RICE UNIVERSITY

THE PLACE OF ARCHITECTURE:
AN EXPLORATION OF ARCHITECTURAL SYMBOL

by

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This work presents an exploration of the theory of symbol as it applies to questions of architectural creativity. Drawing extensively on the prior writing of philosopher Susanne Langer and essayist Walker Percy, this work first discusses symbolization as a way for man to come to know the world. Symbols, which lead one to conceive their objects, are seen as clearly different from signs which only serve to direct attention or behavior. Symbolization is considered an irreducibly tetradic interpersonal event, requiring a symbolizer and an interpreter as well as the symbol and its object. Through symbolization man is able to assert the existence of that which is symbolized. Beyond this, all symbolization is seen to involve rules of projection which are rules of logical analogy between the form of the symbol and the form of its object. This means that different types of symbols such as language and art must be different in what they may symbolize. Language is an appropriate symbolism for knowing the world; art is the symbolic mode through which man conceives of human feeling. Art is capable of symbolizing any feeling from simple sense experience to complex
emotion. Without art, such feelings could only be an undifferentiated part of human process, experienced, but not presented for conception. A detailed exploration of the relation of feeling and form in art includes aspects of illusion, quality, abstraction and organic nature. Architecture is seen as a particular mode of the more general field of art symbol. Each work of architecture may be considered as a unique symbol of the feeling of human functional existence. This position clearly differs with that of much of modern architecture which saw a work as a direct sign of what it enclosed. The theory of architecture as symbolic of feeling may be applied on several levels including the design of furnishings, buildings, cities and landscape. Further exploration of the architectural symbol leads to questions regarding motivation theory, the nature of creative thought and the nature of genius and talent.

This work offers a framework through which to approach issues in architecture in a way consistent with the more general approach to symbolic phenomena. While it starts many lines of thought it does not complete, it does present a coherent theory based on the way architects create.
ACKNOWLEDGEMENTS

The present work has been several years in development even though the actual writing took place over a few months in 1976. I can trace some of the ideas contained herein in my own daily journals dating to early 1971. Nonetheless, I had been hesitant to write because the deeper I delved into these subjects, the more I realized the inadequacy of my knowledge of them. However, it seemed to me that at some point in one's own development it is a good practice to pause and take stock—to concretize and summarize conclusions one has reached.

The present work would not exist at all were it not for the assistance and support received from a number of friends and faculty at Rice University. Among them were Professors Elinor Evans and Charles Schorre who each helped to awaken me to a world beyond that accessible by simple logic; Professor Stephen Tyler also played a crucial role in exposing the surprising richness of human conception; Professor Anderson Todd whose patient criticism aided considerably in clarifying my ideas; Professor O. J. Mitchell, who as Director of the School of Architecture at Rice, allowed me the freedom and opportunity to structure my own program in such a way as to make this work possible; and Ms. Mary Comerford who patiently typed and retyped the manuscript.
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INTRODUCTION

The Nature of the Material

Architects seldom offer us insight into their ways of working. The processes of imaginative thinking through which they generate new designs are most often hidden from view. Even the first manifestations of imagination and inspiration, the tentative sketches are rarely displayed. Sometimes they may be seen by select members of an architect's office staff, but these staff members may, themselves, be unaware as to their sources. When one turns to the writings of architects, one seldom finds documentation of those initial processes and, when one does, it is often difficult to understand. In this age, when a concern for method and process has become paramount, that these initial efforts remain unexplored is particularly surprising.

The work which follows is such an exploration. It touches on issues in psychology, philosophy, anthropology, linguistics and the fine arts as well as architecture. The emphasis is often on areas which seem apart from architecture but, as the work progresses, the conclusions reached will be seen to have far-reaching implications. Often these conclusions may diverge from what many architects believe. Some may decide, therefore, that this work should be considered a complete theoretical tract. To
arrive at such a conclusion would be in error. This is only an exploration of issues which arise in considering how architects are able to create. While some questions are completely answered, others may only be touched on in passing, and still others may be ignored altogether. Speculation will be given in certain areas where sufficient data do not now exist to support thorough, well-reasoned arguments. This work will not take issue with those theorists who may previously have offered contradictory ideas. And, it will be impossible to follow out every implication of the thought presented to its logical conclusion.

This work will often draw on the ideas of others primarily as they offer a foundation on which to build. The terminology used within this work is largely drawn directly from the writings of others. Wherever possible, the ideas presented have been reconciled with existing terminology in order not to add a new layer of jargon where much confusion already prevails.

**Point of View**

An approach to architecture from the question of architectural creativity must begin in the studio. A work of architecture, like any work of art, may be viewed from two perspectives, that of its creator and that of its users (or spectators). From one perspective the emphasis
is on expression, while from the other it is on impression. From the first point of view the questions one asks are those of process—how are works of architecture created? From the second point of view one asks, what do works of architecture do, how are they used? The second question is the one most often treated by architectural and art historians and even by the architectural press. But, the question of how works of architecture are created is primary. All questions of impression and use depend first on the work as it is made.

But, if this is true, why have architects seldom written philosophies to explain themselves? Part of the answer may be that the language of architecture has not lent itself to such studies. Indeed, much of the usage of words by architects in their writings has been virtually incomprehensible. Susanne Langer, the philosopher, writes:

"Nothing is more haphazard than the employment of the words: illusion, reality, creation, construction, arrangement, expression, form and space in the writings of modern architects."¹

The vocabulary of architects is often metaphorical. They refuse to see their work in terms which are easily adapted to the philosopher's more common discursive analysis. This must result from the elusiveness of the ideas architects are trying to express. Architects who work in a world of three dimensions may, not surprisingly,
become incomprehensible when they try to express themselves within the limits of the written or spoken word.

It seems impossible to characterize the totality of architecture within the language of philosophy. But, one cannot accept the chaotic speech of the architect as it is. Therefore, this work will try to find a position between the two. On the one hand it will draw extensively from the writings of architects, seeking to discover what they think and know, but at the same time it will strive for the precision of the philosopher. The result will be an explication of the question of architectural creativity from the designer's point of view which is comprehensible to readers other than architects alone.

Form, Meaning, Architecture

The central question in architecture today is that of meaning. Architectural formalism—the creation of forms divorced from meaning or forms with only formal reasons for being—is widely challenged. Architects are asking how to create meaningful works. Some argue that certain forms have intrinsic meanings, while others suggest meaning is derived from historical precedent or by reference to things outside of architecture. None of these answers appears completely satisfactory. A perusal of recent titles in the field shows the importance of these questions: Meaning in Architecture, Meaning in Western
What is surprising is that most architects and architectural theorists have apparently remained unaware that the questions they are asking of architecture—its meaning and form—transcend this realm and concern all of human experience. Questions of meaning are central to current research in linguistics, philosophy and the social sciences. An exploration of these questions in a wider context will be an effective way to approach the active nature of architectural design as creativity.

Structure

The structure of the work which follows approaches these questions in a sequential fashion. Each chapter builds on the ideas presented in the preceding ones in a logical, step-by-step process. Chapter 1 introduces the central concepts of symbol theory as a basis for the conveyance of meaning through form. An important contrast is developed between symbol theory and sign theory. In Chapter 2 the intersubjective dimension of symbolic process is added and explored in detail. Chapter 3 distinguishes between types of symbols—primarily between discursive, linguistic symbols and non-discursive presentational symbols. Chapter 4 discusses the art symbol in considerable depth, introducing the concepts of significant form,
illusion, semblance, quality and abstraction. Chapter 5 presents the idea of individuation in art and its relation to intersubjectivity and the habit of emotion or sense about life. Chapter 6 is an exploration of architectural symbols, which are seen to have as their mode of expression virtual place or ethnic domain. In Chapter 7, motivation theory is analyzed as one source for symbolic creativity. Chapter 8 argues that current models for thought provided by science and philosophy prove inadequate to explain symbolization and intuition. Chapter 9 concludes this work with an application of some of these ideas to architectural education. The most crucial ideas in the work are found in Chapters 1, 2, 4 and 6. The others are either transitional or derivative, but all are necessary for a coherent, though not exhaustive, treatment of architectural creativity.
Notes


CHAPTER 1: THE HINGE OF MEANING

Thought in Transition

Every age is dominated by certain central themes. Underlying the intellectual efforts of any period, its art and its science, will be certain basic assumptions or predispositions which tend to limit and determine the kinds of thinking which take place. It is possible to look back on history as a succession of such periods each dominated by its own particular world-view. Philosopher Susanne Langer writes:

"The formulation of experience which is contained within an age and a society is determined ... not so much by events and desires as by the basic concepts at people's disposal for analyzing and describing their adventures to their own understanding."

For the last three centuries philosophy has been dominated by the Cartesian dicotomy of reality into inner experience and outer experience. This dicotomy has become so basic to our understanding that it has permeated our language and our thought. The philosophic questions of this period have been framed in these terms. What is given to mind? What is the nature of sense data? Can the mind know anything of the world? Whole systems of thought have been created to answer these questions: realism, idealism, existentialism, phenomenology and logical positivism. The impact of the dicotomy is most
easily characterized by two of the most prominent schools of thought which took opposing points of view: empiricism, which accepted only the knowledge afforded by sense data; and rationalism which argued that knowledge existed a priori in the mind and that the impact of sense data was insignificant.

The dawn of the empiricist school was particularly noteworthy as it opened the door for the rapid development of the physical sciences and their derivative technology. The importance accorded by empiricism to sense data allowed the introduction of observational methods into science displacing learned dispute as the central determiner of truth. (The fact that observation alone could not account for the synthetic nature of scientific theory on was largely ignored in the ensuing flurry of scientific success.) The physical sciences soon grew to overshadow all other fields. Many humanistic studies followed the direction of the physical sciences and set themselves up as separate disciplines. Although the results they achieved through the application of scientific methods were unspectacular compared with the physical sciences, it was argued that this was only a matter of their relative youth. Fields such as aesthetics and ethics were lost in the new world-picture and never regained their former significance.
The opposing current, alternatively rationalist and idealist, met with less success. It held that sense data alone were insufficient to explain inner experience. But when this tradition tried to develop an alternative explanation of the human spirit, it seemed often to lose all touch with reality.

Men were caught between these two currents. Should they accept the products of empiricism, a culture built on science and technology, they would be required to deny their internal experience. But, if they accepted the reality of their internal experience, they seemed to be giving up any acceptance of their physical existence. For most, the proof of empirically based technology proved too strong. Man accepted its achievements and its estimate of his nature: life was reduced to oxidation processes, mind to passive response and humanness to the sub-human. The bifurcation of knowledge into mind and thing resulted in a bifurcation of the academy into two cultures and a bifurcation of the human soul.

However, as philosophy developed, the dicotomy between mental and physical phenomena grew more and more problematic. Suddenly concern has developed over the question of meaning. Psychologist Viktor Frankl writes that man today lives in an existential vacuum dominated by seeking after the meaning of life. In philosophy the problem of meaning has been signalled by the appearance
of numerous tracts in the last fifty years all on aspects of this question. The emergence of the study of linguistics as a valid discipline is centered on the issue of language and understanding. And, as Langer points out, as the nature of science changed from direct to indirect observation, the problem of interpretation of information became crucial.  

The philosophic systems, empiricism and rationalism, are mirrored in theories of meaning. Empiricism has given rise to meaning theories based on reference while rationalism has led to theories based on coherence. The empiricist explanations of meaning generally hold that words have meaning because they refer to things. This theory has received its most thorough exploration in the writings of logical positivism which concluded that the only language which had meaning at all was that which referred to the world of facts. This is clearly the central issue with which Wittgenstein dealt in his *Tractatus Logico-philosophicus*. The structure of language was held to be a mirror for the world. The parts of language which did not refer to facts were meaningless. According to this theory there was to be a one-to-one correspondence between words and things. The fact that some words had more than one corresponding object or that some things were referred to by more than one word was highly problematic for this theory. As a result, logical positivism spawned many works with titles of the
form, "Words and Things." However, no completely satisfactory solution for this ambiguity has been offered. Further, as a result of making truth and meaning a product of correspondence, all statements which did not directly refer to facts were devalued and called meaningless pseudo-statements. (Critics noted that logical positivism had eliminated everything that made life worth living.) In contrast to this, rationalism pointed toward a coherence theory of meaning. In this kind of theory, meaning is a product of the relation of words to words and usually involves the determination of words or their relations by innate structures or a priori knowledge. The reference component is omitted. For rationalists, truth depends on coherence of propositions within a formal system. Coherence theory was largely ignored in the earlier part of this century when it was thought that reference would be able to explain all phenomena and that difficulties in reference theory would soon be eliminated. However, in recent decades linguists working with reference theory alone have been shown to offer inadequate explanations of meaning. As a result, in new texts, such as Semantic Theory by Jerrold Katz, one finds the reappearance of meaning through coherence.

Both sets of theories for meaning appear inadequate. If one accepts reference theory, one seems to end up accepting the world but denying the mind. But, if one accepts coherence theory, one starts with mind but never
seems to get back to the world. Neither theory can bridge the Cartesian divide. To find a solution, one must look elsewhere.

**Naming**

Speech is the hallmark of humanity. It is so much a part of man's existence that he does not even find it remarkable that he can speak but no other animal can. Man acquires speech so naturally, that he has never paid much attention to just what that event signifies. Even Helen Keller, born deaf and blind, learned to speak. But, the event for her was such a breakthrough that her description of it in her autobiography may be more revealing than any other passage ever written about language.

"She (Helen refers to her teacher, Anne Sullivan) brought me my hat and I knew I was going out into the warm sunshine. This thought, if a wordless sensation may be called a thought, made me hop and skip with pleasure.

"We walked down the path to the well-house, attracted by the fragrance of the honeysuckle with which it was covered. Someone was drawing water and my teacher placed my hand under the spout. As the cool stream gushed over one hand, she spelled into the other the word water, first slowly, then rapidly. I stood still, my whole attention fixed upon the motion of her fingers. Suddenly I felt a misty consciousness as of something forgotten—a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that 'w-a-t-e-r' meant the wonderful cool something that was flowing over my hand. The living word awakened my soul, gave it light, hope, joy, set it free! There were barriers still, it is true, but barriers that could in time be swept away."
"I left the well-house eager to learn. Everything had a name and each name gave birth to a new thought. As we returned to the house every object which I touched seemed to quiver with life. That was because I saw everything with the strange new sight that had come to me. On entering the door I remembered the doll I had broken. (She had earlier destroyed the doll in a fit of temper.) I felt my way to the hearth and picked up the pieces. I tried vainly to put them together. Then my eyes filled with tears, for I realized what I had done, and for the first time I felt repentance and sorrow.

"I learned a great many new words that day. I do not remember what all of them were; but I do know that mother, father, sister, teacher, were among them—words that were to make the world blossom for me, 'like Aaron's rod with flowers.' It would be difficult to find a happier child than I was as I lay in my crib at the close of that eventful day and lived over the joys it had brought me and for the first time longed for a new day to come."6

This passage must offer the necessary clues to the hidden nature of language and meaning. What happened so dramatically to eight-year-old Helen offers more opportunity to examine the phenomenon of language than most writings of philosophers and linguists.

What is crucially different about the theory of meaning generated from these events in a well-house in Tuscumbria, Alabama, in the summer of 1887, from those presented earlier is that these events demand the insertion of consciousness into the theory. Both coherence and reference attempts at theory assumed objective positions with regard to meaning as if meaning phenomena were possible without consciousness. A model of meaning must involve consciousness. Before Helen's transformation,
she functioned without meaning. For example, Helen had learned that if certain sensory patterns were traced on her hand (spelling out "cake") she could expect a pleasant consequence—that of fetching and eating the cake. In the autobiographical passage she relates knowing or expecting the sensation of warmth from the sun when the hat was placed on her head. But, as Walker Percy demonstrates so conclusively in *The Message in the Bottle*, this is exactly what did not happen at the well-house. Helen did not receive the sensations of having "w-a-t-e-r" traced on her hand and then direct her attention (behavior) toward the liquid water. She received both the word, "water," and the liquid, water, at the same time. She put the two together—a coupling in her consciousness of word and object. Suddenly, and mystically, she knew that water (the liquid) is "water" (the word). Further, because she knew that water is "water" she could leave the well-house and still think about the water. Along with the life of sensation she had had previously she now had something new. What happened to Helen at the well-house happens to each human being in his early life. Where for most it is an event long since forgotten, for Helen it had the power of revelation. But what actually happened?

What happened to Helen was not a linear causal or linear energy exchange. What happened cannot be explained or modeled by equation, as can all other known natural
phenomena. Somehow, this is unique. It is, in Percy's terms a "non-linear non-energic natural phenomenon." The triangle involving Helen, the word "water," and the liquid water, cannot be reduced to a simple pairing or linear sequence. This triangle is irreducible. (In the next chapter it will be argued that this triangle is actually part of an irreducible quadrilateral and that the part played by Anne Sullivan is also essential.)

Langer calls this involvement of consciousness with objects through naming (language) the "symbolic transformation." The event of naming is so unprecedented in evolutionary history it is extraordinarily difficult to grasp. The language used to describe natural phenomena carries with it the connotations of science usually involving energy exchanges and/or causal connections. To suddenly speak of a natural phenomenon which involves neither causality nor energy exchange is a truly radical step. But, the event of naming, which is central to all language, is only to be grasped in this fashion. Naming is unique because in it man stands apart from the universe and then affirms it. Man says, "This (the liquid water) is water (the word)." Many semanticists (linguists who concentrate on the relation of word and meaning) find this a particularly difficult point. They note that the word is not the
thing. Nonetheless, man continues to call liquid water, "water." In a sense, the semanticists are right. The liquid is certainly not the word, but for man's consciousness, the liquid must become "water" or man can never know the water. This is the breakthrough Helen Keller made. She suddenly knew water as "water." And, after that she could think about the water. This is the central issue in the phenomena of symbolism. Everything man knows, he knows through symbolic media. Langer tells us very simply that symbols are the vehicles of meaning.  

10 Man can know nothing unless his mind symbolizes it. This implies as a very clear consequence that man must respond to the world in an active, not a passive, manner. Sense data may become known to the mind only because they are wrought into symbols--because they are symbolized. (Helen even noted that her first experience of true emotion in contrast to fleeting sensation came only after she acquired control of language.) Symbolization is essential to thought, but prior to it.  

11 Symbolization is prerationative--the starting point for all human thought. Langer writes that the mind is not just a receiver and transmitter; it must be looked on as a transformer as well.  

12 Symbolic transformation is not an end in itself, but a means of knowing. This is not knowledge in the sense of mere possession of facts but, in some sense, an identification between the consciousness of the knower and the
object known. The sensory content is transformed and appropriated as the material of one's own ideas.

**Signs and Symbols**

The uniqueness of symbolization can be further illustrated by examining the crucial difference between symbols and signs. This difference has often been lost during several decades of confusion by linguists, philosophers and psychologist. Both signs and symbols are significant, but the similarity ends with this generalization.

A sign is something which directs our attention to something else. It indicates a condition—past, present, future—of some thing or event. Thunder and lightning are signs of an approaching storm. Wet streets and sidewalks are a sign that it has rained. Smoke indicates fire. A scar is a sign of a past operation. Such signs are naturally occurring, but signs may also be created artificially by man. This was clearly the case of the buzzer in Pavlov's experimentation with dogs. Man responds to the telephone ringing, to the sound of a siren and to the whistle of an approaching train. Tin cans on a string attached to a car are a sign of recent marriage and crepe on a door indicates that someone has died. Signs, artificial or natural, stand in a one-to-one correspondence with their objects. For each there is a definite item, event or condition indicated. In this way, one might say
that signs are symptoms of the things they indicate. Further, signs almost always produce some action in their perceivers. Pavlov's buzzer caused the dog to salivate. The ringing telephone will almost always be answered if someone is home. If a person and a dog and even an insect hear thunder they will all seek cover from the impending downpour. While it is evident that human beings can respond to signs in this way, it is also clear that this is not the only way in which they can respond. One may say to a dog whose master is John, "John," and the dog will go and look for John. But if one says that to another person, he may reply, "What about John?" This reply is something different. The word has been used as symbol rather than as sign.

Symbols, in contrast to signs, do not direct attention to things or indicate things. Symbols, writes Langer, "... are vehicles for the conception of objects."\textsuperscript{13} When one person mentions, "John," to another, they do not engage in a search for John; instead, they think about John. Signs announce, but symbols lead one to conceive their objects. When one talks about "John," he need not be present for one to have an idea about him. Symbols, ultimately, do not mean their objects directly. What symbols mean directly are the conceptions of their objects.

Of course, a word can be used as a sign, as it is when spoken to a dog, but this is an exception rather than the rule. Words are directly associated with conceptions,
not with public events or objects. In speaking one usually uses words to cause others to conceive of objects and not to announce those objects. That one may occasionally use a word as a sign does not deny this very central distinction between sign and symbol.

If one now rereads the passage from Helen Keller's autobiography quoted earlier the issue is very clear. At first Helen was able to operate only through signs. The word "cake" spelled in her hand, announced to her that she might have a piece of cake to eat. This is identical with saying the word "ball" to a dog, causing it to fetch the ball. The same is apparent in Helen's response to the hat placed on her head. This to her is a sign of going out into the warm sunshine. This is further reinforced by her statement, "This thought, if a wordless sensation may be called a thought," which shows very clearly that real thinking is not possible without language--without prior symbolization. For Helen such thinking only became possible when she discovered that the word, "water," was not a sign that water was wanted or expected, but that "water" named liquid water. Through this name, water could be conceived and recalled.

This passage indicates the gap which divides animal intelligence based purely on sign behavior from human symbolic conception. Those behavioral scientists who have tried to reduce all symbolic behavior to sign behavior have clearly erred. The two are radically different. Many
modern linguists have attempted the same reduction, but in so doing they have omitted the central aspect of language itself. They have made a reduction which does not reduce.

What has been missed is that words name things. The name may represent a conception as some linguists admit, but it also names its object. Symbols symbolize. The relation between name and object is called denotation. A name denotes its object. For proper nouns, the relationship is so specific it is often confused as a sign relationship. But the fact that one may talk about a person independent of his presence points out the error here. The name, "John," denotes a person. Through this name one may have a conception of John. Langer makes this very clear:

"Denotation is, then, the complex relationship which a name has to an object which bears it; but what shall the more direct relation of the name, or symbol, to its associated concept be called? It shall be called by its traditional name, connotation. The connotation of a word is the conception it conveys. Because the connotation remains with the symbol when the object of its denotation is neither present nor looked for, we are able to think about the object without reacting to it overtly at all."¹⁴

Symbolic phenomena are unique to man. While man uses and is influenced by signs, he is not restricted to operating in that way. Symbolic phenomena are not just higher forms of sign phenomena. They are something entirely different. The failure to recognize this has led to a multitude of errors in genetic psychology which has tried to trace the origins of language in the sign phenomena of lower species.
All such efforts must miscarry. As Walker Percy points out, symbolization is something new under the sun, evolutionarily speaking.  

