Synthesis of Ideas and Creative Design

A workshop presentation of a design thought model and an organic Design Process

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by

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Essence of Method Employed

To understand the subject matter of this study, we need to recognize the characteristics of the reversed process of synthesis, namely de-synthesis, which deals with synthesis as a synergistical "whole" or as a product, which has its often forgotten humanistic, artistic and intangible ingredient, instead of more mechanical summation of the "parts".

Itself synthetical in nature, this presentation amounts to an ontological elucidation of linguistic architecture. Methodically, it is an unique dealing of one's artistic zeal and the vital scientific spirit of experimentalism.

Being and non-being

The working principle of this paper is the simple pattern of creative function generalized by Laotzu in Chapter 42 of his book, the Tao-Teh-Ching. It states that successive creation of "the third" and henceforth the infinite number of "beings" is the consequence of the mere precedent existence of "the first" and "the second", or more technically defined, the "non-being" and the "being" of an existing entity.[1] I believe there is no need for us to elaborate on the function of these two terms since by now we are so familiar with their modern equivalence, the binary multiplicity of the basic digital units in computer cybernetics which are sumbolically represented by "O" and "1". By necessity, the Gestalitsm involved therein of course is something considered inherent.

Architecture Defined

Architecture has been playfully referred to as something scientistic, supposedly meaning neither scientific nor artistic. To many of us, nevertheless, the word "scientistic" tends to stand more aptly for the quality of being both scientific and artistic instead. This is so because coexistence of such opposite beings, or one kind of being and its non-being, however ambiguous and semantically inadequate each of them might be and however dicotomous they are against each other at first, together they do furnish mutual enhancement to begin with and by virtue of mutual compensation naturally adjust the relationship from the state of contrast toward the state of complement. The result is the emergence of a new reality which by name is the so-called "union of opposites", i.e., non-being and being or sinologically Ying and Yang.[1]

Co-existential Reality

Physically, the reality we confront in our daily life is the synthesis of what is the most conspicuous to us (actuality such as mass) and whatever is its obvious opposite (Potentiality such as void.)[2] This is the base of architectural aesthetics. As a result, the surface of a stone wall is meant to be either rough enough to be called a "textured" surface, which is the synthesis of small masses integrated with small voids, or smooth enough to be referred to as a "polished surface", which is the synthesis of a large uniform area and its reflectivity or virtual void implied within the surface. Plain and dull surface would have to go with void beyond the surface.

Bilateral Realization

Psychologically, according to Dr. Adelbert Ames, Jr.'s interpretation of the phenomena manifested in his perception demonstrations, what we are supposed to see in our environment is not at all just the mechanical optical image we receive, but the organic synthesis of such images we momentarily receive and the conceptualized images we have stored up in our mind based upon our previous experiences and comprehension. As it is technically formalized by Prof. William H. Ittelson of CUNY, the data from Ames' laboratory samplingly if not statistically verifies the hypothesis that man's experien-

tial reality is indeed made "realistic" by synthesis.[3]

Between dreams and reality

The word "realistic" we use here furnishes a proper description of a vital point. To those of us who have gone through the experiences of realistic normalcy out of varied distorted actuality designed by Dr. Ames, it is obvious that seeing the miracles created by a magician or for that matter seeing a ghostly object or simply seeing a "ghost", is not the result of any optical illusion but rather a matter of experiencing solid visual realism organically internalized in man's mind. As it is demonstrated by the famous "distorted room", experience of such situation amounts to a tangible existence by its own right. However intangible it may be, an element which otherwise should be regarded as the element of a dream thus is approaching the status of being one part of physical reality.

Paradoxical Reliability

Among all kinds of perception demonstrations designed by Dr. Ames, the "leaf-room" setup is particularly significant. This is a case which miraculously but positively manifests the fact that uniqueness of an environment is the quality which is capable of standing truthfully for its own genuineness even in a contradictory situation. Technically it is so simply because all the walls, the ceiling and the floor surfaces are totally decorated with weirdly reddish leaves designed to secure

the overall immunity from any misinterpretation that might be induced by superficial impression of normalcy out of an actually distorted arrangement of conventional clues or optical distortion of physical regularity. Distorted arrangement in actuality is uniquely absent in this particular case while optical distortion is the technique employed for reflecting the fact that the rectilineality of the room is otherwise undisturbed.

