# PROJECTIONS

**Edited by
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# Preface

The Student Publication of the School of Design was established in 1951 as a tribute to Matthew Nowicki whose architectural career was suddenly terminated when he died in an airplane crash. Since that time annual issues have addressed a variety of topics in the fields of architecture, landscape architecture, urban planning, product design, and visual design. In addition to the work of student and faculty in the School of Design, the publication has documented the work of Le Corbusier, Alvar Aalto, Louis Kahn, Paulo Soleri, Harwell Harris, Charles Eames, James Fitch, Buckminster Fuller, Pier Luigi Nervi, Eduardo Catalano, Duncan Stuart, Amos Rapaport, and Kenneth Craik. This issue is concerned with the assessment and presentation of a philosophy of design, as it exists within the community of the School of Design, and the implications of this philosophy for the future of design.

The Student Publication of the School of Design is entirely organized and staffed by student volunteers from different departments within the school. Content of each issue is determined by the editors who are encouraged to continue a tradition of relevance and quality but are otherwise unrestricted. Working with the assistance of a faculty advisor of their choice, the staff prepares the material for printing, distributes issues to students, and maintains the international mailing list. Financial support is provided by student fees, the sale of issues, and donations: Benefactors $100.00 per year, Patrons $50.00 per year, and Donors $20.00 per year. The Student Publication is no longer available by subscription. Issues are announced when they are ready.

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# Introduction

"Where is the future of modern design? It seems to me that it depends on the constant effort of approaching every problem with the consciousness that there is no single way to solve it."

Matthew Nowicki, "On Exactitude and Flexibility," **The Student Publication of the School of Design**, Vol. 1, No. 1.

Volume 25 is a collection of articles and opinions which project a complete statement of the possibilities and potentialities for the future of design. This statement also represents a variety of roles that designers may play as agents and makers concerned with environmental design. Ultimately this statement deals with the purpose of design and the corresponding motives of designers.

This assessment of purpose seems desirable at the present time as the increasing complexities of the world create many-sided issues and place designers in the position of having to make finer and more precise decisions. Every design act is a trade-off in which the competing factors are each weighed, calculated, and studied carefully. The competition is intensified by the organization of vocal constituents who demand at least the consideration of their point of view. The situation is quite different from that of those days when a "good environment" could be achieved or produced by putting "good things" into it — and everyone knew exactly the constitution of, and the ways to recognize, those "good things." Past ways of thinking need to be updated, casting off dogma and retaining workable, sensible opinions and information. Gone are the days when designers burdened society with idealist, formal and social images conjured by the Heroes and their disciples. Some images are desirable, but society, both culturally and environmentally, needs to be considered as it actually

exists with its problems and idiosyncrasies — not as it should exist according to an ideal doctrine.

The following articles begin the task of considering and reconsidering how to deal with the present state of affairs that designers face and the corresponding implications for the future. Each author presents a **unique but contiguous** view of the purpose of design and how that purpose might be dealt with. Each view constitutes a definition or explanation of the nature of design. Taken together, they constitute a complete statement — similar to a dictionary definition — of designing. These views are grouped into four viewpoints.

The first is the problem aspect of design. From this viewpoint the desirable purpose of design is to delineate and focus on the problems or issues that need to be addressed by designers. Shun Kanda, in "The Design of Topologic Settings," focuses on the problem of "place." He is concerned with why this issue is crucial to environmental design and how the qualities necessary for the making of "place" may be established. John Reuer, in "Culture, Art and Architecture," describes the problem of individual volition and how it merges and surfaces with culture in the production of artifacts.

The second viewpoint is the practice aspect of design. The advocates of this viewpoint hold that the necessary purpose of design is to develop management techniques which facilitate the practice of design. These techniques are based on a body of knowledge and contributions made through investigative research. Richard Wilkinson, in "Landscape Architecture: Now and Then," traces a short history of the profession of landscape architecture recounting why the profession exists as we now know it and how it should respond to changing conditions and changing needs of society and practice. John Tector, in "Problem-

Solving and Design," describes why procedures and methods are important to design and presents a method describing how problems should be managed and solved.

The third viewpoint is the project aspect of design. The supporters of this viewpoint hold that the purpose of design is to develop alternative techniques that could be used to deal with design problems. Each project is conceived as only one of a variety of possible solutions structured within the specific design situation. Denis Wood, in "Human Instrumentality and Environmental Evaluation," presents a technique for data gathering which can be used in understanding and evaluating the physical environment in terms of human response. Edwin F. Harris, in "A Planning Framework," suggests one technique for the relating and structuring of diverse elements in campus planning.

The fourth viewpoint is the production aspect of design. The advocates of this viewpoint hold that the actual purpose of design is the production of "things." This viewpoint is the most common way of regarding design and is often felt to be the sole realm of design. Vernon Shogren, in "Architecture: Ground-Zero," discusses why "things" are produced and experienced the way they are and describes a model which explores a variety of possibilities for the production of "things."

The problem, practice, project, and production viewpoints of design provide a diverse range of possibilities creating a rich tapestry of design concerns. At some point they are all considered as part of the task of designing and usually are used in conjunction with each other. As such their recognition offers usable concepts dealing with emerging trends and long-range potentials.
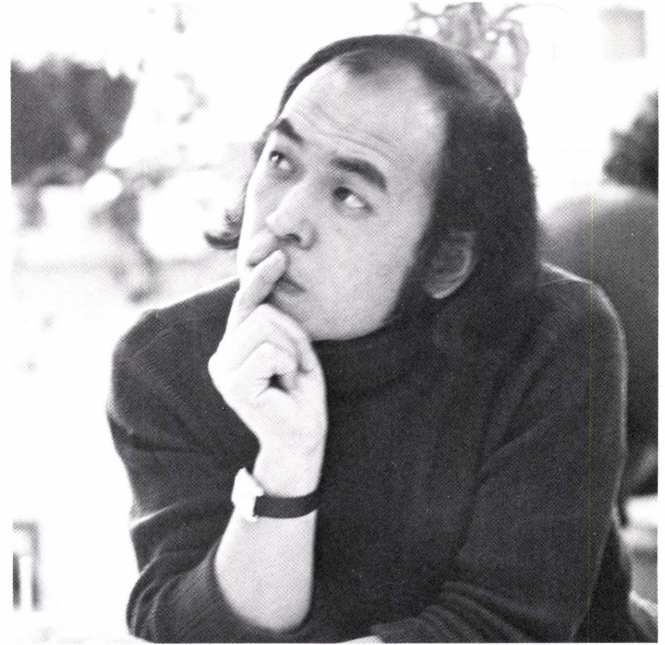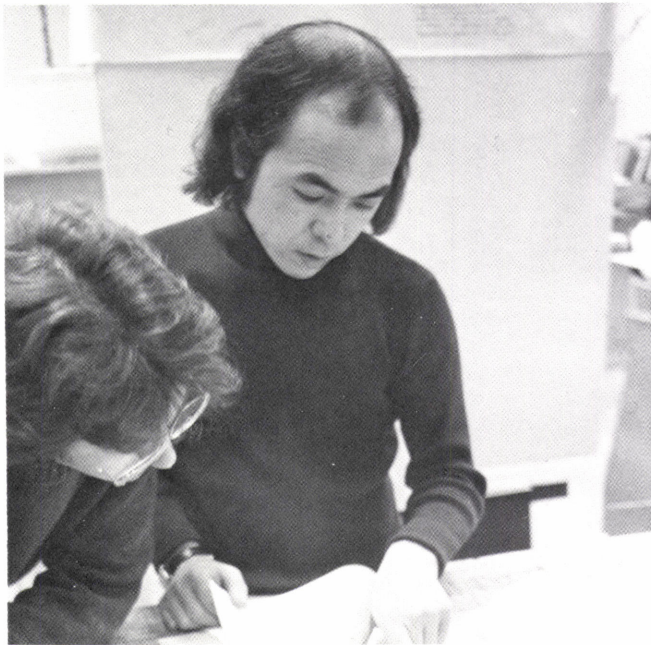
McCain McMurray, Editor

# The Problem Viewpoint

## The Motives of Design

# The Design of Topologic Settings

## Shun Kanda

**Shun Kanda**, Assistant Professor of Architecture at the School of Design, is interested in the structural and cultural morphology of communities. His studies focus on the responsive design of collective environments such as housing, neighborhood spaces, and urbanized centers.
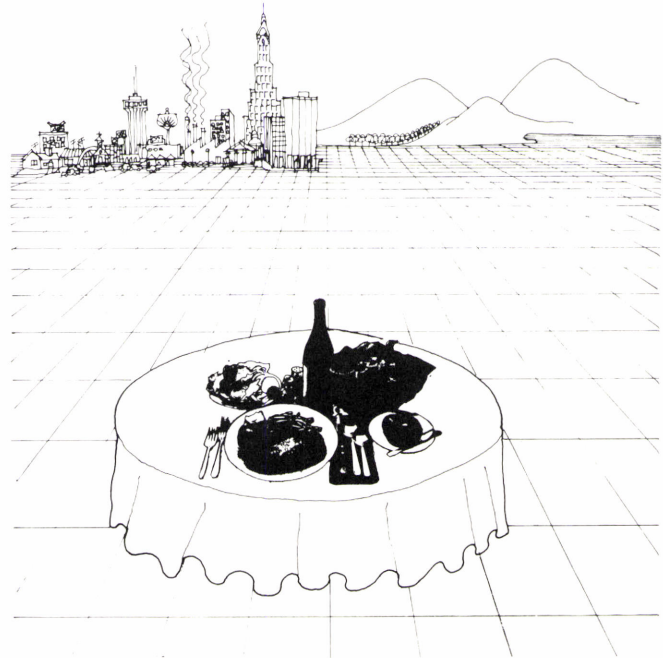
The "eclipse of community" foreshadows the values of our physical environment as a social milieu.[1] The association of our neighborhood, the downtown, and other parts of the public environment with our daily pattern of living generated not into that of social and communal networks, but one based more on a stratified relation to functional, dispersed, and piecemeal events of privatized worlds.

Where the home in the past was consciously regarded as being integral to a neighborhood, there is perhaps now a marked escalation in the value placed on its solitary sacredness. Simultaneously, the autonomy of the home has come to stand in increasingly sharp contrast with the lack of autonomy outside the home. Infiltrating our common environment is a pervading condition of "closed-up" buildings, each physically internalizing its respective exclusory activities. Spaces which used to link buildings now seem to push apart — leaving the people in between in a state of anonymity, disjointedness, and alienation.

L. Wingo cites that almost all books on the city now begin with twentieth-century placelessness. Mobility, communication, and the broadly distributed fruits of rising productivity are generating a society scattered and heterogeneous, organized by functional relations rather than by proximity.[2]

It may be said that the importance in our lives of a "sense of place" passed out the window with the "elipse of community." For the meaning of "place" is closely joined to "social place" — a feeling of self and communal belongingness. When "neighborliness" meant also "sense of place," that environment was the visible result of shared com-

munity values, life-styles, and subtle unities which germinated out of the people within.

As an example, urban neighborhood blocks and Main Street USA, used to possess a tangible dimension which directly spoke of the vernacular and ethnicity of "someplaceness." The advent of our more recent past has successfully replaced them with containerized institutional products of "packaged places." Rather than differences, it is the sameness by which we recognize them. Motels, chain stores, service stations, shopping centers and ranch houses, all evoking a comforting familiarity that you are still secure in the same cultural womb.

This latter-day demand for conformity pervades much of our immediate surroundings. These settings offer highly compartmentalized experience and programmed events, unrelated to local flavor and topological meaning. We are busy transporting ourselves from one packaged place to another by yet another capsuled creation called, "my car."
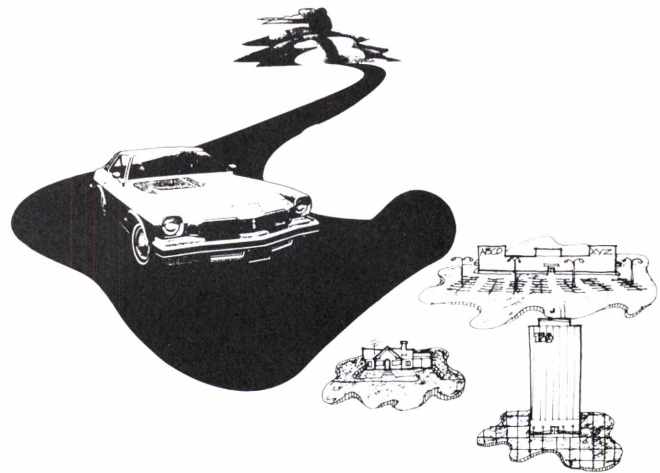
> In a sour tone, Illich concludes that "the more the public is trained in the consumption of packaged goods and services, the less effective he seems to become in shaping his environment. His energies and finances are consumed in procuring ever new models of his staples, and the environment becomes a by-product of his consumption habits." [3]

This phenomenon underlies a culture obviously begotten of the auto age. Instant mobility creating instant places. The automobile has certainly altered the dimensions of "place" in the environment, but more profoundly, a diffusion of the physical and social "sense of place."

> A vacationing traveler stops to purchase a picture-postcard to inform the folks back home of where he is. How well that is con-

veyed depends on the card selected. The photo-image may be a prominent structure in the city, or a field of tulips, or the local costume of the people. A temptation of the sender might be to mail several varieties all in one bundle so that what he feels will be better communicated with a series of vignettes. It often happens that none of the cards will depict quite what you have experienced, or more tragically, the place is non-descript! Well... let's reconcile the matter by mailing the hotel's own postcard!

How would you design a limited descriptive medium such as a picture-postcard which would best characterize where you are now? The significance of this exercise is not the medium, but primarily, what distinctive components of your locality can be identified to describe that to someone else?

It becomes apparent that how we "read," how the environment is articulated, are continuously held accountable (with conscious or unconscious breaks here and there) in our daily conduct of affairs. Furthermore, whether it be a building, a street, or a town, the manner in which these are defined begins to reveal its make-up and how it offers meaning to the perceiver. The environment is notably called out in terms of the physical and temporal setting, and of people's actions within them. In turn, these particulars are finitely recognized as an assemblage of inter-relationships — a chain of relations linking parts to overall form and to personalized associations within the participant. When identified and experientially signified, that environment begins to construe a "place."

