

L'histoire de l'architecture a fait valoir l'influence de certaines théories et valeurs ainsi que de certains styles sur le design architectural, mais elle n'a pas su traiter la nature de la relation entre la théorie et le design. Il est fondamental de questionner l'existence même d'une telle relation et dans l'affirmative, d'en examiner la cause et l'effet. Est-ce que le design découle de la théorie ou la théorie du design? S'agit-il d'une relation simultanée ou de deux entités dissociées? Une chose est certaine, la théorie se réfère nécessairement à l'action ou au produit de l'architecture. →

Tout au cours de l'histoire, ce sont les théories et les idées qui ont donné aux architectes une raison d'être à leurs oeuvres. Malgré leur influence sur le cours de l'histoire de l'architecture comme tout autre aspect de l'histoire de l'homme, elles ne peuvent pas en elles-mêmes être transmises littéralement dans une oeuvre architecturale. L'architecture dans son expression concrète est issue des propriétés rationnelles et irrationnelles de notre esprit. D'autre part, la théorie est structurée entièrement selon un modèle logique et rationnel. Néanmoins si la théorie était un exercice intellectuel non rationnel, son application se devrait de suivre une certaine méthodologie.

# THEORY AND DESIGN IN ARCHITECTURE

by Craig Applegath

Architecture has been variously conceived of throughout its history in terms of its formal, spatial and visual qualities, its mathematical and metaphysical properties, its response to function and purpose (however defined), its transcendent manifestation of God, the spirit of the age or culture, and of course in terms of its role as a didactic political tool.

When one takes a step back and views the history of architecture (at least western architecture) in this fashion, as a roll call of theories, ideologies and styles, one wonders what it is about this phenomenon of architecture that leaves it so susceptible to such a wide degree of interpretation? Certainly there are those that would maintain that there is only one ultimately valid theory or style of architecture, and that all others are either wrong, misguided or not fully evolved. This Monist position is of course exemplified by a number of the contemporary fundamentalist doctrines, for example, structuralism and rationalism. In fact, some would go so far as to say that architects in general hold this position, as Anthony Jackson contends:

*...The fact that no rules have ever been proved to be necessary or sufficient, that most rules are mutually exclusive and therefore suspect in their own validity, or that the history of architecture itself is sufficient evidence that both theory and design are conditioned by time and place, has done nothing to dampen the enthusiasm with which architects hold to their belief in the existence of some ultimate and external authority.<sup>1</sup>*

The opposite vantage point, the pluralistic position, would of course relate any particular style or theory of architecture to a particular context, to the situation from which it sprang. This point of view, however, has both its advantages and disadvantages: it does obviously accord with the vicissitudes of history without requiring the desperate intellectual contortions required of Monist theories in order for them to appear plausible - if only to their adherents. But, though it may be a helpful postulate for the historian or critic, the perception of architectural theory in such relativistic terms does leave the architect in a somewhat ambiguous position. If all ideas, values, and theories are of equal or relative value, and there are no absolute, universal principles of design, then on what basis can an architect predicate his design?

Maybe the discussion of the history of architecture in terms of the ascendancy of particular theories, styles and values has somewhat missed the mark in dealing with the question of the nature of the relationship between theory and design. Fundamental to this issue is the question of whether or

not there is indeed a casual relationship between design and theory, and if such a relationship exists, what is cause and what is effect? Does design stem from theory, theory from design, or is the process reciprocal? Or, is it also possible that the two are mutually exclusive? One thing is certain: architectural theory at some point necessarily refers to either the act or artifact of architecture. Though it may derive or borrow its ideas from other sources, the final theoretical product will *ipso facto* refer back to architecture.

On the other hand, it is reasonable to argue that the act of design need not necessarily be based on a conscious theory of architecture. This is not to say that theoretical issues have not the power to influence the act of design. Indeed, theories and ideas have had a significant influence on the course of architecture throughout its history. Certainly in many cases ideas have been the fulcrum about which styles have turned. One only has to look to the changes in direction that architecture took at the beginning of the Renaissance, under the influence of the notions of a rebirth of antiquity, to appreciate the power of an idea. Theories and ideas have historically given architects a *raison d'être* for their work. However, though ideas and theories have always had the potential to influence the direction of architectural history, as they have had in every aspect of human history, they do not in themselves translate into architecture - rather, the act of design in architecture is a creative act that is mediated by both the rational and non-rational parts of our mind. Theory, on the other hand, is formed and structured only along rational and logical patterns. Even if one were to argue that theory can be non-rationally derived, the logic of its application must nevertheless follow some sort of methodology.