The Indifference of Words

Langer writes, "Meaning is a function, not a property of terms." By this is meant the fact that words are used to convey meaning, but that this is a result of choice not necessity. In consciousness, the word is transformed and understood. But without this transformation words are actually rather drab and dull. This is particularly evident in the phenomena of false onomatopoeia. That the words "flat," "fuzzy," "furry," "limber," "round," "yellow," "sharp" sound like the things they mean occurs only because they have been transformed in consciousness to "become" their meant objects or qualities and not because they actually bear any resemblance to them. One may test this by repeating any term from this list over and over. All of a sudden it will lose its magic and appear as the rather barren expression it really is.

This points out the reason why the cries and gestures of animals can never become a true language. Every cry of the ape or chimpanzee carries immediate signification as a sign. All their expressions are directed toward pragmatic and emotional ends, thus already bearing significance (as signs). There is no way these could carry
symbolic meaning, because their meanings as signs are already too strong. In contrast, as Langer points out, the symbol usually is based in an object, sound, or act which carries no practical signification at all.¹⁷

On this practical scale words are generally trivial. They have little value except as symbols. They do not interest one for themselves and, therefore, they do not distract one from their meanings. A symbol which did interest one for itself, would detract from the meaning it conveys. Langer gives the example that one might try to use a succulent, ripe peach as a symbol for "plenty." But peaches interest one directly as peaches and would already be too significant to act as words. The noises one calls words give nothing but their meaning. Vocables in themselves are nearly worthless, so that one may actually ignore them to attend instead to the meaning they convey. This is what is meant by the phenomenon linguists call the transparency of language. Conceptual activity appears to flow through words rather than merely accompanying them as it accompanies other experiences. In this sense the semantic power of the word as symbol is in direct proportion to its indifference as sign.

Words and Propositions

Language consists of more than single terms. Indeed, if language were just a random selection of terms it would
be virtually meaningless. Terms by themselves have little value. The power of language begins to grow only as terms are combined in sentences or propositions. For example, one could memorize an entire French dictionary, but not be able to speak French at all. There is more to the mastery of language than just possessing vocabulary. To form even the simplest meaningful statements involves not only words, but knowledge of how to combine those words according to rules of structure, called principles of grammar. One must be able to recognize and distinguish between verbs and nouns, between various tenses, between person and number and in many languages even gender. Randomly chosen words combined in strings would have no meaning.

Grammatical structure, itself, must, therefore, be a source of meaning. Clearly it is not a symbol, but it has a symbolific mission. Grammar offers one a method for trying together several symbols with but fragmentary connotations into a single proposition which functions as a single complex symbol.

Propositional structure has received more attention from modern philosophers and linguists than any other aspect of language. It is impossible to give even a reasonable short summary of this effort in the space available here. However, some indication of general directions and conclusions is essential to any discussion of symbolic form. Philosophers and linguists have concluded
that a proposition is a picture of the structure of a state of affairs. There appears to exist a minimal correspondence necessary for a proposition to be symbolic of a certain occurrence. The unity of the proposition is thought to be very similar to the unity of a picture. Picture and proposition each function as a single complex symbol.

Within this conceptual framework there is actually a great deal of latitude. A picture may be a simple diagram, a child's sketch, a builder's blue-line print, an architect's rendering or an actual photograph and yet each may be recognized as unmistakably representing the same thing. The reason for this is that a picture is only, "... a symbol not a duplicate of what it represents." 18

What is it, then, which is essential to the different images if they are all to be understood as representing the same thing? Each of the diagrams, drawings or photographs shows the same relation of parts, on which the mind can fasten to form the conception of the house. Those things which must appear in the simplest picture if it is to be understood also appear in all more complex renderings though in considerably greater detail. Further, they are all part of each person's conception of the thing. But, one's individual conception of the thing may contain more than appears in any of the drawings or even the photographs, so that these symbols need not picture everything.
Similarly, another person may have a conception of the same thing which is the same in the essential pattern, but may vary in its details. However many private aspects each person's conception has, it will also have certain aspects in common with all others. These certain aspects which are held in common in all conceptions of the things make up a fundamental pattern which all correct conceptions of the thing must have. And, it is the fact that all correct conceptions have these aspects in common that allows any group to talk about the same thing. Without this common fundamental pattern, communication would be impossible.

Langer writes:

"That which all adequate conceptions of an object have in common is the concept of the object."19

This concept may be embodied in a multitude of different conceptions. It may even be that, due to variations in sense organs, experiences and imagination, no two people have an identical conception of any object. But that their conceptions of a thing (person, event, quality) embody the same basic concept allows them to communicate. In reality, all the symbol conveys is the concept. One's own mind dresses it up in a conception which is private, personal and unique. Through this personal presentation of the concept, one is able to grasp it.

Symbols must, therefore, be understood in mind through a process of abstraction.20 From a configuration of sounds
presented to the senses, the mind abstracts the concept and forms a conception accordingly. Everything about the sense datum may be regarded as irrelevant except the form it embodies which symbolizes the meaning. Once more one encounters the transparency of language. (What is shown here to be true in language will later be shown to be equally valid in the symbolic forms called art.)

For Helen Keller, the sensation of fingers upon her palm was suddenly apprehended as the name of a substance. For most the word as sound rather than touch becomes a symbol for some item in the world. But rarely does one see anything singly. Rather, things are always seen in different relations or configurations. Patterns of denotative symbols symbolize different but analogous configurations of things. The temporal order of words in a sentence is a transformation of the relational order of things in the world.

Propositional forms can always be conceived as involving two aspects: the context and the novelty. The context is what a speaker or writer presents as framework. The novelty is that which the speaker is trying to point out or express within or about the context. Grammarians find this context-novelty juxtaposition in the basic units of sentence structure, subject and predicate. The subject presents the context and the predicate says something about it. The meaning of the predicate in turn is conditioned
according to the subject to which it is attached. From the simplest to the most complex, all sentences are based on this coupling relationship.

To go from a language of simple naming to one of complex abstractive sentences appears to be a giant step. Nonetheless, the child accomplishes it easily. How is this possible? For a long time this transition was a puzzling one for linguists. It was not until it was recognized that for the child even the very first single word functions as a sentence that a reasonable explanation might be given. The basis of all language, even for the child, is in the sentence. In naming the child couples the thing and the name which denotes it. This has the effect of functioning as a sentence. When a father captures his child's attention, points to an object and says, "Ball," for the child who repeats the word, "Ball," the expression is actually something like the sentence, "This is a ball." In this case, the word is the novelty and the object, a ball, is the context. The two are coupled in an expression of naming, which is equivalent to a sentence with the verb "is."

From the first actions of naming to the development of complex sentence structures is not that long a step. The basic structural issue, that of coupling of context and novelty, has already been realized. When Helen Keller wrote that by understanding that water is "water"
the mystery of language was revealed to her, she was expressing intuitively what linguists are now beginning to understand.

In conclusion, one may state that all sentences represent assertions. Naming and naming sentences assert the existence of things and the names used to denote them. Other sentences represent assertions about the relations or configurations of things and the different ways in which they interact.

Metaphor

The issue of metaphor and metaphorical usage has proved nearly as difficult for linguists as the question of naming. Metaphor is the apparent assertion that one thing is something else. And, it is often the case that the most illuminating metaphors are those which assert identity between totally different things. How can one account for the apparent illogic of metaphoric speech?

Langer offers a partial explanation of the structure of metaphor in her concept of logical analogy.²３ This consists in removing a word from its literal denotative representational usage and applying it in a context which shows that it cannot be meant literally, but must have figurative meaning. When the poet speaks of "rosy-fingered dawn" one does not literally expect the sky to be filled with rose colored fingers. Rather the form or configuration
of the sky in the early dawn must be streaked with pink in a way analogous to fingers on a hand. The form of fingers and the form of the sky streaking are seen to be similar. Therefore the familiar image of fingers is used to symbolize an unfamiliar kind of dawn.

The usage of metaphor occurs most often when there is no literally symbolic word for an object (event, person) so that one employs instead a figurative symbolism. For example, the spontaneous and vivid activity of a brook is most clearly described by calling it "laughing," although literally no brook has ever laughed. But, if this metaphor were used too often it would lose its power. Once a word is used in a context fairly regularly it begins to have literal meaning there. Its metaphoric function disappears. "The stream runs quickly," may once have employed "run" in a metaphoric way, but now it is simply literal. It may be suggested that "run" had but one meaning initially, but over time acquired many metaphoric usages which were transformed into literal ones. It is now typical to speak of a fence "running" around a lot, a rumor "running" through town, a stream "running" by, or a team "running" up the score. The use of "run" in so many senses has resulted in its generalization. Its literal value has increased, but its metaphoric value has plummeted. Linguists have called such a word a "faded metaphor."

Further, some have argued that all general words have been
derived from specific appellations by general use. Literal language is composed of faded metaphors.\textsuperscript{24} 

In the use of metaphor Langer finds evidence for the immense human capacity for "abstractive seeing."\textsuperscript{25} This is the power of the human mind to use presentational symbols to express concepts. Each new idea and each new experience first finds expression in metaphor. (That which is new has previously been unknown and therefore carries no literally applicable symbolism.) After an idea is expressed figuratively, it is accepted and then the figurative usage fades. Metaphoric expression becomes literal expression. The usage of metaphor is essential to man's ability to know the world and to communicate that knowledge. The actual vocabulary with which one describes a nearly infinite world is incredibly finite by comparison. Only by the use of words in metaphoric forms can the multitude of new concepts be clarified in order to be conveyed.

The power of metaphor is its ability to make new unfamiliar concepts understood through familiar words used in unfamiliar ways. The poet uses the same process to apply familiar words in unfamiliar ways to awaken one once more to those things (events, persons) he symbolizes. For the child learning language, naming has the same effect. Each word leads to a new conception of an object. Familiar sensations are suddenly concretized and presented through the unfamiliar device of language. Certainly, this is what
Helen Keller expressed when she wrote that on leaving the well-house, every object she touched seemed to be alive seen through the new sight which language had given her. But once unfamiliar names become familiar, their power and beauty are lost until reawakened by the expressive metaphoric speech of the novelist or poet.

(In a later section of the present work it will be suggested that the kind of coupling which takes place in naming and then in metaphor may actually form the basis for all of human creative functioning.)

The power of language and words is difficult to capture, itself, except in metaphoric speech. Perhaps the best description of language originates not in the writings of linguists or even novelists or poets, but in the autobiography of Louis Sullivan, an architect:

"How monstrous, how fluent, how vagrant and timorous, how alert are the living things we call words. They are the giants and the fairies, the hob-goblins and the sprites; the warrior and the priest, the lowly and the high; the watch-dog and the sheep; the tyrant and the slave—of that wonder-world we call speech.

"How like hammers they strike. How like aspens they quiver. How like a crystal pool, a rivulet therefrom, becomes a river moving sinuously between the hills, growing stronger, broader as its affluents pour in their tributary power; and now looms the estuary, and the Ocean of Life.

"Words are the most malignant, the most treacherous possession of mankind. They are saturated with the sorrows of all time. They hold in most unstable equilibrium the vast heritage of man's folly, his despair, his wrestling with the angel whose name is Fate;"
his vanity, his pride before a fall, his ever-resurrecting hope—arising as a winged spirit from the grave of disaster, to flit in the sunshine for a while, to return to the dust and arise again as his civilizations, so laboriously built up have crumbled one by one. And yet, all the beauty, all the joy, all the love that man has known, all his kindness, all his yearnings, all his dreams for better things, his passionate desire for peace and an anchorage within a universe that has filled him with fear and mystery and adoration; his daily round of toil and commonplaces; his assumption of things as they are; his lofty and sublime contemplations, his gorgeous imageries; his valor, his dogged will, his patience in long suffering, his ecstacies, his sacrifices small and great—even to the casting aside of his life for a thought, a compassion, an ambition—all these are held bound up in words; hence words are dangerous when let loose. They may mean man's destruction, they may signify a way out of the dark. For Light is a word, Courage is a word, and Vision is another. Therefore, it is wise to handle words with caution. Their content is so complex and explosive; and in combinations they may work beautiful or dreadful things."26

A Final Comment on the Semiotic

It should be evident from this chapter that the behaviorist attempt to explain all language in terms of sign activity ignores the central aspect of language, symbolization. The relative lack of success of behaviorism in generating anything other than trivialities can probably be attributed to the behaviorists trivialization of man himself. Language is symbolic. No other explanation is possible.

While behaviorism has been dethroned as the leading theoretical framework for the study of man, no other
framework has been created to replace it. Semiotic, the modern attempt at a general theory of signs and symbols, is incoherent. It appears to be largely an arbitrary grouping of three separate approaches to language. On the one hand some linguists now concern themselves purely with the study of the logical structure of language—in the field of syntactics. Others, still operating in a rather behaviorist framework, study the field of pragmatics. Their efforts are almost exclusively directed to the study of the effects of signs on perceivers. A third group studies semantics, the relation of words to meaning. It might be hoped that semantics could bridge the gap between words and objects, between syntactics and pragmatics. However, most semanticists today approach the question of meaning in terms of purely logical analysis. As a result, the real issue of the symbolic relation of words to objects is largely ignored. It is not impossible that a true science of semiotic might merge. But, for this to occur many linguists and others in related disciplines will need to throw off their presuppositions and begin to examine the actual speech act.

(As a result of the general incoherence of the semiotic, the present work has avoided for the most part drawing material from this field. Instead it has turned to the writings of philosophers such as Susanne Langer and essayists such as Walker Percy whose work suggests a more coherent framework through which to examine phenomena in language and later in art.)
Summary

The symbolic transformation has been suggested as the key to a theory of meaning which transcends Cartesian duality. Through symbols man can know the world and create meanings. The importance of symbols as a basis for meaning is further shown by contrasting them with signs. Where signs direct attention or behavior toward objects, symbols lead one to conceive of their objects. What a symbol means is the concept it conveys. Symbolic phenomena are most often composite, involving a novelty coupled with a familiar context. This is reflected in the subject and predicate of the sentence and the structure of metaphor.
Notes


8. Ibid., 39.


10. Ibid., 60.

11. Ibid., 41.

12. Ibid., 42.

13. Ibid., 60.

14. Ibid., 64.


17. Ibid., 117.

18. Ibid., 68.

19. Ibid., 71.

20. Ibid., 72.

21. Ibid., 139.

23. Langer, S., op. cit., 139.


CHAPTER 2: INTERSUBJECTIVITY

The Sign Triangle

Trying to see language is rather like trying to see a mirror in which everything else is seen reflected back. Whatever one places in front of the mirror is detected within it. Too many linguists have looked in language and tried to fit it into preconceived theories. Instead of looking at the mirror itself, they have examined certain reflections of their own prejudices. Some have approached it looking to find a confirmation of stimulus-response theories and have ignored all data which did not fit that theory. Others have come to language with the purpose of finding the rules by which it is guided. In each case the approach has been close-minded. A true study of the phenomena of language can only begin when linguists approach language with the question, what happens or what is the nature of the speech act?

One problem has been the selective vision with which certain people have studied language. For example, the anthropologist Malinowski used it to demonstrate the application of stimulus-response theory to human behavior. When a party of Trobriand Islanders go out fishing, if one man sights a school, he calls out, "Mackerel here!" The others in the fishing party converge on the spot and aim their spears. The stimulus-response theory appears
directly applicable. One fisherman calls out and another, who has learned by past experience and reward, responds by paddling over to help in making the catch. But, as Walker Percy points out, the model is applicable only because Malinowski has been so selective. What would he have to say when the Trobriand fisherman returned to the island and sat around spinning tales after a great feast? Suddenly the apparent simplicity of the stimulus-response theory appears too simple.

Stimulus-response theory attempts to explain all questions of meaning in terms of signs. The basic concept is that the organism, whether human or animal, is regarded as an open system living in an environment. It adapts to that environment through response to elements called signs which act as stimuli. The sign, as explained in Chapter 1, directs the organism, acting as interpretant, towards another element or towards biologically appropriate behavior. The basic relation may be expressed as a simple biological triad as shown in Figure 1 (see following page). Between the sign and organism and between the organism and object, causal relations hold. Between sign and object no real relations exist, but an imputed relation of designation does.

This model has clearly been demonstrated as an accurate description of animal response. It explains why
Figure 1^2
the mountain lion follows the scent of the deer and why
the deer flees from the scent of the mountain lion. It
is also applicable to the artificially induced responses
of Pavlov's dog to the sound of the buzzer. But as was
shown in Chapter 1, this relationship cannot be considered
an adequate explanation of naming or human conversation.

A number of attempts have been made to extend this
model to human language. One has suggested that sym¬
bolization actually consists in substituting one sign
for another. But as was pointed out in Chapter 1, this
leaves out the entire notion of denotation which forms the
essential aspect of symbolic phenomena. Another suggestion
was that symbolic phenomena of conversation were just
higher forms of the "conversation of gesture" which
exists among animals. The action of one dog in responding
to the bark or feint of another dog when the two are cir¬
cling a bone at first glance seems similar. But, actually
the relation is the same as the one in which a solitary
polar bear responds to the sound of splitting ice. In each
case, the organism responds to its environment by biologi¬
cal adaptation. That environment may consist of inorganic
material or other organisms.
Interpersonal Process

Symbolic phenomena are clearly quite distinct. A crucial difference, which has not been apparent until this time, is the fact that symbolization always involves human interaction. Every symbolic act implies an audience to whom it may be addressed. The second person is required as an indispensable condition of all symbolic behavior.

It may therefore be asserted that all symbolic acts involve on entering into a mutuality toward what is symbolized. In every symbolic act, the object is symbolized by a speaker (namer, writer, painter) for another who hears (reads, sees) and interprets. Without the presence of two conscious individuals, symbolization could not occur because there would be no one from whom a symbol could be received as meaningful. Percy states this explicitly:

"The irreducible condition of every act of symbolization is the rendering intelligible; that is to say, the formulation of experience for a real or implied someone else."  

Even Robinson Crusoe, writing all alone, stranded on his island, is writing for an implied other. His action, as all symbolic action, is social in nature.

Through all symbolic action a new relationship comes into existence between the two interacting individuals, between a namer and a hearer, a writer and a reader, a painter and a viewer. The symbolizer and the interpreter
exist in a mutual understanding of what is symbolized. Every act of symbolization involves or implies another in the role which Percy calls, "Co-conceiver, a concelerant of the thing symbolized." Like the identification of symbol and object, this relation of mutuality has neither causal nor energetic aspects and is, therefore poorly described by language. Percy characterizes it using the term, "intersubjectivity."^\(^5\)

The complete relationship in symbolic transformation must, therefore, involve symbol and object, namer and hearer. It is irreducibly tetradic in structure, a quadrilateral in place of the sign triangle. The quadrilateral structure of symbolic process is shown in Figure 2 (see following page).

One may now reconsider what happened to Helen Keller in the well-house. The relationship between Helen and her teacher, Anne Sullivan, is crucial. Suddenly, instead of thinking of the sensations Anne Sullivan traced in her palm as sign, Helen recognized them as the symbol for water—the name, "water." Helen knew then not only that water was "water," but that water was "water" for both her teacher and herself. At the same moment that she knows this water, the two validate their common existence. For man to stand apart from the universe and assert its existence human interaction is essential. An individual human being alone could never spontaneously develop symbolic acts; he would have no reason to do so.
Figure 2

INDIVIDUAL\textsubscript{1} namer

INDIVIDUAL\textsubscript{2} hearer

SYMBOL

OBJECT

Relation of Quasi-identity

Relation of Intersubjectivity
The interpersonal tetradic structure suggested for symbolism presents several aspects for examination. The first of these is the relation of quasi-identification which has already received some discussion in Chapter 1. It was noted that the identification between name and thing, between symbol and object is not describable in terms of linear causality. At the same time, it was clear that the identification is not a complete identity. One cannot drink the word, "water." But, somehow, through symbolizing water as "water" one is able to know the water. The pairing of water and "water" is identification without real identity. Now, one may go further and state that such knowledge is possible only because of a mutuality of such identification. The union of symbol and thing is not a private phenomenon. Another person is an indispensable participant.

A further aspect of this kind of symbolic action which sets it apart from sign response has been noted by Ernest G. Schachtel. Schachtel has differentiated between need-motivated behavior which is underlain by sign response and the genesis in children of another motivation, "the relatively autonomous capacity for object interest." In the need-dominated approach to intelligence, all objects are perceived as signs pointing toward food, prey, danger or escape. The response of the animal is completely directional. And, when the need is satisfied, the objects
which arose with the need as signs, are forgotten or ignored. In contrast to this, Schachtel observed the development of "autonomous object interest" in the human child which was not need-motivated. Such interest in objects appeared independently of any needs. Walker Percy adds that it should not be difficult, "to demonstrate that this autonomous object interest is intimately associated with the genesis of object language in the second year of life and is, in fact, an enduring trait of all symbolic behavior." This can clearly be seen in the now familiar case of Helen Keller. After she realized that "water" is water, she wanted to know what everything else is.

The interpersonal tetrad points toward another difference between sign and symbol, and between sign-using animals and symbol-using humans. For the animal there is only the sign in the environment to which it responds. It has no world as such. In contrast, the human conceives of the world. The sign using organism reacts only to the signs of food, prey, danger, escape. The sign appears, the animal responds and then the sign is lost. But each human being who knows what a symbol symbolizes may recall that thing or conceive of it at any time, even if it is not biologically relevant. Admittedly, the conception that each may have of any one thing may be different, but each conception will embody the concept conveyed by the symbol. Percy points out that the baby chick will respond to the...
shadow of a hen or to that of a hawk, but not to that of a sparrow. The two-year-old child may ask for milk and get it like any sign-using animal, but he may also see a sparrow and ask what it is.¹⁰

The human being, who knows what one thing is, wants to know what everything is, and he will develop a conception of what the world is. The world he knows will be the totality of what he is able to formulate through symbols. This world has both spatial and temporal aspects. The origin of myth must be man's desire to know not only what is on the surface of the earth, but what is below and what is beyond and not just what is happening now, but what happened in the beginning and what will happen in the end.

Further, by virtue of symbolization man steps apart from the world and asserts its existence. When he does this, he no longer lives in the world as an organism which responds only to signs. By acquiring knowledge of the world through symbol man is suddenly faced with acting in the world he has symbolized. Symbolizing man must choose.