5. (a) the part of space occupied by a person or thing;
   (b) situation

**utopia:** n. (Gr. **ou**, not, and **topos**, place.)

The modern course of events has muddled the role and responsibility of the environmental designer. The term "environment" tends to connote vacillating significance, and seemingly less as purporting "community" or more aptly, "people-places." With all the givens around us today, some of which will undoubtedly continue to remain with us, architecture might be reviewed as to its capabilities and forthcoming priorities.

**"place"**
• EVENT
• socio-spatial value
• supports dynamic-temporal process
• intra-dependent environment
• particular inter-relationships
• experiential, imageable, associational
• ethnographic constancy, continuity

**"sense of place"**
• EXPERIENCE
• internalized state of being
• participatory action
• subjective, personified comprehension
• felt awareness
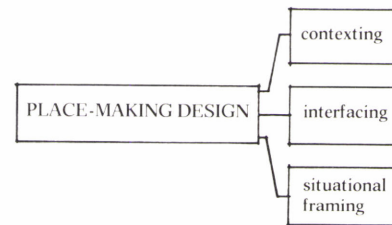• wholistic relatedness

**Webster's Dictionary**
place: n. (fr., from L. **platea**; Gr. **plateia**, a street, from **platys**, broad.)
  1. a square or court in a city
  2. space, room
  3. a short, usually narrow street
  4. a particular area or locality



PLACE-MAKING DESIGN — contexting — interfacing — situational framing

**Place-Making:**

**Place-making** inserts physical settings into the environment as a tangible, ordering process to suit human dispositions. Architecture in this sense is an act of imparting good fit within on-going realities. It is the building of a "social place" — the collective context, as well as providing a "personal place" — of individual human identity and existential orientation.

Architectural design calls for re-creating or re-adjusting contexts for releasing people's anima-

tion, choice, constancy and identity. **Place-making** architecture emphasizes the interpretation, delineation, and signification of those experiences and values. The architect's task is one of physically qualifying them in time and space.

In understanding the nature of **place-making**, it becomes crucial to bear in mind that a "place" is not created by architects alone, nor by a building **per se**. Each designed environment is always either a retention or an alteration of a **pre-existing** place.



## Contexting:

"Where, if you had a choice, would you like to live?" A similar question was posed by geographer Peter Gould in his study of defining people's "mental maps" about various places.[4] The question, and if it is further followed by "why so?", elicits predictable responses of people conjuring up images of favorite towns and cities like San Francisco, Charleston, Boston, etc. stated in terms of physical features, cultural phenomena, activity characteristics, specific amenities, and personalities. Towns and cities defined in a "sense of placeness" are a composite of these factors, sifted and

selectively screened in the minds of each respondent — a matching of the individual's likes and dislikes developed and identified from personal experiences and associational values. Each person draws personal meaning from the place-context, a process according to E.T. Hall that includes five sets of disparate categories of events which must be taken into account: the subject or activity, the situation, one's status in a social system, past experience, and culture.[5]

A context represents a wholeness of a set of events whose parts are woven together to determine exact meanings. In shaping an environment, we are essentially organizing a milieu so that man derives meaning, converting that environment into a "place."

In environmental design, we may call this a conscious act of **contexting** — the responsibility of arranging a multitude of context determinants into compatible linkages including those political, economic, social, and ecological components having direct spatial ordering implications.

A contextual make-up ultimately manifests human commitments entrenched in a dualistic value-interplay of the **individual** on one hand, and his **collective institutions** on the other. The morphology of culture, as reflected in our towns and communities, has been governed by these two interactive processes in shaping the environment. Engaging our design directives to substantiate a harmonious coordination of this relationship constitutes **contexting**.

An example of a pervading case of dichotomy is best exemplified in the housing environment, where the private commitments (as in the single-family home) spar with those of the public (as in the institutionalized sector of mass housing). N.J. Habraken points out the confrontation as revealing three qualities

common to both: (a) that each constituency tries to expand its territory until stopped; (b) each power structure uses the minimum effort necessary to exercise its power (that is, economy of means resulting in mass-produced uniformity); and (c) that each power structure reflects its particular value system in its territorial claims — each has its own vernacular (visible and manufactured).[6]
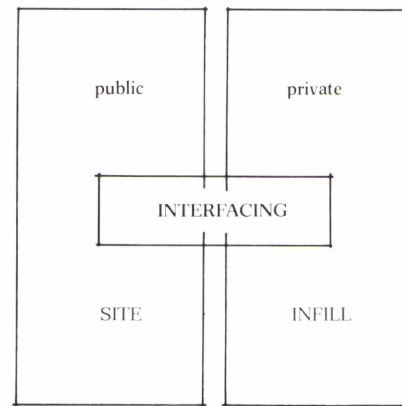
Hence, **contexting** predicates not only a physical, formalistic fit but a psycho-social symbiosis. **Place-making** may be characterized as providing personal "infill" within the larger public "structure" and vice versa. The former demands that the public "structure" be legible, accessible, and personalizable. The absence of reciprocity occasions a loss of personal "sense of place" whenever in the public framework.

Take the common European sidewalk cafe, whose location as an event in space resides patently in the "public structure" of the street. It is perceptually legible and effortlessly accessible. The setting offers a personal increment to socializing encounters. Diverse actions of "personal infills" may be accommodated. Mingling through an open market or a public square presents similar sociopetal opportunities. Such events in the public environment support the spontaneous, informal bonds of community — individually and collectively.

Contrast these settings to the more plentiful public urban-scapes denoting aloofness and intransigence to such social mergers. Contemporary street-fronts are often impervious walls. Spatial and social propinquity of those inside and out is discounted. A sense of obvious communality is made invisible, and personal-collective interest in such cognizance evaporates as one intentionally spends the least amount of time in such situations.

**Contexting** today is overwhelmed by the installation of monolithic imbalance. In the name of institutional sanctity, communal events and settings are helplessly disappearing. To the tunes of functional purity, efficient technology, and token formality, architects cooly reinstate object-fetishes and not the community, which architecture sustains.



Interfacing:

**Interfacing** here, means the precise task of introducing a binding fragment between the collective structure of "social place" and the private need of "individual place" — a connection to and retention of the values always dormant within a context. A building is not an idealized embryo unto itself. It is a piece of the heterogeneous surroundings, and aspects of the building's elements are in fact part of the city — a public space, interactive and structuring that larger tissue. Rather than conceiving the building's perimeter as an envelope, it should be considered more as a membrane, susceptible and resonating to what it protects internally and how it joins with the external
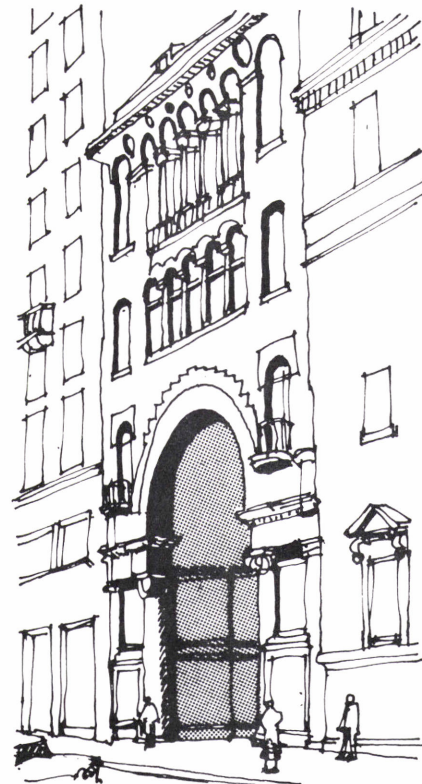
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environment.

In a highly bureaucratized culture, the intentions of building synthesis have been reduced to rational, efficacious, operational dictums which begin to determine the specifics of building-to-building, people-to-people, people-to-people environment interface.

> Zoning regulations literally shape places by a **land plus use** parceling methodology which is a two-dimensional delineation of an abstracted, formularized flatland world measured in terms of surface area, movement of goods, real estate distribution, among others. Health codes, building codes, public ordinances constitute to be highly spelled-out ordering devices assuring sanity and "decent standards of living" when complied with.[7]

The gist of **interfacing** is a conscious search for the allowance of spatial (time-order) and activity (experience-meaning) confluence with each built-form; of integrating splinter "claims" on the environment by various sectors of the community. This ordering process attributes less arduousness to the architectonics of "border-lining" and arbitrary "compartmentalization." Adjoining rights of ownership and their governance, such as expressed in terms of property-lines and municipal use-activity regulations embody a **spatial** configuration, not a "line." They comprise a "transactional zone" and occupy volumetric overlap. This recognition consequently generates significant alternatives to spatial arrangement, territorial expression, psycho-perceptual experience, and use-form placements — in short, the legitimization of a socio-spatial "in-betweenness."

Undoubtedly, it is the network of "in-betweens" which holds the environment as a coherent whole, a tangible continuum binding artifacts, events, and meaning.



Jacob Reed's Store.  Philadelphia

"At a particular point in time and space, a man has one identity and lives within one structure. At an increasing number of adjacent points, he must assume a totally different identity and structure. It is of primary importance socially, economically, and personally, that man does not get lost as he travels between, enters into, and exits from his different daily and lifelong roles."[8]

Under prevalent institutional and econometric mandates, "in-betweens" as environmental entities are of negligible worth. This is due as much to the influence of a culture indifferent to basic human sensitivity as the environments architects fail to interweave.

setting          user

SITUATIONAL
FRAMING

SITUATION        ACTION

## Situational Framing:

The organization of human-occupancy environments in terms of **place-making** deems such settings as composed of a series of event-locations carried out by those present. These stage-settings, as locational experience, provide situations for the participant's activity-performance. The difficulty of design is that the architect deals essentially with an abstracted version of these possible experiential states, not forgetting to add the heterogeneity of the acts and actors.

Until predetermining people's behavior is proven healthy or beneficial, we can but may not truly "design" activities. Realistically, architects are designating settings for certain actions to take place or not to take place. The spatial configurations can be no more than a premeditated **situational framework** for possibilities.

Because we are discussing environments as relating to a "sense of place," the foregoing statements require a re-emphasis of the subtlety of the notion "experience," especially in light of interior space-planning. An experience of a "sense of place" is perhaps best analogous to a feeling of "at home-

ness" with oneself in an environment. A felt sensation of "at homeness" only exudes when meanings are drawn by the perceiver from individually associational clues in the setting. "Experiential meaning" is personally derived. C. Moore refers to this as the individual's attainment of a "sense of possession" of place.[9] Anthropologists have noted the clues to this state as "man's deepest attachment for always turning spaces into places, attaching them through habit, memory, mood and personal association."[10] Metaphorically, T. Lee alludes to this as "the disposition of people and objects fused."[11]

The manifestation of the need for a sense of "at homeness" is frequently observable. Sometimes it means decorating the walls by one's desk in the office with personal memorabilia, or just sitting at a favorite spot on a windowledge. The differences between conditioned/programmed experience and personified experience are not always blatant. But the distinctions become acutely visible when an individual "sense of place" especially in a collective situation turns into a contagious feeling of a communal sense of shared "at homeness."[12]

The design of environments may be restated otherwise: a design based on environment as providing **potential signification** by the occupants. We have been saying that a "sense of place" is a result of "internalized experience." What is unassailably problematical is that it is very hard for someone who does not share an unstated, informal, internal need with another to experience, let alone design, that need as tangible and valid. It is easy to omit what is inefficiently quantifiable, and far simpler to assume conventionalized generalities based on surrogate formulas or normalized predictions.

The design act pursued in **situational framing**

advocates a scrupulous differentiation of architectural elements in terms of dimensional increments, temporal-performance characteristics of building components, position and location of materials, and providing situations replete with personalizable clues to user interpretation. It is a question of the right designation of an open-ended scenario for potential **place-making**. The building is a vessel — a framework, physically complete **per se** but leaving ample spatial tolerance for voluntary, evolving variations on the theme by its users.

## Toward the Development of Place-Analysis

If, at the task of each environmental design, we are to reshape an existing context, no doubt we have to understand that milieu — its structure, its order, its behavior. Towns and cities hardly crop up overnight, although many of us will not hesitate to admit that parts of our contemporary surroundings are beginning to resemble entities which, for all we know, were hoisted from the dark heavens during our slumber. What we inhabit is the result of an evolving process of events, decisions and natural forces. Our communities are incrementally shaped, often at random, but mostly self-consciously — men fulfilling their individual and collective needs with the givens of the times.

We may witness these in the elements of the environment: these markings may be examined, codified, communicated and evaluated. The operational task of **place-making** incurs an unprejudiced inquiry and dialogue.[14] At one end, we ferret out information in the public domain of the collective world; at the other, in the variegated acts of personified settings and most assiduously examine the mutual transcendence of the two. This process employs a method involving the reduction of the
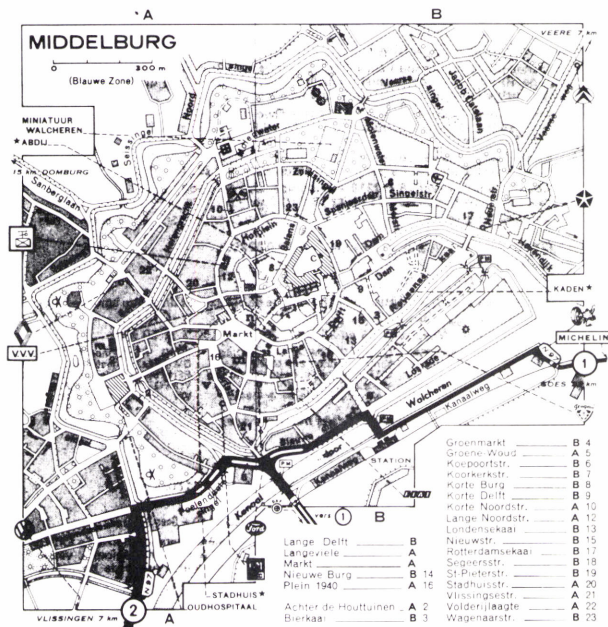
volume of information while preserving as much of its value as possible[13] — an anatomical diagnosis of the apparent ensemble into the smaller, generic, archetypal forms making up the whole. At its nucleus, we will undoubtedly find man — the "smallest increment."

**Place-analysis**, as an antecedent to neighborhood or building design, inquires after hidden meanings for patterns of unities and order shaped by people and events. Extant physio-spatial articulations are sought for their cultural derivatives: use, form-dimensions, object-placements as signs of human actions and aspirations. The intensity and clarity within them reflect no more than the energies and convictions indigenous to their makers. These morphological signs are carefully extracted and edited into a set of explicable semiotics of place.

