

Theory

THE MYTH OF MEANINGFUL FORMS: COMPARING THE FORMS OF INDIGENOUS AND CLASSICAL ARCHITECTURE

R A L F W E B E R

A RETURN TO AN ARCHITECTURE OF TRADITIONAL FORMS HAS BEEN PROPAGATED RECENTLY by a number of movements which have aimed at creating a more “meaningful” architecture. Starting with the question of whether meaning is innate in form, this article discusses various kinds of meaning in architecture as well as the notion of architecture as a language. It determines that meaning is principally inferred into architecture by individual subjects, but that this can occur at different levels of intersubjectivity. It argues that the development of a vernacular architectural tradition is characterized by the parallel evolution of architectural forms and the intersubjective cognitive schemes that allow different people to infer similar meanings from them. By contrast, the emergence of classical architecture (defined broadly as architecture produced by architects) is characterized by a process of formal ritualization that results in a steadily decreasing intersubjectivity of meaning. The article concludes by noting how both classical and vernacular architecture eventually undergo a process of stylization by which original meanings become less and less accessible to the public.

With the rise of a kaleidoscope of architectural styles since the decline of architectural modernism, debate about the “meaning of architecture” has recently enjoyed renewed popularity. One of the claims frequently heard in this discourse is that the alleged crisis of Modern Architecture resulted partially from the movement’s lack of a vocabulary of meaningful forms. This line of reasoning usually concludes by calling for a return to the more traditional forms of classical¹ or indigenous architecture which, it is argued, possess self-evident meanings and are more reflective of the popular socio-cultural milieu.

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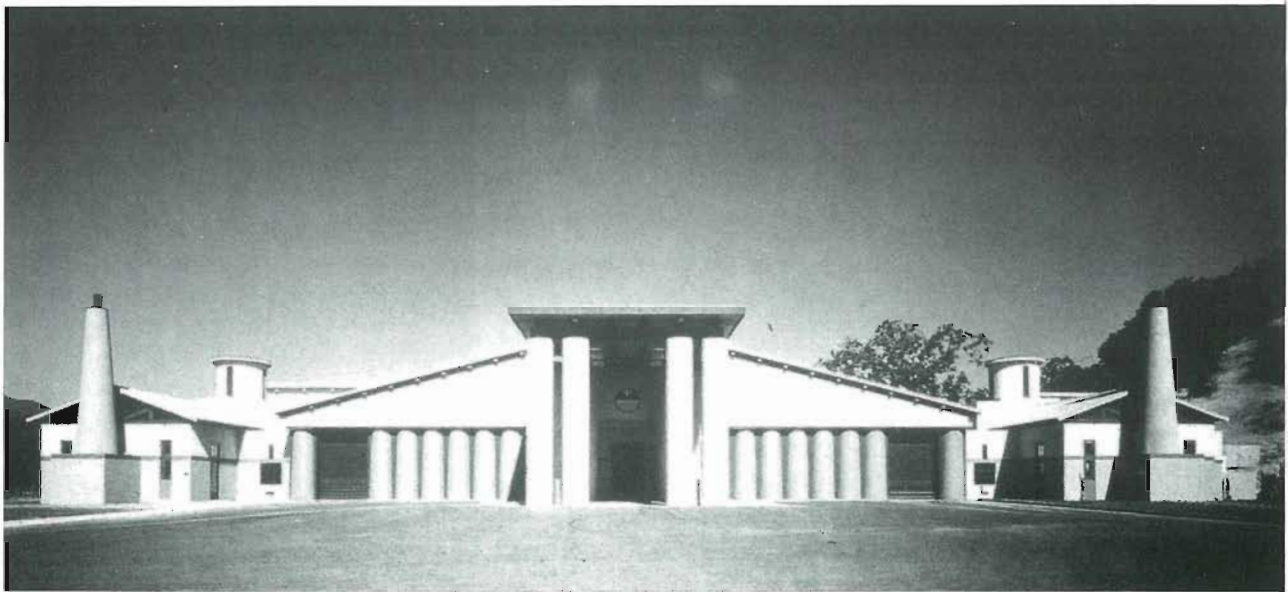


FIG. 1. (FAR LEFT) *Classical vernacular?* Thomas Gordon Smith: Richmond Hill House, 1982. (Photo courtesy of U.C. Berkeley Dept. of Architecture.)