All of this is possible only because man is able to enter into the mutuality of symbolization, the state called intersubjective. The basis of one's knowledge is the community of the symbolic act. The phenomenon of intersubjectivity has been widely noticed, but it remains difficult to describe. The philosopher, Maurice Merleau-
Ponty writes, "... at the moment of expression, the other to whom I address myself and I who express myself are incontestably linked together,"¹¹ and later he adds, "Words ... carry the speaker and the hearer into a common universe."¹² Some of the central aspects of intersubjectivity have been uncovered by Martin Buber, writing in the field of philosophical anthropology. Two of Buber's major ideas are those of distance and relation.¹³ By distance, Buber means the standing-apartness of man in the world, which has already been discussed. But, Buber goes on to suggest that only by standing apart from the world can man enter into any relation with it. Man stands apart from the world through symbolization and he relates to it in the same way. But, man also stands apart from man. Through speech (intersubjectivity) man can enter into a relation with others and confirm his common existence with them.¹⁴

Intersubjectivity enters into all kinds of symbol acts. It is most evident in conversation, but it clearly must exist in writing and reading. But in this case the intersubjective response of the reader is apart in time and place from the writer. Nonetheless, if the reader comprehends what he reads, he enters into a common universe with the writer. In art the same thing is true. There is a clear intersubjective tie between the moment of expression and the moment of impression.
Missing the Point

The pattern of symbolic interaction is not necessarily always successful. Mistakes are possible. Indeed, the quadrilateral structure of interpersonal process suggests that two different kinds of problems can arise in symbolization.

The first kind of difficulty involves an incorrect usage of symbol for that which it does not denote. The fact that "water" denotes water means that it has a fixed connotation. But it is possible to say about a flask of sulfuric acid, "This is water." In this case the error is one of application. The term, "water," (denotes and) connotes water. The connotation of water does not include the liquid sulfuric acid. A similar difficulty arises if one's conception of something is incorrect. If one has a next door neighbor named John, the term, "John," may call forth a whole conception of John which could be wrong. This is not a mistake in applying the name John to John but a mistake in what one knows about John.

The importance of intersubjectivity is evident in that a failure of meaning can occur if it is not present. This is the second major kind of difficulty which can appear in symbolic process. Percy suggests that this is the case in much modern poetry which appears to be composed only by combining words drawn randomly from as diverse
contexts as possible in order to produce striking effects.\textsuperscript{15} The effects are potent, but without the active intention of the poet in creating meaning, the reader or hearer is not likely to find any meaning since none was conveyed. As a result nothing is held in common and intersubjectivity fails.

The possibility of intersubjectivity may depend, too, on the relative positions of the speaker and hearer of any sentences. Percy gives an excellent example of this with a story of two men riding a commuter train.\textsuperscript{16} Both live the most meaningless, trivial kinds of lives, filled with a routine of meals, work, chatter, television and sleep. One feels totally at home in this existence and completely content with himself. He is, in a cliche, fat, dumb and happy. The other is quite ill at ease. He knows something is wrong, but cannot identify what it is. He has all the worldly possessions he could want, but still he thinks something is missing. If one approached the first commuter with the message, "Come, I know your predicament and I have information of utmost importance," he would reject it immediately because he is not aware of his own predicament. But, the second commuter, on hearing this message might well be open to communication. Other issues may intrude at this point. The message-bearer, if a stranger, may be ignored, but if an associate or a
friend, would probably receive a hearing. In this situation the success of intersubjectivity is clearly dependent at least in part on place, time and circumstance.

The dependence of all statements on intersubjectivity might be challenged. It might be suggested that statements such as, "Water boils at 100°C," are true under all circumstances. While such natural science statements portray objective facts, they still must be communicated. One is much less likely to accept a new scientific discovery as true if he hears it from the man on the street than if he hears it from a university professor. And, that same discovery is much more likely to be understood by one's university colleagues than by the man on the street.

Third Dimension of Interpersonal Process

Metaphor is the origin of much, if not all, of language. It is through the expression of novelty in familiar context that one crystallizes and captures his experiences. One speaks, at all times, in faded metaphors. The quality of speech and of understanding and, therefore, the possibility of intersubjectivity, are dependent on how much metaphoric content remains in the words one uses. Within this dimension of speech there are three possibilities: first, what is said may be old information which is already overtly known; second, what is said may be totally new information, in which case it cannot be under-
stood at all and anyone listening must be baffled by it; or third, it could be a combination of old and new, of familiar context and unfamiliar novelty in which case it is something privately experienced but not known before because it had never been rendered intersubjective.

Since the second case is not understood, it lies outside the realm of intersubjective process and may be ignored for the moment. The first and third cases are easily distinguished. The first is the dull dry speech of familiar usage. One may say, "Last year, I went overseas and had some interesting experiences and saw some famous buildings." The meaning conveyed is almost nil because the words have been used so often and for so many situations that they offer nothing new at all. In contrast, one may recall Shakespeare's comparison of winter trees with, "Bare ruined choirs where late the sweet birds sang," which in its freshness offers so much to the reader who discovers that he, too, has seen this but had never crystallized it as an experience. It is the connotational content of the words themselves which runs the scale from the dullness of overworked usage to the brightness of the unfamiliar combination. This contrast gives a third dimension to the model of interpersonal process—a dimension with a scale running from convention to intention. The quadrilateral two dimensional diagram now becomes the octahedron shown in perspective in Figure 3 (see following page).
Figure 3
It is clearly the case that the language of intention and the language of convention are different in the way they convey meaning. One may be arrived at merely by copying the speech or writing of others, but the other must be original. Merleau-Ponty makes a clear differentiation between the two, in his terms empirical usage and creative usage:

"The empirical use of already established language should be distinguished from its creative use. Empirical language can only be the result of creative language. Speech in the sense of empirical language—that is the opportune recollection of a pre-established sign—is not speech in respect to authentic language. It is as Mallarme said, the worn coin placed silently in my hand."

Schachtel, in "On Memory and Childhood Amnesia" discusses at some length the sterility of conventional language and the obscuring of meaning and experience it produces. He writes,

"But while Midas suffered the tortures of starvation, the people under whose eyes every experience turns into a barren cliche do not know that they starve. Their starvation manifests itself merely in boredom or in restless activity and incapacity for any real enjoyment."  

Such people turn every experience into a conventional phrase and lose the experience by the transformation. The vacation becomes "an exciting time" or "a lot of fun." Indeed, Schachtel suggests all the average person sees on his vacation is what he can find on the road map or guidebook. Not only does one tend to express in conventional terms, but one's experience is appropriated to the
conventional symbolic complex. Percy calls this phenomenon, "the loss of the creature." He suggests that it is nearly impossible to see the Grand Canyon today because it has already been totally conventionalized by symbolic media. Instead, all the tourist sees are those things which conform to the pre-formed symbolic complex. The same thing can occur in education. It may be impossible for a biology student to actually see the individual dogfish he is dissecting or for the English student to comprehend the Shakespeare sonnet he reads. In each case they have been totally devalued by their placement in the most conventionalized contexts.

Can this conventionalization be escaped? Schachtel argues that all language represents conventionalization and leads to the loss of experience. However, since symbols are the only way one has of knowing things (experiences), one must seek to escape the clutches of conventionalization through totally intentional speech. Of course, for understanding some convention is necessary. This creates a tension in all human symbolic action. Schachtel admits that intentional speech is possible but also shows how difficult it may be:

"One might well say that the greatest problem of the writer or poet is the temptation of language. At every step a word beckons, it seems so convenient, so suitable, one has heard or read it so often in a similar context, it sounds so well, it makes the phrase flow so smoothly. If he follows the temptation of this word, he will perhaps describe something that
many people recognize at once, that they already know, that follows a similar pattern; but, he will have missed the nuance that distinguishes his experience from others, that makes it his own. If he wants to communicate that elusive nuance which in some way, however small, will be his contribution, a widening or opening of the scope of articulate human experience at some point, he has to fight constantly against the easy flow of words that offer themselves. Like the search for truth, which never reaches its goal yet never can be abandoned, the endeavor to articulate, express and communicate an experience can never succeed completely.\textsuperscript{24}

It is this seeking which is the root of genius, and the basis for creativity. It is this seeking which makes the writer, the poet, the painter and the architect.

**Summary**

The symbolic event is further distinguished from sign phenomena by its intersubjective aspect. The symbol presents the interpersonal validation of existence. Man is only able to know the world through symbolic interaction with others. Intersubjectivity and quasi-identity combine in symbolization to create an irreducibly tetradic event. A third dimension is added to the interpersonal process by differentiation between conventional and intentional symbolization. Creativity may be considered as a constant struggle to avoid conventionalization.
Notes


2. Ibid., 199.

3. Ibid., 256.

4. Ibid., 257.

5. Ibid., 257.

6. Ibid., 200.

7. Ibid., 200.


10. Ibid., 202.


12. Ibid., 75.


16. Ibid., 132.

17. Ibid., 206.

18. Modification of the interpersonal tetradic diagram was first suggested to me by Dr. Stephen Tyler at Rice University.


22. Ibid., 57.


24. Ibid., 10.
CHAPTER 3: BEYOND LANGUAGE

Symbolic Projection

One is continually faced and haunted by the apparent inadequacies of language. On the one hand, there are things which one believes or feels or knows, but seems unable to put into words, and, on the other hand, there are some words one uses which carry so many multiple connotations that they may easily be subjected to significant misinterpretations. One may deal with this second difficulty either by defining each term one uses exactly or one may depend on context to give the sense of the terms one uses.

What may one mean by projection in symbolic form? Literally, the word projection indicates a protrusion of some kind which stands out from a smooth mass as a bracket is a projection from a wall. The projecting item usually is quite easily noticed and is more readily perceived. This leads to the many figurative uses of projection as the projection of a picture on a screen from a slide, the projection of a plan of action for either the next day or the next ten years, the geometric projection of an object through mechanical drawing, the Mercator projection of the world or the paranoid projections of delusions by a mentally ill individual. All of these different uses of projection are to some extent metaphorical.
The common denominator of the use of projection in all these circumstances is according to Langer, "... a projection is a principle of presentation."¹ This principle of presentation need not be intentional for while the cartographer clearly intends to produce the Mercator map, the paranoic will vehemently deny that he is projecting.

Even though this principle may underlie all of the senses of projection it still may be intended in different ways. Projection may be the principle of presentation, or it may be the act of presentation (as the paranoic projection) or it may be the presentation itself (as the Mercator projection). In this work, following the lead of Langer, the term will be left ambiguous—its exact meaning will be determined by context.²

The question of what is the basis for projection has been important in philosophy for several decades. Wittgenstein in the *Tractatus Logico-Philosophicus* turned to the idea of projection to explain how speech relates to written words. He makes an analogy to how music as played relates to the written score:

"In the fact that there is a general rule by which the musician is able to read the symphony out of the score, and that there is a rule by which one could reconstruct the symphony from the line on a phonograph record and from this again—by means of the first rule—construct the score, herein lies the internal similarity between the things which at first sight seem to be entirely different. And the rule is the law of projection which projects the symphony into the language
of the musical score. It is the rule of translation of this language into the language of the gramophone record." (4.0141)³

This law of projection may be viewed as the process of making logical analogies. Projection involves one and the same logical form in two different exemplifications which are different expressions of it. Usually one of the examples is much more available to perception than the other. If the one which is more elusive is also more important, the more obvious can become a symbol for it. That which is elusive will be conceived through the more evident symbol. The symbol remains a vehicle for meaning. To carry that meaning it must have the same logical form as that which it symbolizes.

A very simple example of this is the mercury barometer, which is used to indicate air pressure. The rise and the fall of a column of mercury is easily detectable, while the rise and fall of air pressure is rather subtle. However, the rise and fall of the column of mercury varies directly with air pressure. By constructing a proper scale to detect changes in the mercury level one may, analogously, detect changes in air pressure. The unidimensional change of air pressure from high to low forms a continuum directly analogous to the linear continuum of the scale to measure the rise and fall of the mercury. The symbolically established heights are the terms in which one measures the air pressure at any time.
The case of a Mercator projection of the globe is slightly more difficult. In the barometer case, if the pressure went up the mercury went up and vice versa. What was literally true was a direct analogy to symbolic conception. But, the Mercator map shows Greenland larger than South America. This, while literally true of the map, does not mean one must symbolically conceive of Greenland as larger than South America. Once one knows the rule of projection is not a linear proportion nor even the rule used in making drawings of physical objects, one may take that into account. Even though the map shows Greenland larger than South America, one may apprehend it smaller. Eventually one may even learn to "see" it smaller. It is interesting that one does not have to be aware of the exact mathematical rule (tangency) in order to take its role in Mercator projections into account. (Analogously, children are able to speak many different grammatically correct sentences long before they consciously learn the rules of grammar.)

All symbolism involves projection. In every symbolism there must be form acting as a vehicle to convey meaning. The form of the symbol must be analogous to the form of that which is symbolized. The analogy which is involved is governed by rules of projection. Such rules are similar, involving the concept of logical analogy, but need not be identical as was shown by the cases of the Mercator map and the barometer. What this means is that every symbolism
need not be equivalent to every other. And, therefore, translations between different forms of symbol may be impossible.

Discursiveness and Its Limits

Language is the most pervasive of all human symbolisms. Because man stands so close to language, it is often forgotten that it, too, involves a set of projection rules which govern what it may be used to symbolize. Language presents facts in a particular way. If one says, "X hit Y," one describes what took place between X and Y. This statement pictures an event within the form "X," then "hit," and then "Y." But this temporal order does not directly relate to what happened. There was not first an entity, X, then an entity, hit, and then an entity Y. The involvement of X and Y was simultaneous. Further, although "hit" appears as a discrete word, it does not describe a thing, but an occurrence. It is evident, therefore, that the statement and the event are not exactly parallel. While the event takes place all at once, the language used to describe it is restricted to presentation in a linear fashion. A proposition involves a succession of words in time. Words in language are discrete units which must be ordered and cannot be said or written simultaneously. (Langer points out that some philosophers have lamented the fact that words in sentences cannot actually parallel
events. A statement such as, "Lightning precedes thunder," would, in that view, be better said, "Lightning, thunder." But Langer points out that this kind of thinking is fallacious because the structure of a symbol should not include something which is part of the meaning. If language were restricted to symbolizing only those things in which a linear temporal order--like that in language--could be found, it would be nearly impossible to say anything!)

The transparency of language can sometimes make one forget the importance of linguistic form. When sentences are written or spoken correctly, one attends to the meaning. But, if sentences are grammatically incorrect, the meaning will be lost. The form of language is crucial to its symbolic capacity. Everything that can be spoken must be able to be strung out in the temporal order which is inherent in sentence formation. This property of stringing out is called discursiveness. All language is discursive. As a result, anything which cannot be projected into discursive form cannot be said. The symbolic capacity of language is a direct correlate of its discursive form.

The rules of projection in language--rules of logical analogy--have been closely studied by philosophers and linguists, with the idea that if one could determine conditions for exact symbolism, a greater understanding could
be had of the relation between language and knowledge. Bertrand Russell, in the Introduction to the English language edition of Wittgenstein's *Tractatus*, writes that this is Wittgenstein's central concern:

"Wittgenstein is concerned with conditions for accurate symbolism, i.e. symbolism in which a sentence 'means' something quite definite... In order that a certain sentence should assert a certain fact, there must, however the language may be constructed, be something in common between the structure of the sentence and the structure of the fact."\(^5\)

By setting out the conditions for exact symbolism, Wittgenstein opened a way to explore the symbolic capacity of language in a highly technical fashion. Rudolf Carnap followed Wittgenstein with a detailed technique to determine the capacity of expression of any linguistic system. Carnap concluded that one might only ask those questions which language could express and that all one might ever know was that which was demonstrable by experiment.\(^6\)

Meaningful language could, therefore, be composed of only two types of sentences: first, statements true by definition such as, "All unmarried men are bachelors," and second, statements proven by experiment such as, "Water boils at 100°C at STP." Statements not true by definition and not verifiable or refutable by experiment (under ideal, perhaps impractical conditions) were considered pseudo-propositions without meaning. Accordingly, such pseudo-statements were said to fall outside of knowledge and outside of logical conception as unthinkable.\(^7\)
By this standard almost all conversation and many other human activities (such as art) are pseudo-statements without real significance, although used as if they did have meaning. According to these philosophers, all such expressions are to be treated as symptoms (signs) of the inner life similar to tears or laughter. Carnap even suggested that there is no real difference between cries like, "Oh, Oh!" and developed lyrical poetry. And, questions of metaphysics, values, ethics are considered simply meaningless.

As a result, the philosophers and logicians of science and math defined the knowable within the severely restricted domain of discursive projectability. Between statements of science and all other expression these philosophers erected a wall. All non-propositional symbols were classed as emotive signs and thereby ignored. As a result Langer writes, the study of human mentality as a whole has been thoroughly confused, for it is a crass assumption to state that all human symbolic processes are either concerned with gathering and storing facts or with working off emotions. Outside of language there do exist symbolisms of highly articulate form. By denying them, positivist philosophers have cut themselves off from crucial dimensions of human thought.

Positivist philosophy is based on several central assumptions. This view of knowledge must stand or fall
with those assumptions. First, the whole positivist approach is based on the idea that language as a subject of study may be separated from consciousness and from circumstantial context in which it is written or spoken without fundamentally altering its nature. But, as soon as this separation is made, all that can be left as truth in language are the universals of science. What positivism showed is that, apart from consciousness and context, language is appropriate to scientific truths. But, this says nothing about language as it is actually spoken or written in acts of symbolic intersubjectivity. Indeed, if one were to be restricted by the standards of positivism, one could never speak at all. That statements become pseudo-statements when divorced from their role as speech acts is only a result of the method philosophers use to approach language and does not reflect the actual truth of the statements themselves. (Indeed, if at a philosophical convention, someone entered the hall and called out, "The building is burning; just follow me and I'll lead you out," the philosophers would follow even though by their positivist standards such pseudo-statements are considered meaningless!) Ignoring consciousness and circumstance is only one failing of positivism. Langer points out two more central assumptions. Positivism assumes that language is the only means available to articulate thought and that everything not speakable is feeling. It has already been
demonstrated that all genuine thought is symbolic. Therefore, the limits of expressive media should be the limits of thought. But, language is not man's only expressive medium. As long as other media are ignored the positivist picture of cognitive mentality as purely scientific and "material" (semi-scientific) will remain. Langer summarizes this clearly:

"... so long as we admit only discursive symbolism as a bearer of ideas, 'thought' in this restricted sense must be regarded as our only intellectual activity."

The Possibility of Presentation

Symbolic material provided by the senses offers another medium for expression. Human perception functions as an active, not a passive, response to the world. The senses transmit impressions of form, not just raw data. The material the mind receives from sense is already in symbols. Such symbolism has been called pre-rationative. In other words, the organs of perception transmit abstractions or forms of perception--true symbolic materials which are available for use in different combinations and able to be known and recalled at any time.

Visual forms, for example, are clearly capable of articulation (complex combination). In this, visual forms appear similar to language. But, the rules of projection into visual forms must be very different from those in language. Visual forms are perceived immediately,
instantly, whereas language is perceived in temporal succession. Visual forms may, therefore, be called non-discursive. The relations of visual structure are perceivable in one glance.

In language, the complexity of ideas which may be conveyed must be limited by the attention span of the mind. A sentence has discrete elements and finite length. An idea which involves too many internal relations or too many minute segments cannot be spoken. Positivist theory would argue that such an idea is uncommunicable and, therefore, unconceivable. But, visual forms are not restricted by discursive limits because they are not discursive. Some ideas which language cannot express may be conveyed in visual form. A non-discursive symbolism with meaning conveyed in symbolic visual form is possible. The primary function of such a symbolism could be the conceptualization of sensations or feelings. The tactile and sensitive knowledge that man has of space could never be expressed in discursive geometry. A symbolism of such space is possible in painting and sculpture. The forms found in nature—qualities, textures, lines, rhythms—are able to be understood as symbols and recognized as things which continue past fleeting temporal sense experiences. They are abstractable and they may be combined in innumerable ways. The forms of sentience are the material of a non-discursive symbolism.
Often one reads of a "language" of sensation or sometimes a "language of tonal music," a "language of color," or a "language of architecture." In the way language is used as a term in the present work, such usage is inappropriate. Language is a unique vehicle of symbolization. Not all symbolisms are languages. To generalize from discursive symbols to all symbols is to be guilty of distortion and error.

As Langer points out, true language has several properties which may not be generalized. Language involves vocabulary and syntax. The vocabulary is a set of words with fixed meanings. These elementary units are combined by the rules of grammar or syntax to form the composite symbols called sentences. A second property of language is that one meaning may often be expressed in several ways. One word may be substituted for several sentences. This means that a dictionary of definitions may be constructed. Third, a thing may be named by several different words. Where an entirely different set of words is used for everything (almost) one speaks of a second language. It is then possible to translate between the two languages.

These same properties are not found in the most common visual form, a picture. Although a picture is composed of independent elements which all work together, those elements do not carry independent meaning. The individual
elements in a picture cannot be considered names as words can. And, there are no unitary or basic elements in the picture. There is no smallest unit. In other words, the picture is without a vocabulary. Since pictures have no vocabulary, there can be no dictionary either. A curved line in one picture may mean one thing, but in another picture it would have a different meaning. The meaning of the elements is determined by context. There is no way non-discursive symbols might be used to define each other except as context. Without definition, there cannot be any translation. There is no standard key to translate from symphony to sculpture or from painting to poem. The equivalence of art exists only in its total reference.

A further difference between language and non-discursive symbolism is the kind of reference each may have. Language usually has a general reference. Without the convention of a proper name, a description may be found to refer to more than the possible place. Where proper names of people and places are concealed, it is impossible to prove that a given description means one particular place or one particular time. Non-discursive symbolism in contrast, is always a presentation of some individual object. Mathematics describes a square in a discursive fashion. A picture of a square is always of one size. And to abstract the squareness of the square a discursive system such as mathematics or language is necessary.
Discursive symbolism (or language) and non-discursive symbolism are clearly different forms embodying different rules of projection. In language, meaning is successively given. In all other symbolisms the individual elements compose part of one larger symbol understood through apprehension of the whole and all its internal relations. Langer writes that because this kind of symbol depends on an integrated, simultaneous presentation of the whole, it may be called presentational symbolism.¹⁴

Meaning in Presentation

Presentational symbolism shows a formal difference from discursive, but it shares in the properties of all symbols. It must be bound by the same logic which is inherent in all symbolic formulation. Between the structure of the presentational symbol and that which it symbolizes there must be some kind of formal analogy. The presentational symbol must convey meaning or import must as any discursive symbol. The meaning within the symbol must be conceptualized as an element for understanding. By its projection into symbol it is more easily apprehended. Indeed, if it were never projected into symbol it could never be known.