The Message and the Mission

The broader message carried by such a perceptual realism means two things: Firstly, the function of securing cognitional honesty or probity alone may well be strong enough a factor to be the sole justification of our endless strife for creativity and uniqueness. Secondly, uniqueness in effect means syntheses of dreams and reality whose noble quality always has been the pride of scientist and artist alike.

To advocate, and hopefully to facilitate the validity of uniqueness is the mission of this study.

Aspects of Concern:

The aspects of concern in architectural design may be categorized into four areas, namely:
I. The probity of reality mainly due to the presence of uniqueness in the synthesis of actuality (alias being or thesis) and potentiality (alias non-being or anti-thesis) as perceptually

demonstrated in Dr. Ames' laboratory. We shall value the implication of this principle of uniqueness and probity revealed in our perceptual experience and apply it conceptually in any type of synthesis process.
2. The proficiency in dealing with the tactical relativity among architectural components when each component is the synthesis of its dual-roles acting both as a part of a larger scope as well as the whole of a smaller scope.
3. The propriety of strategical relevancy concerning the synthetical transition from one level of intellectual consciousness to another. This is the area of our major concern.
4. The propensity of Creative Revulsion suggesting Jungian source of revisional compensation lofting within the unconscious realm. Perhaps this is the richest untapped source of creativity.

An Architectural Design Thought Mode[4]

The complexity of verbal expression involved in inter-relating the main concepts mentioned above and the ramification of ideas therefrom is nearly unthinkable without tangible reference. They are therefore designed to be inter-relatedly positioned along the three dimensions of a thought model simulating the form of the earth. These three dimensions

3 will provide the ideation of the following qualities and their relative ranking:

1. Empirical Probity—Its longitude reading represents the successive "phases of manifestation" of human experience, namely: actuality (alias being or thesis), potentiality (alias nonbeing or anti-thesis) and reality (snythesis) (see figure 1)
Actuality usually is referred to things that are physical, potentiality conceptual and reality perceptual.

2. Tactical Relativity—The amplitude "radii and arcs" readings radiating from the core of the model which respectively represents the expanding scale and scope of an architectural composition. (see figure 2)

3. Strategical Relevancy—Its latitude reading represents the successive "levels of consciousness" whose details of ranking are: (see figure 3)
   A. The pole of utmost consciousness which stands for cold determinism whose loud catchword is "why not". It is the root of human creativity.
   B. The pole of Null-consciousness which stands for the equally cold sagacity whose enlightenment is a reticent "why". It is the root of human wisdom.
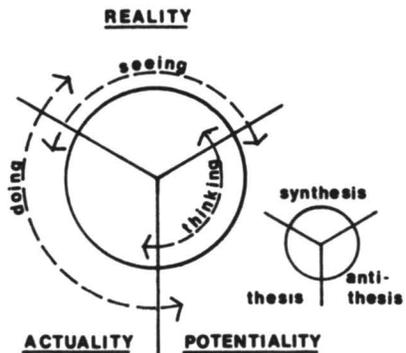

FIGURE 1 TOP VIEW
(concern 1) emphirical probity
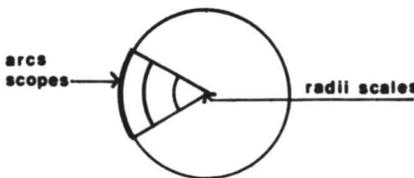   experiential reality

