A Dialectic Shift:

syntactic and semantic

LAYERING

A Design is a Spin-off

The process of design is, according to Harris (1972), essentially the process of gaining understanding. The effort to gain understanding is continuous; it represents a finite span within a larger period of time. The design itself becomes the physical manifestation that expresses this understanding.

The spin-off metaphor applied to the design process is employed to show how various elements in design fit together. Zeisel (1981) proposes three characteristics in design, that are reflected in the spiral process:

1. Designers seem to backtrack at certain times; they move away from, rather than toward, the goal of increasing problem resolution.

2. Designers repeat a series of activities again and again, resolving new issues with each repetition.

3. These apparently multi-directional movements together result in one movement directed toward a single action.

by Raymond Bertrand

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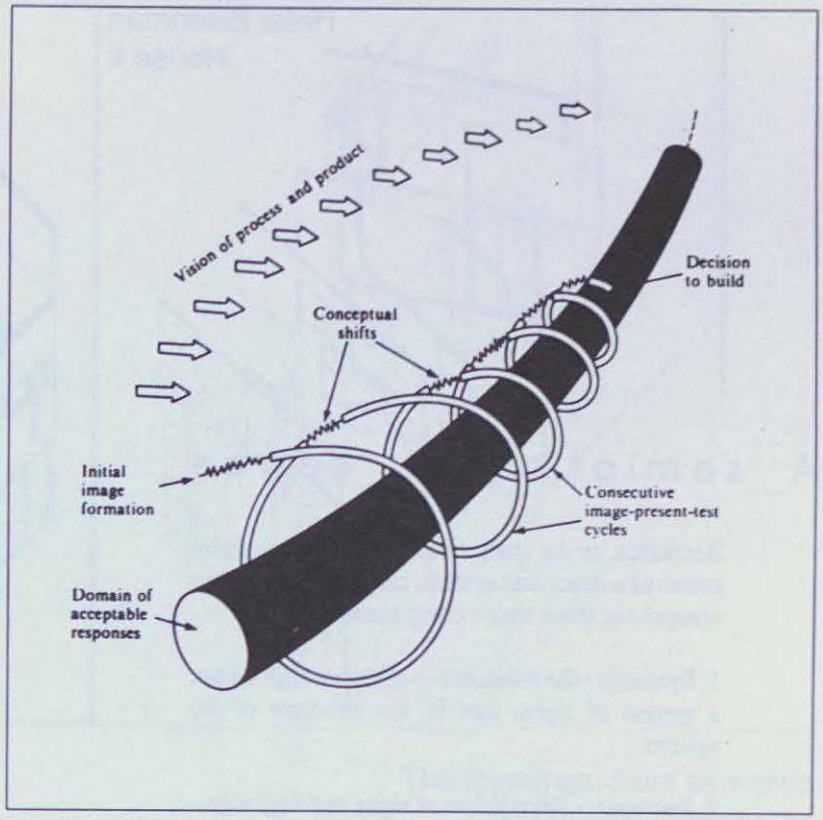
Design development spiral



The use of a spiral metaphor to describe the design process enables us to identify things we can do to use design as a way to grow and learn. This spiral is represented in the project by a successive rotation of 90 degrees between each layer.

The process of relationship

Faced with the problem of generating three-dimensional form, the designer resorts to a number of processes which Broadbent (1980) called "Types of Design". This typology serves to express a relationship between the object and what it stands for. Pierce (1903) discussed the implication of this construct in this manner:

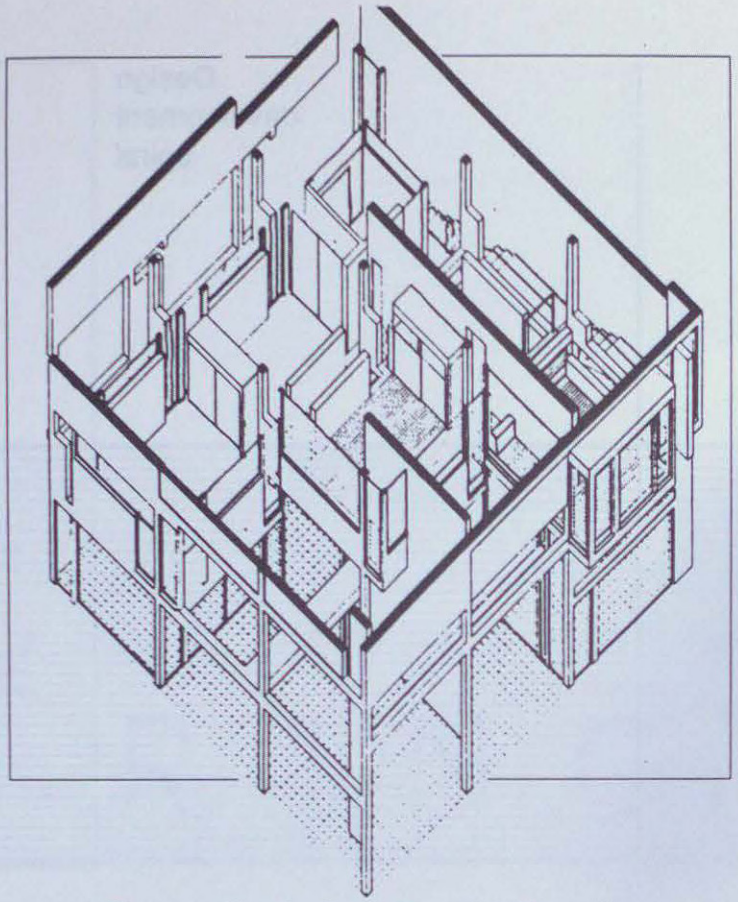
"For instance, we speak of writing or pronouncing the word man; but it is only a replica of the word that is pronounced or written. The word itself has no existence although it refers to a real being, consisting in the fact that existence will confirm it".