Mapping is intrinsically an editorialized note-taking, its synthesis requiring legibility to a large number of users for proper transmission of piecemeal as well as holistic information. Well executed travel-maps serve such a function. Recalling the picture-postcard analogy cited earlier, we could substitute the fractional image post-card with a "place-map." The idea is not unlike mailing an entire city map to the folks at home, preferably, one authored by the Michelin people.

What is prominent in the Michelin-Guide maps lies in the pink solids of the diagram, that is, the approximate built-form components of a town are recorded! [15]

One can "size up" from their map, the feel and texture of the town, even the spatial openness or closure — not only the location of focal points but probable significance: whether the town is a church, market, or civic-dominated culture. One could come

The concept of "place" is not entirely new nor absent from the concerns of contemporary environmental designers. We are aware of the meaning of "place" and the fleeting value of "place" from our daily culture. Yet, it is clear that this agreeable belief meets operational ambiguities in transcending mere polemics of the subject. In that attempt, somewhere between our practice of grand sculpted masterpieces or the ultra-rationalistic journeys from which architectural form becomes impossible to derive, an impending method for and techniques of **place-making** design beckons the maturity of our profession.

close to "experiencing" the town via this map-form. The medium of mapping is to be noted here, but imagine also a similar graphic depiction of your town or suburban environment and see what that will reveal!

A purpose of the pre-design method referred to here approximates that of a "performance criteria" in the making of place. A specific topologic analysis, for example, may generate evidence of how the parts fit together, how they are sequenced, and how they are experienced. The nature of the analysis and documentation explicates a **process** in that environment — how the values and intentions of the people perform and become tangible. To the designer, this instrument procures decision-making guidelines without which our acts indulge in arbitrariness.

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## Notes

1. Maurice R. Stein, **The Eclipse of Community** (New York, Harper-Row, 1960). Studies of the American community patterns which established the conception of the split between ideologies and realities in modern community life.
2. Lowden Wingo, ed., **Cities and Space, The Future Use of Urban Land** (Baltimore, Johns Hopkins Press, 1963).
3. Ivan Illich, **The Celebration of Awareness** (New York, Doubleday, 1970).
4. Peter Gould, **Mental Maps** (London, Penguin Books, 1974).
5. Edward T. Hall, **Beyond Culture** (New York, Anchor Press, 1976).
6. Quote from lecture by N. John Habraken, "The Limits of Professionalism," John Demys Memorial Lecture, Architecture Association, London, 1975.
7. Lawrence Halprin, **New York, New York** (New York, Housing and Development Administration Report, 1968).
8. Kevin Lynch, **Image of a City** (Cambridge, MIT Press, 1964).
9. Charles Moore, "Toward Making Places" (in **Landscape** journal, Autumn 1962).
10. Asa Briggs, "The Sense of Place," in **The Fitness of Man's Environment** (Washington, D.C., Smithsonian Institution Press, 1968).
11. Terence Lee, "The Psychology of Spatial Orientation," (in **Architecture Association Quarterly**, July 1969).
12. The reference here is to the office-building Centraal Beheer in Apeldorn, Holland by H. Hertzberger (**Architecture Plus** magazine, September/October 1974) where within a specific architectural framework, the employees have provided their own individual as well as communal "in-fills" within the over-all surroundings.
13. Kenneth Arrow, **The Limits of Organization** (New York, W. Norton Co., 1974).
14. "Dialogue," as defined by John Friedmann: "the dominant mode of communication in transactive planning through which mutual learning and knowledge among all those concerned are derived and lead to action." John Friedmann, **Retracking America** (New York, Doubleday-Anchor, 1973).
15. The map is taken from a page in the Michelin Guides (Paris, Pneu Michelin-services de Tourisme).

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# Culture, Art and Architecture

## John Reuer

**John Reuer**, Associate Professor of Architecture at the School of Design, is interested in architectural history and the design of shared facilities. His main concern is in teaching and the education process.

When societies see clearly their existential destiny for any given length of time, they become a culture. As such, they are an integer which may be constituted of any of the known social orders. Members of such a culture are able to understand and express its meaning in accordance with their respective station in it. Consequently, a collective cultural will can be observed and identified which, under the careful examination of any individual, provides the initial stimuli necessary towards the occurrence of art. The phenomenon of art, then, is the process of design, in which one individual translates selected stimuli into physical artifacts.

This process may be described as the relationship between the cultural will of the collective and the artistic volition of the individual. When this relationship no longer exists, art appears to become a private matter and remains inaccessible or largely ignored by the general public. While this situation does not necessarily imply the replacement of good art by bad art, it does seem to indicate a loss of the meaning of art to the public. Art then becomes the privilege of a minority and does not exist for the many, a condition which is widely observable today. Attempts to recover the lost relationship between cultural will and artistic volition through manipulations of surface manifestations of contemporary societies into works of art is vulgar and offensive to the respective society itself and inevitably doomed to failure. Today, both artist and society distrust one another, a condition which is the result of a fractional rather than an integral way of life.

The mutual alienation between artist and society has led to a number of consequential developments in architecture as well. Today's architecture comprises a large number of failures for the general public flanked on one side by style-works of the masters for the affluent few and on the other side by goodwill-works of the advocates for the poor. Appended to either side are the contributions by theoreticians proposing utopian "thing" phantasies or behavioristic "no-thing" remedies.

Integration of the factions is prevented by the intolerance of their respective representatives. "E Pluribus Unum" does not exist, while pluralism cannot emerge from mutually exclusive or contradictory principles. The noticeable loss of the relationship between collective will and artistic volition explains the current misery and is the result of a gigantic betrayal of the ideals of the founders of the modern movement in architecture.

More than anything else, the modern movement was founded on the principles of a new life for an envisioned new humankind. New methods and new materials of construction yielded new forms of architectural designs to be employed only towards the realization of the envisioned new life!

New methods, materials and forms were always and clearly understood to be means to an end. The founders of the modern movement acted in historically appropriate ways: they selected stimuli from a perceived, though latent, but emerging new cultural will to be used through their respective artistic volition towards a new architecture for a new life.

By institutionalizing the ideals, practicing and teaching professionals perverted the means into ends and betrayed the vision of a new life. Our environment today is the inheritance of that betrayal: it bears no evidence of either representation, that of a collective cultural will or of an individual artistic volition derived from the former.

Since the beginning of the modern movement decades have passed and one must re-examine the concept of the collective will and its possible application in the future. Today's youth follows existentially frightened generations of the near and distant past. Worldwide upheavals of recent years have cleared the way for an improved human condition, which is not necessarily a corporeal, but primarily a spiritual one. The idealistic notion of classical humanism of the 19th century, which anticipated the world-views of the modern movement's originators, yields to the currently emerging concept of the uniqueness of the individual human being. Historically and for the first time, stripped of all prejudices, arises — on a broad participatory basis — an opportunity for the self in any and all of us to be fulfilled. Former social goals begin to be replaced by personal values: past racial, sexual or philosophical inequities disappear while the personal sovereignty increases. Though value is placed upon the self, selfishness will not result, rather a greatly improved and compassionate understanding of others through the experienced, matured and fulfilled self. This new self emerges to become the determinant for a cultural will so necessary and pre-requisite for artistic volition. What is observable is the change from a former system of superimposed values to one generated by its participants. Only after this change has occurred and has been accepted can the relationship between the cultural will and artistic volition be re-instated, and the mutual isolation between society and artist disappear.

To promote and accelerate this change, schools of architecture are professional provisions uniquely endowed through their studio classes. If and when such classes emphasize self-development, self-recognition and self-fulfillment as their first priorities, then given assignments will no longer be dutifully completed in a stereotypical fashion and the rapprochement between cultural will and artistic volition will be facilitated. Students must be encouraged to act in behalf of and as advocates for the public, as well as individual artists.
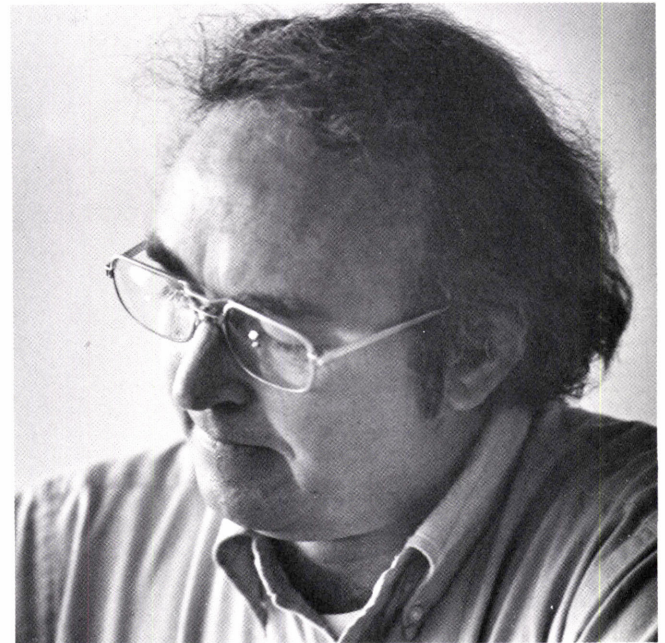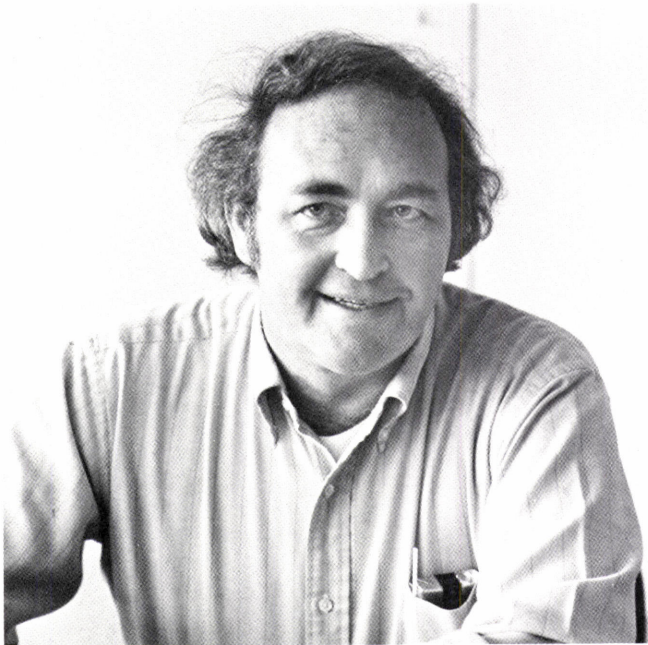
Finally, encouragement should be taken from Martin Heidegger's essay, "Building, Dwelling, Thinking," in which he observed: "The real dwelling plight lies in this, that mortals ever search anew for the nature of dwelling, that they **must ever learn to dwell**. What if man's homelessness consisted in this, that man still does not even think of the **real** plight of dwelling as **the** plight? Yet as soon as man **gives thought** to his homelessness, it is a misery no longer. Rightly considered and kept well in mind, it is the sole summons that **calls** mortals into their dwelling. But how else can mortals answer this summons than by trying **their** part, on their own, to bring dwelling to the fullness of its nature? This they accomplish when they build out of dwelling, and think of the sake of dwelling."

# The Practice Viewpoint

## The Values of Design

# Landscape Architecture:
# Now and Then

## Richard Wilkinson

**Richard Wilkinson**, Professor of Landscape Architecture at the School of Design, is interested in the management, conservation and development of natural resources and community settings. As past director of the Landscape Architecture Program, he has been active in expanding the context of concern of the Landscape Architecture profession.

During the past twenty-five years the profession of landscape architecture has attempted to create a destiny for its practitioners that will place it in the mainstream of American society. The profession in America is just over 120 years old. During that time, there have been many episodes contributing to its fulfillment and to the periodic declines from which it has had to regroup and rebuild.

Frederick Law Olmsted is still the principal figure, and his work is the model from which various sub-groups have attempted an expansion of the professional boundaries. He developed the concept of the managed public environment, and his work dominated the initiation of the profession. As a designer, planner, writer, and visionary, the work he performed established a professional arena inclusive of the entire prospect of American landscape development. His park work, including Central and Prospect Parks in New York City and the Boston Metropolitan Park System, done with Charles Eliot, and his role in formulating the National Park concept are unfulfilled destinies.

His view of an education system based on a humanized landscape experience brought about the Morril Act which led to the land grant and state university system. By his involvement as the first president of the National Sanitation Commission, he gave credence to the relationship between the environment and health. His work reflected the grasp he had of the realities of his own time. As the dominant practitioner of that time, he set the framework for a continuing development of the ideas he promulgated. In the aggregate, his work reflected a most advanced concept of public environmental management. He was a contemporary of George Perkins Marsh, Darwin, John Muir, and other natural and social scientists who were awakening to the potential of science in the affairs of a developing country.

Toward the end of his professional life, he became involved in the estate movement, best expressed in the design of the Biltmore Estate in North Carolina. The estate was most noted for its influence on the forestry profession as the first school of forest management in the United States. The succeeding practitioners of landscape architecture seized upon it as an avenue for accommodating themselves to the rich and powerful. From the time of his death in 1895 until April 1929, the profession followed this avenue: estates and resorts for the wealthy, pleasuring grounds, and imperial schemes for cities.

Olmsted's concern for the public environment was largely ignored and, in many cases, rejected as not in keeping with the then (and now) current view of the profession as an applied fine art. During this hiatus, the work of environ-

mentalists was being carried out by others. The National Park Service, U.S. Forest Service, commercial forest management, national housing programs, agriculture production, water management, and the other environmental sciences were well-established in the process of creating the character of the American public environment. However, city planning, once a function of landscape architecture, was neglected and became a function of the engineer/administrator's point of view. Land grant universities were soon dominated by the production ethic and the purposes of agriculture and land conservation were established without input from a design profession. The park movement soon served the interest of the recreationist.

Those purposes initially conceived by Olmsted as functions of design, public administration and the supporting sciences were left without design input. One must remember that the applied natural sciences were embryonic in that day and that public administration, as we know it, did not exist.

The retreat by landscape architects into the pure and centrist concept of the profession as an applied fine art caused the long gestation and growth periods of public environmental management concerns to proceed without influencing the growth of the profession of landscape architecture.

The landscape architect, with no continuous tradition but with the prospect of association with wealthy patrons, borrowed what was theirs to lend. That this became the formative core of the profession did service to neither the origins nor the practice. The central concept of the profession as the practice of applied fine arts, borrowed largely from other cultures, left much that was rich in opportunity and exciting in America to be the work of others. The work for which the practitioners were suited came to an abrupt halt in 1929 with the onset of the Depression.