FIG. 2. (BELOW) Michael Graves: Close Pegase Winery, Napa, Calif., 1984. *Architecture as a collage of quotes, from the Classical temple to LeDoux.* (Photo courtesy of U.C. Berkeley Dept. of Architecture.)

FIG. 3. (LEFT) Fernau and Hartman: Berggyuen House, Napa, Calif. *Regionalism as a matter of cladding the exterior in various materials of the American farmhouse.* (Photo courtesy of U.C. Berkeley Dept. of Architecture.)

FIG. 4. (OPPOSITE PAGE) *Instant vernacular as a developer's concept.* (Photo courtesy of U.C. Berkeley Dept. of Architecture.)



The call for an “architecture of communication,” one of meaningful forms, is central to the ideology of three currently prominent architectural movements. The first and most infamous is Postmodernism (FIGS. 1,2).² Proponents of this school have been threatening architectural historians and the public with the use of architectural history as a quarry from which to reassemble, in the manner of collage, an architecture of “metaphor,” “irony,” “symbolism” and the like.

The movement to create a “regionalist” and “contextual” architecture has also tried to imbue contemporary architecture with new meaningfulness. Architects of this persuasion have concentrated on developing regional repertoires of shape, technique and materials, but frequently, in the absence of an evolved style specific to a region, they have not hesitated to invent stylistic “traditions,” as in the case of northern Califor-

nia regionalism (FIG. 3).³ Their buildings rarely limit themselves to simply resembling vernacular homes of an area. Instead, they are marked by carefully designed deviations from traditional repertoires or by the addition of classical quotes. More often than not, such buildings consist simply of traditional drapery around a contemporary core.

While these two trends have emerged in the past two decades and have been realized in only a marginal number of buildings, a third type of architecture that has also made use of classical and vernacular quotations has existed far longer. Developer-tycoons of middle-class suburbia, Club Med-type resorts, and waterfront malls have long known that historical and vernacular drapery sells better than the unadorned clarity of the Bauhaus or international style (FIG. 4). But while their repertoire of forms and justifications differs little from that of



more fashionable designers, their buildings have been scorned by architectural academics and banned from the encyclopedias of the profession.

Despite their different origins and motives, all three movements have shared a common contention: that architecture should use meaning-laden forms which communicate a building's role and make evident the socio-cultural circumstances of its occupants. Yet the question remains: can form convey meaning?

EXPRESSION

The notion that architecture can “represent,” “express,” or even, like a language, “communicate” is not new. It has enjoyed diehard popularity and is recurrently resurrected from the burial places of scholarly refutation by theorists and architects alike. “Houses as metaphors,” “poetic discourse between building and landscape,” “architecture’s narrative qualities,” “communication between buildings and their contexts,” “vocabulary of architectural forms”—such phrases do not just result from architects’ proverbial love of metaphor. They are indicative of the conviction that there are meanings to architectural form that transcend the dictum of fashion or the arbitrariness of shapes composed at the drafting table. The popularity of the view that architecture is a kind of language, a system of signs which allows “communication,” can be noted in the titles of such works as N.L. Prak’s *Language of Architecture*, C. Alexander’s *A Pattern Language*, and C. Jencks’s *The Language of Post-Modern Architecture*.⁴

Among the various kinds of meaning ascribed to architecture, three are especially popular: expressive, symbolic, and semantic. The most popular assumption is that buildings possess expressive properties. This concept originates in the visual

and performing arts, where it commonly refers to manifestations of emotional states, to “character.” Certainly, it does seem plausible to speak of expression in a painting — one, for example, that depicts the temptation of St. Anthony, and in which one can clearly see the physique of an angry man. The assumption, however, that expression is somehow an innate property of shapes and colors is incorrect on both psychological and logical grounds.

According to J.J. Gibson,⁵ the perception of pictures rests on textural properties that simulate environmental patterns. Thus, expression is a matter of a represented subject which expresses a certain character. Expression is a mimetic property: only when something is represented that is itself expressive can we speak of it as being “expressive.” In the case of the painting of St. Anthony, an observer can say the image expresses anger because it is possible to draw inferences from one’s own behavioral patterns to the patterns depicted in the physiognomy of the saint. But it is simply incorrect to speak of the expression of inanimate things such as buildings.