This relational process is taken from linguistic concepts. Clearly the relationship between word and object has to be learned. This brings us to the fundamental problem of representation: how one object comes to "stand for" another.

Saussure, in his concept of sign, explained this relationship by a bi-polar system of signifier and signified. The signifier being the expression of the signified. The present project wants to demonstrate the relations between the following oppositions:

SIGNIFIER	SIGNIFIED
PART	WHOLE
EXPRESSION	CONTENT
DIFFERENCE	SAMENESS
PRESENCE	ABSENCE

Peter Eisenman
House II



A semiotic of space

Semiotics, as the study of the significance of elements of a structured system, can be understood as comprising three major components:

1. Syntactic - the relationship of sign to sign within a system of signs, that is, the structure of the system.

2. Semantic - the relation of signs to things signified, that is, how signs carry meanings.

3. Pragmatic - the relation of signs to the behavioral responses of people, that is, their effects on those who interpret them.

The first two components are used in this project to demonstrate the difference between what could be called **la langue** and **la parole**. One level, then, is concerned with the content while the other is with the expression.

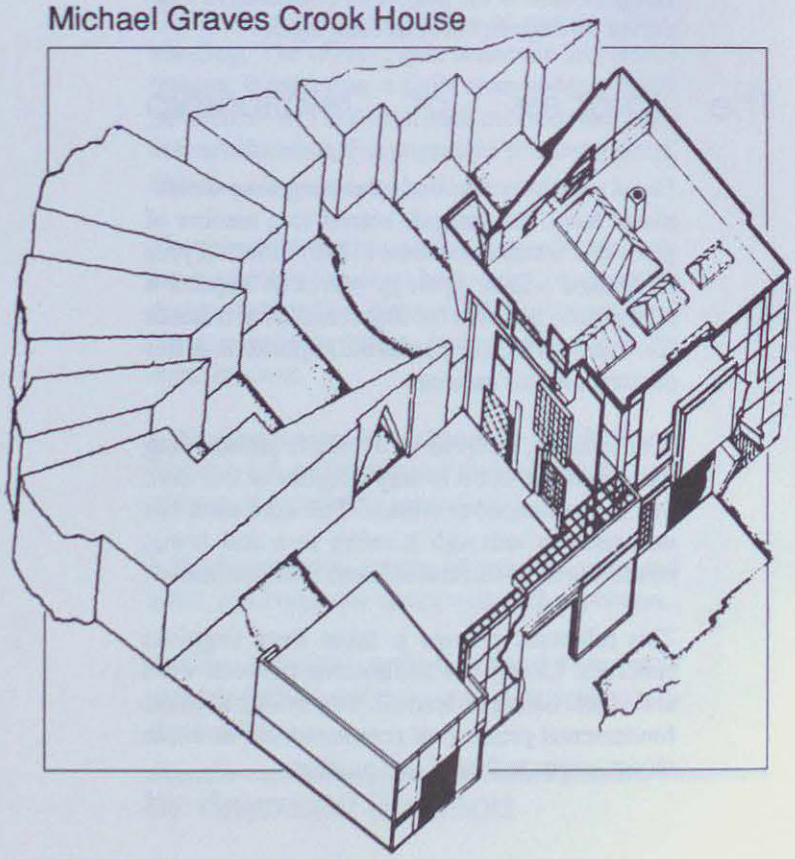
The syntactic and semantic levels can be expressed by the present works of two American architects: Peter Eisenman and Michael Graves. Although their projects seem quite divergent, they both create within a semiotic approach.

Eisenman and Graves view architecture as a system of signification. But while Graves shows the relationship between architecture and context, Eisenman disregards all relationships between architecture and any cultural meaning.

In Eisenman's work, the semantic aspects have been absorbed in planes that interrelate without dependance on external references; they are self-referential of the internal system-grid. Consequently, his work exists primarily within the syntactic dimension of architecture.