The idea of a profession is perpetuated by the serious practitioners. Its development has always encompassed the need for a core or base from which to evolve. The central questions in this case have been whether the origins needed to be re-examined or whether the means to apply what was already known was at fault. Is the condition of the community a source for ideas, or is the centrist theory the only true path? These issues are not pertinent today, but they are a legacy.

Regardless of the time lapse, the legacy still bears heavily on today's practitioners and teachers. Many are and have been engaged in discovering a process for creating landscapes. The concept involves understanding the relationship between the inherent capacity of land and the needs, aspirations and capabilities of the people who are on and of the land. Landscape as a descriptive term is explicit in its connotation of people and place. The word indicates neither one nor the other, but both.

The potential for the practice of landscape architecture lies in the process of the evolving development of landscapes. This is work that must be shared with foresters, agronomists, town planners, community developers, wildlife biologists, park supervisors and many others who have a long-term commitment to their work.

The landscape architect can bring his interpretive capacity and his aesthetic judgement to these tasks and they will be richer for having them. The years of catching up are difficult from two standpoints: the accumulated knowledge and experience of the applied scientist/manager is impressive and integral to effect participation, and the dogma associated with stylistic and applied art is difficult to abridge.

The elements of the legacy pose problems to the practitioner and to the community. Stated

simply, they are (among others) as follows:

1. The central concept of practice as an applied fine art has not produced a body of work, research and criticism which is adequate for establishing a base from which to expand or address community and environmental issues.

2. The prevailing concept of professional administration, the fee for service system, is not adaptable to solution of public environmental problems; but it controls the manner in which work is described and executed.

3. The core of skills is not adequate to either identify, address or resolve the complex array of problems which can be and should be undertaken.

The main problem is lack of a more comprehensive receptivity to ideas. Among the sources should be the fine and applied art base. Historically, this view has not been acceptable, either from within or without the profession. Ideas from the community, whether it is the wider academic community, the fraternity of other professions, or the broader civic community, are not now understood or understandable in terms of the artist. The broader idea base has been posed these many years by the applied scientist and has evolved to a level of sophistication and detail beyond the reach of the dated intuitive protocols of the designer.

Within the profession the styles are equally well-safeguarded. Vigilance is maintained through the exposure of counterpoint and contretemps by the cognoscenti. Grand departures are either beyond their ken or are picked apart until recognition is regained. In either case, the matter ceases to cause inspiration.

This is not to say that grand works do not exist. The profession has been blessed with people of vision and purpose. They did not always stand out as boldly as did Olmsted. The men who created the Blue Ridge Parkway, the great university campuses, the National Park and Forest systems, and wilderness reserves, as well as those who have been fighting for local qualities in every corner of the country go largely unrecognized. Lay people expressing their values in everyday life create the most pleasant neighborhoods, the sweep of farmscapes and the crannies of delight which are totally unrecognized as sources for emulation by the profession.

The concern focuses entirely on the provinces of criticism. That which is not recognized by the profession is not evaluated and criticized. Hence we have no clearly defined ideas about the **therapeutic value of different public environments for different life styles**. Even more succinctly, there is only now an embryonic concern for understanding what types of environments are preferred by different groups for their varied purposes.

An ultimate truth does not lie anywhere. What seems pertinent is that those places and settings most prized by people in the community are a result of evolving and expanding developments. It takes work and time to make something gratifying. The preferred concept of delivering design services does not accord this view a high status.

The fee-for-service system is not specious in and of itself. It must be combined with a lack of alternatives to achieve such status. In the profession of landscape architecture, it has achieved such symbolic purity and dominates the teaching of practice. It is necessary that a professional be paid for his work. Not all work, however, can be compensated on the same basis.

The misleading aspect of the fee-for-service concept is the necessity to prepackage all professional work into standard increments with precise beginnings and ends for which a precise fee can be calculated. It presupposes that only those who know exactly what they want or have a clear con-

cept of their needs can negotiate for the services of a designer.

The profession has always given lip service to stewardship, or husbandry, of the landscape as a component of professional service. It is clear that this is not the case when the clause in the standard contractual instrument between professional and client states that the relationship is to be dissolved upon completion of installation of the work covered in the contract. Stewardship implies responsibility for the situation being managed or cared for. In the landscape architect's world, this is land and people, the landscape.

The idea of people being involved in the development of a landscape is generative. It points to the true historic meaning of the term "landscape." The professional view of landscape as a picturesque arrangement of features on the land is contrary to the idea that a landscape is the term most normally descriptive of the relationship between a place and its people. It implicitly accepts the functioning of men, women and children as an integral part of the process, and looks toward the evolution and changing conditions that the land and people bring to each other. There is room for, and a need for, professional design assistance in developing landscapes, whether they be central city neighborhoods, large-scale recreation reserves, or farm regions.

The landscape is a relationship between people and the land, involving dual concepts of setting and place. Setting is the pattern of human, psychic and social interactions involving two or more people engaged in an activity of any sort. It ranges from two children playing a game to the complex and formal behavior of public institutions. The results of the activities are related to and in many cases deterministic of the physical surroundings. The attendant physical attributes of a setting are place. The two concepts cannot successfully be viewed independently.

Some setting/place constructs are temporary as in a brief conversation on a street corner; others have greater longevity. Prepackaged professional work, or artifact design, does not account for the dynamic nature of the setting/place relationship. It seems more reasonable for the designer — the landscape architect — to create a process that looks to change. As ill-formed as the concept of husbandry might be, it includes a responsibility for components of an evolving landscape beyond the centrist's doctrinaire theories of form and fee.

**Beyond the art and science of settings and places lies a more intangible philosophy that looks to the future and considers the implications and possibilities of present action.** These attitudes and values come from knowing the science underlying change processes and they steep the practice of application with a concern for all possibilities that affect the environment. **It seems reasonable to expect the practice of landscape architecture to provide such a humanizing experience.**

As a point of beginning, it is necessary to understand the landscape or community as it exists. The structure of the land and its resources, traditions of land assembly and organization, and modes and methods of action by people to utilize and cohabit with the landscape are pressing concerns that must temper the interpretive skills of the designer. Acceptance of present reality as a starting point and realization of change as artifactual evidence is vital to a progressive profession.

What is called for is an expanded consciousness of the community as a source of ideas and process. Guidance in continuing the process is normally welcome. In this manner, the core of skills can be broadened and adapted to people's wants and needs; their competence can be recognized and
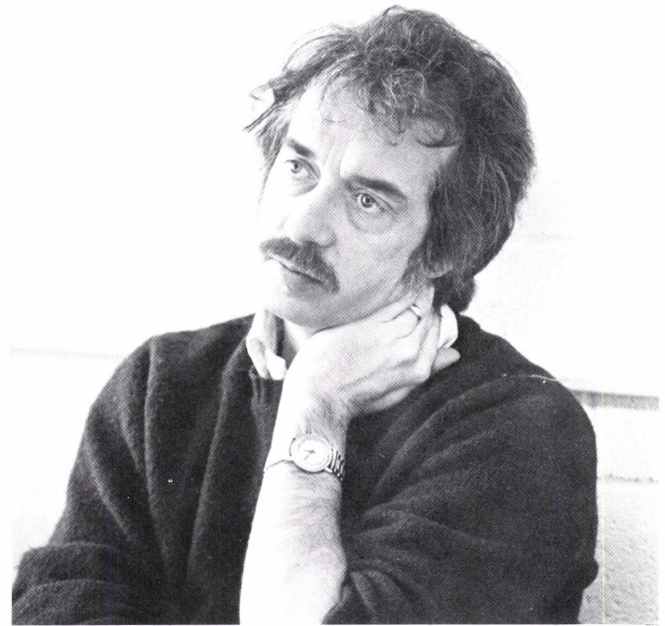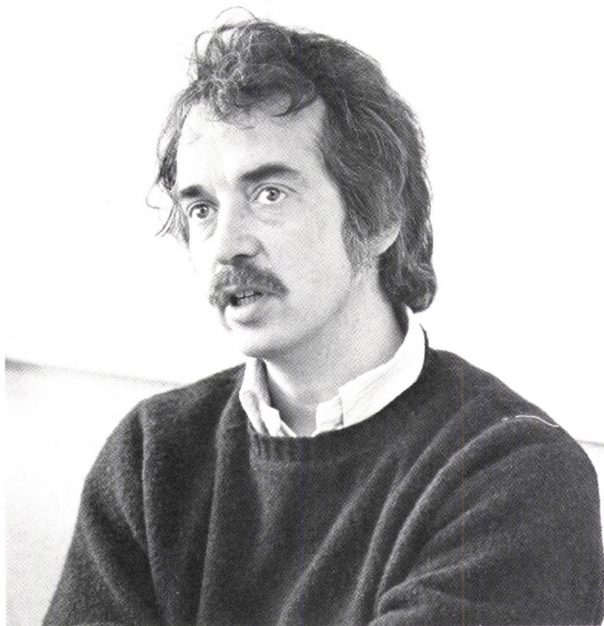
the capability of the landscape to progressively evolve can be enhanced.

A profession concerned with and involved in landscape is an exciting idea. It requires practitioners skilled in and sensitive to the realities of physical change brought about through people seeking to satisfy basic needs by utilizing their own competencies. It calls for knowledge and assimilation of the purposes of other practitioners concerned with management and guidance of change — the forester, agronomist, community organizer, politician, geographer, anthropologist, and others who more readily see and understand the community as it is. From this base a community aesthetic can be established through interpretation.

Interpretation rather than dictation is more normative and acceptable. It is also evolutionary and incremental and a progressively evolving relationship is implied. The community serves as the source and the practitioner as the interpretor, communicator and participant in plan formulation. Most importantly, interpretation implies a transcendence of reliance on the centrist concept of practice as an art applied as fixed artifacts. The totality of the changing landscape is the appropriate artifact.

# Problem-Solving and Design

## John Tector

**John Tector**, Assistant Professor of Design at the School of Design, is active in the study of man-environment relations, architectural programming, problem-solving methods, and design for the handicapped.

In order to discuss the impact of design and designers upon the future, we must share a meaning for the verb "to design." Webster, quite acceptably, states that to design is "to conceive and plan out in the mind ... to have as a purpose ... to devise for a specific function or end ..." The designer, then, makes a series of decisions about the becoming of some thing and then records those decisions in a drawing or some other document. Webster states the definition of the verb "to decide" as "to arrive at a solution that ends uncertainty or dispute about ..." Such an arrival necessitates a traveling from one state to another. The first state is one of uncertainty: a question raised for inquiry and consideration ..." Webster calls this state a problem. The second state is one of certainty: "an answer... explanation...a bringing or coming to an end or into a state of discontinuity." Webster calls this state a solution. This transition from uncertainty to certainty, which is the action of problem-solving, is the central action of design.

Really, problem-solving never makes it all the way to certainty. The traveling is from more uncertainty to less uncertainty, from lack of confidence to confidence, from hypothesis to validation. The word validation smacks of certitude, but we must remember that validation is only achievable in a probablistic sense.

We can't do it all at once. The trip takes time. It travels through differing levels of complexity; the modeling of an alternative shoe last, the conducting of market research, the selection of a palette for a painting. The real problem-solving trip is also a traveling through many phases. At least five of those phases regularly reappear.

The first problem-solving phase is called **strategy selection**. We select strategies when we ask what the problem is and when we ask what processes we might use to solve it. Another name

for strategy selection is planning.

The second phase is called **information structuring**. We structure information when we look for the purposes, variables and methods appropriate to the way we have chosen to solve our problem. During this phase we search for those criteria that will tell us when the problem has been solved successfully. Another name for information structuring is programming.

The third phase is called **alternative generation**. We generate alternatives when we exercise the methods selected to develop a proposal. When we develop a proposal, we organize variables according to purposes in a way that the criteria for success have the best chance to be satisfied. Some would have it that the word "synthesis" is exclusively reserved to this third stage and that the word "analysis" is exclusively reserved to the second stage. In fact every decision that limits the possible outcomes of a problem-solving effort is a synthetic decision. And every synthetic decision requires some efforts at analysis in order to make it. Both analysis and synthesis behaviors are appropriate to all five problem-solving phases.

The fourth phase is called **implementation**. We implement when we actually make a thing, or perform an action recording an alternative proposal we have generated. Some other names for implementation are building, playing, doing or trying.

The fifth problem-solving phase is called **evaluation**. We evaluate when we ask whether or not the thing we made or the action we performed met the criteria we found in the second phase which would tell us that we succeeded in solving the problem. When we have met the criteria for success we have validated the alternative we generated to solve our problem and, hopefully, we have learned something about solving this kind of problem. Another name for evaluation is testing.

Problems do not exist in the past, nor do they exist in the future. They exist in the logical and the temporal now. Problems have histories and problems are predictable or expected. But their existence and influence are only immediate.

The longer we wait to deal with a problem, the more it will change; and, therefore, our concept of the problem will soon be out of phase with the problem's current state. The more we attempt to act on an anticipation of the problem, the more rapidly our concept of the problem is out of phase with what the problem has become. It will take a greater amount of time to solve the problem and to be ready to implement its solution. Meanwhile the situation will have changed. It is necessary to predict what new state the problem will be in when the problem solver is ready to implement his solution. The only chance for success is to be so experienced with similar problems that we generate a solution which anticipates an intersection with the changing series of problem states.

Problems can only be solved with information. Information is the key to reaping the benefits of past problem-solving experiences and capitalizing on future expectations. Information needs to be validated, needs to be made trustworthy. Even if the problem-solving paradigm is one that is highly personal, intuitive or internal, some external, experiential validation must be achieved.

Design is problem solving. If any of the five problem-solving phases is left out of the design effort, then the design problem has not been solved.

Every design problem is an experiment. Inquiry, exploration and research provide information. Structured information produces the thrust of theory and the direction of hypothesis. Performance criteria are established, hypothetical

solutions generated, and tests developed to validate those hypotheses. Once the data is gathered, the tests made, and the outcome determined, the validation process has transformed the design solution from hypothesis to fact, from assumption to experience, from anticipation to history. The validated design solution is a mapping from the unknown to the known, the establishment of future confirmation.

The design program generates the means for validation. The program sets up the designer's test. The program establishes the criteria for success, lets us know the rules of the game, tells us when the problem will be solved. Without a program, no performance specification is generated, no validation test is possible, no design problem is solvable.