However, there are two theories which make just such a claim: the theory of empathy and the Gestalt theory of expression. The first, which has had a considerable following among architects since being popularized by Louis Kahn, states that viewers project their own feelings into persons and objects and thus endow them with expression.⁶ For example, one person can perceive another as being “sad” because he or she can associate past personal experiences with sadness with what appears in the face of the other. A logical extension of this theory to architecture would be that a person looking at a Greek column would be able to feel the forces acting on the column, and so empathize with its particular constellation of shapes (FIG. 5).

There are three problems with this theory. First, there is the crucial logical flaw that the associative processes by which the perceived world is supposed to be endowed with expression cannot be rooted entirely in past experience. If this were possible, how could experience be acquired initially? And how is it possible to learn by association when associations are the prerequisite for learning? The second problem concerns situations in which there are no previous experiences from which to draw. The best a person could do in such a case is *sympathize* with another — for example, in trying to understand their deep personal grief. But this is clearly inadequate. In such a case, what would prevent an innocent person from fatally misinterpreting the mood of a charging bull as, say, affectionate pursuit? The final problem with the associative theory concerns whether we can project ourselves into the place of inanimate things at all. The problem here is especially

evident when physiognomic interpretation is impossible, as in the case of the classical column that may be exchanged for the *caryatid*.

The Gestalt theory of expression gives a better explanation of such cases by claiming that expression is an innate property of the perceived stimulus — in the same way, for example, that hue is a property of color or size is a property of shape. The core of this theory is the assumption that a parallelism exists between physio-motor behavior and psychological experience, allowing physiognomic qualities and states of mind to be structurally isomorphic. Hence, Rudolph Arnheim has written: “An observer will adequately gauge another person’s state of mind by inspection of that person’s bodily appearance, if the psychical situation of the observed person and the perceptual experience of the observer establish structural similarity by means of a number of intermediate isomorphic levels.”⁷

In both theories objects are thought to be expressive because they refer to physiognomic correlates of emotional states. This makes expression anthropomorphic by nature. Yet while a *person* who is perceived to be sad in this way may, in fact, be sad, can the term “expression” be justly extended to describe *inanimate* things like buildings? The weeping willow provides a famous example. Arnheim argues that this tree does not look sad because it looks like a sad person, but “because its formal properties convey the expression of passive hanging, . . . a structurally similar psychological pattern of sadness in humans.”⁸ But use of the term “passive” here can be no more than an analogy. “Passivity” cannot be regarded as a property inherent in form. Furthermore, a psychological isomorphism necessitates structural equivalents on *both* sides. And while this can be the case with two humans, it cannot be the case with a human and an animal, or a human and a thing.

ARCHITECTURE AS A LANGUAGE

Equally popular is the tendency to define architecture in semantic terms. Like a language, it is often asserted that buildings can denote, represent, or even communicate earthly matters or metaphysical affairs.⁹ Though there is no doubt that buildings can evoke a varying number of indefinite personal associations, these are not the dependably specific semantic denotations that are required to make up a language. Thus, we cannot speak of architectural communication using these terms.

In literal languages, terms denote matters fairly unequivocally: words are “representations,” signifiers of things or events. Terms, thus, have a specific kind of meaning. But what is it that things, themselves, can denote? While every word has

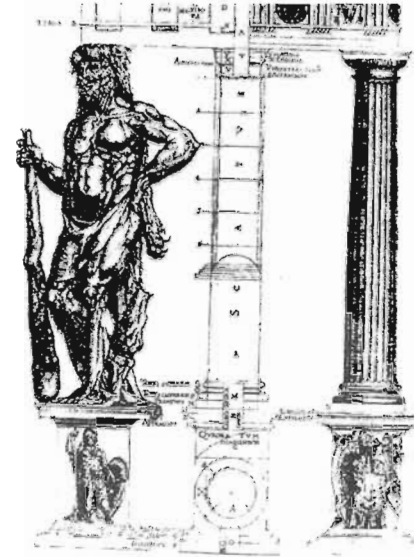


FIG. 5. *The Doric order: Caryatids or the column as a representation of man.* Drawing by John Shute, 1563. Source: E.H. Gombrich, *The Sense of Order* (Ithaca: Cornell Univ. Press, 1979).

meanings that are *intrinsic* or *self-evident* by virtue of convention, things can only have meanings that are *extrinsic*, that is, that are mere connotations and are in no way unequivocal.