FIGURE 2 ANY SECTION THRU THE CORE
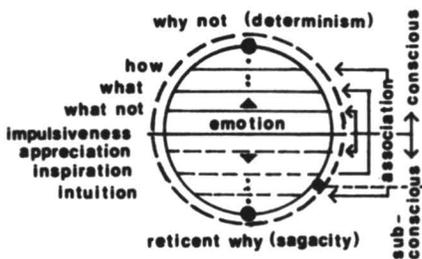(concern 2) tactical proficieny
COMPOSITIONAL RELATIVITY

FIGURE 3 SIDEVIEW
(concern 3) strategical propriety
          expressional relevancy

(concern 4) - creative propensity----
un-conscious compensatory revulsion

C. The median zone between the two poles is the watershed of subconsciousness where intellect is overshawdowed by emotion and actuality is usually ignored and potentiality exaggerated. We shall call it the circle of impulsiveness.
D. Ranking upward from the Null-consciousness pole, the circles of Intuition, of Inspiration and of Appreciation successively come into place before the ranking reaches the watershed of subconsciousness or the circle of impulsiveness.
E. Ranking downward from the utmostconsciousness, we find the proper positioning of pronoun circles of consciousness each being corresponding to its subconscious counterparts, perhaps suggesting Freudian free association, namely: "how" versus Intuition, "what" versus Inspiration and "what not" versus Appreciation.
F. Emotional force seems to have the least influence at both poles and gains increasing impact when it approaches the median zone of impulsiveness from opposite directions. The model thus also seems to simulate the earth climatologically.

4. Creative Revulsion probably could be best represented by an atmospheric sphere (dotted line in Figure 3) whose ideational constitution is fluctuating freely only to make up for what is lacking on the corresponding surface of the earth. This in fact is the fourth or time dimension of the model.

The Means-and-end Sequence

The sequence of concern proceeding from empiricalism to technicality in tactics and strategy of architectural design as it is suggested above is a natural one since tactics is a synthesis of empiricalism and human improvisation while strategy is a synthesis of tactics and human ingenuity. From one aspect of concern to another, there is a logical means-to-end sequence which is more or less beyond our control. The reversed process of de-synthesis is also true. Thus, interchangeably, each one of them seems to underline the consequence of the other two aspects:

1　Tactical relativity demands all the three "phases of manisfestation" to engage themselves at the same scale and the same scope of concern.

2.　Strategical propriety demands a designer's compositional proficiency as a prerequisite which will free his mind from over-consciousness of compositional technique and enable him to concentrate on the higher concern of relevancy.

3.　The rule of creative propensity which demands revulsive compensation from the unconscious source for any conscious "being" would tactfully also rectify the comparatively mild revulsive function of its subconscious counterpart. The function of "inspiration", for instance, analogically should be able to incude subconscious meta-similarity, which is an anti-thesis of ordinary similarity, to serve as the basic conscious constitution of the "what" while the what should have its true creativity coming in the form of meta-dissimilarity which is to be furnished by creative propensity from the unconscious source whose substance is often theoretically unknown and unidentifiable until the creative synthesis between meta-similarity and meta-dissimilarity is completed.

4.　"Meta-similarity" mentioned above, comparatively speaking, is a subtle "actuality" of the synthesis while "meta-dissimilarity" is its potentiality counterpart. Both of them are abstract elements of creativity at a higher level of imagination.

An Organic Design Process

Assuming that the principle of creative probity (figure 1) is tentatively acceptable and the compositional proficiency (figure 2) as a prerequisite is a matter of practice, we shall not have any further discussion on these two aspects other than to say that compositional proficiency could be better accomplished if composition is executed hierarchically. This means, for instance, that when we are working on a composition at the mass-and-void relationship level, we should not be too concerned about the detail of each mass.

We shall concentrate mainly on what stragegical relevancy in general and creative propensity in particular may mean to us (figure 3).

We find our concern of strategical relevancy, which has its conscious and subconscious "roots" of ramification, amounts to an organic design process. Also hierarchically, each of the steps of the design process has its opportunity to absorb creative thought related to relevancy of a design.