Design problems are human problems. There are always two elements to every design problem: the thing and the person. The designer is immersed by necessity in person-thing relations. The thing is perceptual, experiential, affective, a part of the person. The person is bonded to the thing in an intimate way. Neither has meaning without the other. The solution to the design problem is found only in the relation between the person and the thing: in shelter, in possession, in service, in image. To deal with the person to the exclusion of the thing courts disaster. To forget the thing and concentrate only on the person is unproductive.

The design program helps us strike the balance between the person and the thing. Programming asks the person why the thing needs to be and looks to the person to find some clues as to what the thing might become. Programming looks to the person for a statement of goals, explores the person's goal-directed behavior, describes the setting that facilitates that behavior, and finds there the performance criteria for the thing. Program-

ming, therefore, allows the designer to make the person-thing relation.

The solutions of the design problems of the future will arise from those paradigms that appreciate the dynamic nature of problem time frames, that accept the necessity of validated information, that recognize the essential problem-solving and experimental nature of design, that fully comprehend the importance of person-thing relations, and that are versed in the methods and techniques of design programming. It is in the experiences of today that we learn to cope with the challenges of tomorrow.
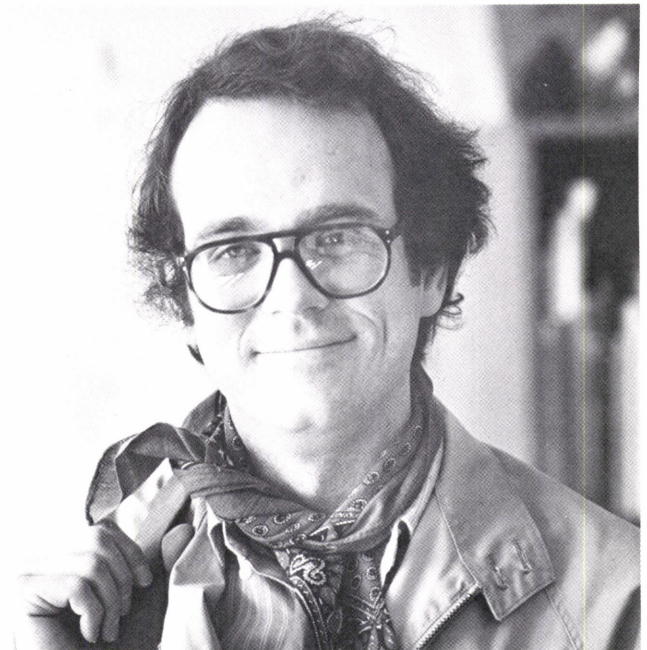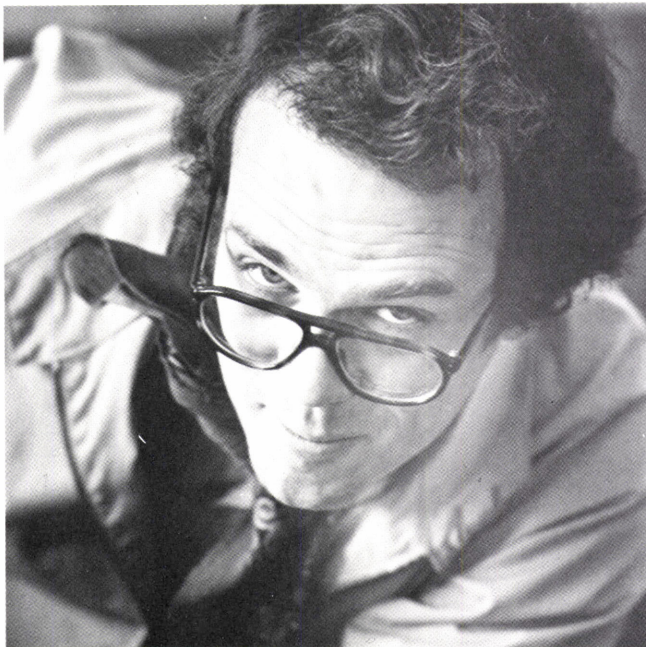
# The Project Viewpoint

## The Strategies of Design

# Human Instrumentality and Environmental Evaluation

## Denis Wood

**Denis Wood**, Assistant Professor of Design, is interested in geography and psychology. Combining the two, he is actively engaged in teaching and research of spatial and environmental cognition.

On the table before me sit a number of common instruments useful in measuring — useful in evaluating the environment. On the table before me sit a tape, a yardstick, a stopwatch, a watch, a goniometer and an arm protractor, a clinometer, a map measure, a compass, a wall thermometer, a pocket thermometer, a percentage protractor, a level, a plumb, a light meter, a camera, a pocket scale, a postage scale, a barometer, a measuring cup, a set of measuring spoons, a pedometer, a stud finder and a passle of questionnaires. Some of them, like the pedometer, no longer work; but I still hold on to them. Others, like a couple of the questionnaires, never worked at all; but even these I am loathe to throw away. All of them have told me, or promised to tell me, about my world, and since this I would know of, I am not eager to part with these instruments — functioning, flawed or broken down. It is sixty-nine degrees Farenheit where I sit at three-o-five in the afternoon. It is four minutes and forty-seven seconds since I typed the first word in this paragraph.

There is another instrument in this room and I am it. I would have said it was chilly where I sit and that twenty minutes had passed since I started writing, although my stopwatch now says it has been nine minutes and thirty-four seconds at, according to my other watch, three-fifteen on the nose. I won't argue with my instruments. They're measuring different things than I. My thermometer knows nothing of the breeze bussing my skin and driving down the temperature; my watches, recording the pressure of their drive springs, know nothing of the pressure of trying to say something with words. Who should say which is superior instrumentation? Not I, certainly. My watches and I, we are holding up the world against different standards and both of these are interesting and valuable and important.

I am a superlative instrument and I measure
what I measure as no other instrument can. I am
useful and valuable in measuring, and hence in
evaluating environments. So are you. But to be
useful you must be an instrument and not a judge.
As an instrument I respond. I respond to the to-
tality of my environment, to my viscera no less
than to my field of vision. As an instrument I do
not judge. It is now four-forty-four according to
my watch and according to my watch that is all
it is. My watch knows nothing of late or early. As
an instrument, I don't either.

As an organism, as a person, I respond and
judge. It is not only four-fifty-nine, but it is also
very late. It is too late, in fact, to get done today
everything I have to do. As a person I am instru-
ment and operator. In the remarks that follow,
written during my first year in Raleigh, I tried to
record only my responses. I tried, in other words,
to be an instrument. But I tried to be an instrument
responsive to the totality of its environment and so
remarked the state of my stomach along with the
state of the world. I did not always succeed in re-
fraining from judgement. Sometimes I confused
judgements with observations and observations
with judgements, though actually this is only a
guess on my part: some of what look like judge-
ments are only records of my responses to my
environment.

No instrument is transparent or impartial.
It responds to only those parts of the world to
which it is capable of responding and it responds
only as it can, though this changes as the instru-
ment changes, grows, matures, shrivels. The words
that follow are thus records of interactions between
me in my instrumentality and the world around
me. They are environmental transactions and they
are my measure of the world. While it's as good as
any, it is not sufficient, not even for me.

from
Denis Wood's

MOVING:

An Interactional Analysis of
Man-Environment Relations

Raleigh, North Carolina
2 August, 1975

## 1   Sunday Two P.M.

I wanted to write this afternoon.
Instead I ended hanging curtain rods
and poking holes in freshly painted pegboard.

I was vexed for a while
but soon I realized:
curtains on bedroom windows:
magnificent poems.

## 2   Here Where I am Not

I am here in Raleigh
where I am not.
I am not in Worcester
where I am.

The pain of separation
just begins
to show
in the crooked smile
that is all
I manage
when I look for Worcester
here in Raleigh
and find it not.

These Southern faces
shut me out
and the heat
shuts me in
and the sound of this city
is alien to my ears.

What am I doing here
where I am not?

## 3   Homer Gone

On our walk, Homer just disappeared.
I turned around and he was gone,
vanished to some strange backyard
to snuffle the sun and gambol with pups.

I went and watched the trains pass by
and counted every car till I was dizzy
when in the corner of my eye Homer was
circle running, mild lost, and I
whistled and he came and we went together
to the far-flung field
where I threw him sticks until my hurt was gone.

## 4   Silly Business

Writing poems is like taking pictures,
once seen, unnecessary to record.

Why then bother
with this blather of words?

## 5   In Love With King Street

After winter,
when ice storms coated
sidewalk and pavement
when Punky and David sledded
and the street knew the squeal of steel
and the silence of snow,
everyone comes out at night
to celebrate the year's first fire,
in dishabille,
the flame and water faces
wondering
if this were set on purpose
or just the chance of a cigarette
fallen from a drunken hand.
Ambulance tires
crush a thousand flowers
danced from yellow trees
by the west winds of spring.
The ground is rich in their dust.

The mingled shadows
of the summer nights
echo the cries
of teenage loves
and suicides.

The momentary stillness
is shattered by a broken bottle
which brings the sirens
and the cops
and their futile questions
eagerly entertained.
Buried under the brittle leaves of autumn
the pools of vomit are forgotten
and the dusk comes early.
Jagged clouds
scud across the studded sky,
clustered kids
hang like dying insects
at the windows of the corner store.
My footfalls ring cleanly on the sidewalk
in this night of my remembering.

When we moved
neighbors brought out chairs to watch.
They told passersby:
"These fine people are moving,"
and they asked us to stay.

It was fine on King Street, very fine.

## 6   Goodbye, Anyway, You Son of a Bitch

Everyone I said goodbye to
said goodbye to me.
They
promised to write,
asked me
to drop them a card.
Darlene from upstairs
wanted me to remember
not to forget
to send a picture of the baby
when it came.
A lot of souvenirs
changed hands,
some
just words.

Goodbye. Keep in touch!
Yeah, you too now okay?
Take care. Take care!

But that damed city didn't care.
I cried goodbye, said it, whistled
and cooed it but it didn't matter
how I said it that damn city just
sat there holding its breath.

Ungrateful
son of a bitch.

## 7   Lives

The expansion of a copper rod
the smile on my baby's face
both miraculous
in the same degree
both descriptions
of the way things are...

## 9   On Crow Hill

On Crow Hill the grass was sere and tall
where we came surprised into this high place
and the view forever on this Sunday walk.

Clanging the hills surrounded: Tatnuck,
Newton, Prospect, Winter, Stratton,
Burncoat, Green and Wigwam down beside

The long lake silver-golden in the summer
afternoon: Millstone, Chandler, Oak and
Union, Vernon, finally Packachoag.

Our hearts went out in this blueberry warren,
the scent was rich and heavy in the air:
now and then Homer's head would show above the grasses.

Suddenly: two grouse exploded from the underbrush!

## 10   5 King Street

What did we leave it for?
When in this awful sundering
will we hear again
the noise of Mike and Punky
playing ball? The flowers
have withered on our porch.
The temple bells
are silent.
The setting sun
caught in the windows of the nursing home
illuminates the kitchen
for someone else.
I shall come never down again
from Castle Hill
to 5 King Street.
Our crazy friends,
come on the off-chance,
will find another face
behind the door.

## 12  Moving

Last month I knew the names
of all the buildings
on the north side of Main Street
in Worcester Mass.
I would call them as I walked
naming them as friends:
Boynton and Commerce and Slater and Day.
Some on the south I would name as well
like Park and Albion…

These, all I can remember now
one month moved to Raleigh.

## 13  Knowing Never Hurt

Let me measure how
he smiles,
Randall (my son):
let me count the inches
end to end,
calculate
precisely
sine and cosine
the triangulation
of his baby's grin.

Shall I love it less
for knowing
what I do?

## 17  Confirmation of the Obvious

I really didn't need
to count
the five instances
of O'Connell
in the Raleigh phonebook
to know
there were sixty-three
more of them
in Worcester.

It doesn't need
statistics
to miss
those
Irish eyes.

## 18  Very Much Alone Together

I am very much alone together with my wife and dog
here in mad Raleigh in North Carolina mad,
for the end of love is being alone and my love is ended
now for many things I loved: Worcester and of Worcester
and in Worcester and by Worcester holy heartfelt
Worcester Worcester Worcester Worcester.

For my love is not ended and I am alone from Worcester
severed and I love still things Worcester and Worcester
and of Worcester and by Worcester and in Worcester
but I am from Worcester severed and I am alone in love.
And it is alone in love from me severed and they are in love
alone and from me severed and they beat their wings against
the air against the air I beat my wings and the song is silence
welling in the lovely loneliness alone in love in love alone.

Simpler to have never gone this way, simpler to have hid
the hungry heart, simpler to have not in Worcester deeply loved,
simpler surely but impossible for the love light was bright in
Worcester's eyes shining afternoons from Vernon Hill from
Union Hill from Packachoag and College Hill from Chandler
Hill and Oak Hill and Burncoat Hill ringing and
shouting and madly chasing me in love with this crazy song
of love of life this sweet song of sweet afternoons with the love
light shining bright blazing fiercely in the blood red afternoon
of our day of love whose end is being alone and my love is ended.

But it cannot be that my love for Worcester is ended for it cannot die
for it abides always but I am still very much alone together
here in mad Raleigh with my wife Ingrid and our fine dog Homer.

O my hungry heart!

## 19  The mandolins are playing, the moon above is saying…

I shall love you forever,
I shall love only you
are promises
that leave no room
for newer
loves.

O Worcester,
is it these
I made to you
that make me linger a little,
sadly,
as I fall
in love
with Raleigh?

Fool
to say forever
in a universe
of change.

## 20 Reaching Out I

Here I am in my new house
bright with flowers.
When we eat dinner in the late afternoon
the sun shines on my plate
orange through
the bamboo shades
and the new wax
on the floors is beautiful.

But at night
when I walk into a room
and reach for the light switch,
it is the switch in Worcester
that I do not find.
Here in Raleigh
I fumble still at this late date.
I fumble in this present
here
in my past.

## 21 Addlepated

When I think of Worcester —
as I do not much above
fifteen or twenty times a day —
I have in mind a Worcester
stopped
the day I left,
manacled to a moment
that will not change
into another
moment.

How surprised I'd be
to learn
that Eileen Shoenborg's hands
aren't still
raised above her head
in a goodbye
wave
to us.

## 22 Grapesmelling Kudzu

I have never lived
a place before
where the mighty metropolitan daily
ran editorials
on the olfactory virtues
of parasitic plants.

In Raleigh
the grapesmelling kudzu
is news,
best appreciated from afar.
Homer, searching for sticks,
breasts its waves, body kudzu surfing.

