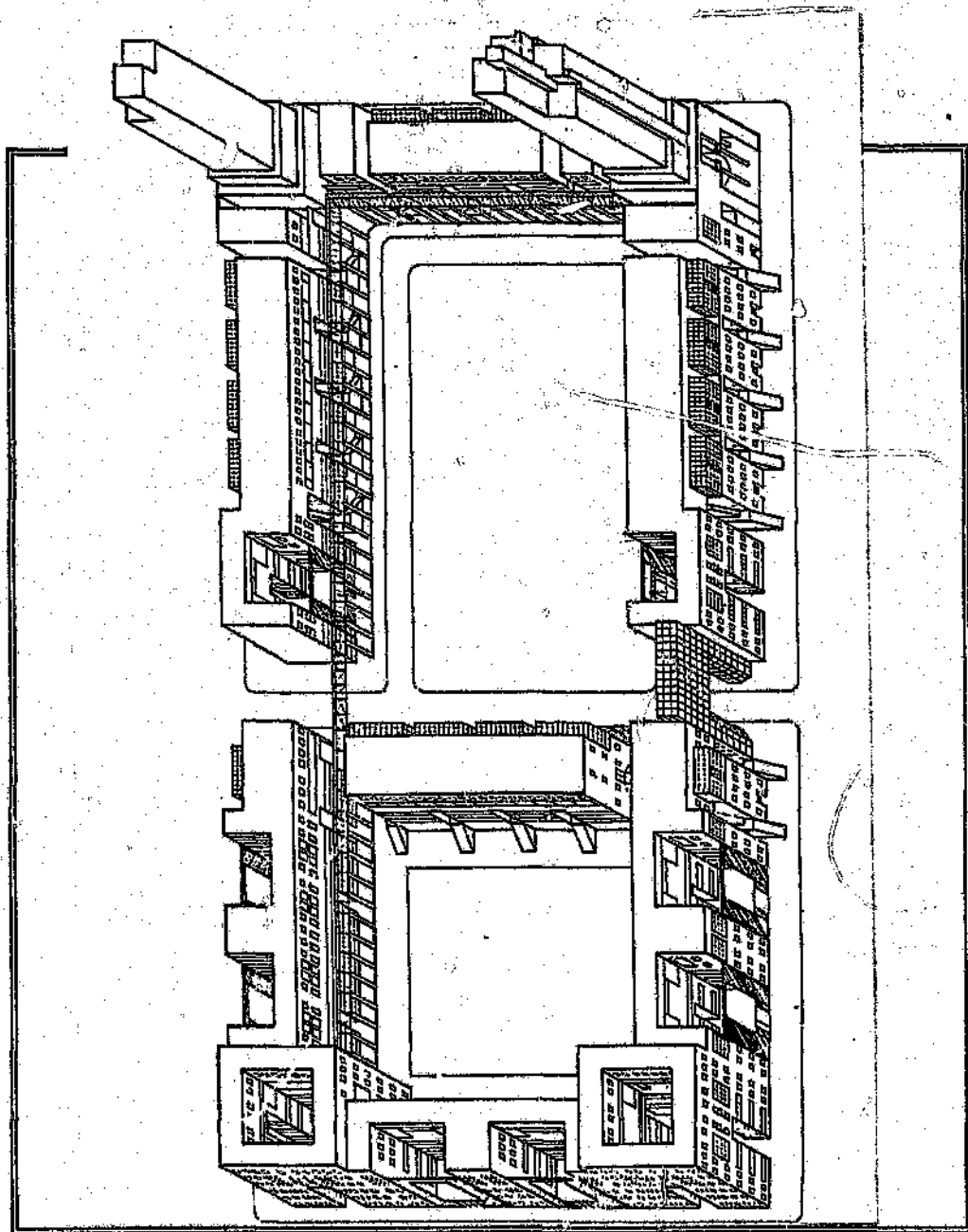


Figure 23: A Housing Proposal for the French Minister of Housing (Agrest and Gandelonas 1980b)

type is a recognisable building form which has functioned efficiently over time and been associated with a particular cultural tradition. As the basis for this design, the utilisation of types allowed for the development of a housing system which users would recognise and identify with without having been directly involved in the design process.