What is presentational symbolism appropriate as a symbolic expression for? Langer argues that presentational symbolism is a means for the comprehension,
expression and apprehension of man's impulsive and sentient life. In order for this to be true, Langer suggests that what is called reason must be considered to have broader meaning than just the analytic reasoning to which it is commonly applied. Anything which partakes in the logic of the symbolic transformation must be part of the rational mind. In this, Langer echoes the 1921 essay of J. E. Creighton which proposed that feeling as well as reason must have a cognitive role in the mind. Creighton points out that feelings tend to interact with other aspects of experience as they develop from lower "opaque" levels associated with simple bodily sensations to higher levels associated with experiences of different character. Langer notes that this implies that feelings have definite forms which become progressively articulated. But language is not an appropriate medium for the expression or symbolization of feelings. Presentational symbolism, lacking in the aspect of denotation, offers the means for man to conceptualize and thereby know his and all sentient life.

Summary

All symbolization involves projection which is the principle of making logical analogies. In order for the symbol to be a vehicle for meaning it must have the same logical form as that which it symbolizes. This implies
that any symbolic form is limited in what it can symbolize. Language can only symbolize those things which can be expressed in its discursive form. Non-discursive presentational symbols may convey imports which are too complex or too subtle for language such as concepts of human impulse or sentient life. Since presentational symbols are non-discursive it is inappropriate to speak of them in terms of language, as "a language of form" or "a language of painting."
Notes


2. Ibid., 75.


7. Ibid., 83.


10. Ibid., 88.

11. Ibid., 94.

12. Ibid., 96.

13. Ibid., 96.


15. Ibid., 100.


17. Langer, S., op. cit., 100.
CHAPTER 4: FEELING IN FORM

The Art Symbol

Coming to an understanding of the symbolic transformation will alter one's concept of the entire field of human mental processes and production. The implications of the role of symbolization in thought must lead to a re-examination of many of the basic questions of philosophy, psychology, linguistics, anthropology and related areas. Questions which have been asked for decades or even centuries may now be recast into a form appropriate to the concepts of symbolization. In this way, it may be possible to find answers where none have been possible before.

In Feeling and Form, philosopher Susanne Langer has developed a framework for the exploration of art based in the concepts of symbolic transformation. The idea of symbol clears up many of the apparent paradoxes which have plagued art theory for nearly 200 years. Langer's work has not had widespread impact since it has been available for only two decades. Further, her exploration of art as symbol is dependent on the basic understanding of the symbolic transformation. As symbolization comes to be more widely recognized as the basis of all human mental processes, the impact of Langer's effort will grow accordingly.

In the space of a single chapter it is impossible to do more than explore some of the major insights found in
Feeling and Form, and in her even more recent work, Mind: An Essay on Human Feeling. The overview provided here is essential for an understanding of architecture, but a truly complete comprehension of the theory of art symbol can only come from a familiarity with her two works themselves.

Over the past two centuries philosophers have approached the study of art from the position of audience, looking at the impressions made by art on themselves and others, and then trying to discover the causes of these impressions. Most philosophers immediately assumed the unity of the arts to be self-evident and left questions of the separate arts out of their considerations. If the philosopher did try to explore the various arts, it was usually only after he had already arrived at certain general views of the field. The conclusions reached about each of the arts usually supported his overall view. As a result, much of the philosophy of art has been filled with misconceptions. The artists and the philosophers of art, who, one would think, could learn so much from each other, went their separate ways finding little or no common ground in their common field. For the philosopher the problems of the art studio were secondary. If the artist was included in his philosophy at all it was as an afterthought. For the artist, the philosopher of art appeared irrelevant having
no real knowledge of what was required in the making of art, and what the artist was attempting in art. In retrospect it seems incredible that artists and philosophers should have been so far apart and so totally unable to help each other. Langer's approach to art is a marked contrast with earlier philosophers. Because she is primarily interested in art as a phenomenon of symbolic transformation, she is primarily concerned with the artist and only secondarily with his audience. She argues that the philosopher must approach art from the studio where art originates.¹ This means that the efforts of individual artists working in individual fields must be examined first. In this way the differences among the various arts are traced all the way to their vanishing points and where no more differences are found, there will be the unity of the arts.² Langer's method is one of constructing the general principles of the arts out of specific ones generated by the various art fields. Her method is clearly a very different one from previous philosophers. Over two thirds of Feeling and Form is devoted to a study of each of the arts individually in its unique forms. Only at the end of the work do general principles fundamental to all of the arts emerge.

(In looking at issues in art symbolism as guidance for an approach to architecture, this work cannot follow her method. Instead, an outline of the fundamental co-
elusions reached in *Feeling and Form* will be given. These can be considered to apply equally to all of the arts.)

Art is one of the forms of presentational symbolism. The techniques and elements employed by each of the arts are very different, but their essential symbolism is common to all. Langer writes, "'Significant Form' (which really has significance) is the essence of every art; it is what we mean by calling anything 'artistic.'" Unfortunately, Langer's use of this term tends to slightly obscure the fact that art forms are significant because they symbolize. Perhaps "symbolic form" would have been a better term.

Art, like all symbolic media, is a means for the articulation and presentation of concepts. That a concept is well-expressed in art does not mean that it necessarily refers to one's own situation or even that it is true, but only that it is conveyed clearly and objectively for contemplation.

Art, like all symbolic forms, involves the phenomenon of projection and the associated laws of projection. The art symbols demonstrate formal analogies or structural similarities to those things they symbolize. The symbol and the thing symbolized must have a common formal order,

For what, then, can the forms of art symbols be appropriate as symbolizations? When the artist creates a work what does he symbolize?
It is often stated that the tones, lines, colors and textures of art seem to express tensions, rhythms, continuities and contrasts. In art one is often able to find an appearance of movement, growth, attenuation, flow, calm, conflict, resolution, speed, arrest and excitement. These patterns appear in painting, music, sculpture, dance, drama and all the arts. But these are not only the patterns of art, they are also the patterns or forms of sentience. The forms of art are analogous to the forms of sentience, the forms of human feeling. The forms of sentience or feeling occur only in nature. They are often temporary or even fleeting. But, the forms of art may be created, invented, developed and contemplated at will. Some art, such as dance and drama, may be re-created repeatedly. Each form of art may be held up for perception. Art, with its relative permanence, is clearly appropriate as a symbol of impermanent sentience or feeling. In fact, through the art symbol one may actually know sentience or feeling; without it they would remain totally subjective, uncomprehended states. Langer writes simply, "Art is the creation of forms symbolic of human feeling." The forms of art are presentational symbols of feeling which is not accessible to discursive symbolization. It is important to recognize that the feelings symbolized by art may include the emotions but are not restricted to them. Art
may symbolize any form of sentience including feelings of energy, vitality, quiet, concentration, somnolence or any inward action or condition felt in the fabric of the mental life. As linguistic discursive symbols lead to the conceptualization and knowledge of objects, art symbols lead to the conceptualization and knowledge of feelings. In this sense, the art symbol may be said to objectify feelings.⁶

The symbols of art, in contrast to those of language are presentational, not discursive. The work of art is not to be broken down into elementary units each of which has its own symbolic value. In isolation, the elements of a work of art have no individual significance. The reference of elements in a work of art is not conventional, but depends on the role of each element as part of the whole art work. Because of this, Langer suggests the use of the term "meaning" in reference to what art symbolizes may be misleading. Rather, she suggests that art has "vital import" where the term vital is used to restrict the "import" to dynamic subjective experience.⁷ Since the elements of a work of art do not have import apart from the whole, it is incorrect to speak of an art symbol as a symbolism. Each work of art is a single symbol, not a system of significant elements.⁸ The elements of art have no expressive value outside their functions in the perceptual whole.
The understanding that art is a symbol of human feeling helps to clarify an important distinction between the feelings expressed within the art symbol and the emotions of an artist or his audience. The function of art is the symbolization of feeling, not the stimulation of emotion. The work of art is not a symptomatic expression of the feelings of the artist (a sign), "... but a symbolic expression of the forms of sentience as he understands them." The artist does not express his own emotional state. He expresses what he knows about the inner life of feeling. In fact, the artist may explore conceptually through his work states of feeling which he has never actually experienced. To distinguish between an emotion directly felt and one contemplated and imaginatively grasped requires an effort and an insight which escaped many earlier philosophers of art. As a result, they saw the work of art as a direct outward expression of the artist's inward state—as a sign, rather than as a symbol. Admittedly one does not usually speak of the possibility of objective contemplation of feeling, but this is exactly what the art work offers. The work of art may also engender a feeling of excitement which is sometimes more massive than the import of the work. But this feeling of increased sensibility and heightened awareness goes with insight and intuitive judgment and is not contained in the work of art itself. (The same feelings can be generated by grasping
a difficult theorem in mathematics or an elegant proof in logic!) The work of art is a symbol of feelings conceived and rendered.

The non-discursive nature of art symbolism prevents it from being a symbolism which can be manipulated by general rules to create compositions. Many different techniques and principles of presentation are used by the artist in his work. The art symbol does not depend on convention. The conventions that do exist in art, which change with time, govern ways of creating a symbol and not its actual conveyance of import. The art symbol is to be understood without translation or comparison of ideas. Its import is immediately perceived in its form; to distinguish art from other presentational modes such as maps, charts and graphs where meaning is conventionally determined, a work of art may be called a metaphorical symbol.\textsuperscript{11}

Illusion

The successful art work stands apart from the world. Every work of art seeks to be dissociated from its immediate surroundings. This character of art has been referred to by critics as "otherness," "apartness" or even "strangeness." The successful work of art seems to exist in a world of its own, in a sense of "self-sufficiency" or "rightness and necessity."\textsuperscript{12} In this way, a work of art is somehow "unreal" and this "unreality" appears crucial to the central creation which is an art symbol.
Some art philosophers have suggested that the art work is a re-creation of its object. A picture is considered a re-creation of a real vase of flowers, a sculpture is a re-creation of the human form. In literal terms, at least, this is fallacious, for in re-creating anything, it must first be destroyed and then created again. Further, what is created in a picture is not an actual vase filled with flowers. A sculpture is not a real human being. These works of art are images. A real object such as a real vase can hold real flowers. But one would never try to put real flowers into a picture of a vase. The image is appearance only. It exists only for perception.

(Even a real object may even have the appearance of illusion. When one perceives a vase, or a rug or even a building as a purely visual thing, it is abstracted from its material existence. It acquires a different context. It assumes the features of an image which is to say, an abstraction.)

An image is a purely "virtual object."\(^{13}\) It is not treated as anything tangible and practical, but as an entity with visual attributes and relations. It has no world other than that of perception. Since the idea of image has become so wedded to the sense of sight in its connotation, Langer seeks a term with wider application, because all "aesthetic objects" share in the virtual character of images. From the writing of C. G. Jung, the
eminent psychologist, Langer borrows the term "semblance." Jung, writing about the unreal character of the dream, says that the things which appear there, sights, sounds, smells, feelings and happenings may all be considered "semblances" of real events. The virtual nature of the aesthetic object, the art symbol, is also semblance.

The aim of semblance or illusion is to liberate perception, and thereby conception, from practical purposes and to allow them to enter the world of sheer appearance. Langer characterizes this as a "disengagement from belief" so that the sensory qualities of things may be considered without their usual practical meanings of "table on which to place things," "chair on which to sit," or "pitcher for containing liquids." Once a virtual world is created without practical significance, one may attend to the appearance of things and to the feelings appearances symbolize.

The unreality of illusion pervades all of art. The forms of art have been abstracted from their usual practical usage and are presented as symbolic forms. Even a simple vase or a building may arrest one sense so exclusively that it will seem to be given to that sense (usually vision) alone. Of course, such objects do have practical reality, but one may be forced to perceive it in terms of a single sense—-it becomes image, illusion or semblance. Within the picture or the sculpture this abstraction of
objects from practical use is much more apparent. In music the practical usage may not even be a question. The abstraction of forms is central in all works of art.

The virtual nature of form in art makes the form itself become more apparent. It appears as "quality without practical significance." But, the abstraction of form is not the sole aim or the ideal of art. Forms are abstracted from practical use in order to take on new use, to function as symbols of human feeling, to express the forms of sentience. The elements within a work of art combine in the articulation of feeling and serve to concretize the elusive patterns of sentience. The forms of art reach beyond themselves as symbols. Like speech which is mere sound but which conveys meaning, the forms of art convey the reality of feeling. In the articulate symbol the import pervades every aspect and may be called the content of the form which is available for direct perception. The forms of art are not meant to be representations of the reality from which they are abstracted. Rather, these apparent representations of things are to become as transparent as the words of speech in order to convey vital import just as speech conveys meaning.

The substance of the art symbol is virtual. What it conveys as symbol is emotion, feeling or sentience. How is feeling portrayed or symbolized through perceptual form? The only perceptual form feeling can take is quality.
"Feeling is projected in art as quality." Quality is said to pervade every element in the successful work of art. This is what artists refer to when they discuss the "feeling" of a work of art or, almost as often, the "quality" of a work of art. It is the quality of the art work which presents the felt tensions of life from their diffused somatic levels to the highest complexities of human emotional and mental experience.

How is the artist to present as quality his elusive idea of feeling which must be vague and amorphous before it appears in any projection? There can be no formula for the creation of feeling through symbolic transformation. As metaphor must be original to be effective, so too the metaphorical symbols of art cannot attempt conventional transformations of feeling in form. Where does the artist find the key to the transformation of elusive sentience into the objective quality of the poem, or the symphony, or the painting? Langer offers a possible explanation for the artist's envisagement of quality before he or anyone has seen it. She writes:

"The answer is I think, that he has seen it; it is this apparition that he tries to re-create. His idea is initiated by experiences or perhaps even one isolated experience, of actuality colored by his own way of feeling (rather than by some emotion of the moment), and the image he creates is of the way things appear to his imagination under the influence of his highly developed emotional life."
If one is to speak of the artist "re-creating" one does not mean that the artist re-creates a vase of flowers or a human figure as a sign of his own emotion, but that he re-creates a quality that he has once known or experienced through events, situations or sounds he encountered. He need not try to copy the reality in which that quality was initially found. In fact, he may find qualities in many areas which bear little apparent kinship to his own art. But the artist will take a quality and better render it in his own idiom. When the artist chooses an object or theme to render, he does so with the idea that this object or theme can be endowed with that quality which is really the projection of feeling. This is the abstractive process involved in all art, by which forms are removed from practical significance and assume import as symbols. The artist need not even be conscious of his abstraction. He works with a single aim in mind, pointing toward the quality he wants the piece to have. Whether poet or painter or architect, the artist begins with an idea which he seeks to realize in the art work.

The ways artists begin are totally random and unpredictable. Some may begin with a single form or a situation which seems to have that quality they seek. Others may begin with pure emotion. The poet may begin the poem with a single line—but the origin of that line is totally obscure. Some work rapidly, others may take weeks or months
or years. (The initial impulse is somewhat mysterious. No more can be said here, but this question will be re-explored later in the present work.) Throughout the whole creative process the artist seeks to achieve that artistic quality which is the projection of human feeling or sentience in the work.

This explains how the artist may find more in his own art work than he intended. He may explore feelings in his work which he has not actually experienced. In the process of working with the elements of the art symbol, the artist may find possibilities which appear motivated by the structure of the work to that point as its natural development or continuation. The artist may see a new quality emerge which he had never conceived before. The artist may articulate ideas of feeling of which he had been unaware before the work presented them. The work of art is an objective entity which even the artist may contemplate, appreciate and probe in depth.

The role of intuition needs to be touched on here because it provides a possible explanation for the artist's perception of quality before he creates it. Langer uses intuition in the sense of direct logical perception consisting in the perception of relations, forms, exemplifications of forms and meaning. Intuition in these senses may be generalized as "insight." The ordinary intuitive act which is considered the most basic act of intellection
explains the recognition of formal structural similarities in dissimilar frameworks. This in turn is the basis for the understanding of symbols. Through intuition meaning or import is perceived in form. Through intuition the artist perceives the quality he seeks to re-create in a work of art. (But, it must be recognized that the formulation of the art symbol itself is not an act of intuition. Intuition is only an event of perception and comprehension. It is not a process of reasoning.)

Unfortunately, today, as Langer points out, few people are able to perceive the import in the work of art. Some have concluded that artists really do re-create vases of flowers and the like and they perceive the art work totally in terms of realistic representation. Others have rediscovered perceptual form and in a reaction to representational realism, they rule out any import at all. Meaningless abstraction becomes an ideal. A developing mind grows on the articulation of feeling both subjective (inner life) and objective, deriving from outside contacts. He who lives and grows surrounded by good visual and tonal forms even on the modest level of textile designs, household utensils, dinnerware and the like will develop a sensibility to the quality of form and the aspects of semblance. The intuitive capability will be enhanced and the possibility of perception of formal analogy which is the basis for all art will be created. Then the life of feeling itself
can be conceptualized and experienced both as inward subjective event and outward objective presentation.

The breadth of feeling which can be symbolized in art goes far beyond the level of emotion. The limits set by earlier philosophers were the result of a misconception. The life of emotion and the life of feeling are one. There are no walls between them. Langer writes:

"Between all different levels and modalities of feeling, however, there are no breaks, as there have always seemed to be between the traditionally assumed realms of sense, emotion and intellect. There are graduated changes, and sudden shifts of rhythm; proliferations of detail, and sweeping simplifications; but the import of art is one vast phenomenon of 'felt life,' stretching from the elementary tonus of vital existence to the farthest reaches of the mind."²²

The Role of Abstraction

The meaning of abstraction for artist and scientist is very different. Each approaches his own field in his own way with widely divergent aims, goals and methods. Scientific abstraction has been widely explored and is generally understood, but artistic abstraction remains a mystery.

Scientific abstraction may also be called generalization. The scientist begins with a set of facts and discovers certain relations between them. From those he develops propositions at progressively more general levels.
In fields such as physics and math such generalizations may reach totally rarefied levels. The process by which such generalizations may be developed is one of abstraction; Langer calls it, "generalizing abstraction."\textsuperscript{23}

The artistic uses of abstraction are much more complex. It is evident that artists seldom generalize. They seek no universal laws— they create unique individual works. Why should one speak of artistic abstraction at all? In a generalizing sense, one should not. But, as has been noted above, the artist does abstract things from practical context in order to use them in the role of symbols. This form of abstraction Langer calls "presentational abstraction" to contrast it with generalizing abstraction.\textsuperscript{24}

Presentational abstraction, unlike generalizing abstraction, does not appear to be guided or bound by formulas of any kind. It does not show evidence of the definite successive levels of abstraction found in generalization. As Langer notes, "For purposes of logical analysis, art is unsystematic."\textsuperscript{25} Art involves an interplay of formulation, abstraction and presentation in varying amounts and combinations. It should be no surprise that art presents this kind of complex picture, for it must be adequate to symbolization of the complexity of all levels of human feeling.
In all works of art, the problem encountered by the artist is the same one. The artist must discover a way to transform subjectively known realities (feelings) into objectively apparent semblances which are sufficiently articulate to be apprehended by intuitive perception. The direct presentational abstraction is the primary illusion of every art. Within it, a number of identifiable sub-types enter into the final formulation.

Langer turns to the studio to find out what may underlie these presentational symbols. She notes a difference in the language of the artist describing a work in progress and in speaking a completed composition. Artists speak of "quality," "stability," "harmony" and "completeness" when describing finished works, but works in progress are defined in terms of dynamic metaphors: balanced or unbalanced, thrusts and counterthrusts, attraction and repulsion. The artist, in each of these cases is dealing with tensions. Tensions are the most fundamental elements in all art. By their presence they offer a structure. Tensions are found in different combinations in every work of art. They may be conflicting or resolved, intersecting or reinforcing. They may join to form new elements or they may retain their identities even in complex combination. Apparent movement in sculpture, the expansion and contraction of space in architecture, and rhythmic and tonal gestures in music, all create tensions.
The establishment and organization of tensions appear as parts of the basic technique for any artist to project an image of feeling into any medium. The tension pattern in art reflects feeling predominantly as a subjective experience, stirring from within oneself and symbolized in outside virtual form. It is the apparent isomorphic nature of internal personal tensions and the tensions within artistic illusion which has probably led so many critics and philosophers to misconstrue art as the direct sign of feeling. It is this isomorphy which is at the root of all "subjectivist" theories of art. But the tension principle alone does not constitute art, for tension does not offer an objective presentation.

This demand for objectification leads to the second major principle in art, the principle which is often called the gestalt. This is the tendency (which is inherent in the senses themselves) which results in the perception of simplified wholes or closed forms. This principle may be said to objectify by organizing sensations into larger, more complete units. Presentational techniques originating in this principle tend to subordinate tensions (which still remain, nonetheless) to the unity of substantive elements. Instead of beginning with lines of force, the gestalt principle may create a preeminent bounded form out of the total virtual environment of the work. This points clearly to the role of representation in art which should serve to
orient and unify. In place of abstraction by tension this principle is a means of "abstraction by emphasis." It is the gestalt tendency which must be behind one's ability to see one thing in another, to perceive the import figured in the form.

These two principles, the gestalt or articulation of form and the tensive or dynamic interaction of structure, are found intimately entwined in every work of art. The life of every design springs from these two creative processes. While one is able to abstract the principles and speak of them in separation, they are always simultaneously present in art. Langer makes this clear:

"They are aspects, abstracted from the actual sense of life in different and incommensurable ways. Intellectually we can conceive of them only by turns, though perhaps very quick turns; but in the visual arts we see them, in the poetic art we understand them, in music we hear them, simultaneously. That is a fundamental fact of artistic structure, and one of its differences from discursive form. Within a work of art this sets up a deeper level of tensions than those which we perceive as such: a permanent tonicity, which pervades the work and is the most elementary source of its apparent life, of 'livingness.'"

(There is a very real parallel here to some work which has been done on the nature of organic hierarchical organizations. The conflicting tensions and unions of the art symbol seem to mirror the two tendencies found by essayist Arthur Koestler on every level of living hierarchies:"
assertion on the one hand and integration on the other. This leads in turn to the material in the next section which explores the question of "living" form.)

Living Form

Why is it that every art form which is charged with feeling should also seem to be alive, to give the impression of "livingness"? Why is it so many artists may speak of a work as "organic" or having an "organic quality"? What is the origin of this semblance of life? It is evident that the illusion of life may seem to be implicit in the artist's creation even though he does nothing explicit to attain it. Every work which successfully expresses feeling is an apparent "living form" even though it may have nothing to do with a real living creature. Where this illusion of life is missing, so too is the successful symbolization of feeling and the work appears "dead." Even though this seems apparent, is one truly justified in using the metaphor "living form" in reference to art?