The kudzu's purple flowers
wilt quickly if plucked
from their hidden places
in verdant oceans.
I could come to like this
crazy place.

And wear the kudzu
as a sign
of my own heart's wilting
in this crazy place,
of my own heart's wilting
in this crazy place.

## 23 John

He wants to visit
but I'm not sure.
What will we talk about
we two
who made a career
of being angry
with each other?
Shall he come
to sit quiet in a corner
of my room
and listen?

In Worcester
where we walked
there was reason
for our talk,
but here
the logic's gone.
What will we say
without the hills
as punctuation?

## 24 Red and Green

This morning the sun
was flying through my green
kudzu and it was ninety-three
in the sun but cool
in the deep grape-scented
hollows and I was glad
in my tropic wilderness.

But then I spoke
with Tom in Springfield Mass
who reported maples
brandishing scarlet arms
hard by Sturbridge
and that fall was in full fling.

I was confused.
In my green delight I had
forgotten to despair, I
had forgotten to be loyal
to an older love.

Outside the still summer sun
danced madly and already here
so tender is the green,
so tender and so callous
toward my love
of melancholy red.

## 25 Not Useless

What will I do with
my detailed understanding
of the mad map of Worcester's streets?
What will I do with
my nascent comprehension
of the ethnic insanity of Worcester politics?
I am in Raleigh and must learn it all again.

What will I do with my knowledge of if
he takes sugar with his tea and how much?
He won't drink tea with me again.

## 26 Contemptible

Strange to think
that some should find
the moon
less beautiful
because we've been there.

Truly
they must find themselves
contemptible.

## 28 Easier and Easier

It's getting harder
every day
to remember Worcester
and how it was
with steep streets
very dark at night
before the lights
Italian boys
and Irish girls
and coffee regular
limp with milk
without the asking.

Aye...
and easier and easier
to live
in Raleigh.

## 29 The Visit

I am returning to Worcester
in a couple of weeks
on business of an academic nature.
The flight there will be delightful.
We will come in low
over the Verrazano Straits and fly
up the East River beside the shiny buildings
and over Providence afar
I shall see Mount Monadnock
rise cold and lumpy
against a yellowing horizon.
Otherwise I am stupid with anticipation:
I have already planned too much
and will be made to see too many people.
In the short hours we shall say
nothing to each other
and I shall worry how we
could have ever meant what we did.
In the end I shall return home.
gladly to Raleigh:
to Ingrid and Randall and Homer
my fine dog
two pillows
and my own sweet bed.
How will Worcester seem
to me now
with my two hearts?

## 31 Clouds

I want to reflect
on my journey and its meanings.
I try to focus on faces
names and gestures
but it is no good.
We are thirty-four thousand feet in the air
and below me the
entrancing clouds
are making a big fuss
and I cannot keep my eyes
off them.

## 32 Love

Love built
on naught
but promises

has a way
of dying.

It takes a lot of walking
to keep a city
waiting
for the feel of your feet
upon its streets.

## 33 O So Unexpected

Our backyard is rich
in the song of a dozen different birds,
each singing on each,
contrapuntally complex
which deliriously I follow
out beyond the dreams of Monteverdi.
The dogwood leaves are
as ancient wood in the morning light,
gold and russet gleaming through
each layer in harmony
with the deep red berries.
The music of our backyard
still does not quench
this crazy pain
that has reached this week
a new crescendo,
my screaming heart
awash in anger at everything,
my face a wreck of pimples,
that tightness in my back
again come to keep me company
when nothing else is on my mind.

So absorbed am I
with my insane life in this mad place
that I forgot
that Ingrid,
sweetness and light,
love of my life,
was born this day,
incredibly,
thirty-four years,
thirty-four incredible years,
ago.
So, O very unexpected
did the thirteenth of October
this year stab me
in the heart.

## 34 The Awful Burning

The money they pay me is no satisfaction.
It has nothing whatever
to do with it.

In Barranquitas
in the afternoons
we would lock the house
against our friends
and read out loud
the novels of Jane Austen.
In Worcester
we'd take walks together
here and there
in the sun or in the rain
happy just the same.
But here I am so tired
that we do nothing:
I walk the dog to get it over
and read the paper to be through
and watch television
in the evening to forget
or to continue to ignore
my awful burning.

## 35 Sunday Morning Thoughts

Already when I walk to work
I am angry. Along the railroad tracks
the sun lies like a razor and the crunch
of my feet on the ballast
could be music.
But I neither see nor hear
anything but sullen faces
and tired voices
of partners in vicious dialogues
that I endlessly rehearse.

At school I am social.
I parcel out my few smiles carefully
where they will do most good.
For those I like I save my true face
and these I scare
with the depth and heat
of my dissatisfaction.

The burden
of having not screamed
in this nightmare university
weighs on me
and while my step is lighter coming home
and while I see more and hear now,
still I rehash conversations
saying to myself what I would have said
to them,
again and again,
the anger rising,
my face tight
tomorrow's acne revealing
what I buried today.

O! I'm so unhappy here!
And worst of all
I do not feel that it will pass away
so easily this time...

## 36 Sunday Morning

This morning taking Homer for his walk
I cursed the trees
blotched and motley,
partly turned,
here red, here brown, here green,
that make a mockery of fall
in this perverted climate.
In the empty lot
I found with search
a single stick to throw for Homer
and he bored wandered off
and ate garbage probably
while furious I returned home
cursing Homer, cursing Raleigh,
cursing cursing cursing

## 37 Las Noticias

I sit on my front porch
reading the newspaper.
I am not enthralled
with these daily events,
but feel the need
to be up-to-date.
I must be able to say yes
when someone asks, "Did you
see such-and-such in last night's paper?"

No one will ask me if I saw
where the lowering light
touched the leaves of the tree across the street
and I was enthralled
by my quickening pulse
in the crackling air
and the cascade of molten gold
that passes here for fall
on one tree at a time.

Here there is no battle for attention.
All the trees but one hang back
and let it go, and when its turn is over,
one more tree will turn.
Each enthralls me in its turn,
killing me softly with its turning,
this autumn canon,
this seasonal rondo, mezzopiano.

I don't notice that the light has faded
until Homer comes
to call me in for dinner,
lost in the leaves and the light.

38 Foiled

I went out beneath
my pecan tree
to learn what my anger
might buy.
I sat down to vent my spleen.

But the damn pecan leaves
would not cooperate,
they just kept falling
on my paper
and the air
was full of them
dancing.

40   Forgetting

So,
not God,
I stupidly yearn
for a place at a time
that will not be again
except in my
addlepated
mind
a little less
each day.

41   Here

The teacup is empty.
Outside the sky grows gray and heavy.
When I stand at the window
I can watch it bleed into night
at the edges.

Watching from the backyard
I am chilly and the moon is
plain and bright. I huddle
in my jacket and the thought
of warmth inside the house,
squatting content there on the ground.
After dinner we shall play some Chinese Checkers.

I like it here, without all I had,
I like it here, with all I have.
This accounting
of moving is confused and painful
but if I can think of no reason to have moved,
I can think of no reason not to have.
And no reason not to be glad in the
hereness of this moment.

Accounting is a silly business:
who shall keep the tallies
and against what account?
I shall not live my life
as I keep my checkbook,
carefully recording what I get
and what I spend. I shall be
profligate and blow my wad
on the crazy grin
of my son
and the dizzy smile
of my wife
and the world run wonderful.

I like it here, I say,
as I take stock
and harbor up these moments
against my ease.

42   Thanksgiving

I like it here.
Tomorrow we shall head
west to the mountains
for Thanksgiving.
I am bold to wear winter clothing
and bring boots against the snow,
but it will be cold and we shall glow
with our own wonderful warmth.

I have so much to be thankful for,
but wonder whom to thank.
While others thank their maker
I shall prefer
the mathematics of my life
that has for me acquired wife and son
and the wisdom to like it
where I am.

# A Planning Framework

## Edwin F. Harris

**Edwin F. Harris** is Director of Facilities Planning at North Carolina State University. He is responsible for the management of the budgeting, design and development of the campus buildings and landscape.

Changes in the physical environment at North Carolina State University are guided by a planning framework. The need for this framework, its explanation and application are the substance of this article.

## Need for Framework

Having moved about the NCSU campus for a number of years, one observes that older buildings are never really monstrous; that newer ones sometimes are; and that the older campus landscape of walks, walls, and trees larger than buildings is rich in a folk art tradition. Common to this sensitive milieu is an appropriate and small project scope that was never so large as to destroy existing campus relationships among buildings, landscape and networks. This changed quickly in the 50's. Larger buildings were funded that were very functional and efficient — labs, classrooms, and dorm rooms flanking corridors. Then in the 60's the drive for efficiency combined with a desire for bigness generated a campus that now resembles battleships of function moored in a sea of asphalt. We have failed with our modern efforts to create a campus environment that matches the gentle humanity of the remaining older campus.

If we are now to build, change, and improve the campus, we could return to small-scale projects and build incrementally in a piecemeal way. However, programs, ambitions, and funding procedures emphasize larger-scaled projects, and small scopes and piecemealing have not satisfied facility needs. Large-scale projects are a practical reality and guidelines for design are imperative now to protect against overwhelming impacts. Therefore, the need for design guidelines is reinforced because we have moved from that time when designers were directed and harnessed, perhaps, by small project scopes. And one must ask too, whether the older campus environment, which is

far more humane than the newer parts, is the result only of this smaller scale or whether the designers then were simply more sensitive and civilized in their design approach.

Most designers seek limitations to a point where the urgency of today's functional imperatives has excessively shaped and donominated our buildings. Future functions and those non-functional dimensions critical to environmental character have been virtually ignored. Since our buildings are constructed to last at least 50 years, the design must be based on constraints that supersede a particular function. Functional requirements are almost always met and State agencies concerned with the building process focus on the technical and contractual aspects of planning and construction. The organized activities then have been accommodated, but our campus has evolved into a group of buildings and areas with little regard for the **time or space between**, and this space and time we view as perhaps the most important element in shaping environments.

The remnants of time and space after the schedules and the net assignable areas were arranged were usually regarded by designers and users as negative space and leftover time and therefore disregarded. The lack of consideration of space between functional entities is evident in buildings where the remaining space is minimized for the sake of efficiency and compositionally ignored, yielding meaningless spatial relationships to other buildings. We are trapped in a net-to-gross efficiency syndrome and must program as positive functional elements those traditional leftovers — circulation, time and space between.

A framework of guidelines is also necessary so that we may communicate in a common language about the buildings, landscape and networks of the campus at many scales. Master plans are dead and a complex physical arrangement requires more than a cumulative litany of designers... "the big idea in this design is"... to describe and relate buildings and spaces. And one must assume that some designers could use direction. The framework that follows will simply enrich the work of the gifted.

### Explanation of Framework

The basic unit is called a **cell**, which can be amplified into a **framework** that has application at many scales. It is necessary to include many **elements** in the basic cell to insure designer and user involvement with the major factors that determine environments.

The **Structure** of the framework is the open space network that exists on campus. This traditional pattern of courts, streets, malls, and spaces defined by buildings and rooms for the most part forms a substantial legacy on which to build the framework.

**Activity** includes the scheduled functional life on the campus as well as non-scheduled and spontaneous life. In the campus context focal points and concentrations of activity develop that are independent of the organized schedule of assembly. These spontaneous focal points often happen in the negative spaces between the organized functional rooms and buildings. To structure the spontaneous is contradictory, but the framework attempts to provide unassigned public space, interior and exterior, that encourages gathering. While activity includes the organized as well as the spontaneous, the functional imperatives of classroom, lab, and office are self-supporting. Therefore, the emphasis is on the public and community aspect of every activity and especially on those, such as food service, which catalyze spontaneous gathering and conversation.

**Circulation**, the dynamic participation of

people in buildings and spaces, is a most influential design determinant. People movement consists of many levels of speed and intention, and the spaces and containers for movement must vary as responsively as highway design varies according to vehicle speed. There are non-scheduled and spontaneous needs associated with moving about a campus that render our conduit/corridors obsolete. Additionally, the architecture of circulation is usually much more stimulating than the architecture of function.

**Enclosure** is defined, rather simplistically, as the perception of space generated by boundaries. The profound psychological dimensions of "enclosure" are acknowledged, but have been generalized in the definition.

**Containers** are simply the houses of activity and circulation and generally are the architectural boundaries that define spaces and make enclosures.
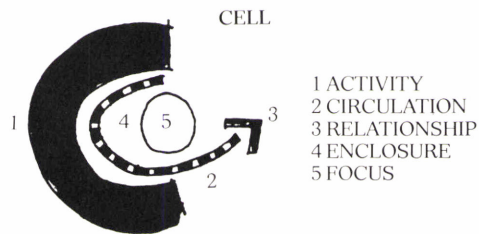
**Focal Points** are intensifications of activity, circulation or enclosure.

**Negative Space** is the area left over after the containers are placed in context.

**Relationship** is the connection, physical and visual, of cell to cell. Relationship is the connector that bonds many cells into a larger framework.

**Orientation** is a participant's understanding of the many aspects of the dimensions of a space: the activities; relationship to larger and smaller cells; a circulation network for access; and a visual domination of the whole.

The elements are arranged as shown to define the **Basic Cell**.



CELL

1 ACTIVITY
2 CIRCULATION
3 RELATIONSHIP
4 ENCLOSURE
5 FOCUS

The cell then becomes a **guideline for arrangement** that is applicable at many scales. The planning framework is the composite structure of many related cells.

The arrangement of the elements in the cell can be applied literally to designs. Activities housed in containers form a basic enclosure. The public aspect of the activities — an entrance, for example — opens to and flavors the character of the enclosure. Circulation becomes both the connecting conduit as well as forum, providing the opportunity for spontaneous concentrations as well as the essential orientation for adjacent cells in the framework. The campus is viewed now as a **Framework** of cells and it is very important to recognize that the framework is a fabric of rooms, activities, movement, relationships, reactions and spaces.

An example of a cell would be the arrangement of two offices whose entrance relationship created a focus that occurs in the circulation network of the building.