This project clearly illustrates the design approach generated by Agrest and Gandelonas from their theoretical base. Context supplies typological material

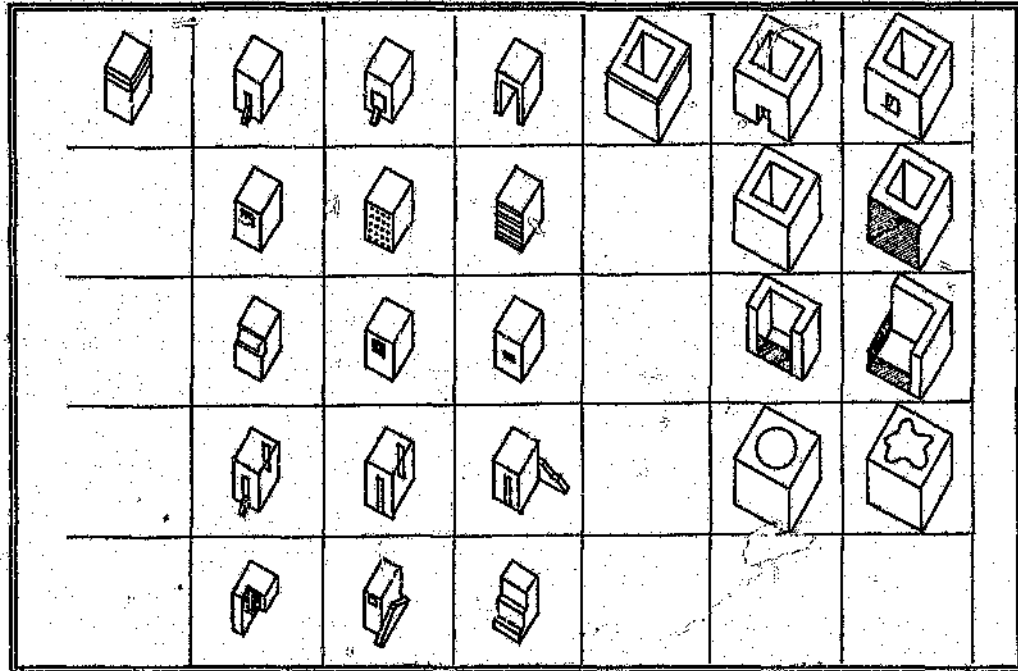


Figure 24: Typological Elements (Agrest and Gandelsonas 1980b)

which the designer shapes and transforms in a dialectical relationship with urban morphology.

Design is a process of:

- (a) Analysis of context for generic types and urban morphologies.
- (b) Transformation of types in relation to one another.
- (c) Exploration of the relation of types to the urban morphology of a specific site.

This process models itself after the process by which the city takes shape. It combines, articulates and transforms a given context of types and urban spaces (fig.25).

criticised or interpreted in an alternative written discourse.

In their work, design is itself conceived of as critical.

There is no doubt that this position was developed out of a theoretical discourse which made explicit the rules of architectural production, and confronted it with the notion of "textuality". However, there is also no doubt that Agrest and Gandelsonas' buildings do not straightforwardly attempt to be the illustrations of a discursive criticism.

Instead they make use of a strategy of analogy: design is thought of as "reading". Just as literary texts read existing texts, and, in doing so, establish a critical distance from them, so architecture reads the texts of the architectural tradition and the urban realm, and actively transforms them.

Design is no longer an unreflective process dictated to by the unifying will of the designer, but rather involves a conscious criticism of existing aesthetic codes. Working with the sedimentations of meaning passed down in aesthetic codes, design becomes a process of unmasking the extent to which these codes "naturalise" ideological practices. It makes explicit the unstable relation between form and meaning which codes conceal. In this process, the desire of the designer is required to be countered by a capacity to criticise those very forms which give him or her pleasure (Colquhoun 1983:8).

The public foyer in Building 1 of the Urban Fragments project exemplifies this procedure particularly well (fig.28). In it, a small baroque double staircase is placed in the residual space between the front and back blocks of the building. Its centralising function is in conflict with the narrow interstitial space which it occupies. This stair suggests the socially incongruent tradition of high bourgeois architecture to those who enter the building. However, this reference is countered by the insertion of solid elements into the foyer it encircles - a large circular column which impedes an axial approach, lift and screen walls. These give the foyer a feeling of compression and prevent a

reading of spatial or social grandeur.