But why should a building have to represent anything at all, apart from being a building? Advocates of architecture as language argue that buildings “represent” or “symbolize” their functions. For example, a certain arrangement of architectural parts “represents” a church. Here, obviously, a concept from the mimetic arts is being misapplied to architecture. In languages or representational images a particular constellation of words or shapes can, indeed, represent something. And, to the extent that a person is familiar with the conventions of the language, he or she can “understand the message.” But this isn’t the case with buildings because there is a lack of conventions by which to assign specific meanings to architectural parts. It thus appears that the concept of representation is confused with such concepts as typology and style. A building’s function can often be recognized because of previous experiences which allow us to formulate hypotheses about it, but this process is quite unlike that of representation and denotation using language. In architecture there is also a Babylonian muddle with the morphic types: thus a Wall Street bank may be confused with a Jupiter temple, an apartment complex with a factory, or a telephone company headquarters with a Chippendale bureau (FIG. 6).

Similar arguments can be made against the notion that architecture can symbolize particular socio-cultural circumstances. Buildings have been called “talking witnesses of the

Zeitgeist,” and one often hears talk of things like “the language of Islamic architecture.” But the morphic similarities of buildings in certain cultural and temporal periods must be subsumed under the concept of style, the art historian’s tool for classification. It isn’t the building which “represents” specific socio-cultural circumstances, but, rather, the knowledgeable beholder who brings socio-cultural concepts to the building and associates it with its style. Of course, deliberate symbolisms have often been designed into buildings. For example, medieval builders used the pentagram as a proportional device to ban evil from their constructions. But even familiarity with the use of proportion systems cannot reveal this symbolism directly to the eye; it must be extracted by inscribing geometric patterns into a plan or an elevation drawing (FIG. 7).

The central fallacy involved in the notion of representational meaning in architecture is thus apparent: a concept developed for a mimetic medium cannot be applied to a non-mimetic one. Form can acquire denotative function only through direct representation (e.g., when a building takes on the form of the thing it represents, i.e., a hot dog) or through clear

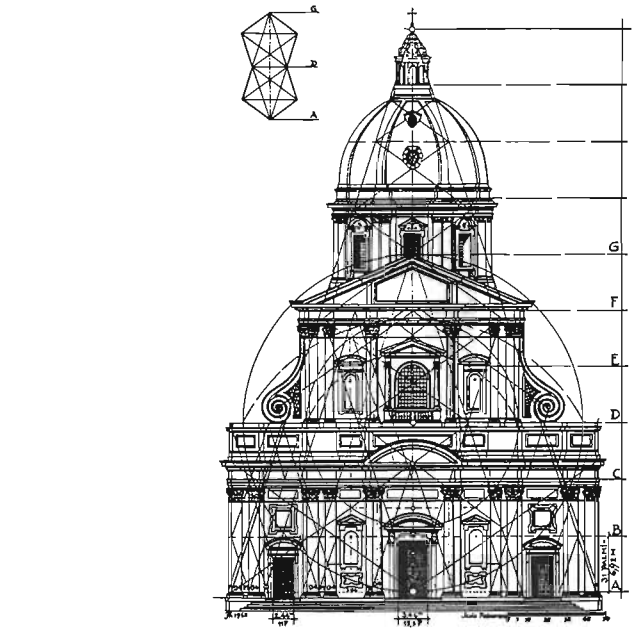


FIG. 7. *Proportion systems as grammar? Diagram of S. Ignazio, Rome. Source: K. Freckmann, Proportionen in der Architektur (Munich: Callwey, 1965).*

semantic conventions which determine the meaning of individual shapes. In short, architecture is not a language. If architecture were a language, one could “understand” buildings and control their meaning through design. For this to be the case, two conditions would have to be met: there would have to be clear semantic meanings for the constituent parts of architecture, and a system of rules—a syntax—would have to be devised by which the meaning of a whole could be derived from the meaning of the parts.

Clearly, architecture meets neither condition. Not the least of the reasons why is that the two conditions are interdependent. For example, Frege¹⁰ has argued that one cannot speak of an architectural syntax because syntactical meanings are derived from semantic meanings. But the majority of shapes used in buildings are without any specific meaning, and where such meanings do exist they are usually highly individual.