In answer to this Langer suggests that what one knows of feeling must be considered the culmination of vital process. The symbol of feeling must, therefore, have some semblance to that underlying vital process whether its culmination is in general organic activity or in a highly complex action. The tensions and resolutions found in every art symbol express an underlying dynamic process
which is the central fact of living. The art form and the organic form are both apparent expressions of this dynamism. This is the kinship which exists between every art symbol and every organic form even though an individual art symbol may not be modeled after actual natural form at all. When the art form as symbol conceptualizes feeling, it must also conceptualize life.

The art form as symbol offers the artist the opportunity to explore feelings conceptually which he may never have actually experienced. In the same way, the art symbol may make apparent aspects of life which are never felt. The most evident of these is growth, which in art is symbolized by directedness and movement.

However, the complexity of life overshadows that of art. It is impossible for art, therefore, to symbolize every aspect of life exactly. Instead, the artist chooses to symbolize that quality he has seen which represents but one aspect of the field of feeling and the universe of life. This is important, because while the art symbol is a means to conceptualize "livingness," it can never offer the complete conceptualization.

Langer suggests that the art symbol also projects an image of mind:

"In artistic projection, human mentality (which is mind in a strict sense) appears as a highly organized, intricate fabric of mental acts emanating more or less constantly from the deeper activities, themselves normally unfelt that constitute the life of an individual."34
The characteristic of life that no part has meaning apart from the whole is reflected in a work of art. Acts, even those unfelt, are parts of a life. The acts of living are all dynamic; living form in art shows the same basic dynamism. Acts themselves have dynamic form which articulated through the course of the act itself. The end to acts is the end of life. Living form in art shows similar characteristics.35

In the work of art an intricate web of interrelationships is woven between each element and each other element. Every element is at once determined by the whole and a determiner of every part of the whole. A simple and direct relationship between one element and the whole work does not exist. If one begins with any element in an analysis, one must eventually encompass every other element and every relation in order to define that first element's relation to the whole. Once a single element is added, it influences the whole work.

Elements in art may, therefore, be said to have the character of acts, not things.36 Although not true acts in the physical sense of the term, they seem active or act-like. The formal properties of elements in art, when found in nature, characterize organic activity. What is presented in the elements of art is not the acts themselves, but their character. No translation of "such-and-such an element" is equivalent to "such-and-such an act"
is possible. The quality of art is the quality of act. What is reflected in the underlying dynamics of art is the dynamic nature of acts so necessary for life.

The art symbol has aspects of the logical forms of acts. Among them, Langer lists fusability, violability, and revivable retention of past phases in succeeding ones. The internality of relations within a created form means that every element appears to emanate from context. The parallel biological condition is the motivation of every act by a combination of past and present acts and the motivation by any act of present and future (additional) acts.

The preceding characteristics do not suffice to make the art symbol a projection of the image of human mind. The fundamentally different aspects of human mentality which set man above the animal kingdom are those behind symbolic transformation: symbolization and intuition. Both of these are events, not activities. They involve neither energy exchange nor apparent linear causal relations (see Chapter 1). The primary illusions of art, which have the semblance of acts or processes, cannot present the character of symbolization and intuition. Symbolic transformation and intuitive insight are elusive, displaying neither visible traces nor apparent source. The mysterious comings and goings of images must find a different expression in the art symbol, if it is to be an adequate presentation of the mind.
Langer suggests that the phenomenon of "secondary illusion" has the character of intuition, imagination and symbolization. The appearance of secondary illusion in art appears as a transient phase which seems insubstantial compared with the substantial nature of the primary illusion. Such a secondary illusion may be so elusive that it seems purely personal or so strong that no one can fail to perceive it. In music, the semblance of "harmonic space," in plastic forms the semblance of "spatial rhythm," and in poetry the semblance of "dramatic action," all are examples of secondary illusions. In every significant work of art secondary illusions play over the unfailing primary illusion and raise the art form to new heights. These illusions appear as intangible elements deriving from something other than the "real" virtual substance of the work. Drama is virtual action but it can appear to become sculpture. A piece of music has no spatial aspect, but it can appear to take one on. A building has no primary illusion of rhythm, but the appearance of rhythm may seem to be present nonetheless. The secondary illusion usually carries a work beyond its initial virtual realm and transforms it into something new. And this clearly parallels that characteristically human transformation of form into symbol. It is this semblance of transformation which allows Langer to suggest art is the presented image of mind.

(It should still be remembered that the import of art is
presented in simplified form, as it must be to be accessible to perception.)

Modes of Illusion

Every work of art is a symbol made up of forms which convey import. The import of the art symbol has been shown to be the nature of human feeling. What art expresses is not actual feeling, but ideas of feeling, just as language does not express actual things, but ideas of things. The totally presentational sensuous nature of art is the indispensable medium for conceptualization of feeling. In order that this import be perceived, the art symbol abstracts form from practical context and then presents it as expressive of concepts of feeling. It is the interwoven nature of feeling and life which leads in turn to the apparent "livingness" of the successful art symbol.

Every kind of art is based in these principles. Each form symbolizes feeling; each is the result of abstraction; each seems to be living. Each form of art creates entire and complete symbols. The different kinds, painting, poetry, dance, drama, music and literature stand alone. The fields of art need not be added to achieve any totality. Each symbol in each art is self-sufficient.39

All of the arts deal in the realm of virtual forms, but the variety of these virtual forms is often surprising. The plastic arts, painting, sculpture and architecture,
have as their primary illusion the semblance of space which Langer calls "virtual space." The organized space within a picture is clearly not the tangible physical space in which man acts, but is, instead, an entirely visible affair. All of the forms and colors developed in the picture serve to build up the self-contained and independent virtual space within it. This virtual space is built up purely in terms of vision and could just as well be called perceptual space. The creation of this virtual space and its organization by forms (planes, lines, lights, shadows, volumes, textures) in turn serves to symbolize the patterns of sentience and emotion. Even though the picture is actually still, if it is successful, it will have the semblance of animation. While painting, sculpture and architecture are each modes of virtual space, in each virtual space manifests in its own particular way. The virtual space of the picture, including photography, drawing and painting, is that of "virtual scene," in the sense that it is always, "a space opposite to the eye and related directly and essentially to the eye." Sculpture, in contrast, treats virtual space in the form of volume. In sculpture, the semblance of living form is particularly expressive of movement which leads to the semblance of a vital "virtual kinetic volume." In architecture, the mode of virtual space involved is the "ethnic domain." (Further discussion of the "ethnic domain" concept is left to Chapters 6 and 7.) While space
is the particular virtual mode of the plastic arts, the other arts find expression in other virtual modes. The appearance of vitality in music comes through the varying durations in forms, which, in Langer's terminology, makes it the image of "lived time"—the illusion of "virtual time." In dance, illusion is generated by gesture which is an expression of "virtual powers." Each form of literature finds its appropriate realm. The semblance of events felt is expressed in the "virtual life" of the poem, the semblance of past occurrences in the "virtual memory" of the novel, and the semblance of actual occurrences in the "virtual acts" of drama. In the virtual realms of art, every experience of human feeling can find many forms. And these can be further enhanced by the semblances of secondary illusion drawn from every other realm to form a true image of the human mind.

**Artist and Audience**

Each work of art stands as a single symbol. It cannot be broken into elementary meaningful units. Every element has import only in reference to the whole. Therefore, the art symbol may never be constructed by elemental addition. It must first be conceived as a whole. The import of the work is then apparent as feeling as known by the artist and transformed into the symbolic form of the work.
How is this import to be known by anyone other than its creator? How can an audience understand a work of art? This question has already been partially answered. The audience may know the work only through the most fundamental of all intellectual processes, intuition. All cognition of form, and meaning through form, is intuitive. The aspects of relatedness, distinctness, congruence, form correspondence and contrast are all known by direct insight. The significance of any form as symbol may also only be known intuitively. Intuition is not to be contrasted with reasoning processes such as induction, deduction and the like. Intuition is neither process nor method; it is an event. This event is the beginning and the end of all reasoning and all logic, for it is the only way one perceives the import or meaning of form.

The understanding of art begins with intuition. The import of the symbol must be grasped from the whole. There is no way one may construct the meaning for oneself or another from elements examined individually in the work. This means that it is nearly impossible to show the import of a work of art to someone who has not seen it. A discursive explanation could never convey the feeling of the form. The only way the artist may be assured that his work will be understood is to make the symbol so strong that anyone with normal sensibility will perceive the quality and, therefore, the feeling of the work.
This is the point at which issues of technique become paramount. In making the art symbol, the artist must use varying amounts of technique or craftsmanship. The rudiments of handling a pencil, or a knife, or carrying a tune, are required of any artist, but beyond that he must find his own craft. His technique is not a mechanical thing, but a matter of personal invention for each artist as he works. The environment in which the artist practices has little to do with his creation:

"Whether art is practiced in the service of religion, or of entertainment, or in the household by women potters and weavers, or passionately in forlorn attics with leaky skylights, makes no difference to its own aims, its purity or its dignity and importance."50

The artist articulates a vital import which he could not imagine apart from its own expressive form. He cannot know it before he expresses it. But he may get the "idea" for the work in a general way in his mind. As soon as he conceives of the work he knows of its general structure. The details will be worked out as he goes. The painter who signs a contract for a work, or the architect who accepts a commission, trust that they each can have an insight: the painter of the feeling to express and the architect of the proper feeling of his building.

But eventually, the work must leave the hands of the artist. The completed piece is turned over to an audience. What will they do in response to it?
In one sense, in the studio, the artist must satisfy his own expectations and his own demands. But, every work of art must also stand before others. The work is presented. It must therefore be examined by an objective standard. Every artist works with the idea in mind that someone will understand his work. No artist could continue if he thought that it would be mute. Many artists accept that their work will be largely misunderstood or misinterpreted. The artist cannot create for a particular audience in a particular place or the work will become totally conventional and lose its quality as art. The artist works instead for an ideal audience—that individual somewhere who can intuitively grasp the whole of his symbol, who can see through its novelty and its unconventionality. The artist trusts that somewhere, someone can discover the import of his work. But it may be that this ideal beholder can only come into existence after many years of a work's existence.

It is important to discern in exactly what way the artist may be said to communicate (if he communicates at all) with his audience. The work is symbol, not sign. The work is also not comment. The artist is not trying to tell anyone anything. He does not speak; he does not teach. The artist has one purpose: to show. By showing the human feeling in perceptible form the work offers a way to conceive sentience and emotion. And, in any strict sense of
the word communicate the work does not communicate its idea, it reveals it.52

When one forgets about the artist and delivers oneself totally to the contemplation of a work, one may intuit its import. This intuition often induces an independent emotional experience which is not the feeling symbolized in the work at all. This emotion, arising in the audience, has been called the "aesthetic emotion." It belongs to the perceiver and not to the work. It is a feeling of exhilaration which is directly inspired by the perception of the successful art symbol.53

To understand art all one needs is responsiveness. This may depend on clearing the mind of intellectual prejudices, but other than that it is something which is totally intuitive and, therefore, cannot be taught. Such responsiveness will be heightened by the experience of successful art so that every time one listens to a symphony or looks at a painting one heightens one's possible responsiveness for each successive art experience.

The work of art forces each person who encounters it to undergo a formulation of feeling. It clarifies the intuition itself by its organization of the forms of feeling, imagination and living. In doing this, it inspires the exhilaration of aesthetic satisfaction. Langer notes, "Life is incoherent unless we give it form."54 Art gives form to the world of feeling and articulates human
nature. For each individual the experience of art is a deeply personal revelation.

Summary

Art works are individual symbols of human feeling. Such symbols are presentational not discursive. They may not be broken down into individual elements but only convey meaning as wholes. The feeling conveyed through the art symbol is not the same as the emotion experienced by the artist or the viewer. Instead, it is the artist's concept of a particular feeling which he explores through the symbol he creates. That symbol has aspects of illusion or semblance because it is simply an image or virtual object. Important related aspects of art include quality, abstraction and living form. Each mode of art presents feeling in a different kind of virtual realm. The import of the art symbol, is perceived by the audience only through intuition, so the artist must make it as clear and explicit as possible.
Notes


4. Ibid., 26.

5. Ibid., 40.


7. Langer, S., Feeling and Form, 32.


11. Ibid., 104.

12. Langer, S., Feeling and Form, 46.

13. Ibid., 48.


15. Ibid., 49.

16. Ibid., 51.


18. Ibid., 118.

19. Ibid., 114.

20. Ibid., 128.


23. Ibid., 153.
24. Ibid., 156.
25. Ibid., 156.
26. Ibid., 158.
27. Ibid., 164.
28. Ibid., 164.
29. Ibid., 166.
30. Ibid., 175.
33. Ibid., 199.
34. Ibid., 200.
35. Ibid., 200.
36. Ibid., 202.
37. Ibid., 204.
38. Ibid., 230.
39. Langer, S., Feeling and Form, 60.
40. Ibid., 72.
41. Ibid., 86.
42. Ibid., 89.
43. Ibid., 95.
44. Ibid., 109.
45. Ibid., 175.
46. Ibid., 212.
47. Ibid., 264.
48. Ibid., 306.
49. Ibid., 378.
50. Ibid., 388.
51. Ibid., 393.
52. Ibid., 394.
53. Ibid., 395.
54. Ibid., 400.
CHAPTER 5: THE NECESSITY OF ART

Man's Minimal Nature

The phenomenon of symbolization must radically alter one's concept of man in the world. In the ordinary theoretical view of the world, one sees a succession of energy states. Particles at the sub-atomic, atomic and molecular levels are all in motion, interacting in a dynamic set of energy exchanges. At a higher level gases expand and contract according to statistical laws and elements are mixed or separated in chemical reactions. Animals act as organisms in the environment, responding and adapting by means of sign behavior. The whole system of causal interactions appears on every level, save one. Man symbolizing the world changes everything. The associated phenomena of intuition and symbolization are not part of and apparently not product of linear causal energy processes. They are non-linear and non-energetic. Man stands apart from the world and through language affirms its existence. Man stands apart from his inner experience of feeling and asserts its existence through art. As Walker Percy points out, this has a rather drastic effect on one's minimal concept of man.\footnote{1} It means that man is not an organism in an environment. He is something more, qualitatively different from the rest of the world. He is not to be explained in terms of explanatory-causal science.
Enlightenment science and philosophy have been largely dominated by the idea that all actions are only the result of other actions.² Causality has been construed as a law of action and reaction. By this law, any action of any organism was said to occur and affect other actions in the process of occurrence and then to terminate, setting new actions in motion. Each explanation of any step of the process involved the idea of energy exchange. The application of this philosophy led to mechanical explanations in physics, chemistry, biology and psychology. Of course, in different fields the terminology changed slightly, as in behaviorist psychology's substitution of stimulus and response for action and reaction, but the basic causal model remained the same. This explanation must now be considered, at best, only partially correct. Man as an intuitive and symbolizing being stands apart from the causal chain. By the fact that he can symbolize and thereby know the chain of causal events, he stands outside it. Neither intuition nor symbolization fit the causal model, yet they are real occurrences. Therefore, one must conclude that the causal model is not an adequate explanation for man.

The full philosophic consequences of this conclusion are not the subject of this work. However, one particular aspect must be developed further, because it leads to a more complete understanding of art. Man knows the world
because he can symbolize it. He constructs through symbols his own conception of the world. At the same time man also conceives, through symbols, of himself. He constructs his own concept of what he is and what actions are possible to him. By placing himself outside of the chain of causality through symbolization, man forces on himself the possibility of choice. Man may symbolize the present and any number of alternative futures. Man chooses a future for himself when he chooses the actions he performs in the present. Understanding of symbolization forces acceptance of a non-causal, freely choosing image of man.

All human action involves choice. The artist may not think he chooses, but he must. Since each art work is an abstraction it cannot present the totality of feeling. But, one must not make the mistake of thinking that the artist makes his choices in a totally judicious process whereby, when painting a scene, he consciously selects one thing to portray and leaves out something else. Virtual form in art is created, not re-created. As Susanne Langer notes, artists who made bold departures from "actual forms" of things, such as Leonardo and Cezanne, believed they were faithfully reproducing nature. Leonardo even advised his students to set up a glass through which they could see objects, and then to trace the contours on it. Cezanne always claimed the absolute authority of nature. What we
call choice, then, enters in the transformation of natural elements into pictorial forms that takes place in seeing. The artist, in fact, portrays "what he saw." For Cezanne, sight and composition were the same thing. Leonardo apparently saw only what, when transferred to the canvas or paper, would create the primary illusion. Langer writes, "In this way the painter's vision is indeed selective; but the line that 'selects' a form was never found in actuality." Only a lesser artist actually notes the process by which sense data are abstracted as forms in which feeling may be symbolized.

Truly successful works of art must go beyond the artistic practices of the society in which they arise. The artist must see the expressiveness of form in a way which modifies the familiar motifs according to his own abstractive vision or his personal concept of feeling. Langer calls this personalization of the art work "individuation" and writes of it:

"Wherever such a projection of inward vision takes place in the making of a piece, its maker is approaching it not in the spirit of a schooled craftsman, but as an artist, and the piece is a work of art, whatever the success or shortcoming of its realization, its measure is more than vital expression, it is the expression of his idea, his personal conception of the ways of feeling." The artist is guided not by conventional forms, but by his own personal idea of human feeling. What has happened has been that a great mind has "chosen" to depart from the
familiar and express his own different vision of the inner life. What occurs is not a gradual elaboration of existing forms but an individuation of form along an uncharted path. Langer notes that individuation of this type is especially adequate for expressing, "... the rise and course of emotions and the coloration that each artist's particular 'habit of emotion'... lends to all the sights and sounds and events of the outside world." Individuation appears in the virtual life of a work, but it may be impossible to determine where it actually originates.

Individuation gives rise to the humanization of art. Each work becomes an individual conception of unique human feeling. Along with the phenomena of secondary illusion presented in the last chapter, individuation makes art truly human in the image it projects.

**Symbolic Roots of Emotion**

Symbolization can be found at the root of nearly every uniquely human attribute. Not only is the symbol the basis for knowing the world and for man's freedom of choice, but it also allows the articulation of feeling which is necessary for the emergence of human emotion. This is a rather complex development of which only the bare outlines may be presented here.

Symbolization forces on man the necessity of choice. Once man can hypothesize alternatives in any situation,
he must choose between them. In order to choose between alternatives he must evaluate them. Cognition is the discovery of what things are; evaluation is the analysis of the relationship of things to man, himself. Man evaluates in order to discover what things are beneficial which he may then seek and what things are harmful which he may then avoid. Those things man seeks which are beneficial for himself are called values. Man must make value-judgments in order to live. Man's need of values is a direct result of his ability to symbolize.

Feelings exist in man prior to symbolization. Man experiences feeling pleasure or pain, but he is not able to conceptualize this experience without symbols. Even the basic feeling of being alive, sentience, found in man as well as all animals, cannot be conceived without symbols. It may, therefore, be said that fleeting experiences of feelings are possible before symbolization, but knowledge of those feelings is not.

The root of emotional experience is found in the primary irreducible states of feeling common to all men. The child, much like an animal, seeks to achieve pleasure and avoid pain. Pleasure is experienced as a value, pain as a disvalue. The child, unlike any animal, may also seek a sense of cognitive efficacy or cognitive control and avoid cognitive ineffectiveness and cognitive helplessness. Value is experienced in mental clarity and disvalue is
experienced in mental chaos. The value of efficacy as such, like the value of pleasure as such, appears, according to Nathaniel Branden, psychologist, to be experienced as a primary.\(^9\) (This would clearly seem to be paralleled by Schachtel's idea of "autonomous object interest" as a motivating force in the child (see Chapter 2) and Helen Keller's joy in learning the names of different things.) This means that the concepts of value and disvalue are initially experienced by man as feelings and only later are cognitively grasped. But, even after values are cognitively understood, the feeling component remains. In fact, it is the articulation of these primary feelings which give rise to the emotions.

Normally the development of emotion is much like the acquisition of speech in that it is unnoticed and taken for granted. But, just as Helen Keller's experience in the well-house offered an opportunity to see the origins of speech clearly, it also offers clues as to the origin of emotion. Prior to the walk to the well-house, when Helen was given her hat, she experienced pleasure. Earlier she had, in a state of mental chaos or cognitive disefficacy, destroyed a doll. The primary feelings are clearly evident, but remarkably undeveloped for an eight-year old girl. However, nothing more than this would be found in any man if he had not developed symbolization. But, when she returned from the well-house she recalled that doll she had
destroyed. Not only did she know that she had destroyed it, but she evaluated her action and for the first time, "... felt repentance and sorrow." Not only has Helen learned the mystery of language, but she has also opened herself to the possibility of emotional experience. The tie between symbolization and emotion is clear. Only with symbolization can the knowledge and evaluation which are the means of emotional articulation be gained and emotion itself be unleashed.

Following Branden, one may say that the relationship of value to emotion is one of cause to effect. Emotions are the end result of an automatic and largely unconscious process of appraisal. As man grows, first as a child and then as an adult, he acquires and develops values and dis-values. Many of these become automized, so that in any situation in which he finds himself he need not recall his entire value structure in order to choose between alternatives. The experienced motorist who sees an oncoming truck veering toward a collision will avoid the collision by an apparently automatic response of braking and turning. But, behind the automatic response was an incredibly rapid integration of perceptions and appraisal of the situation. A similar integration and lightning-like appraisal is behind each emotion. A man's emotions are his automatic barometer of what is for or against him (within the context of his values and knowledge). An emotion is a value-
response involving somatic and mental components. Branden writes: "An emotion is the psychosomatic form in which man experiences his estimate of the beneficial or harmful relationship of some aspect of reality to himself." While man may think the sequence of experience is perception to emotion, the actual sequence is closer to perception, evaluation and emotion. Most of the time man remains unaware of the intervening value-judgment.

The development of emotion is sequential. From the child's first experiences of pleasure or pain, efficacy or inefficacy to the heights of self-realization is a long process of articulation and development. At each stage man's emotional development interacts with his cognitive and symbolic abilities. The choices he makes and the success or failure he encounters will clearly influence his future possibilities.

Emotions are not tools of cognition. Ultimately, what one feels in relation to anything is irrelevant to whether it is a true value or not. Reason and emotion are not antagonists. Rationality is involved in every symbolic transformation. Emotions are clearly the products of such transformations in their dependence on perception and evaluation. If one experiences an emotional impulse contrary to one's own conscious evaluation, what it reflects is a struggle between two opposing ideas, one in the form of feeling.
Every good work of art has the appearance of being alive. The interaction of dynamic tensions and stable forms, an interaction of apparent change and apparent permanence, clearly parallels in virtual form the characteristics of life as man knows it. Langer suggests that this gives each successful art work a "sense of life," meaning a semblance of living.¹³

But the term, "sense of life" need not only be used to refer to the semblance of living, it may also be used to refer to a sense of what it is like to be alive. A "sense of life" in this sense, as used by psychologist Nathaniel Branden and novelist Ayn Rand, refers to an implicit view of life which each individual holds as a personal attitude underlying his emotions.¹⁴ In order to distinguish "sense of life" in this sense from Langer's usage, this "sense of life" will be referred to as a "sense about life." It may be considered similar, if not identical, to Langer's "habit of emotion" (see above).