In this way the codes of the architectural system are undermined and designers alienated from an uncritical relation to their own work. A single reading or interpretation of the building is no longer possible.

(iii) *A new relation to ideology*

Agrest and Gandelonas speak of their work as generated out of a new relation to an ideological "unconscious" - "a network in which the subject of the reading, the laws of the unconscious and the historico-cultural determinants are articulated" (Agrest and Gandelonas 1977:116).

Beginning with de Saussure's distinction between langue and parole, the assumption is made by semioticians that langue is the unconscious level of every ideological discourse, unalterable by individual activity. The structure of langue is the structure of ideology - the hidden structure in every discourse.

Althusser (1977) spoke of ideology as an objective level of social reality, independent of individual subjectivity. It comprises systems of representation having nothing to do with consciousness: "usually images and occasionally concepts, but above all structures imposed on the vast majority of men not via their consciousness" (Larrain 1979:155).

As a profoundly unconscious level of social reality, ideology is only intelligible as a system. It is a process of the production of sense, prior to its appearance in conscious representations.

The Tel Quel initiative in literature and Agrest and Gandelonas' initiative in architecture was an exploration of the unconscious structure in their respective fields.

For Agrest and Gandelonas this meant, as has been seen, an activation of the

unconscious (metaphoric and metonymic) processes which operate in the construction of meaning in the built world, outside of the phraseology which, in architecture, fixes it in words.

In order to evade the ideological functioning of language, and this is to me, the brilliance of Agrest and Gandelonas's project, the architectural system was located in relation to another system having the same material substance - the built world. This enabled relations between diverse and often contradictory building forms and codes to be established, as in the above mentioned example. In this, there was no need for language to mediate. One built text confronted another directly, by juxtaposition, accumulation and reference.

It must be noted that this did not do away with linguistic discourse in the production of architecture, but it did bring to the fore the mechanisms whereby built form signifies as built form. It foregrounded the operations of the system so to speak, and, in fact, established relations in built form which linguistic prescription would have excluded.

I would like however to suggest that the absence of language is not something which characterises the process of design which Agrest and Gandelonas adopt. While I find the notion of the juxtaposition and continuation of codes an interesting and a constructive one, I would not hold as Agrest and Gandelonas do that this process is outside of language:

If the system of architecture and of design, even when we play with it, is always closed within a game of the commentaries of language - a meta-lingual game - it is interesting to speculate on the outcome of a similar "game" of non-design, a game of the built world. For non-design is a non-language, and by comparison with a language, it is madness, since it is outside language and thus outside society.

(Agrest and Gandelonas 1977:116)

Their work is as articulated by language as any previous architectural code, and slips into the dangerous position of becoming just another ideological

prescription for architecture's production - a new code of architecture producing designers with an altered perception of their task. In their case, this perception is both contextual and formalist. It draws on typologies from an existing context and juxtaposes their forms to produce familiar though unexpected results. Agrest and Gandelsonas' discursive position of maintaining meaning in a permanent state of incompleteness is as "ideological" and prescriptive a position as any other.

But this is not a serious criticism. For what is important is not whether something is ideological or not, for there is no practice except by and in ideology (Althusser 1977), but rather, what comes out of it.

In my opinion, what has come out of Agrest and Gandelsonas' practice is the erosion of architecture as a distinct and autonomous system of meaning and its incorporation, on a semiotic, not a sociological level, into broader cultural processes². In this sense, their practice is entirely successful.

It both describes and explains how meaning has been traditionally defined in architecture and, at the same time, as a form of "architectural/political/psycho-analytical" critique, counters this system. Buildings are no longer generated out of prescriptive codes of meaning which project specific values onto the built world, but rather articulated in a process which condenses and juxtaposes values within in a generalised social and urban framework. Buildings are designed as if they are being interpreted from a variety of points of view. Architectural and general cultural processes, individual and collective activity, ambiguously merge and remain distinct.

In Building 1 of the Urban Fragments Project for instance, a powerful contradiction is established between the familiarity of its parts and the unfamiliarity of their juxtaposition. It is a building both familiar and strange,

² In no way do Agrest and Gandelsonas question the traditional relation of the architect to society. What they question is the manner in which the architect conceptualises and relates to his/her task. This is entirely consistent with the terms of a semiotic framework.

which both seduces and alienates, countering any attempt towards unified interpretation³.