If architectural design does not necessarily derive from theory, but is the end result of a so-called *creative process*, then what is the possible nature of this process? Certainly the rational aspect might follow a logical procedure or theory to derive a possible answer to whatever fact oriented problem is at hand, but what about the creative non-rational aspect? It might be postulated that architecture is brought about through the creative application or adaptation of non-verbal design conventions, punctuated by infrequent bursts of insightful invention - that themselves have the possibility of becoming new conventions. Here the term conventions refers to the non-verbal, internalized rules, methods and strategies of assembling the myriad of elements that go into creating architecture of any type or style - from rules on how to propor-



tion a wall opening or defining the nature of light in a space, to the manipulation on a larger scale of plan, form, and space. Certain variations of these conventions, for any number of reasons - social, psychological, aesthetic - are adopted or learned by an architect, consciously or unconsciously. These are then rationalized for the sake of his or her sanity or vanity in the various guises of beauty, truth or spirit. They are given meaning and value through the various philosophies of structuralism, functionalism, expressionism, historicism, regionalism or any of the other 'isms' in general currency at the time.

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Such a conception of the act of design seems to accord reasonably well with the fact that the majority of architects of whatever stature, and associated with whichever style or movement, usually cannot translate into an intelligible verbal form just what it is that they are doing, or why they are doing it. Yet this fact in no way seems to hinder them in designing architecture. Moreover, even when one examines the theories and architecture of architects that espouse some particular theory of design, it is many times impossible to reconcile the theory with the artifact. This leads one to view the notion of a direct connection between theory and design as being rather questionable.

But what then of the origin of theory itself? It has been argued that theory is not directly translatable into design. However, is design the basis of theory? It would seem that in many cases theory arises out of the desire to explain the nature and significance of existing design conventions or to give meaning to the emergence of new conventions. It is most often the architectural critic or historian that, recognizing something new or different, may canonize a particular set of design conventions by formulating an appropriate explanation of *theory*, or by defining a *style*, and there by giving a transcendent, legitimizing meaning to the collection of conventions used by one or more architects.

Thus, architectural theory becomes the verbal attempt at the formulization and ordering of non-verbal design conventions with the intent to attach to them an intellectualized meaning or *raison d'être*. Indeed, there has been a long-standing tradition in the history of western architecture for architects and theoreticians alike to describe formal and spatial phenomena in terms of verbal constructs, most often in terms of analogies with other intellectual disciplines. This tendency has had far-reaching consequences as, in turn, the analogue has become the basis upon which we judge the quality and validity of the architecture itself. Even though analogies drawn from disciplines other than architecture, whether it be from music, literature, science, politics or art, may possibly shed new light on our understanding of architecture, it will necessarily be a coloured or filtered light. Whatever its basis, however, it becomes apparent that the central function of theory is to serve the dual role of both making sense out of what it is that the architect is doing, and, at the same time, giving definition to what it is that other architects *should* be doing. Moreover, this dual role gives any particular theory a certain momentum and validity, for once a

theory is defined, architectural values and conventions become defined with respect to that theory - at least insofar as the propagandists of the theory are concerned.

Criticism, the active aspect of theory, plays a supportive role in the establishment or maintenance of a particular set of conventions or styles. It can be at one level an explanation or exploration of those architectural conventions and their meaning employed by an architect in his design; at another level, it can be an evaluation of an architect's success in employing these conventions. If such an evaluation is carried

out with reference to, or in the sphere of the values implicit in the conventions used, or explicit in the theory stated, the exercise seems possible and maybe even useful. However, problems arise (as sometimes new insights do) when the set of values reflected in the criticism are different from those values on which the design was predicated: it is one thing to judge a classical Renaissance building by its adherence to, and manipulation of the Greek and Roman orders, or its supposed mathematical implications; it is quite another to judge it by its picturesqueness (a 19th century romantic concept) or its experiential qualities (a 20th century behaviorist notion). Ironically, however, though it may not be *fair to judge* a design by values foreign to those of its original conception, we may sometimes have the possibility of unknowingly creating the impetus for new conventions by reading a design through a distorted lens - one that distorts the original meaning, but may provide a new and more interesting meaning.

Therefore, to sum up, in the preceding discussion it has been argued that the act of architectural design is distinct from and not necessarily dependent upon any particular theory of architecture, though indeed the two may be mutually supportive. It has also been argued that it is the purpose of theory to both give meaning to, and legitimize the use of, certain design conventions employed by architects. Though some might argue that denying architectural design of its basis in theory is tantamount to denying the significance of the act itself, as well as the relevance of theory, it might be more reasonable to suppose that there is something inherently significant about the act of architecture itself, something which may indeed be the basis for the continued attentions architecture receives from theoreticians. However, if the act of architectural design is really at its core a creative act - a creative manipulation of design conventions - then maybe the real question of importance is not that of the relationship between the act and the theory, but rather that of what indeed is this thing we call *creativity*. Ah! but that is another question altogether.

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1. Anthony Jackson, 'A Canadian Architecture: Delusion or Reality?', *The Fifth Column*, Vol. 3, No 3/4, 1983, p.4.