The "sense about life" is the result of a process of emotional generalization. Man cannot refrain from integrating his experiences. Each choice he makes adds to the sum of total experience he has. Each success and each failure adds to his certain implicit view of life. His every choice implies an estimate of himself and his rela-
tion to the world. The sense about life is this implicit view. Such a sense is formed only slowly over time. But, every emotion a person experiences includes this sense as a component. The sense about life is an attitude which informs his view of himself and his world. It is the emotional sum of a man's most basic values. It affects his every action.

Even perception is affected by sense about life. It is now known that man is not just a passive receiver of sense data, but that even perception symbolizes sensation for transmission to the brain. It is in the active character of perception that the sense about life has a role. A simple example of attitude effects on perception was given by Jerome Bruner at Harvard in experiments in which, relative to a neutral comparative scale, coins appeared larger to poor children than to rich children. Most actions in which man participates are much more complex, demanding more complex value-judgments and bringing forth more complex emotional responses. Underlying all of these is the sense about life.

When an artist creates virtual forms, he is forced to make abstraction for presentation. In his unconsciously selective imagination, his personal sense about life (habit of emotion) affects his actions. He cannot escape it. If the artist is creating a work which is an expression only of the simplest form of sentience, the influence of his
sense about life may not be apparent. But, in highly personal, individuated works the sense about life must play a crucial role in the artist's symbolization of feeling. His uniquely personal vision of quality, which he uses as a symbol of feeling, must have been informed by his personal sense about life. The artist puts into his work only those things which he considers important enough to include. All else is omitted. This "choice," often totally unconscious, is the result of his values expressed in his sense about life. Architectural critic Christian Norberg-Schulz leaves out the idea of sense about life, but expresses the same idea writing, "When we say that forms are 'expressive,' it therefore means that they manifest higher objectives, which eventually are based on values."\textsuperscript{16} This explains why art, which is most highly individuated, is usually concerned with articulation of the higher forms of feeling, the emotions.

**Art and Intersubjectivity**

It is possible to encounter a work of art and come away with complex and even contradictory feelings. The reason for this is the composite nature of art. Langer writes:

"When we say that something is well-expressed, we do not necessarily believe the expressed idea to refer to our present situation, or even to be true, but only to be given clearly and objectively for contemplation."\textsuperscript{17}
In terms of the tetrad of interpersonal process (see Chapter 2), the symbol depends both on the quasi-identity of symbol and object and the intersubjectivity established between individuals. Langer argues that it is the formulation of the symbol of feeling (the quasi-identity aspect) which determines whether a work is good or bad. The quality of the formulation depends on the degree of candor.\textsuperscript{18} If the envisagement of feeling is impeded by other emotions or feelings not formed and recognized, the work will show distortion. The result will be bad art, which is not true to, "... what a candid envisagement would have been.\textsuperscript{19} A bad work of art is one in which the artist tries, but fails, to express a given feeling. The concept of the work is unclear. It is perceived by an observer as flawed.

The intersubjective dimension of the art symbol may also fail, even if the work is clearly formed. In Chapter 2 it was suggested that intersubjectivity represented a common validation of existence. In art, intersubjectivity depends on the common validation of feeling which may be simple sentience or complex emotion. In art works in which the feeling conceived and expressed is a form of sentience, intersubjectivity rarely fails. But in art which is highly individuated and expressive of an articulate personal emotion the common validation of feeling may be impossible if the sense about life of the artist and his
audience are totally divergent. For example, the sense that one artist may have about life is that it is a maze of complexity and contradiction. A second artist may sense that life is simple and logically ordered. If each creates highly individuated works, their two different senses about life will cause their works to be very different. Each of these artists may create works which are clear envisagements of feeling, but consider what would happen if each artist was to see the work of the other. Each might comprehend the other's work because of its clarity, but the intersubjective validation of feeling would not take place. Neither artist would experience the other's work with a sense of personal revelation and the aesthetic emotions, if experienced at all, would probably be somewhat muted. In Chapter 2 it was argued that intersubjective validation occurred if the symbol presented its perceiver with something he had experienced but never consciously conceived. In the case of the art symbol, the same is true of feeling. The import of the art work can only be completely perceived if it presents a feeling previously experienced. If the sense about life of the artist (and, therefore, of his work) is totally opposite that of a perceiver, intersubjective validation may fail.

When intersubjectivity fails the perceiver comprehends the symbol at an objective level but does not recognize it at the intersubjective level. If the work is
a clear, candid expression, he may say, "This is a great work of art, but I do not like it." This is not a contradiction. It merely reflects the tetradic structure of symbolic phenomena.

When the work is a clear expression and it is inter-subjectively validated then the perceiver may experience the aesthetic emotions. In the context of this chapter, the fact of a positive emotional response implies a value-judgment that the work is beneficial for oneself. Why should art offer any value? What is the necessity of art? The answer to these questions lies in the realm of intersubjectivity and the "principle of psychological visibility" identified by Branden. Branden gives an account of two events which show the root of the aesthetic emotions. The first occurred one afternoon while he was sitting alone in a room contemplating a philodendron plant. This contemplation was enjoyable, so he asked, "What was the source of this enjoyment?" The enjoyment came not from the form of the plant, because if it had been artificial, it would have looked the same, but his response would have been altered. The life of the plant was its value. But, what value to man is the observation of successful life? Branden suggests that if one were on a desert planet where one had every material provision for survival, but where nothing was alive, the appearance of a single living plant would be a source of intense pleasure. Why should this be true? Branden answers,
"Because ... life by its very nature, entails a struggle, and struggle entails the possibility of defeat, and man desires, and finds pleasure in seeing, concrete instances of successful life, as confirmation of his knowledge that successful life is possible." 22

This represents a means, not of allaying doubts, but showing on a perceptual level that which man knows conceptually. This is nearly what happens in all art, even in the simplest forms of decorative design which are expressive of only the simplest forms of sentience. The artist takes a conceptualization of the feeling of life and symbolizes it through form so that it may be perceived by an audience as quality. Here is a source of aesthetic exhilaration. Branden extends the principle further in a way which is equally applicable to art. He relates that one afternoon he was playing with his dog, boxing and jabbing in mock ferociousness. The dog appeared to grasp the playfulness of his intention; though snarling and snapping, she remained gentle in a way that projected trust. Why was this a source of enjoyment? If the dog had been a robot without any consciousness, but programmed to respond similarly, the enjoyment would have been lost. What was important was an interaction with another living consciousness. Consciousness, according to this conclusion, is of value to consciousness. Interaction with the dog offered psychological visibility; it made Branden aware of himself, because the dog responded to him as a person. If the dog had responded inappropriately, then the value
would have been lost. The importance of visibility originates in the unique way man experiences himself. Man experiences himself as process. He experiences a shifting flow of thoughts, emotions, sensations, and perceptions. His sense of himself remains a diffuse feeling. But, man needs an objective correlation of self, of his inner life. Art provides that correlation through the intersubjective objectification of feeling. When the artist creates a fully individuated work, he objectifies a feeling which is uniquely his. When a perceiver encounters a work in which the objectified feeling corresponds to his own sense about life, he not only perceives the feeling, but he also perceives himself. His inner life is confirmed, not in direct communication, but in the intersubjective symbolic abstraction of feeling in form. His response may be, "I am not alone in conceiving of life, of feeling, in this way."

Here one sees the root of the aesthetic emotions in the intersubjective state created by the artist through the art work. Symbols of sentience offer confirmation of sentient life. Symbols of complex feeling offer confirmation of human value response as personally experienced.

Summary

For the art symbol to be completely experienced as revelation, not only must the quasi-identity of form and
feeling be clearly articulated, but the feeling must also be intersubjectively validated. This intersubjective validation depends in highly individuated works on the compatibility of the sense about life or habit of emotion of the artist (as shown in the work) and that of the perceiver. It is possible that a work may be particularly profound, but that a perceiver might not recognize it as such.
Notes


4. Ibid., 78.

5. Ibid., 78.


7. Ibid., 225.

8. Branden, N., op. cit., 64.

9. Ibid., 66.

10. Ibid., 68.

11. Ibid., 68.

12. Ibid., 69.


18. Ibid., 380.

19. Ibid., 381.


CHAPTER 6: THE ART OF ARCHITECTURE

Symbol in Architecture

This work has come full circle. The questions with which it began were those of meaning and purpose in architecture. It was discovered that those questions were not restricted to architecture, but were central to all of culture. To fully grasp those issues and to begin to find an answer, an exploration of the phenomenon of symbolization was required. Symbols were found to be a uniquely human product, completely unlike signs. Between discursive and presentational types, formal differences pointed toward differences in symbolic capacity. The concept of presentational symbol proved to be a valuable key to approaching art from the point of view of the artist creating the art work with its aspects of illusion, abstraction and virtual life. With this framework, it is now possible to begin a complete exploration of the art of architecture itself.

The development of architectural theory over the last two centuries has been very difficult. Each proposed theory has seemed to center on a different aspect of architecture, ignoring or denying all of the others. The nineteenth century produced theories based on mechanical, biological, literary and even gastronomic analogies. Architects of that time seemed unable to generate a theory of architecture independently and so tried to find an analogy with another
field which might serve to clarify architectural issues. All of these efforts failed. As a result, early theories in the twentieth century tended to concentrate on the actual values of shelter, security and physical comfort, ignoring illusion and related aesthetic questions altogether. The modern movement argued that functional considerations were the root of all beauty in architecture, but the failings of modernism have led many to question this idea. As a result, recent efforts by some theorists have tried to introduce symbolic concepts into architecture in one form or another. Unfortunately, many of these efforts have floundered in an attempt to describe architecture as a discursive symbol system. All theories which suggest that architectural forms can be generated by copying forms found outside of architecture depend on forms having meaning by reference, much as words mean by referring to things. But, as has been shown, art symbols have meaning as wholes, and the elements within any work only have meaning by virtue of their relations to the whole, not by reference to things outside. Other efforts have suggested the development of an architectural vocabulary of beams, columns and the like, which would be combined as words are combined in linguistic sentences. These efforts again ignore the nature of all art symbols, including works of architecture, as presentational wholes. Architecture is not language. It has no vocabulary, no dictionary and
no translatability. Each work of architecture must be
looked at as a **single unique symbol of human feeling**. The
context offered by the theory of art symbols is a framework
through which architecture may be viewed in this way.

Architecture is probably the most practical,
material-bound, economically and socially limited of all
the arts.² This makes it one of the most difficult fields
to explore, which explains why it may be approached only by
a circuitous path. Langer considered architecture a test
case for the theory of art as feeling in form because in
architecture reality and appearance seem to come very close
together.³ If the theory is to be adequate for architecture
it must admit no exceptions. If architecture is a purely
functional science except in the case of monuments, then
pure functionality cannot be absolutely essential.
Sculptural concerns appear to apply to many works, but not
to underground construction or factories and mills so
architecture is not a form of sculpture. Whatever archi-
tecture is, must be found in all of architecture
without exception.

Architecture has generally been regarded as the
definition or creation of space. Such statements as archi-
tecture is the "art of space" are highly problematic,
however, since they do not define exactly what they mean.
Most theorists seem to refer to the actual physical space
within a building when speaking of the creation of space.
Typical of this viewpoint is the writing of Bruno Zevi in *Architecture and Space*\(^4\) and Sigfried Giedion in *Space, Time and Architecture*.\(^5\) From a strictly scientific viewpoint, to speak of creating physical space is clearly in error: space exists. In terms of making divisions of actual space, such theorists are somewhat closer to the real issue, but they have still tended to ignore the fact of human perception (of space) in architecture. Still, a few theorists have begun to recognize that the space of architecture is not mere physical space, but has the attributes of a truly artistic space concept. It is evident that many architects have viewed space as an entity which might be carved and shaped. Moholy-Nagy, a modern theorist, clearly had this in mind in the last paragraph of his work, *The New Vision*:

"A constant fluctuation, sideways and upward, radiant, all-sided, announces to man that he has taken possession, in so far as his human capacities and present conceptions allow, of imponderable, invisible and yet omnipresent space."\(^6\)

But a full grasp on this cannot be achieved unless human perception and understanding is recognized as a necessary part. The apparent unreality of the architect's space led critic and theorist Christian Norberg-Schulz to eliminate space from the theory of architecture he proposed in 1963 in *Intentions in Architecture*, but in a later work, *Existence, Space and Architecture*, he reinstated the space concept understood from a point of view dependent on human interaction. Architecture clearly involves space, but not simply the physical space of the real world.
Architecture is one of the plastic arts. The architect, like the painter and the sculptor, deals in the creation of space, but like the painter and sculptor the architect works in a virtual realm. The primary illusion of architecture is virtual space. However, as painting involves the abstraction of virtual scene, and sculpture the abstraction of virtual kinetic volume, architecture, according to Langer, is involved with the abstraction of an ethnic domain, or virtual place. An ethnic domain may be considered as the area or space under the influence of a human activity or group of related activities. The architect creates a virtual realm from an actual place. The difference between an actual location and an ethnic domain is perhaps best illustrated by the fact that an ethnic domain need not be stationary or fixed in one place. A ship, a Gypsy camp and a circus are clearly well-defined self-contained places, but they may often shift location. Literally, the Gypsy camp is in a place; culturally, it creates a place. An open field is an actual location, but until it is occupied by the circus tent or the Gypsy camp it is not an ethnic domain. And, although the Gypsy camp and the circus may occupy that same field at different times, they are clearly different places. A virtual place is not tied by location, but must be created. The ethnic domain made visible, tangible and sensible is clearly an illusion. It offers the illusion
of self-contained, self-sufficient perceptual space. Langer summarizes this very simply, "... architecture articulates the 'ethnic domain,' or virtual 'place,' by treatment of an actual place." ¹

The extent of the concept of virtual place or ethnic domain must include all of architecture within it. On the one hand, the ethnic domain of the circus or the Gypsy camp or the ship has already been noted. The illusion may be established simply by an array of upright stones in a circle as at Stonehenge, or even by a single stone or by a massive monument such as the famous St. Louis Gateway Arch. In such cases the outside world is dominated by the object and becomes its frame or context. On the other hand solid rock tombs such as those of ancient Egypt, which have no outside, create their own totally illusory semblance of place. And, between this totality of closure and the center surrounded by total openness all other possible forms of virtual place may be included.

The idea of the ethnic domain is crucial to this concept. Human culture may be considered the sum of all the activities of human existence. Each individual creates his own pattern for himself and each of these individual patterns of action interlock and intersect in a cultural framework. This framework as such is invisible; its artifacts are visible as are its signs. But each of these is only a fragment of the whole. The culture is not
grasped as a whole through any of these. It is left to the architect to create the image of the culture, "a physically present human environment that expresses the characteristic rhythmic functional patterns which constitute a culture." Those patterns are alternations of all activity—departure and return, sleep and waking, work and relaxation, play, eating, conversing, studying, dreaming, and worshiping. Every part of an individual or social order finds its image in the form of environment, the semblances of architecture.

Within nature there is a complete indifference as to place. The role of architecture is to delimit a place with center and periphery as a domain for human activity. A world for human activity is the semblance created by architectural treatment of a place.

The nature of the activity finds its conception and image in the architectural environment. At the level of the individual, the image is most often found in the individual dwelling. At the level of the group, the image is found in works in the public domain—both single communal buildings and multi-building communal environments. At each level, the actor or actors are the self around which the architect designs a world. That world is a virtual place which acts as a symbol of human functional existence. It is important to note how this differs from the error of much modernist functionalism which saw
the environment purely as a system of signs of human existence. A convenient bench was construed as a sign for sitting, a convenient door as a sign for passage, a convenient sink as a sign for washing. This was the total import of architecture according to functionalist theory. Architecture, however, is symbolic. Each work of architecture is a single symbol, embodying the feeling, the rhythm and the sense with which human activity occurs within it. The image of architecture found in the visible semblance of ethnic domain is the symbolization of the feeling of human activity.

Aspects of Virtual Place

The writings of several architects who have explored the philosophic implications of their own work offer insight into the development of nearly every aspect of art symbolism in architecture. As in all art, feeling is found in architecture as quality. The architect probably does not generally come to conclusions about all of the human activities for which he designs, but rather he discerns a certain feeling which is embodied as quality in the work. The quality of the religious experience, of worship and self-transcendence may be epitomized in the design of the holy sanctuary which cannot be a dwelling place for man because it seems so totally pure and removed from practical living. A great windowless tomb with the
qualities of stillness, silence and darkness may have the semblance of peace which is the final feeling of death. The open council chamber of a city hall will have a different quality from the lecture room of a university. In one, a feeling of openness to the citizenry of the place must be omnipresent, while the other will embody the solemnity which accompanies all true learning. Two similar places in functional layout may have entirely different senses of place. Within the abstraction of the art symbol it is the quality of the work which conveys the feeling.

The quality of the work must pervade the entire created art symbol from the simplest detail to the total form. The work of architecture is but one symbol. It must have a single import. In his work, Kindergarten Chats, architect Louis Sullivan wrote that the expressiveness of architecture lay in the sameness of "organic quality" throughout an entire work.\textsuperscript{12} Sullivan later explained in greater depth:

"A building which is truly a work of art ... is in its nature, essence and physical being an emotional expression. This being so, ... it must have, almost literally, a life. It follows from this living principle that an ornamented structure should be characterized by this quality, namely that the same emotional impulse shall flow throughout harmoniously into its various forms of expression - of which while the mass-composition is the more profound, the decorative ornamentation is the more intense. Yet both must spring from the same source of feeling."\textsuperscript{13}
While Sullivan is mistaken in limiting expression to just emotion, if one substitutes the more general form, "feeling," throughout his statement, the meaning is clear. The work of architecture as an expression of feeling must be "one thing."

The processes of presentational abstraction necessary to the production of art symbols are found in architectural creation. The successful work of architecture creates an ethnic domain clearly abstracted from purely practical context. Le Corbusier, the modern architect and theorist clearly had this in mind when he wrote in *Towards a New Architecture*:

"Architecture ... brings into play the highest faculties by its very abstraction. Architectural abstraction has this about it which is magnificently peculiar to itself, that while it is rooted in hard fact, it spiritualizes it."

As in all art symbols, the primary abstractive means are found in the tensions and resolutions of the virtual architectural space. Combined with these the tendencies to closure or gestalt add to give the work its underlying quality of dynamism. The effects of spatial contractions and expansions as creators of tensions in architecture have been widely experienced. Langer notes that an open outdoor space is many times larger than the largest building, but that a sense of vastness is more likely to be felt on entering a building. On the other hand, the space inside St. Peter's in Rome may often be felt to
contract because its size is apparently reduced by its complete resolution of tension in the totally balanced proportions. Indeed, it has been suggested that the major difference between Renaissance and Baroque architecture is the handling of spatial tensions. The balanced Renaissance interiors usually are static or seem to contract while Baroque interiors show rather dramatic expansion of space.\textsuperscript{16}

The basic dynamism inherent in the art symbol rooted in the balance or conflict of tensions within an enclosed whole or gestalt is a primary cause of the semblance of life in successful art symbols. The semblance of life is further reinforced by rhythmicity and periodicity found in art which also echoes life. This rhythmic quality is most widely recognized in music, but it is found in all art including architecture. A succession of repeated forms can be used to suggest the passage of time as represented in organic growth. Le Corbusier offers an example of this rhythmic quality in his description of the Green Mosque at Broussa in Turkey:

"You are in a great white marble space filled with light. Beyond you can see a second similar space of the same dimensions, but in half-light and raised on several steps (repetition in a minor key); on each side a still smaller space in subdued light; turning round you have two very small spaces in shade. From full light to shade, a rhythm .... You are enthralled by a sensorial rhythm (light and volume) and by an able use of scale and measure into a world of its own which tells you what it set out to tell you."\textsuperscript{17}
This rhythmic dynamism leads, in turn, to the full semblance of livingness in architectural symbols. Architecture as the complement to rhythmic patterns of human action holds the symbolic impression of the functional life. Any work which creates a successful ethnic domain must have the appearance of life. Architects Louis Sullivan, Frank Lloyd Wright and Le Corbusier each saw this in his own way and it permeates their writings. Throughout their theoretical treatises one finds notions of biological organic life: organic growth, organic structure, living form, nature, vital functions and feeling. Such terms cannot be taken merely to apply to the physical materials in the building nor to just the forms nor even the actual physical spaces. These references to life must refer to the virtual form of the architecture, the virtual place or ethnic domain. The passage from Sullivan quoted above gave some feeling for this understanding of the organic quality of the work. Sullivan introduces the complete scope of the living illusion of the successful architectural work early in *Kindergarten Chats* in his description of H. H. Richardson's Marshall Field Building in Chicago. The following description is of the building (not the architect):

"... here is a man for you to look at. A man who walks on two legs instead of four, has active muscles, heart, lungs and other viscera; a man who lives and breathes, that has red blood ... a virile force - broad, vigorous and with a whelm of energy ... I mean that stone
and mortar here spring into life, and are no more material and sordid things, but, as it were, become the very diapason of a mind rich-stored with harmony. 18

Sullivan's pupil, Frank Lloyd Wright, placed even greater emphasis on the idea of organic architecture which was the keynote of all of his design. This living quality is a result of the semblance of virtual place. It is often called an "atmosphere." It is clearly a property of the built form, for if the form is destroyed, the quality is lost.

The fullness of the living nature of a work of art as an image of the mind appears in the phenomenon of secondary illusion. Even though architecture is the most practical and concretely bounded of the arts, it still may be a medium for the appearance of secondary illusion. Le Corbusier writes of the secondary illusion of drama overwhelming the primary illusion of space as ethnic domain: "The cathedral is not a plastic work; it is a drama." 19

In any significant work of architecture, there will be a wealth of secondary illusions intersecting with and building upon the primary illusion of space.

The theory of architecture as a type of art symbolism with the primary illusion of space formed as a virtual place through which the feeling of human functional existence may be conveyed seems to clarify many problematic issues in architecture. 20 First, the elements of structure, of mechanical and related systems, and the like while
important, are not central to architectural theory. Technology may yield new ways for architectural symbols to be constructed, but technology should not dictate architectural form. Second, architecture must proceed primarily from inside out. The work is to be symbolic of the life activities it contains. Third, the conception of architectural form as symbol means that everything within the work as furnishing should participate in the creation of ethnic domain. The embellishments of an interior decorator may serve to destroy a successful illusion by their non-participation in it. However, if properly selected or designed, furnishings will participate in the creation of the space, the living abstraction of an architecture filled with feeling.