In this sense, it is a form of critique, utilising negation to expose the mode of intelligibility which configures architecture as a system of signs. The operations of metaphor and metonymy provide both a model and a strategy for a critical architectural discourse.

The outcome of this critique for architectural practice is the recognition that architecture is caught up in collective systems of representation which exceed its limited institutional form. These systems are profoundly unconscious, accessible in architecture only as processes, by activating the operations of metaphor and metonymy in design.

Agrest and Gandelsonas provide a model for such a practice.

Their work, occurring at the time it did, contributed substantially towards the development of post-modernism in architecture. On a theoretical level, it provided a more rigorous critique of architecture as a system of signs than other more prescriptive writers (cf. Jencks 1977, Venturi 1966). On a practical level, it utilised collage techniques critically, producing what is in my opinion, a highly ambiguous relation between architecture and popular urban forms, and avoiding both the pastiche and the abstract formalism to which other postmodern practice was often reduced.

This established, in my opinion, the parameters for an ongoing practice of architecture which is critical and transformative. Provided their work is read from the perspective of its process and not its product, it can be utilised as a strategy of design which constantly questions and rewrites existing ideological practice.

³ Nevertheless, in the mind of architectural critic, Alan Colquhoun (1983), the building's meaning is one of unresolvedness, irony and contradiction.

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LIST OF REFERENCES

- AGREST, D. (1976). Design versus Non-Design. In: Oppositions. 6:45-73.
- AGREST, D. (1978). Toward a Theory of Production of Sense in the Built Environment. In: Anderson, S. (ed.) On Streets. Cambridge: MIT Press.
- AGREST, D. and GANDELSONAS, M. (1973a). Critical Remarks on Semiology and Architecture. In: Semiotica. IX(3):252-271.
- AGREST, D. and GANDELSONAS, M. (1973b). Semiotics and Architecture: Ideological Consumption or Theoretical Work. In: Oppositions. 1:93-100.
- AGREST, D. and GANDELSONAS, M. (1976a). Roosevelt Island Housing. In: L'Architecture d'Aujourd'hui 186:22-24.
- AGREST, D. and GANDELSONAS, M. (1977). Semiotics and the Limits of Architecture. In: Sebeok, T.A. (ed.) A Perfusion of Signs. Indiana: Bloomington.
- AGREST, D. and GANDELSONAS, M. (1980). Introductory Essays. In: Architecture and Urbanism 114:33-39.
- AGREST, D. and GANDELSONAS, M. (1980a). Transformation and Articulation of Types. In: Architecture and Urbanism 114:62-67.
- AGREST, D. and GANDELSONAS, M. (1980b). Architecture between Memory and Amnesia. In: Architecture and Urbanism 114:80-87.
- AGREST, D. and GANDELSONAS, M. (1980c). Three Variations on a Theme. In: Architecture and Urbanism 114:88-99.
- AGREST, D. and GANDELSONAS, M. (1980d). Roosevelt Island Housing. In: Architecture and Urbanism 114:54-61.
- AGREST, D. and GANDELSONAS, M. (1980e). Project for the International Competition for the Renewal of the Area of La Villette in Paris. In: Architecture and Urbanism. 114:68-79.
- AGREST, D. and GANDELSONAS, M. (1983). Architecture between Memory and Amnesia. In: Lotus. 39:55-60.
- AGREST, D. and GANDELSONAS, M. (1984). Urban Fragments Building 1.