But beyond this, the crucial factor remains the lack of a syntax by which individual meaningful shapes can be combined into a meaningful whole. One might speculate that systems of proportion or particular formal styles could fill this role. But how then could different architectural styles rely on similar proportion systems? Could the syntax of one language really be used to order the semantics of another? In literal languages

FIG. 6. *Can architecture speak? Julia Morgan’s Hearst Castle, San Simeon, Calif. Casa Grande: the facade promises a church but houses profane entertainment. (Photo courtesy of U.C. Berkeley Dept. of Architecture.)*

this would result in incomprehensibility. But in architecture such interchange does happen precisely because architecture doesn't communicate any specific thing. Architectural "meanings" are different from meanings in languages. The latter are concepts derived from combinations of terms and syntax; the former require concepts extrinsic to their discrete formal features and overall composition.

The overall concept here is that meaning is not an intrinsic property of form; it is *inferred* by the beholder on the basis of concepts derived from cultural conventions, individual experience, and learning.¹¹ On the basis of this determination it is possible to see that meaning can be both intersubjective and individual. And it is in the degree of intersubjectivity associated with the meaning of forms that indigenous architecture differs from classical architecture. Whereas meanings in indigenous architecture are self-evident to the members of a specific group, meanings associated with classical architecture are largely individualized. This is because originally meaningful systems of forms have become mere styles in classical architecture. Their use has become *ritualized*, or *formalized*, so that their original meaning is no longer discernible by public convention and is thus no longer important.

In general, two conditions must be met before there can be a high degree of intersubjectivity to meaning: (1) there must be a high denotative potential to the form of representation being used, and (2) there must be strong similarities between the cognitive makeup of the different individual subjects. When comparing forms of representation such as architecture, words, painting, sculpture, music, etc., architecture, together with non-vocal music and non-representational visual art, would seem to have the lowest denotative potential. Only truly mimetic media possess a high degree of this, and architecture is certainly not mimetic — with the obvious exception of instances in which it consists of actual representations of objects such as hot dogs or dinosaurs (FIG. 8).

EVOLUTIONS OF MEANING

There is no doubt that people with similar cultural backgrounds associate similar meanings with buildings, but such intersubjectivity requires similar cognitive schemes or concepts. In a few cases, as in the learning of a language, these schemes may be formed through some kind of cultural ordinance. But generally they must be acquired through learning and through one's interaction with one's milieu. Jean Piaget¹² has provided a model of cognitive development that describes the formation of knowledge as an interactive process involving the assimilation of information and the subsequent accommo-



FIG. 8. Example of denotative architecture: Bob's Java Jive, Tacoma, Wash. (Photo by author.)

dation of one's cognitive schemes to it (FIG. 9). Changes in one's milieu result in the adjustment of cognitive schemes to the new situation, a process supported by the awareness of established conventions. One of the conditions governing the emergence of interpersonal similarities from this process is, quite obviously, similarity of cultural background.

More important, however, is the connection between the evolution of architectural form and the conventions by which meaning is associated with it.¹³ It is apparent that gradual and steady evolutionary change is the condition which best allows cognitive schemes to accommodate changing conditions in the environment. The evolution of meanings accessible to larger groups may, of course, lag behind the evolution of a style, because it takes time to adjust conventions of meaning; but when the gradual adjustment of meanings to forms is discontinued, or when it is interrupted by revolutionary stylistic change, or when styles divert abruptly at any particular point of change, the cognitive schemes of different individuals will most likely adjust differently and cause a decrease in the overall degree of intersubjectivity. This often results in a situation where specific stylistic tendencies become meaningful only to particular subcultures, who then develop their own exclusive conventions. Once meaning deviates from common convention in this way, an evolutionary process is set in motion which results in ever more diverse meanings. Because new styles are based in part on old styles, styles whose meanings are no longer largely intersubjective will form the basis for further stylistic divergences, which, in turn, will produce ever less intersubjective meanings.

It is here that we encounter a crucial difference between indigenous and classical architecture, namely, the high conventional intersubjectivity of the former relative to the latter.

The highly intersubjective meanings of indigenous architecture are due to its evolution, the close connection between its producers and occupants, and its essentially functional nature.