If we also assume that architecture is an expression of human life, then we can not avoid accepting the hard fact of life which suggests that in reality instead of in beautiful abstraction, the conscious root of human life is a very primitive one. It is the very

reality of prehistorical savagery. (see figure 4) Somewhere between the viscera of "why not" and the bare sense of knowing "how", man needs to cherish the feeling of survival. Out of the desire to secure his survival, man expanded his capacity of knowing "how" by crystalizing his knowing of the "how" into something tangible, the "what". That is when human settlement began to take shape. The life style of a settlement at first was a rather rugged and undefined one.

The next step of development is something between the "what" and the "what not" stages when everything began to yearn for sensuousness and architecture began to claim its glamorous status in a civilization. We have been living in this stage for thousands of years.

All those times, intuition has been strongly supplementing our know-how, inspiration has been inducing our search for the "what", and "appreciation", happily, has been coordinating more than the necessary tolerance among different schools of thinking out of the "what not". "Sagacity" also has been helpful in counter-balancing untactful inhumane determinism.

We can learn from our political reality that a closed society usually is limiting its concern mostly within a stage between "how" and "what". The stage of "what", when definition is clear and beyond whimsical change, and the stage of "what not", when freedom and diversity is the rule, both exclusively belong to a free and
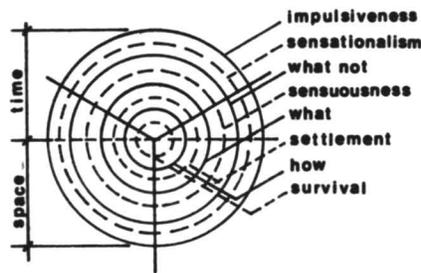

FIGURE 4 TOP VIEW EXPRESSIVE OF EVOLUTIONAL SIGNIFICANCE OF ELEMENTS SHOWN IN SIDEVIEW (figure 3)

open society. We have more than one kind of planning concept and we have many kinds of architecture. This is the blessing of democracy.

Unfortunately, the vital sense of survival is at times unduly over-expressed. Our intellectual capacity, and hence our technological facility, is such that we do think we can build big things properly and quickly to satisfy our needs and our desire in a hurry. The truth is: Human vitality can best be contented in an organic environment which requires gradual adaptation and small-scale change. Megastructure in urban design, like transplantation of an artificial heart, would likely cause tissue rejection as a result. We are simply mistaking "why not" as "why" and allowing ourselves too little attention to the reticent "why", too little credit to "intuition", too little exposure to "inspiration" and indeed too little experience of "appreciation". We are, in short, rather impulsive in our operation at times.

A sensible design process (figure 5), therefore, would have to have its root in the synthesis of "why" and "why not", which means willing recognition of employing sensible "facility" (actuality) to bring out the impact of "context" (potentiality). This is a step when liability could become an asset of design. By context, an otherwise useless piece of land may become the site of a tourist center.

Here we see the alternating sequence between the means and the end begins to function. "Feasibility" (see figure 5), being the synthetical end of "context" and "facility", would assume the status of a means whose name is "content". In turn, the synthesis of "content" and "fluidity" of inter-relationship among elements of the "content" would constitute the "function". This is the "how" of the process when a lot of "intuition" or the sense of habitual operation against a sensitive situation should be utilized in decision making and design.

"Function" the end, then takes the form of "construction", a means which together with "feeling" would become synthesized and end up in the emergence of a "form".