- In: Architecture and Urbanism 167:26-33.
- AGREST, D. and GANDELSONAS, M. (1984a). Park Square Boston. In: Architecture and Urbanism 167:48-53.
- AGREST, D. and GANDELSONAS, M. (1984b). Monumentality Within and Without the City. In: Architecture and Urbanism 167:60-64.
- ALBERTI, L.B. (1955). Ten Books on Architecture. J. Rykwert (ed.) Trans. J. Leon. London: Alec Tiranti.
- ALTHUSSER, L. (1977). For Marx. Trans. B. Brewster. London: New Left Books.
- BACHELARD, G. (1972). La Formation de l'Esprit Scientifique. Paris: Librairie Philosophique, J. Vrin.
- BAIRD, G. (1970). 'La Dimension Amoureuse' in Architecture. In: Meaning in Architecture. C. Jencks and G. Baird (eds.) London: Barrie and Jenkins.
- BARTHES, R. (1967). Elements of Semiology. Trans. A. Lavers and C. Smith. London: Jonathan Cape.
- BARTHES, R. (1970). S/Z. Paris: Editions du Seuil.
- BARTHES, R. (1977). Image Music Text. Trans. S. Heath. London: Fontana.
- BARTHES, R. (1983). The Fashion System. Trans. M. Ward and R. Howard. New York: Hill and Wang.
- BESSET, M. (1976). Le Corbusier. New York: Rizzoli.
- CARUSI, A. (1987). Tel Quel: ecriture as political practice. In: Journal of Literary Studies 3(4):49-66.
- CHOAY, F. (1970). Semiology and Urbanism. In: Meaning in Architecture. C. Jencks and G. Baird (eds.) London: Barrie and Jenkins.
- ECO, U. (1968). La Struttura Assente. Milan: Bompiani.
- ECO, U. (1985). Producing Signs. In: On Signs. M. Blonsky (ed.) Oxford: Blackwell.
- EISENMAN, P. (1984). The End of the Classical. In: Perspecta 21:155-172

- EISENMAN, P. (1985). Fin d'Ou T Hou S. In : Cross Currents of American Architecture. London: AD Editions
- EISENMAN, P. (1986). Investigations in Architecture: Eisenman Studios at the GSD:1983-1985. Cambridge, Mass.: Harvard.
- FIVE ARCHITECTS (1975). Five Architects. New York: Oxford University Press.
- FOSTER, K.W. (1984). A Sense of Building. In: A+U 167:40-43.
- FOUCAULT, M. (1963). Distance, aspect, origine. In: Theorie d'ensemble. Paris: Editions du Seuil.
- FREUD, S. (1953). Complete Works. 5. J. Breuer, J. Strachey (ed.) London: Hogarth.
- FUSCIO, R. de. and SCALVINI, M.L. (1969). Significanti e significati della Rotonda palladiana. In: OP. CIT., 16 Napoli: Ed. "I centro".
- GANDELSONAS, M. (1972). On Reading Architecture. In: Progressive Architecture. 53(3):68-87.
- GANDELSONAS, M. (1973). Linguistics in Architecture. In: Casabella. 373:17-30.
- GANDELSONAS, M. (1975). Linguistic and Semiotic Models in Architecture. In: Basic Questions of Design Theory. New York: North Holland.
- GARRONI, E. (1972). Progetto di semiotica. Bari: Leterza.
- GRAVES, M. (1981). Buildings and Projects. K. Vogel Wheeler, P. Arnell, T. Bickford (ed.) New York: Rizzoli.
- HJELMSLEV, L. (1959). Essais Linguistiques. Copenhagen: JAKOBSON, R. and HALLE, M. (1956). The Fundamentals of Language. The Hague: Mouton.
- JAKOBSON, R. (1957). Shifters, Verbal Categories, and the Russian Verb. In: Russian Language Project. Cambridge: Harvard University Dept. of Slavic Languages and Literatures.
- JAKOBSON, R. (1960). Closing Statements: Linguistics and Poetics. In: T.A. Sebeok (ed.) Style in Language. Cambridge: MIT Press.
- JAKOBSON, R. (1962). Selected Writings. 2. The Hague: Mouton.