Three important considerations govern the intersubjectivity of meaning in indigenous architectures, making the meanings of indigenous buildings largely self-evident to the members of the society that produce them. First, in the process of design, forms naturally carry meaning for an indigenous designer because they are selected for some purpose, either utilitarian or stylistic. The likelihood of correspondence between intended and experienced meaning is similarly high because the producer and the occupant often share conventions. (Even when an indigenous society is marked by an increasing division of labor, craftsmen and clients normally share patterns of life and ritual.) The second consideration is that the stylistic evolution of indigenous forms is usually continuous. Drastic changes in functional patterns are rare in indigenous societies, and new formal solutions resulting from technical progress are normally not radical. The third consideration is that the meanings of the forms of indigenous buildings normally remain closely connected with their use. Accordingly, the layout of a building remains a formal representation of the patterns of life that occur in it, just as its shapes are adapted to climatic conditions and the symbols that adorn its facades are not mere decorations.

RITUALIZATION OF MEANING AS A SOURCE OF FORMAL STYLE

A departure from this state of correspondence occurs with the arrival of the professional architect, a development which has brought greater separation between the producer and the occupant both in terms of conceptual background and social affiliation. The formation of a subculture of architects has brought about a disassociation of architects' conventions from those of the broad public and an increasing stylization of form.

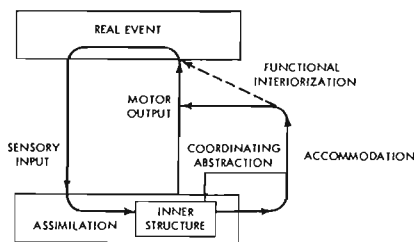


FIG. 9. Piaget's diagram of the formation of cognitive schemes. Source: H.G. Furth, Piaget and Knowledge (Chicago and London: Univ. of Chicago Press, 1981).

Classical architecture, whose original subject was the monument, now deals with an array of functions quite different from those typical of indigenous buildings. Although classical architecture initially evolved from a stylistic repertoire similar to that of any indigenous tradition, its forms have become increasingly disassociated from their original meanings. For example, one can note how the metopes and triglyphs of the Greek temple were transformed from a structural to a decorative function; or one can cite Riegl's observation that the typical arabesque found in the stucco motif of Islamic architecture is a transformation of the Greek palmette, which itself can be traced to the Egyptian lotus motif (FIG. 10).¹⁴ The anthropologist Arnold Gehlen has called this removal of form from its original function "ritualization."¹⁵ In his studies of human instinctual behavior, he argued that man's increasing ability to think abstractly has caused consummatory actions (those which result from inborn reactions to environmental stimuli) to be replaced by discharge actions (those which have no apparent ends). Art, defined as a human activity with no specific survival purpose, may thus be seen as originating in the transformation of instinctual behavior into ritual behavior.

This process of stylization in architecture may be understood as a gradual internalization of the initially external ends served by specific forms. This process has caused the function of forms to become increasingly aesthetically oriented. The less the choice of architectural forms is specifically connected with external purpose, the more dominant becomes the artistic factor. Functionalism transforms into art, and in regard to the choices of forms — but only in this regard — classical architecture has become art. The distinction described here is not strict; some of the meanings associated with classical architecture are intersubjective as well — only to a considerably lesser degree than those of indigenous architecture. But when following the hypothesis outlined here, all architecture eventually and inevitably succumbs to stylization.

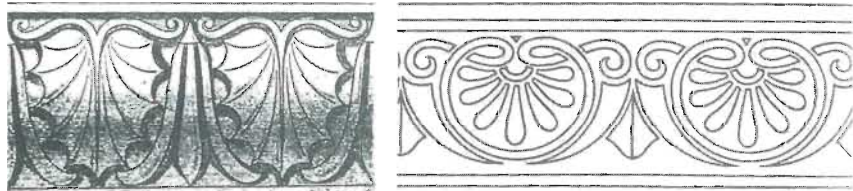
My conclusion is this: The attempt to make architecture more meaningful by exploiting the forms of the indigenous must ultimately be seen as futile. A return to the styles of the past does not bring a resurrection of the meanings connected with them. The strategy of using history as a quarry of forms can only produce socio-romantic drapery because the forms thus discovered originated in socio-cultural conditions and life patterns we no longer share. To create an architecture with a more human dimension, there is no choice but to look forward.