Something important has to be said here. "Function" in fact furnishes the functional anatomy of a design. There are hundreds of ways to design the postures or designs out of one single functional anatomy. When the potentiality of "feeling" such as the sense of safety is truly high, Picasso's approach in architec-
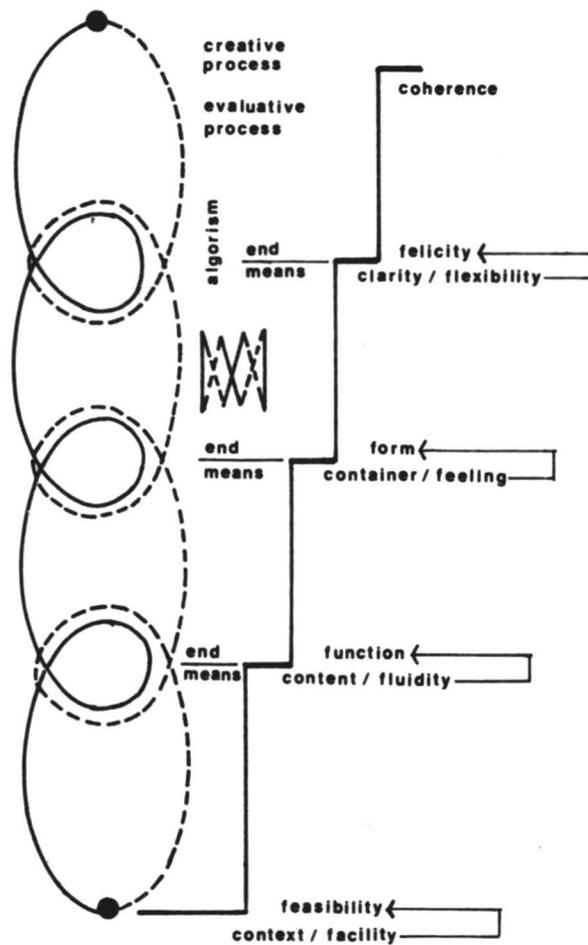
creative process

evaluative process

coherence

algorism

end means

felicity

clarity / flexibility

end means

form

container / feeling

end means

function

content / fluidity

feasibility

context / facility

FIGURE 5 AN ORGANIC DESIGN PROCESS

ture might prevail. While in painting Picasso might cut off the head of a human figure and put it near the corner of a painting, we should have every reason to believe that the nerve center of the Pentagon is in fact a thousand miles from Washington, D.C. The "inspiration" in response to our needs of the "what" indeed is much beyond what Picasso can offer. Wright's inspiration from Beethoven and Venturi's from Eliot are the obvious among many examples.

There is a good reason to expect variable departure from the conformity of form to function, or posture to anatomy rather. For the sake of its own visual "felicity" and its coherence with the random complexity of its surrounding both in terms of contrast and complement. This is a matter of tactful employment of architectural vocabulary which can only be accomplished through the wide spiritual channel of appreciation when our mental concern with humanity is so extensively involved.

The reversed process of de-synthesis would provide the means of evaluation as opposed to synthesis the means of creation. The co-existence of the two is necessary because a fine design process for architects cannot avoid the occurrence of Algorism which in our case would mean repeated alternation between synthetical and de-synthetical operations.

In concluding this presentation, this writer would like to say that what is most important to a would-be creative designer is the vastly untapped and unconscious propensity or reversion of creativity whose revulsive and compensatory function is, I repeat, unknown and unidentifiable until the synthesis of what we are more or less conscious of and what is totally unconscious in our mind is completed. In fact, the real fun of a creative designer is the part of experience that is beyond the power of our verbal expression.

Notes:

1. For detailed implication of Laotzu's philosophy as applied to architecture see Chang's book entitled "Intangible Content in Architectonic Form," Princeton Press—l956.

One unique point emphasized in the book is reversibility between being and non-being, sinologically Yang and Ying. The interpretation that Ying being Female and negative while Yang being Male and positive is regarded as an oversimpliflied interpretation.

2. Arnold Grava, in Philosophy East and West (Vol. 13) reviewed two books dealing with intangibility, referred to Chang book saying "The functional interdependence of the two opposites, actuality and potentiality, is explicitly defined as the very condition of intelligibility."

3. The Ames Demonstrations in Perception by William H. Ittelson. (Together with An Interpretative Manual by Adelbert Ames, Jr. with a new introduction by William H. Ittelson.) HAFNER PUBLISHING COMPANY.

4. When it is first presented at Graduate Center of CUNY for the Environment Psychology Program Faculty and Student, it was called "Trinity of Experience" whose complexity deserves much more of elaboration beyond this presentation.