Graves, on the other hand, shows the linkages that exist between the actual form and the complex set of architectural notions and ideas that generate it.

Michael Graves Crook House



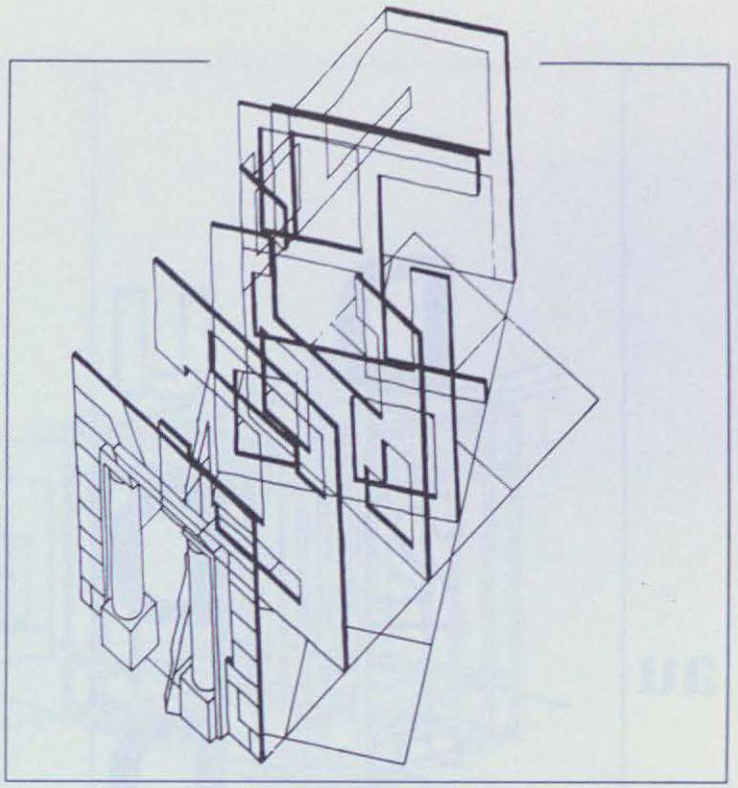
The model set forth represents the two dimensions. The syntactic is void; space becomes apparent while the form remains implicit. Gradually, openings become windows, doors. When a layer hits the wall of the external room (the context), a shift occurs to readjust itself to an adapted condition. The semantic takes place; form replaces space, scale and colour appear and expression manifests itself.

The layering

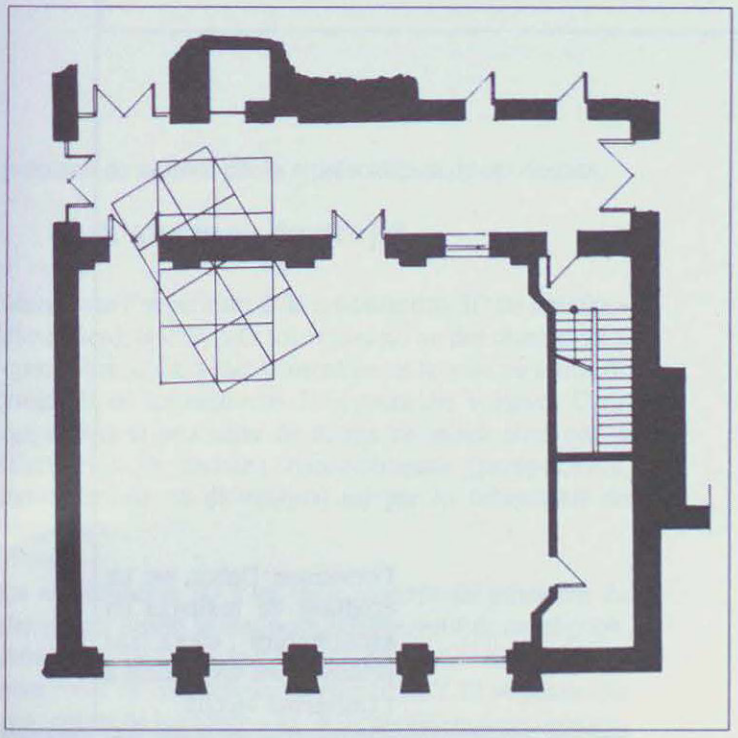
Layering, for the Classical concept of space as a dramatic setting, was expected to reinforce the illusion of perspective from fixed points.

For the Cubist, space is perceived not as a stage setting, from a fixed point, but rather as a dialectic between plane and depth, between frontal and non-frontal planes.

The layers of this model express the progressive transformation of space to form, content to expression, or vice versa. It is a sequential transformation of space that becomes place, when it is being given a memory. This process is then perceived either in time or in space. The relation between time (the sequence-layers) and space (the voids) can therefore express the limit; where the syntactic becomes dialectic, where the inside becomes the outside. ■



The layerings: from semantic to syntactic dimensions



The grid and the context

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