A



B



C



E



F

FIG. 10. Evolution of the Egyptian lotus motif to the Greek palmette and the Corinthian capital. (A) lotus and palmette (drawing by W.H. Goodyear, 1891), (B) vase from seventh-century Melos, (C) lotus frieze from Erechtheion, 420 B.C., and a row of palmettes, (D) Corinthian capital, (E) the arabesque retranslated, (F) sixteenth-century Persian rug border. Sources: (A) E.H. Gombrich, *The Sense of Order* (Ithaca: Cornell Univ. Press, 1979); (B-F) A. Riegl, *Stilfragen: Grundlegungen zu einer Geschichte der Ornamentik* (Berlin: G. Siemens, 1893).



D

REFERENCE NOTES

1. By classical architecture, I mean architecture in the classical sense, i.e., architecture produced by architects rather than the architecture of classical antiquity.
2. Here I specifically refer to a kind of "figural" postmodernism. The term "postmodernism" also has commonly been applied to a wider range of styles and movements, e.g., the "urbanistic/rational" postmodernism of Krier, Rossi, and Rowe and the "space/logics" postmodernism of Eisenmann.
3. While the current concern for northern California regionalism may not account for the entirety of a tradition which goes back almost 100 years to Bernard Maybeck, it has endured for several architectural generations and has now created an architectural style of its own.
4. N.L. Prak, *The Language of Architecture: A Contribution to Architectural Theory* (The Hague: Mouton, 1968); C. Jencks, *The Language of Post-Modern Architecture* (New York: Rizzoli, 1987). While these authors actually consider architecture to be a language, Christopher Alexander uses the term "pattern language" in a somewhat metaphorical way to describe the process of making buildings by arranging functional patterns into a whole. See C. Alexander, et al., *A Pattern Language: Towns, Buildings Construction* (New York: Oxford Univ. Press, 1977). Attempts to define architecture as a language can also be found in U. Eco, *A Theory of Semiotics* (Bloomington: Univ. of Indiana Press, 1976); and most notably in G.K. Koenig, *Analisi del linguaggio architettonico* (Firenze: Liberia editrice fiorentina, 1964), and *Architettura e comunicazione* (Firenze: Liberia editrice fiorentina, 1970).
5. J.J. Gibson, *The Ecological Approach to Visual Perception* (Boston: Houghton Mifflin, 1979).
6. The theory of empathy was developed in the nineteenth century by Vischer and Lipps. The classical sources are R. Vischer, *Das Optische Formgefühl* (rpt. in *Drei Schriften zum ästhetischen Formproblem*, Halle, 1927); and Th. Lipps, *Asthetik* (Berlin, 1927).
7. R. Arnheim, *The Gestalt Theory of Expression*, in *Towards a Psychology of Art* (Berkeley and Los Angeles: Univ. of Calif. Press, 1966), p.6.
8. Ibid, p.64
9. Charles Jencks in *The Language of Post-Modern Architecture*, for example, claims that there are masculine or feminine styles of architecture. Peter Eisenmann maintains that architecture possesses syntactical systems like those of language.
10. G. Frege, *The Philosophical Writings of Gottlob Frege* (Oxford: 1952). Frege's argument is also expounded in R. Scruton, *The Aesthetics of Architecture* (Princeton: Princeton Univ. Press, 1979).
11. For a further discussion, see R. Weber, "On the Aesthetics of Architectural Forms: A Psychological Approach to the Structure and Order of Perceived Architectural Space" (IURD Paper, UC Berkeley, 1989), pp.90—98.
12. J. Piaget, *Assimilation and Sensory-Motor Knowledge*, in H.G. Furth, *Piaget and Knowledge* (Chicago and London: Univ. of Chicago Press, 1981), pp.52—54. See also R.M. Downs and D. Stea, eds., *Image and Environment: Cognitive Mapping and Spatial Behavior* (Chicago: Aldine, 1973).
13. For an interpretation of this model for architecture, see Furth, *Piaget and Knowledge*, chpt. V.
14. A. Riegl, *Stilfragen: Grundlegungen zu einer Geschichte der Ornamentik* (Berlin: G. Siemens, 1893). See also E.H. Gombrich, *The Sense of Order* (Ithaca: Cornell Univ. Press, 1979).
15. A. Gehlen, *Über einige Kategorien des entlastenden, zumal des ästhetischen Verhaltens*, in E. Henrich, and W. Iser, *Theorien der Kunst*. (Frankfurt: Suhrkamp, 1982), pp.237—260.