At a larger scale, the School of Design breezeways, the area around the Syme Snack Bar, and the entire Brooks-School of Design Addition-Syme area illustrate the arrangement of containers to create an enclosure where spontaneous activity concentrates.
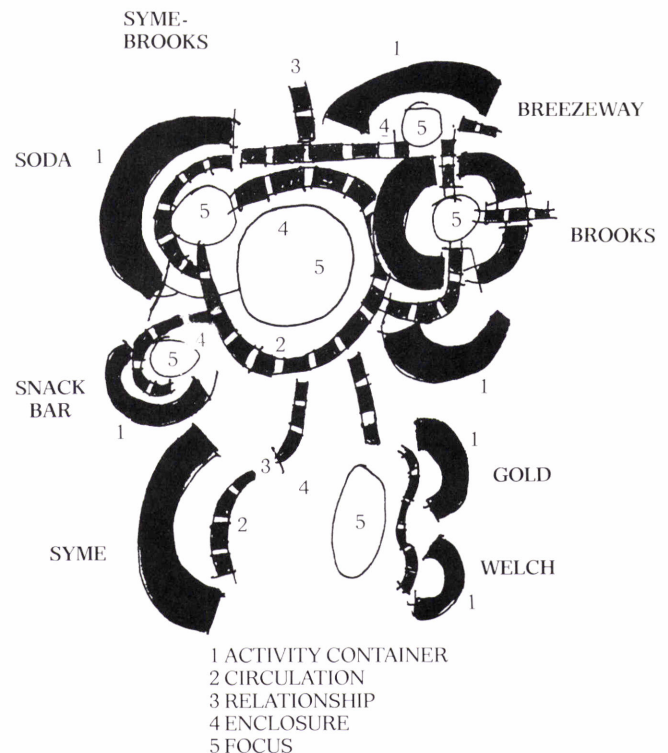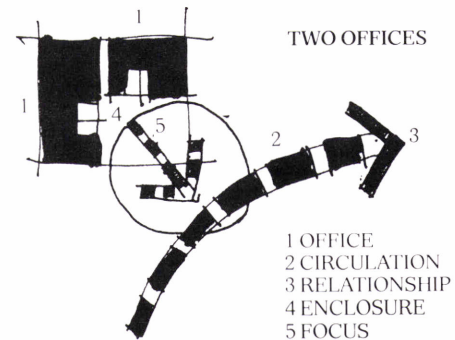
And it is interesting to note that the open Court of North Carolina is probably the largest scale to which the cell can be applied because basic to its definition is the identification of a visual entity. Common characteristics of the cell are indicated in the examples: enclosed space, orientation, and focal points located within the circulation system.

## Application of Framework

The purpose of the planning framework is to shape the campus into more responsive environments.

The framework can be applied at many scales of design: a department consisting of several offices, an entrance, a coffee pot and magazine rack contains the potential of making a focal point by organizing with these guidelines; a building design can be composed of multiple focal points of varying intensities; a court scale potential exists with the composition of buildings. At larger scales the relationship of focal points is an important factor.

The framework becomes an effective tool in the total building cycle. An image of a building as more than a container of functions emerges and the responsibility of each building to contribute to

TWO OFFICES

1 OFFICE
2 CIRCULATION
3 RELATIONSHIP
4 ENCLOSURE
5 FOCUS

SYME-BROOKS

BREEZEWAY

SODA

BROOKS

SNACK BAR

GOLD

SYME

WELCH

1 ACTIVITY CONTAINER
2 CIRCULATION
3 RELATIONSHIP
4 ENCLOSURE
5 FOCUS

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the campus environment is programmed in the initial conceptual stages. Scopes can be established that include an appropriate area for circulation so that an adequate corridor design is not robbing that precious sanctuary of "net assignable area." Activities that contribute life to places can be considered at the pre-budget stages and made an essential part of a program. Preliminary designs can be evaluated according to their ability to organize containers into frameworks of related cells.

Application of the framework by designers forces consideration of the time and space between. The direction of locating activity containers to create focal points of enclosure is programmed. Orientation is considered by locating circulation within the focus. Scale, hierarchy and relationship of focal points is considered and mixed use zoning of activities avoids creating sterile, monotonous areas. Design becomes more than composition of functional areas and maneuvering of building masses and elevation treatments.

The framework then, if consistently administered as a prescription for designers, is not a master plan nor will it guarantee beautiful buildings; but it will provide a tolerable framework in which the activity and life of the University may surpass function and exist in celebration.
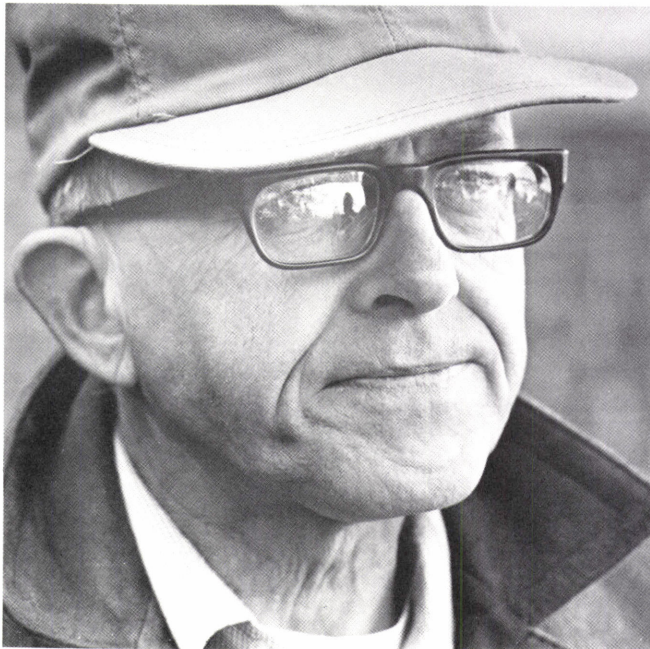
# The Production Viewpoint

## The Goals of Design

# Architecture: Ground - Zero
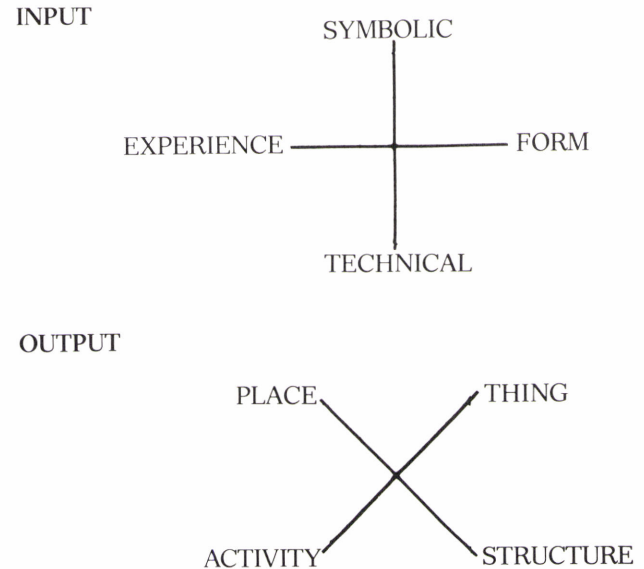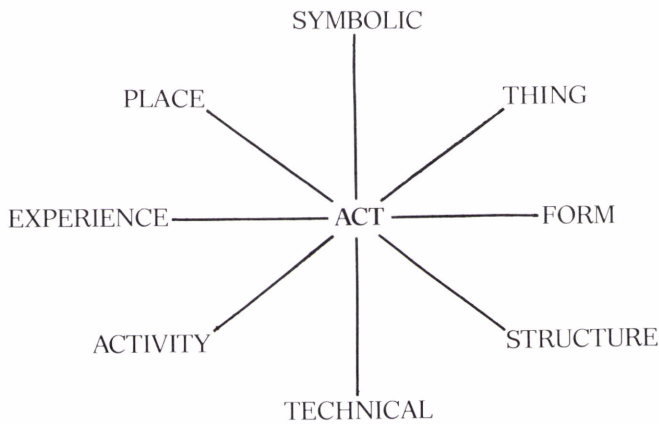
## Vernon Shogren

**Vernon Shogren**, Professor of Architecture at the School of Design, is interested in the education of designers and in the variety of ways that architecture can be understood and produced. This pursuit actively engages the tools of language, meaning, and philosophy.

## Part I

### A Taxonomy of Things

It is postulated that there are eight possible determinative positions to take in any single architectural act. When any one of these positions is taken, the other seven operate, in varying degrees, as constraints.

It is also postulated that these eight positions are paired as shown, and act as polarities (opposites, complements). This means that a position which determines architectural behavior will have as chief constraint its polar opposite. Also, that a position taken will be biased toward one or the other of adjacent positions on the circumference.

This gives us the following spectrum of possibilities:

1. Symbolic: symbolism of place, symbolism of thing: chief constraint, technical.
2. Thing: thing as symbol, thing as form: chief constraint, activity.
3. Form: form of thing, form of structure: chief constraint, experience.
4. Structure: structure as form, structure as technical: chief constraint, place.
5. Technical: technical structure, technical activity: chief constraint, symbolic.
6. Activity: activity as technical, activity as experience: chief constraint, thing.
7. Experience: experience of activity, experience of place: chief constraint, form.
8. Place: place as symbol, place as experience: chief constraint, structure.

Each of these divisions will be discussed briefly:
1. The symbolic approach to architecture is one of the oldest and most primitive. As indicated, it tends to vacillate in terms of medium from place to thing (womb or phallic expression). Architectural acts like houses and temples often take the first bias, monuments the second. However, as in all eight distinctions, a genuinely successful architectural work incorporates both to some degree, one or the other remaining dominant.
2. Things, as physical objects, are the layman's image of architectural purpose because they are most easily confronted. If symbolic in nature, they carry a weight of cultural tradition; if leaning toward form, they are often considered as art-objects. Of all eight distinctions, this is the one which suffers most from a sense of arbitrariness, making styles and stereotypes popular.
3. Form is always a difficult category to discuss because it is often ambiguous whether reference is to form-as-thing, or form-as-structure. It is either, or both. Form-as-thing has a sense of shaper discipline, while form-as-structure refers to questions of order, relationship, and logical consistency. A demonstration of form can take either as a medium.
4. Structure is the approach which emphasizes the logic of acts, focusing on the matrix or framework. It is a mistake to limit it to technical considerations as is often the case. The technical approach, while obviously important, easily degenerates into types. The meaning of structure is not to describe necessity but possibility. This article is, itself, structural in nature.
5. Technical considerations usually evolve into methods, oriented either toward structure (and con-structure) or activity and function. The popularity of the latter, in recent years, is due to the semblance of necessity which it brings to architectural acts. However, on the structural side, it clearly does not, describing instead possible matrices of action; unless, as in the first part of the century, symbolic import is given to materials and media.
6. Activity deals with the dynamic aspect involved in most architectural acts. Since the time of Newton, the argument from activity has often been used to explain things as necessary because of activity use; activities themselves have never been explained, only described as closed systems. In architecture, the biological analogy of "function" is often used. This deals with the technical side but not the experiential side, which is equally important. If activities occur as "games," as they often do, this bias is more confusing than helpful.
7. The word "experience" is used to refer to phenomenal encounter of sensate human beings with the world. As psychologists point out, it involves the life-history of the organism, where the encounter occurs (context or place), and the activity

within which it is engaged. Architecture can deal only with the last two: place and activity. An experiential approach differs in that criteria are established on the basis of the participating subject, the subject being considered the active rather than the passive datum.

8. Place, and the making of place, has historically constituted one of the fundamental tasks of architecture. Since the Renaissance it has been largely supplanted by a thing emphasis, but now appears ready for a revival. Current concerns with environment, preservation, and stability all contribute. But the making of place does entail a radical change in architectural behavior, as presently constituted. As the revival gains momentum, this will become more apparent.

Finally, a suggestive bibliography:

1. Object as symbolic (polarity: function as technical)
   Exemplars: Eero Saarinen, Jorn Utzen
   L. Alberti: **On Architecture**
   Lethaby: **Architecture, Nature and Magic**
   K. Boulding: **The Image**
   V. Scully: **Modern Architecture**

2. Object as form (polarity: function as experience)
   Exemplars: Le Corbusier, Paul Rudolph
   Vitruvius: **The Ten Books**
   H. Focillon: **The Life of Forms in Art**
   L.L. Whytte: **Aspects of Form**

3. Structure as form (polarity: place as experience)
   Exemplars: Mies van der Rohe, Yona Friedmann
   Rene Thom: **Structural Stability and Morphogenesis**
   March and Steadman: **The Geometry of the Environment**
   B. Fuller: **The Dymaxion World of Buckminster Fuller**
   D'arcy Thompson: **On Growth and Form**

4. Structure as technical (polarity: place as symbolic)
   Exemplars: Luigi Nervi, Frei Otto
   C. Wachsmann: **The Turning Point of Building**
   W. Ley: **Engineer's Dreams**
   Salvatori: **Structures**

5. Function as technical (polarity: object as symbolic)
   Exemplars: Christopher Alexander, Bruce Archer
   EDRA: **Publications**
   C. Alexander: **Notes Toward a Synthesis of Form**
   Alexander and Chermeyoff: **Community and Privacy**

6. Function as experience (polarity: object as form)
   Exemplars: Harwell Hamilton Harris, Lawrence Halprin
   S. Geidion: **Space, Time, and Architecture**
   E. Raskin: **Architecture and People**
   E. Berne: **The Games People Play**

7. Place as experience (polarity: structure as form)
   Exemplars: Frank Lloyd Wright, Alvar Aalto
   S. Rasmussen: **Experiencing Architecture**
   B. Zevi: **Architecture as Space**
   J. Jacobs: **The Life and Death of Great American Cities**

8. Place as symbolic (polarity: structure as technical)
   Exemplars: Lou Kahn, Paolo Soleri
   R. Schwarz: **The Church Incarnate**
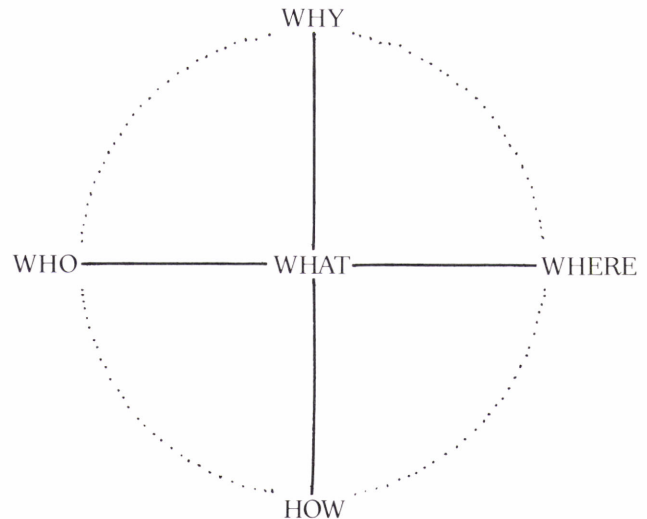   Yi-Fu Tuan: **Topophilia**

## Part II

### A Theory on the Origin of Things

All humanly contrived fields, such as architecture, have one thing in common — their maker. As a result, they all rest on metaphors of human existence, such as being, doing, and personhood. The references for such metaphors are, in turn, states of consciousness which give meaning to our lives, and which we then project onto the things and activities involved in order to give them similar and related meanings.