Existential Keynote

To this point, the development of the semblance of space in architecture has been explored within the context of the larger theories of symbolism and in particular of art symbols. The ideas of virtual form, semblance, quality and virtual life which were discovered in the art symbol have all been shown to find complete expression in architectural works. This means that even though architecture is more utilitarian than any other art form, it is nonetheless capable of the full range of artistic symbolization. Architecture is not an "incomplete," "imperfect" or "lower"
form of art. As an art, architecture stands equal to any other art. A successful work in architecture can be as expressive as a successful work in any other type of art.

In the present work, the method followed has been one in which architectural symbols have been seen in the more general context of symbol theory. It would have been equally possible, though perhaps more difficult, to develop a symbol theory within architecture itself without the more general background. This is the direction which has been followed in the work of architectural theorist and critic, Christian Norberg-Schulz. His sequential development of a symbol theory in architecture has been well-documented in the three works *Intentions in Architecture*, *Existence, Space and Architecture* and *Meaning in Western Architecture*. A complete summary of the theories of Norberg-Schulz is clearly outside the scope of this work. However, the work of Norberg-Schulz is compatible with that of Langer and it does allow a further exploration of the architectural symbol.

Norberg-Schulz argues that certain concepts are basic to all conceptions of space. These are the archetypal relations of primitive spatial symbolism and they are the first space concepts developed by all children. They appear to be the basis on which all more complex spatial symbolism builds. They should underlie all symbolization in any ethnic domain. The concepts comprising the elementary organization of space are center, direction and area.
The center is the first spatial concept to appear. It is the primary place of action. Subjectively, every individual stands in the center of his own world. This is particularly evident in the "self-centered child" who initially recognizes no world other than himself. However, as the child achieves symbolic capacity, he is able to symbolize locations outside himself as the focus for certain activities. Thus, for example, a bathroom may be associated as the center for bathing, a kitchen for eating and a bedroom for sleeping. The focus of any action may be conceived as a center. The center begins as a subjective means for personal organization, but through symbolization, objective centers for individual or interpersonal activities are established and recognized. In a sense, all human activities are centered.

The specification of any location as a center immediately introduces the idea of inside and outside. A center is located in a larger context. Any center implies directions. The vertical direction has often acquired the idea of pointing above or below the normal activity of daily life. It is the path to another reality and as such is often considered the sacred dimension of space. All horizontal directions relate to the concrete world of human activity. Taking possession of the environment introduces the idea of departure and return. The path is a basic part of human action. Without paths man remains
static. The path introduces the dynamic aspect of existence, of human activity.

The path divides the environment into different areas or districts which are more or less well-known. These domains or areas are structured by the paths through and around them. In a sense, domains are very close to locations or centers because they may be defined by closure and by common activity patterns. However, the distinction between center and area is useful, because it allows a clear differentiation of organization within an environment. 24

These primary forms of space conception are closely related to the basic dualities of symbolic abstraction. The paths between centers are elements which introduce dynamism into the design and in architectural space indications of path are sources of tension. However, paths are also contained within areas or districts which relate to the abstractive principle of closure or gestalt. The basic forms of environmental (architectural) symbolization become in architectural space the primary elements of abstraction. The architect may begin his design with directions and paths or with whole forms, but in the final product both of these intertwined aspects will underlie the fundamental structure of the work and give it the feeling of life.
Levels in the Domain

These aspects of space conception and symbolization provide a clue to the extension of architectural symbolism beyond the limitations of single works. The interaction of centers, paths and areas is most evident, perhaps, in the house, in which different rooms or perhaps even the furnishings in the rooms act as centers. Between these centers are the paths or directions. Each room or the whole house is an enclosed whole. The treatment of the paths and centers within the whole of the structure add up to form the architectural symbol, the dwelling.

However, individual houses and public structures combine on an urban level. The urban level is composed of centers (individual buildings), paths or directions (streets, sidewalks, and so on) adding to form the whole area (the city itself). The city is a product of man, a creator of space, and, therefore, symbolic, not at the individual activities level, but at the level of social interaction and cultural development.

Beyond the level of the city, is the more general level of landscape in which the cities function as centers and the major routes as directions. The configurations of landscape set off areas and indicate natural paths. Norberg-Schulz notes that, "As nature is not man-made, it keeps us at a certain distance and offers great but"
relatively undifferentiated experiences." Thus, landscape architecture may be construed as man's attempt to create landscape forms of a more precise and, therefore, of a more meaningful order.

It may be suggested that the possibility of architectural symbolism, through the abstraction of ethnic domain occurs at these levels: landscape, urban environment, individual building and furnishings. At each level the abstractions of path, center and area interact thereby creating the tensions and closures of the art symbol.

However, although these abstractions provide the structure of the work, they can do so without creating architecture. Architectural works must involve feelings embodied as quality or what Norberg-Schulz has called character. Norberg-Schulz states this clearly:

"... any meaning is revealed in a particular place, and the character of the place is determined by this revelation, so existential meanings manifest themselves as 'characters.'" It is just as possible to talk about the character of the landscape or of a city as it is of an individual building. However, it is also clear that at the level of the individual structure greater differentiation and definition will be possible and, therefore, at this level the import of the symbol may be more precisely defined.

Every work of architecture is a symbol of feeling. Each work deserves care and effort, for through any work feeling may be clarified and conveyed. Frank Lloyd Wright saw this:
"Regard it as just as desirable to build a chicken house as to build a cathedral ... it is the quality of character that really counts." 27

Summary

- Architectural works are symbols of feeling. The mode of illusion in architecture is virtual place or ethnic domain. The architect creates a virtual realm from an actual place which acts as a symbol of human functional existence. The architectural symbol partakes in all of the aspects of the art symbol, quality, abstraction and virtual life. Within architectural symbols the primary art abstractions of tension and gestalt are expressed as path and domain. These abstractions are found on all levels, object, building, city and landscape which suggests that each level may give rise to symbolic conception.
Notes


8. Ibid., 75.

9. Ibid., 75.

10. Ibid., 96.

11. Ibid., 98.


13. Ibid., 188.


16. Ibid., 160ff.


21. Norberg-Schulz recognized that the architect is not a designer of the physical space of the real world, but rather concretizes what he calls "existential space," a stable personal image of space. This mental space concept will be affected by attitudes, emotions and intentions. The concretization of this existential space as architectural space will include the effects of feeling and emotion as "character." The architectural space and character of Norberg-Schulz are roughly equivalent to Langer's virtual space and quality.


23. Ibid., 430.


26. Ibid., 432.

CHAPTER 7: SPECULATION ON FEELING IN THE DOMAIN

The Place of Motivation

The architect symbolizes the feeling of human life through the creation of an ethnic domain or virtual place. This domain is the semblance of a world which serves to objectify the feeling of human functional existence. This semblance of a world has been characterized above as the counterpart for a self. Where the self is a group, the world is a communal public one; where the self is an individual, the world is the dwelling, a private realm. While an actual environment is a system of functional relations determined by practical convenience, the virtual space of architecture symbolizes human functional existence.

All symbolic phenomena have an intersubjective aspect. Architecture is no different from any other. The architect must conceive of the feeling of functional existence in such a way that so that it can be directly perceived from the forms of the space he creates. If his work is not to remain mute, he must symbolize the feeling of functional existence common to more than himself. While often the architect may design to embody functions not unlike those he has experienced, at times he will be required to conceive of a wider range of human feeling which he has not personally felt. It is, therefore, particularly important to architecture that the art symbol offers the opportunity
to discover new concepts of feeling (see Chapter 4). When architects are called on to cross cultural divisions, as Le Corbusier's design of the new city of Chandigarh in India or Louis Kahn's design of the government buildings at Dacca, Bangladesh, the ability to conceive of feelings never personally experienced would seem to be crucial. If architecture is truly the image of a culture, then it must embody, through symbol, the feeling of the culture of which it is a part. This demands that the architect be able to conceive of feelings in his work which he would have no way of personally living.

One may speculate that the underlying motivations for human functional existence provide the necessary key for the creation of intersubjective works of architecture. Human functional existence is an existence of human action. Man acts in order to live. Through symbolization of reality, man is faced with many possible goals and alternative means of achieving them. Man must evaluate alternatives. All action presupposes evaluation and, therefore, values which man acts to gain or keep. One can say that values motivate action. Values may also be called motivations. It is these values which provide the basis for human emotion associated with human action (see Chapter 5). Human action is accompanied by a feeling component which at the lowest levels is experienced simply as sentience and at more complex levels is articulated as emotion. The feeling of an
action (particularly when that feeling is an articulated emotion) must be based on the underlying value or motivation. If architecture is to be symbolic of the feeling of human function, it must, in turn, be based on those same underlying values or motivations. Therefore, an understanding of human motivation can offer some clues to the feelings symbolized in any architectural work, independent of personal or cultural boundaries.

Motivational Hierarchies

Although many psychological researchers have explored human motivation in significant detail, perhaps the most important work done in this field since 1950 has been that of Abraham Maslow. While other researchers concentrated on certain individual motivational factors, Maslow presented a synthetic theory designed to integrate into a single structure partial truths gleaned from Freud, Adler, Jung, Levy, Fromm and others. Maslow's Motivation and Personality presents the most complete theory of human motivation currently in existence.  

Therefore, it will be used as the framework for this discussion.

Maslow presents several points prior to introducing the structure of his synthetic theory. He makes a clear distinction between means and ends. He argues that the normal desires that any person experiences during the day are means rather than ends. Each conscious desire is seen
as the surface product of the deeper more fundamental aims of an individual. For example, one may seek money in order to buy a car. But one may only want the car in order not to feel inferior to a friend because such inferiority might cause one to lose the love and respect of others. The surface desire for money can clearly be traced to a more basic desire for love and respect. Maslow argues that motivation analysis ultimately leads to certain basic human motivations beyond which it is impossible to analyze. These provide the structure which underlies all human action. Often a person is unaware of his deeper motivation when he acts but it remains as the real cause of his action.

Maslow makes a second point in arguing that anthropological evidence indicates that the fundamental or ultimate desires of human beings do not differ nearly as much as their everyday desires. For example, a particular fundamental desire for self-esteem may be satisfied by two different cultures in two different ways. In one culture, self-esteem may be achieved by being a good hunter while in another by being a great medicine man. In terms of basic motivations, these two vastly different surface desires have the same root. What Maslow suggests is that the ends men seek (unconsciously) may be far more universal than the roads travelled to achieve them. One may easily suggest that this apparent human commonality can offer a
basis for the intersubjective (be it interpersonal or intercultural) objectification of human feeling.

Of course, Maslow admits that things are rarely so simple. Most human actions derive from multiple motivations, which are probably the sources of the complexity of feelings which accompany them.

Maslow's major contribution to motivation theory is his recognition that human motivations appear to exist in a structured hierarchy. Human beings rarely, if ever, achieve a state of complete satisfaction. Men always seem to be striving after something which is felt to be missing. When one desire is satisfied another soon replaces it. Some fundamental desires may never appear unless others are first satisfied. (The man who is continually starving to death will not be highly motivated to satisfy his needs for self-esteem by writing a novel. Instead, he will seek something to eat.) Individual motivations only exist in the context of a fabric of desires, not in total isolation. They appear to be organized in an ordered hierarchy.

Since the actions of human beings take place in physical and cultural environments, desires and values will be manifest in ways affected by environmental components. Motivation theory is the complement to situation theory. The answers offered to understand human action based on an underlying motivational structure are, at best, only partial, but they are a possible starting point for the architect's conceptualization of human feeling.
Maslow's positive synthetic theory of motivation is composed of five primary levels. The first level is made up of physiological needs, which man shares with all other animal life. While it is impossible to list all of these needs, they include food, sleep, sex activity and exercise. The various sensory pleasures (tastes, smells, tickling, stroking) might also be classed in this category. To a great degree these drives are isolatable and locatable somatically. They seem to be relatively independent of each other. They appear to be the most demanding needs in the sense that a person lacking food, safety, love and esteem would probably feel the hunger for food more than anything else. But, when physiological hungers are satisfied, higher motivations emerge and dominate the organism. In turn, when these are satisfied still higher motivations emerge. What this suggests is that satisfaction at one level releases man to seek higher goals.

The second level of need identified by Maslow is safety which includes desires for order, security, stability, structure, law, limitations and freedom from anxiety and chaos. The safety needs appear to be very dominant in children, though they are present in everyone. Infants and children react strongly to loud noises, sudden lights and anything else of a startling nature. It is clear that children prefer a stable, undisrupted routine or rhythm to their lives. Safety motivations are present
in many people's preference for the familiar to the unfamiliar, for job security and for similar goals. Safety needs become primary during disasters, wars and other kinds of emergencies. A person whose safety needs are satisfied no longer feels endangered, just as a person whose appetites are satisfied no longer feels hungry.

It is important, in the context of the present work, to note that the appearance and satisfaction of the safety needs are dependent, at least partially, on the human ability to symbolize the world. Symbolization provides a way for man to know and to order his knowledge. His understanding of order and his ability to differentiate between that and chaos is clearly the result of symbols. While the physiological needs are pre-symbolic, the safety needs—at least when articulated as order and organization—are dependent on symbolic capacity. Higher levels in the motivational hierarchy become so intertwined with symbolization that their emergence would be totally inconceivable without the symbolic transformation.

Maslow's third level, including the love and belongingness needs, is the basis for man seeking social contacts with others in general and for seeking a place in a clan, group or family in particular. This motivation is the primary one behind man's seeking friends and acquaintances and joining neighborhood, civic and social clubs. When focused, it is the basis for the interpersonal relationships of sexual love, marriage and family.
The fourth level of Maslow's hierarchy is the desire for a high evaluation of oneself, for self-esteem or self-respect. Included on this level are desires for adequacy, mastery, strength, achievement, independence, fame, recognition, importance and appreciation. Healthy self-esteem is based on personal competence, ability and achievement out of one's true self, rather than on some idealized pseudo-self.

The fifth level of Maslow's hierarchy is the need for self-actualization. If all previous levels are satisfied, discontent may arise if a person is not doing what he is individually fitted for. Maslow writes, "What a man can be, he must be." Man's desire for fulfillment means he seeks to actualize that which he has in potentiality. This is a desire to become everything one is capable of becoming, or, "... to become more and more what one idiosyncratically is ..." At this level, individual differences may be great.

(Maslow uses the term, "need," in a somewhat looser fashion that it has been traditionally used. A "need" usually refers to that which is absolutely essential to the survival of the organism. Clearly, human beings can and do survive without the achievement of self-actualization. In the usage of the present work, the term, "value" might be more appropriate.)

The motivational hierarchy of physiological, safety, love, esteem and actualization values is not totally rigid.
In some people esteem may appear before love. Also, it may be that some people will partially fulfill one level and begin to recognize the next higher level. Someone who has struggled to achieve the lower levels all his life may lose the higher levels. And, someone who, after achieving a high level, feels the reappearance of needs at a lower level, may not totally lose the high level attained. However, given these and other alterations which may occur, the hierarchy still offers a structuring of values and their related expressions as feeling. Further, as it has been argued that these motivations underlie all human activity, this structure clearly offers a partial means of grasping the concept of feeling to be expressed in the form of architectural space.

Private and Public

For the individual self, the virtual place of the architectural work will symbolize a personal world of feeling of individual action. Underlying the feeling of activity patterns in any private realm (most often the dwelling) can be found these fundamental common values.

In the public realm, the architect must symbolize the feeling of communal human activities. He must create the semblance of a world not for the individual self, but for a community group. The virtual place of communal architecture symbolizes concepts of common functional
feelings. Interestingly, this may occur at two levels: at the level of district, village or grouping in which the arrangement and structure of multiple buildings is manifestation of group activities, and in the design of a single building which a group builds as the symbol of its cultural aspirations. In either case, the aim is identical—the architect seeks to objectify the rhythmic functional patterns of feeling which constitute a culture.

It is possible to seek "community motivations" behind group activities, just as it was possible to find individual motivations for action. All community activities result from individuals acting in concert. Therefore, a set of group aims may be developed parallel to Maslow's individual motivations. Christian Norberg-Schulz suggests a hierarchy of building tasks in Intentions in Architecture which may be generalized as a framework of motivation for community activity.

The first level is that of physical control. Any group living together must assert some degree of physical control over the environment in order to satisfy basic physiological needs. This will include provisions for climatological control (shelter, clothing), adequate nourishment (agriculture), sexual arrangements and related activities. The physical designs of a society will serve primary goals of channeling and filling the physiological needs of its members.
The next level of group motivation will be to provide an adequate functional framework. The ways of life of any group will be organized in some order. Provisions will be made for stability and security. The group will make rules, laws and conventions to guide its life.

The third level is that of social milieu. The social situation of the group will be organized to provide for meaningful human contacts, friendship and group solidarity. Interpersonal relationships may be organized by patterns and conventions for marriage and family life.

The highest community level will be that of cultural context. It is less evident how individual needs for self-esteem and self-actualization interlocking human actions create a pattern of institutions and artifacts which are the expression of the total pattern of life within the group. Culture is the result of the community's unself-conscious understanding of itself. The general level of culture is a reflection of the esteem in which its members hold themselves and the degree to which they are able to actualize their potentialities.

In the work of architecture there is a quasi-identity between the virtual form of place and the feeling of the human activity it surrounds. The work is not just a sign of the activity. At the simplest levels of activity which serve the physiological needs and achieve physical control the feelings of activity are experienced as sentience which
which remains unarticulated. Correspondingly, structures which enclose such activities will be formed as relatively simple symbols. At the more complex motivational levels, the feelings of activities are increasingly articulated. Works of architecture symbolizing these feelings will be more articulated, in turn. At the high levels of self-actualization or cultural development, the greater individuation of goals and feelings is reflected in highly individuated works. The result is a correspondence between the form of symbol and the structure of motivation. The complete motivational model is shown in Figure 1 (see following page).

Limits to Motivation

The difference between a work of architecture and a building now becomes evident. A building made to serve physical need or functional and social convenience need not become architecture. The building only becomes architecture when it is a symbol of the feeling of the activity for which it provides a place. (Of course, this dicotomy between building and architecture, while conceptually correct is irrelevant in practice. Every user will perceive a building as symbol whether or not it was so designed. If the architect ignores the symbolic aspect of his work, the result may be a lack of clarity and candor. The cultural image his work presents will be confused. It will be bad architecture, but architecture nonetheless.)
INDIVIDUAL MOTIVATIONS

Physiological
Safety, Order
Love, Belongingness
Self-esteem
Self-actualization

GROUP TASKS

Physical Control
Functional Frame
Social Milieu
Cultural Context

Figure 1
Just as every work is a reflection of underlying motivations because of its quasi-identity with the feelings they cause, it is also an object in a context. Each context is unique. If the work is to be intersubjectively understood, it must fit the unique way in which it will be perceived and used. Motivation theory is one clue to the deep structure underlying the feeling in the work, but that feeling will be transformed in context. Motivation theory is only a partial aid, not a formula for design.

Summary

Underlying the feeling of human action is a hidden structure of motivation which forms a framework through which an architect may be able to grasp the idea for his work. Motivations are organized, according to Maslow, in a hierarchy of five levels: physiological, safety, love and belongingness, self-esteem and self-actualization needs. Parallel with these individual motivations is a structure of community tasks which are sought by groups acting together: physical, functional, social and cultural goals. When the architect creates a domain for human action the symbolic virtual place of his work is supported by this deep structure of motivations.
Notes


2. Ibid., 21.

3. Ibid., 22.

4. Ibid., 23.

5. Ibid., 24.

6. Ibid., 35-51.

7. Ibid., 46.

8. Ibid., 46.

CHAPTER 8: CONSCIOUSNESS, CONTEXT AND SYMBOL

Relatedness

A keynote throughout the present work has been the intersubjective nature of the symbolic transformation. At once, this intersubjectivity seems to be the key to the understanding of symbols and the cause of their inscrutability. One seems to be entrapped by a language which cannot describe non-linear, non-causal symbolization. The best one can do is to resort to the diagrammatic models offered above (see Chapter 2) which try to show the simultaneous relationships of intersubjectivity and quasi-identity. Still, even these models seem inadequate to the task. The core of the symbolic transformation seems to escape one's scrutiny.

Architecture, as art symbol, must be seen as an intersubjective phenomenon. As in all art, the aim of architecture is to show; architectural symbols show the life of feeling which accompanies human existence on all its various motivational levels. Architecture interacts with human function because it objectifies as symbol the feeling of that function. And, although all human activity may have a common motivational base at deep levels, each activity is clearly worked out in a given temporal and locational situation. When the architect creates, he symbolizes the feeling of actual human functions in exis-
tential settings. Architecture as an intersubjective phenomenon validates and objectifies the cultural context of which it is an image.

The importance of context in design leads to an architecture of uniqueness and circumstance. The creative architect, who successfully symbolizes human feelings, cannot set forth rules or prescriptions for others to follow to generate ideas because he understands the contextual dependence of his creative act. Each must rely on his own abilities of intuition and symbolization. Each work will be unique because it will objectify the unique feelings of a particular human action in a specific setting. In one sense, the idea of architecture disappears entirely. Architect Louis Kahn, saw this when he noted that architecture, as such, "... does not exist. Only a work of architecture exists." Each single work of architecture stands as a unique symbol of human feeling.

(An excellent example of this at a rather simple level is the handling of the design of the rooms in the residential wing of the Paimio Sanitorium by architect Alvar Aalto. Aalto noted that an ordinary room is built for a vertical human being, while a patient's room should be for a horizontal human being. This changed the feeling of the whole design. All aspects including colors, light, heat and so on were reconsidered with this in mind. Further, special care was taken to enhance feelings of privacy in the
semi-private rooms by provision of special quiet wash basins and sound absorbent materials. Every aspect of the life of a bed patient was considered so that the room might enhance his special kind of functioning and conform most closely to his unique needs and feelings. 

In some senses it might almost be said that the architect does not design—the user designs the building. The architect is the pencil in his hand, objectifying conceptions of his functional life. This architecture is personal and idiosyncratic.

Because the work is intersubjective, it not only relates to the user but it also relates to the architect. It is their common validation of the feeling of functional life. Therefore, the architect may be said to be a part of the context of his own design. The context not only includes the user, the functional patterns, the motivations and the location, but it also incorporates the architect. This is not to make the error that the architect seeks to express himself. The architect seeks only to design a building with a certain quality. He may even be unaware of the feeling symbolized and he is certainly unaware of his own character or style. Philosopher Maurice Merleau-Ponty writes this of a painter, but it applies equally to all artists including architects:

"Even when the painter has already painted, and even if he has become in some respects, master of himself, what is given to him with his style is not a manner, a certain number of
procedures or tics that he can inventory, but a mode of formulation that is just as recognizable for others and just as little visible to him as his silhouette or everyday gestures."