- EISENMAN, P. (1985). Fin d'Ou 'T Hou S. In : Cross Currents of American Architecture. London: AD Editions
- EISENMAN, P. (1986). Investigations in Architecture: Eisenman Studios at the GSD:1983-1985. Cambridge, Mass.: Harvard.
- FIVE ARCHITECTS (1975). Five Architects. New York: Oxford University Press.
- FOSTER, K.W. (1984). A Sense of Building. In: A+U 167:40-43.
- FOUCAULT, M. (1968). Distance, aspect, origine. In: Theorie d'ensemble. Paris: Editions du Seuil.
- FREUD, S. (1953). Complete Works. 5. J. Brever, J. Strachey (ed.) London: Hogarth.
- FUSCIO, R. de. and SCALVINI, M.L. (1969). Significanti e significanti della Rotundi palladiana. In: OP. CIT. 16 Napoli: Ed. "I centro".
- GANDELSONAS, M. (1972). On Reading Architecture. In: Progressive Architecture. 53(3):68-87.
- GANDELSONAS, M. (1973). Linguistics in Architecture. In: Casabella. 373:17-30.
- GANDELSONAS, M. (1975). Linguistic and Semiotic Models in Architecture. In: Basic Questions of Design Theory. New York: North Holland.
- GARRONI, E. (1972). Progetto di semiotica. Bari: Leterza.
- GRAVES, M. (1981). Buildings and Projects. K. Vogel Wheeler, P. Arnell, T. Bickford (ed.) New York: Rizzoli.
- HJELMSLEV, L. (1959). Essais Linguistiques. Copenhagen: JAKOBSON, R. and HALLE, M. (1956). The Fundamentals of Language. The Hague: Mouton.
- JAKOBSON, R. (1957). Shifters, Verbal Categories, and the Russian Verb. In: Russian Language Project. Cambridge: Harvard University Dept. of Slavic Languages and Literatures.
- JAKOBSON, R. (1960). Closing Statements: Linguistics and Poetics. In: T.A. Sebeok (ed.) Style in Language. Cambridge: MIT Press.
- JAKOBSON, R. (1962). Selected Writings. 2. The Hague: Mouton.

- JENCKS, C. (1970). Semiology and Architecture. In: Meaning in Architecture. C. Jencks and G. Baird (eds.) London: Barrie and Jenkins.
- JENCKS, C. (1977). The Language of Post Modern Architecture. London: Academy.
- KRISTEVA, J. (1976). Signifying Practice and Mode of Production. In: Edinburgh Film Festival Magazine. Edinburgh.
- KRISTEVA, J. (1985). The Speaking Subject. In: On Signs. M. Blonsky (ed.) Oxford: Blackwell.
- LACAN, J. (1970). The insistence of the letter in the unconscious. In: J. Ehrmann (ed.) Structuralism. Trans. J. Miel. New York: Anchor Books.
- LACAN, J. (1977). Ecrits. Trans. A. Sheridan. London: Tavistock.
- LAING, D. (1978). The Marxist Theory of Art. Sussex: Harvester.
- LARRAIN, J. (1979). The Concept of Ideology. London: Hutchinson.
- LEITCH, V.B. (1983). Deconstructive Criticism. New York: Columbia University Press.
- LE COREUSIER, P. J. (1931). Towards a New Architecture. London: J. Rodker.
- LEVI-STRAUSS C. (1973). The Structural Study of Myth and Totemism. E. Leach (ed.). London: Tavistock.
- MERLEAU-PONTY, M. (1962). Phenomenology of Perception. Trans. C. Smith. New York: Routledge and Kegan Paul, with the Humanities Press.
- METZ, C. (1969). Langage et Cinema. Paris: Larousse.
- MEYER, R. (1962). A Communications Theory of Urban Growth. Cambridge: MIT Press.
- OGDEN, C. and RICHARDS, I. (1923) The Meaning of Meaning. London: Routledge and Kegan Paul.
- PEIRCE, C.S. (1931). Collected Papers. 2. Elements of Logic. C. Hartshorne & P. Weiss (ed.) Cambridge: Harvard University Press.

SAUSSURE, F. de (1916). Course in General Linguistics; (1959). C. Bally & A. Sechehaye (ed.) New York: The Philosophical Library; (1966). C. Bally & A. Sechehaye (ed.) Trans. W. Baskin. New York: McGraw Hill.

TODOROV, T. (1972). Semiotique. In: Ducrot, O. and Todorov, T. Dictionnaire encyclopedique des sciences du langage. Paris: Ed. du Seuil.

TROUBETZKOY, N.S (1957). Principes de Phonologie. Trans. J. Cantineau. Paris: Klincksieck.

TZONIS, A. and LEFAIVRE, L. (1986). Classical Architecture. Cambridge, Mass.: MIT.

VAN ZYL, S. (1988). Narrative and narratives. In: Journal of Literary Studies. 4(3):299-313.

VENTURI, R. (1966). Complexity and Contradiction in Architecture. New York: MOMA.

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