Creative Couplets

Since each set of circumstances calls for a unique symbolic work, finding a design solution demands that the designer develop his original intuitions. It should be evident now that any kind of borrowing of form from any other context will not necessarily result in a meaningful architecture. Each architectural symbol must embody as quality the feeling of the human functional activity for which it provides an ethnic domain or virtual place. But, how is an architect to find new possibilities for the symbolization of feeling? How can architect create? The complete answers to these questions are found only in the inscrutable realms of intuition and symbolization. Still, some possible indications of directions of answers may be explored.

It has been suggested that the artist might discover conceptually feelings he has never experienced. Through the manipulations of his medium, he may be able to uncover feelings of which he was unaware until his own work presented them. The same thing can happen in any symbolic process. In discourse one may state a fact of which one was previously unaware and then follow up its implications and state further facts of which one was unaware. This
kind of process is impossible if one follows completely conventional forms whose implications have all been worked out. Only the original, creative form can lead to discovery. This leads once more to the crucial difference between conventional and intention symbolic events as expressed above (see Chapter 2). What Merleau-Ponty writes of expressive speech is true of all forms of symbolic transformation:

"Expressive speech does not simply choose a sign for an already defined signification as one goes to look for a hammer in order to drive a nail or for a claw to pull it out. It gropes around a significative intention which is not guided by any text, and which is precisely in the process of writing the text."

When one is learning to speak all speech is expressive and intentional. Every word is a new treasure and each treasure offers a new life. The opening of Helen Keller's world through speech made everything she touched seem to burst with vitality. The root of this was that simple coupling called symbolization by which water (a liquid) is "water" (a word). Somehow through this pairing of symbol and thing one may come to conceive the existence of the world.

But after a while terms which were new become old. Speech becomes a habit taken for granted. The intentional speech of the child becomes the conventional speech of the adult. The world becomes absorbed in a conventional symbolic complex which turns ever more dessicated and dull.
Man rescues himself from this situation through the expressive "mistakes" of metaphor. Instead of a coupling of word and thing, metaphor couples one word with another to note some quality of a thing which might otherwise be lost. One word is the conventional descriptor, but the second word is an unconditional modifier. Together they validate a commonly conceived reality of something which previously had only been personally apprehended. The lost expressiveness of childhood speech finds refuge in the metaphoric speech of the poet. The speech of metaphor is the most expressive and at the same time the most creative. It cannot be reasoned to by logical associations. It is a speech of uniqueness, circumstance and probably fortuitous accident. An excellent example is found in R. Buckminster Fuller's evocation, "Wombland":

"...the nation formed by spaceship Earth's unborn children, sixty-six million of them at this moment, the tenth largest nation in the world. (What human group can have more interests in common? What better claim on nationhood? 'They have a regular way of life in there.')" 

In this image, Fuller joins one's knowledge of the similarities of environments of all unborn babies with the concept of nationhood to create a validating symbol of something one has already apprehended privately, but never seen intersubjectively. It is immediately acceptable on this basis. It is an expressive and unique bit of speech which offers further insight into the nature of human symbolization and creativity.
All creative acts seem to have the same structure of pairing which underlies symbolization and metaphor. In his work, *Creativity and Innovation*, Proctor and Gamble chemist John Haefele suggests that all creativity may be described by the formula:

$$A + B \rightarrow C.$$  

In Haefele's formula A and B are pre-existing concepts, frameworks, or sets of ideas which when brought together form something new, C, which was not predictable from A or B alone. Further, the result is usually greater than the sum of the parts taken individually, so that the descriptive formula cannot be called an equation. Essayist Arthur Koestler, in his work, *The Act of Creation* shows how such pairings or interactions are common to creativity in art and science. The metaphor, simile and allegory of the poet find equivalents in all fields. The distance from the synthesis of space and time in Einstein's relativity to the collision of love and hate in Shakespeare's Romeo and Juliet is not at all that far.

**Thinking about Thinking**

Several models have been offered for the processes of speech and by extension for all creative acts and symbolic events.

It is at this level where the inadequacies of behaviorist theories become most evident. Behaviorism argues
that all human mental processes are based in linear associations of programmed or automatic stimulus and response. J. B. Watson in *Behaviorism* offers the following description:

"One natural question often raised is how do we ever get a new verbal creation such as a poem or a brilliant essay. The answer is we get them by manipulating words, shifting them around until a new pattern is hit upon .... How do you suppose Patou builds a new gown? Has he a 'picture in his mind' of what the gown is to look like when he is finished? He has not .... He calls the model in, picks up a new piece of silk, throws it around her, he pulls it in here, he pulls it out there .... He manipulates the material until it takes on the semblance of a dress .... Not until the new creation aroused admiration, both his own and others', would the manipulation be complete—the equivalent to the rat's finding food .... The painter plies his trade the same way, nor can the poet boast of any other method."8

This is a totally atomist, reductionist view of creativity. It may be an explanation for a rat in a maze, but as far as explaining the art symbol it is irrelevant. It is about equivalent to throwing bricks over one's shoulder and expecting to turn around one day and find a house. As an explanation for Shakespeare's *Hamlet*, Tchaikovsky's *Pathetique* or Frank Lloyd Wright's "Fallingwater" it is an absurdity.

 Many psycholinguists and others have moved beyond a linear S-R model of language and creative activity to a tree-like hierarchic model. This tree branches from an apex to a set of systems which branch to sub-systems which
branch again and again. This model is much more attractive because it allows complexity to be generated from simplicity. An intention is entered at the apex of the hierarchy and filters through a series of levels until at the lower levels one generates the proper symbol—a proposition, a painting or a new symphony. Each level of the hierarchy operates by its own rules, which may be either innate or acquired, and explicates the command received from the next higher level by making the proper commands to the level below. What may be entered as vague intent at the top comes out in concrete form at the bottom. Koestler characterizes this, "The output hierarchy concretizes..." All human action is, therefore, seen to be partially intentional and partially guided by automatic process. At each lower, more specific, level the command received from above is particularized and spelled out in step-by-step form so that a movement may be made or a sentence may be spoken.

However, although the hierarchic model is more satisfactory than a linear associational chain, even this model is inadequate. A single hierarchy operating alone is too rigid and too determinative to allow for creative events or symbolic acts. Only when hierarchies interweave to form networks may chance, circumstance and fortuitous accident enter in.

An excellent example of interwoven hierarchies has been given by Christopher Alexander in the article,
"The City is Not a Tree." Although Alexander is presenting a model of city organization, the principles are equally applicable in the present context. Alexander presents the simple problem of grouping four objects, an orange, a watermelon, a tennis ball and a football. One hierarchic grouping, shown in Figure 1A (see following page) would be to group the two fruits together and the two balls together. This produces one possible hierarchy. But, a second, equally valid hierarchy is also possible if the objects are grouped by shape as shown in Figure 1B (see following page). If the two hierarchies are drawn together the result is a semi-lattice or a network as shown in Figure 1C (see following page). In this example, a very simple lattice results. More variables and more groups would provide a much more complex network. This kind of structure is freed from the rule-boundedness of the linear S-R chain or the rigid hierarchical structure. As a model, it brings one closer to the possibility of new connections or creative pairings.

It should be evident now that the only kind of thought possible in the linear S-R chain and the rigid hierarchy must be conventional. There is no escape from the rules and the rigidites of such systems. In contrast, the event of symbolization and the occurrence of creativity cannot be trapped within a fixed system. The semi-lattice allows jumping from hierarchy to hierarchy, from word to image to concept to sound or to any other element in the mind.
Figure 1
This model allows the contrast between conventional thinking and creative thinking to be clearly made. Conventional thought is often called "convergent" thought because it tends to follow conventional patterns which converge on previously made associations and solves problems by copying previous solutions to similar problems. In contrast to this, creative (and expressive) thought is characterized as "divergent" tending toward no single answer, but expanding possibilities of new pairings and original solutions to problems. Koestler has coined his own terms. Rule-bound thought is conventional, following previous associations. Thought which arrives at new pairs—new theories, new creations, new metaphors, new symbols—is called "bisociation." Bisociation means thinking in two hierarchies or two frameworks at once. This kind of cross-hierarchical thinking has been characterized by some as the "chain complex," meaning an almost random pattern ideation leading to no predictable end, as when one's thoughts wander: tree-flower-vase-base-ball-dance-floor-chair-university ... The rules are as fluid as the items. Images can be interwoven with concepts and rearranged to find new ideas. The fluidity and freedom of this chain is essential to creativity.

It may be disconcerting to recognize that what passes for fixed logical reasoning is based on processes as fluid as this. Actually, however, as noted by Koestler, most
scientists openly admit their dependence on intuition and express horror at all-to-conscious thinking and logic except for after the fact verification.\textsuperscript{13}

When one actually begins to speak, or write, or design, then one begins to concretize the fluid elements and relationships into a fixed pattern. It may often be difficult to think creatively within the constraints of propositional language or hard-line drawings. Many speak of using hazy imagery, fluid words or vague sketches in thought processes. These seem to be less restrictive. Koestler quotes Woodworth, "Often we must get away from speech in order to think clearly."\textsuperscript{14}

Are the semi-lattice and the chain complex an adequate explanation of symbolization or intuition? The answer is clearly that they are not. They are only approximating models. The events of intuition and symbolization still remain shrouded in mystery. All one may say for certain is that the kind of mental structure they demand is neither the S-R linear kind nor the rigid hierarchy.

**Elusiveness**

The unconventional nature of expressive symbols means that one cannot aim directly at the result one hopes to achieve. Initially, at least, it is out of view. The architect must depend upon his own intuition or insight into the unique circumstantial nature of the project and
his own symbolizational capacity. By its very nature creativity in symbolization cannot be aimed for directly.

In *Creativity and Innovation*, Haefele identifies the stages which seem common to many creative processes of different individuals: preparation, incubation, illumination and verification. Preparation includes the initial stages of information gathering, problem identification and the like. Even as this occurs the mind begins to deal with a problem in incubation. This is a time for tentative explorations, false starts, and vague sketches. Illumination is that moment when all the pieces fit together, when a significant intention is recognized, when the structure or form of the symbol is apparent. Verification is the process of working everything out in the writing, designing or testing of the new intuition. Obviously, the steps are not so rigid. This is not meant as a formula. The sequencing may be completely fluid. The point to be recognized is that creativity, itself, cannot be sought. One may seek to design or to paint or to write, but it is only in the doing that creativity occurs, not in the intending.

Alvar Aalto has given a good example of just how circuitous this process may be:

"In such cases I proceed in an irrational way as follows: For a moment I forget all the maze of problems. I erase them from my mind and busy myself with something which can best be described as abstract art. I start drawing, giving free rein to my instinct, and suddenly the basic idea is born, a starting-point which links the numerous often contradictory elements already mentioned, and brings them into harmony with each other."
"While designing the Municipal Library in Viipuri (I had a lot of time at my disposal--five long years), I spent a great deal of time making children's drawings, representing an imaginary mountain with different shapes on the slopes and a sort of celestial superstructure consisting of several suns, which shed an equal light on the sides of the mountain. In themselves, these drawings had nothing to do with architecture, but from these seemingly childish drawings sprang a combination of plans and sections which, although it would be difficult to describe how, were all interwoven. And this became the basic idea for the library ... grouping the reading rooms and the lending rooms on different levels, like on the slope of a mountain around a central control desk uppermost in the building. Above everything was erected a sort of solar system--the round conical skylights."16

The architect, like the artist, does not aim at creativity. He aims at creating spaces with a certain quality, often unaware of the feeling that quality conveys. There are no formulas. If one aims for creativity, it will evaporate before it is ever reached. But in building architectural spaces, virtual places with the quality of the particular feelings of the functions they enclose, the architect cannot help but create meaningful designs.

"What one too deliberately seeks, he does not find, and he who, on the contrary, has in his meditative life known how to tap its spontaneous source never lacks for ideas and values."17

A Final Comment on Formalized Methods

In the late 1950's a number of architects became dissatisfied with the accepted mode of design of modern formalism. As the propaganda dissipated and the failings of modern architecture became evident, some began to look
for other methods of design. The introduction of the computer at about the same time led to the first analytical methodologies published in *Notes on the Synthesis of Form* \(^{18}\) by Alexander and *Community and Privacy* \(^{19}\) by Alexander and Chermayeff.

The basic method of such designers is one of "divide and conquer." A design problem is identified and atomized into the smallest possible parameters. These are then "cleansed" of implications and false preconceptions. After this the designer may begin to recombine these into subsets according to the relationships he determines. Multiple recombinations of subsets lead to an ordering of the problem and a structure for the solution.

This theory is highly problematic. As a kind of architectural reductionism, it suffers from many of the problems that all reductionist theories suffer from. The reduction of complex phenomena to simple elements which are supposedly amenable to quantitative measurement may actually cause specific characteristics of the phenomena to be lost along the way. Further, one always wonders if the relationships chosen are the "right" ones and if the breakdown of the parameters has been sufficient.

As a method for architectural design further questions must be raised. The problem of creation of a buildable form has not been solved. Instead, it has been broken down to a level where many individual decisions are made.
rather than a few encompassing ones. At the same time, it places a thin veneer of objectivity over a process which is still subjective. In terms of creation of architectural symbols, such an elemental additive method cannot work. An architectural symbol is one thing. It has meaning as a whole and that meaning is not arrived at through the addition of many separate parts. Architecture is presentational, not discursive, symbolism.

In essence, analytic methods, when used as prescriptive tools for design, represent a formalist approach to the design process. The fixed rules for analysis and recombination are completely ordered. One merely goes through the process according to these rules and the product results. Of course, working within fixed parameters and rules one can produce only parametric rule-bound solutions. Independent creative thought is impossible. Nothing new can result.

Formalized methodologies cannot function to replace intuition and symbolization. As a means for analyzing functional components of a problem they may have limited value. However, they are not a prescriptive tool for architectural design. Their limitations are many. They have no role in the creative act of architectural symbolization itself.
Summary

Each architectural work is created in a specific context (time and place) to which it must relate if it is to carry vital import. The special nature of each context demands that each work must be unique. An architecture of universals divorced from context would be meaningless. The unique work must be created—it cannot be copied—but when one examines science and philosophy seeking clues to creative thinking, the models offered appear inadequate. The behaviorist S-R chaining model and the rigid hierarchical model allow only conventional thinking. The semi-lattice or network model lacks the rigidity of the others, and so may be a closer, but still inadequate, approximation. The architect cannot aim at creativity. He must seek to build spaces with certain qualities and in so doing he will create meaningful designs.
Notes


Architecture and Risk

The creation of architecture is an incredibly audacious act. That it is possible at all might seem highly unlikely did not the evidence already exist. Architecture may be among the most difficult of the arts because of its social and practical boundedness; nonetheless, in its creation of symbols of feeling it is a true art. Any encounter with a successful architectural symbol makes one stand in awe and marvel at its power. It reaches deep within the human life and makes real the nature of human existence.

Susanne Langer writes, "Life is incoherent unless we give it form." Art articulates human nature and validates one's own inner experience. Through art symbols man comes to know his full life of feeling. Architecture penetrates into the life of motivation and function on all levels showing the reality of the human feeling. As art gives form to feeling, it molds in turn the actual form of human life.

Architecture is audacious because every work of architecture which breaks with convention, thereby acquiring import, is a risk. When the architect opens himself to the life of feeling and to intentional, not conventional, thought, he places himself in a situation where he must draw
on his inner resources. For his design problem there will be no apparently "right" answer and he will have no conventions to copy. The only way he will be able to tell if he is right is if his design "feels right" to him. This is important, for if one never leaves the security of convention, one can never discover the opportunity of original intention. By taking risks the architect opens himself to real opportunity for discovery.

**Talent and Genius**

Because intuition and symbolization operate as unpredictable events, not being processes, they cannot be taught. There can be no training to produce works of art just as there can be no training to perceive them.

There are no formulas for the artist or architect. Each truly expressive symbol is unique. Art and architecture are not produced by rules. Each creator of art or architectural symbols must find his own path to the symbolization of human feeling. The architect is part of the context in which he works and there is no precept to tell him who he is. This points to the difference between talent and genius.

Talent is a native ability to symbolize the ideas of feeling one has in a technically successful way. It is the ability to clearly express what one can conceive. The source of talent is largely unknown, but it is probably
tied with hereditary factors of muscular control, sensitivity body-feeling, memory and coordination as well as early experience. It may occur in gradations. Most people have some talent in most areas—to play an instrument, to dance, to sing and to draw. Evidently, talent is developable through exercise and practice, but ultimately, it is only an ability to handle technique.

Genius, in contrast, is not necessarily related to talent at all, but is the power to conceive of the intangible realities of feeling, sentience, emotion, in a new symbolic form which reveals something of their nature not previously perceived. Without some amount of talent, genius can do nothing, but great art has been produced with only limited talent as artists under the impact of their ideas have struggled to develop their talent to a level adequate for the expression of those ideas. This is the difference between the technically talented architect whose buildings work well but may be totally conventionalized, and the architectural genius whose forms of virtual place embody ideas of feeling never previously conceived. Talent without genius may only imitate or provide variations within the framework proposed by genius. When genius is served by talent it may unfold in an elegant way. The process may not be an immediate one, but can take many years or decades. For every Mozart whose childhood talent served a growing genius, there is always a Beethoven whose
early works hardly differ from their predecessors, but whose genius expands with every new creation. In the architectural development of Louis Kahn one sees a flowering of genius only late in life. Genius, like talent, may admit of degrees, but it is the mark of the true artist and is essential to new symbolization.

The architect rarely reaches maturity at a young age. Many of the technical issues are so complex that the ability (talent) to handle them can only be developed by experience. Only when the architect begins to grasp these fully will he be able to arrive at a complete synthesis of feeling in an architectural work.

**History**

The relationship of the creative architect to the study of architectural history has been widely misunderstood. Some seem to believe that history is a source of forms and designs to be discretely borrowed, imitated and recombined. If history is viewed in this way it can only have a detrimental or restrictive effect on the architect. He may come to believe that his personal conception of feeling is impossible and that design consists merely in dipping into the accumulated architectural capital of the past. An improper approach to history can be the root of a completely fallacious formalism. What is necessary, instead, is a creative response to the past. Psychologist Rollo May writes in *Man's Search for Himself*:
"To the extent that an adult person has achieved some freedom and identity as a self, he has a base from which to acquire the wisdom in the past traditions of his society and to make it his. But if this freedom is missing, traditions block rather than enrich. They may become an internalized set of traffic rules, but they will have little or no fructifying influence on one's inward development as a person."4

If the designer has developed his own personal intuitive and symbolic capacity, then history for him will be a rich stimulus, illuminating the symbolic transformation at another time and another place. The greater one's personal awareness, the more one can acquire the wisdom of history, not just its knowledge. The more profoundly one can confront historical tradition, the more deeply one can know and be oneself. The argument is not between creativity and history as such, but between different attitudes and intentions which underlie one's encounter with history.

Method

The place of formalized methods in architectural design is clearly parallel. Depending on one's attitude and intent they can be beneficial or detrimental. If formal methods are considered central to architectural creativity, the effect must be limiting. If the architect believes such methods supersede his personal creative insight, then he will never find his own conceptions, but will rely totally on the conventions provided by formalized
methods. However, if formalized methods are recognized as techniques for analysis only, and if the architect sees the logic of such methods as an aid or model for organizing ideas in his mind, then he can turn them into a personal tool, not a means for the creation of architecture, but a guide for the organization of preliminary facts and ideas. It must never be forgotten that architecture is the creation of space symbolic of human feeling and that, as such, it is an art, not a science (which is based on "proofs" by repeatable experiment and demonstration).

**Time**

The necessity of time is something which can only be learned from experience, and even then it is often forgotten. By the necessity for time is meant that work of high quality takes a long time to produce. In the present age time is becoming a luxury. This is not time spent on paperwork or in committee meetings or at crowded conventions, but time devoted to thought and contemplation. It is worth recalling Aalto's comment on the Viipuri Library quoted in Chapter 8 in which he noted that he spent five years on the project. In a brief comment in the front of *The Message in the Bottle*, Walker Percy comments that the book was twenty years in the writing.\(^5\) Buckminster Fuller has written that the most valuable year in his life was the one after he left the navy and before he began working in which he spent twelve months
in a personal evaluation of the world. Unfortunately, most scholars, artists and designers today seem to have little time to spend thinking. Routine trivia monopolizes so much time that one rarely takes time out for personal reflections. But, it is those reflections which are the source for new discoveries of form and feeling. Opportunity does come to the prepared mind.

And, should one escape from outside pressure and arrive at a new, if still vague conception, will one have time to let it grow and prosper? A new idea is often a fragile thing. Like a person, it must find its "true self" and articulate its core identity before it can stand alone. The lack of time in this age means that too often ideas are crystallized prematurely, rushed to publication or construction and destroyed by their first critique. Without enough time to be fully developed, an innovation will be still-born. If architecture is to offer new meanings and conceptions, it must be an architecture of personal reflection and actualization. Intentions in architecture are discovered and clarified only with great personal effort. Effort of this type demands time.

Stones Left Unturned

The present work has followed a most circuitous route. It is by no means complete, even though it must come to an end. Its exploration of architecture began with
the general nature of the symbol from an intersubjective point of view. Within this context, the slightly narrower issues of the art symbol were all too briefly touched on before proceeding to the even narrower issues in architecture. There speculation on the underlying motivations and the processes of thought suggested further directions for study. Finally, this last chapter has centered on peripheral issues in architectural design.

Since this work was generated from the point of view of the designer, its true test is in the studio. It has not provided a method for design, but instead has illuminated the opportunities open to the architect. This work also clearly has implications in the areas of architectural education, criticism, and history. However, these are subjects for future exploration.

For every question this work has answered, many more could have been asked. For each line of thought pursued, several others had to be ignored. As indicated, this framework may offer a basis for future studies in more detail of architectural symbols in the different branches of the field and in relation to multiple questions not presented here. But, no matter how far one goes all questions can never be answered. Doubts remain, new works will offer new insights and the breadth of human understanding will continue to grow. Perhaps this is what is so exciting about the study of architecture and the exploration of its import. Merleau-Ponty summarizes:
"What is irreplaceable in a work of art ...--the fact that it provides us with symbols whose meaning we never stop developing. Precisely because it dwells and makes us dwell in a world we do not have the key to, the work of art teaches us to see and ultimately gives us something to think about as no analytic work can; because when we analyze an object we find only what we have put into it." 7

There are no magic formulas. The architect can only seek.
Notes


2. Ibid., 408.

3. Ibid., 409.


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