We always assume that any human act must be understandable (answerable) on six counts: who, what, where, why, how, and when. These are questions concerning, respectively, agent, substance, context, purpose, agency, and time of occurrence. Without consideration of all six, an act is insufficiently explained and insufficiently conceived.

When any activity, such as architecture, begins to flounder and drift (both human metaphors), it can probably be explained by its failure to deal positively with these six fundamental questions. Either it avoids some, or stereotypes them in mechanical fashion, or simply chooses to ignore them for convenience. In any case, the results are equally disastrous.

For architecture, the six questions can be reduced to five, since time of occurrence is always "now." Also, since the acts involved are always those of substance, the "what" question can be viewed as focal or central, around which everything revolves. Finally, the "who" and "where" questions can be directly assimilated into the polarity of people-world, or subjective-objective, and the "why" and "how" into the ends-means polarity. We then have the possibility of a relating diagram such as this:
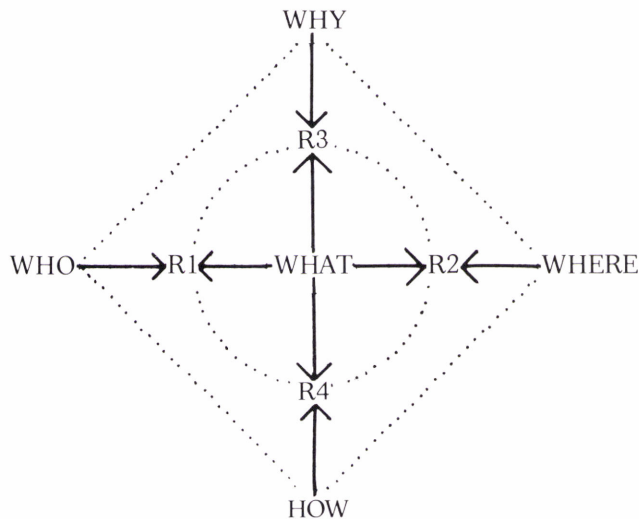


The "what," in this diagram, can be read simply as "act," or as "building," or city," or as one chooses. In architecture, however, it always means an act of physical substance, rather than psychological, social, or cultural "substance." These latter are all, of course, associated, but in the form of "causes of" or "responses to." They are not the **focus** of architecture, but rather constitute the basis for evaluation.

Architecture, then, has four obligatory reference poles in addition to the substantial "what" which constitutes the **act**. Difficulties begin to arise when the ensuing demands of each begin to conflict. There is obviously no given harmony between an arbitrarily conjoined "who" and "where," nor between a given purpose and technique. These all emerge separately and are, in some way, conjoined. It is this "conjoining" that we call design. Architecture constitutes the **embodiment** of the con-
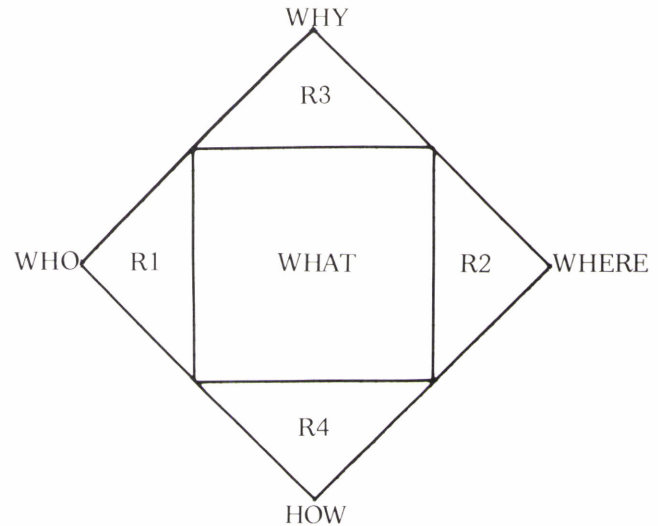
junction, affirming and stabilizing its resolution. In one single substantial act, it resolves (or attempts to resolve) the inherent polar conflict, giving an idealized harmony to variables of an arbitrary selection process.

However, the principle rock against which architecture founders today is that involving the claims of substance, the "what" question. In the past, this is **what** architecture consisted of: namely, the problematic "what." Now, it seems no longer sufficient. Either greater demands or greater ambiguity, or both, face the architect in this domain. Interest no longer centers on the substantial "what," but rather on the relationships of "what," and "why," "how," and "where."
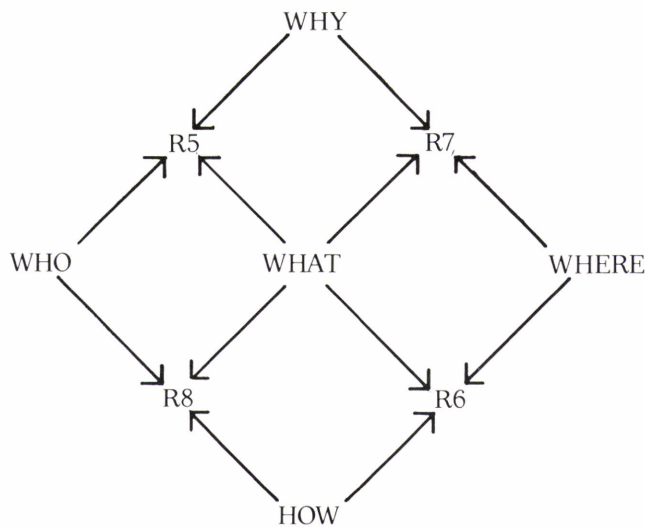
The significance of this diagram does not come from the extension of substance outward, but from the intension of the four remaining questions inward. These are demands made by "world" on architecture. This makes for a much more complex and difficult game. The day in which architects could justify the "what" in terms of their own in-house standards seems to be gone forever. The re-relationships now become the real substance of architecture, and constitute issues of common concern. In other words, architecture has become a dialogue, rather than a monologue.





From the point of view of an architect, these relationships must be understood in terms of architectural capability: i.e., as having **physical** relevance. Four adequate terms might be as follows:

1. who-what, related by experience
2. where-what, related by form
3. why-what, related by symbolism
4. how-what, related by technical

A second set of relationships becomes apparent from the preceding diagram: namely, those involving agent's purpose (who-why), contextual purpose (where-why), agent's agency (who-how), and contextual agency (where-how). All these are, of course, general human concerns; but it is the aim of the various human institutions to deal with them in their various and appropriate ways. In doing so, they exert what amounts to a third force, resolving the dyad into a triad.
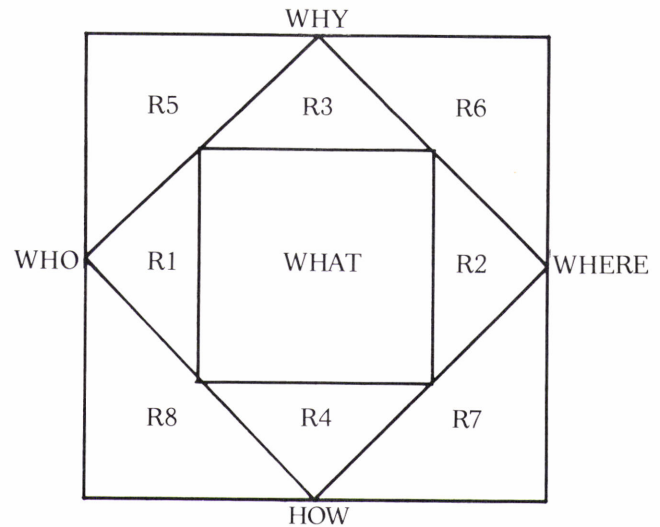


These relationships, taken as generally as possible, might be defined as follows:

5. who-why: the purpose of agents is to live, as fully as possible
6. where-why: the purpose of world is to exist, with or without humans
7. where-how: the agency of context is its order, logic, and relation
8. who-how: the agency of people is behavior, activity and function

What can architecture contribute to establishing, solidifying, and affirming these relationships? Not a great deal, of course, but as much as most other human institutions. Again, the medium is physical, so that the related expression must also be physical. The following is a conjecture:

5. who-why: if the purpose of life is to live, then architecture might produce **places** for such life
6. where-why: if the purpose of world is to exist, then architecture might objectify this fact
7. where-how: by contributing physical order, or **structure**
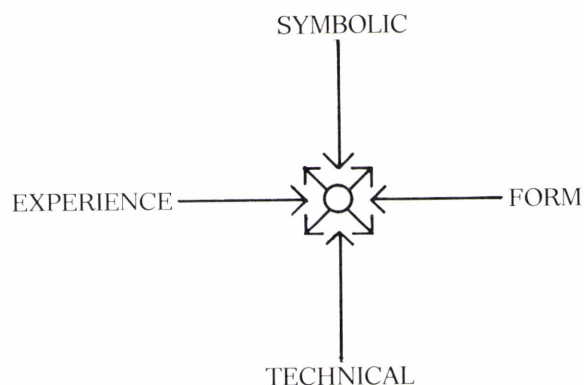8. who-how: by contributing physical control, or activity settings

The "whatness" of an architectural act, its substantial existence or constitution as a **thing**, can be conceived either as stimulus or response, or both. As a response, it is affected by the external factors described, its character and makeup being determined (at least partially) by those factors. As stimulus, it acts as aggressor, modifying relationships and even the nature of the external factors (who, where, why, how). Either mode has its difficulties, but the basic reason for adopting either is a decision centering around the word "problem." An architectural "problem," as such, is a compilation of physical performance criteria which must be synthesized into a single substantial act. If the "problem" is not yet architectural, but rather behavioral, technological, social, or contextual, for example, there is no choice but to take the responsive gambit. The only alternative is to operate from a repertoire or stereotypical routine, usually resulting in the creation of a set of new external problems. It seems that this is the dilemma of architecture in our time, for which architecture is being so widely criticized.
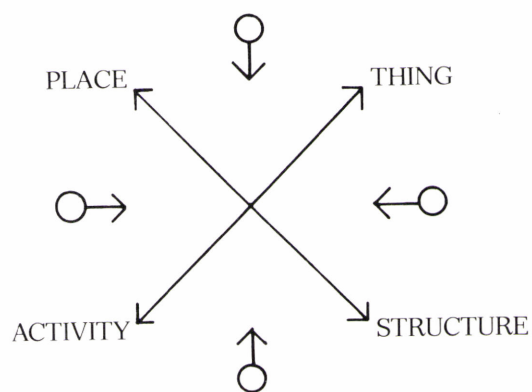
However, anyone who has ever practiced architecture knows that passivity is not possible. In a true dialogue, both stimulus and response are necessary, in continuous alternative sequence. But dialogue does not mean simple toleration, either. Principally, it means that both sides entering do so without preconception, and **construct** a universe of commonality by mutual exchange. At present, this is not really possible because most architects carry into the dialogue such burdens of preconceptions and dogma as to make any fruitful exchange virtually impossible. Worse, they have been taught that this is a desirable, and even necessary, state of affairs. What an architect needs, in fact, is skill and capability, not a grab-bag of dogmas concerning truth and beauty. Given capability, truth and

beauty will emerge in forms we cannot now even imagine, through an architect-world dialogue of substantial relevance to all concerned.

RESPONSE



STIMULUS

## Part III

### The Realm of Things.

It seems necessary to continually remind ourselves that architecture and design are **perceptual** activities. The act of building and making does not — in any literal sense — solve problems, unless the word "problem" is defined in an extremely narrow sense. Nor is the practice of architecture an end in itself, but a means to an end. That end is a physical, perceptual, existential event.

Such a statement may seem a banality, but it is not. We are so caught up by the pervasive influence of ideas, concepts, and institutions, by the magic of scientific abstractions, and by the power of technology and techniques in general — that the world of sense and percepts has almost become unreal. When students enter schools of architecture these days, they almost invariably feel that words and ideas are much more real than the conditions to which they refer. A school is lucky indeed to turn this unhealthy state around in the four or five years of its jurisdiction.

The perceptual world has disappeared in our passion for generalities. There is an almost tangible feeling of power in being able to say "all" or "some" rather than "this one." It is the present-at-hand which constitutes our perceptual world. The rest is in another world entirely — the world of concepts and ideas.

A work of architecture exists, in the same sense that the earth exists. It is a fact. No recourse to concepts, explanation of motives, or theoretical rationalization will change this fact one whit. It remains a stubborn fact of existence, to which we must in some way pay obeisance. It is there, or here; and we are here, or there. We cannot conjure its non-existence by our opinions or prejudices, our likes and dislikes. Of course, we can alter or des-

troy it, but then we simply have something else — an equally obdurate fact.

It is difficult to look at architecture in this way! How tempting to retreat to the world of ideas, and to attribute success or failure in architecture as having to do with conformity to concepts and theories. We are all familiar with the advantages of law and order. We know that organized life would be impossible if we had to deal with each event in-and-of itself. Yet such arguments always resolve themselves to questions of convenience. We have simply made a virtue of necessity. The simple fact is that facts do exist in-and-of themselves. And buildings are facts.

If we were to construct a world, as a simple willful act, what kind of a world would it be? What would be the role of perception in such a world? Would it have law and order? Why?

We can speculate on such a world as being made up totally of forms without form, and nothing would be lost. Perception is primary, and is bounded by physical limits. The form of forms is an idea, which has no limits; but its necessity is given to us by a world of accidents. We cannot live with what we did not make, and so we must learn how to undo the mischief somehow. The pattern of undoing, then, becomes our chief concern.

But in architecture, conditions are reversed. If things turn out badly, we have only ourselves to blame. The **law** is not responsible. There is no reason why we should not shape our existence as we would wish it to be. Law becomes a procedural convenience rather than a binding imperative. The priority of concepts is temporal rather than magisterial.

And so, the management of the given world becomes a quite different operation from the design of the new. Values and priorities are reversed. Facts become ends rather than means, and the simple conditions of existence become the goals of existence.

The products of architecture are not only perceptual in nature, but public: that is to say, objective facts. There are many ways to deny this and attempt to maintain a pose of exclusivity. One is to focus on the word "user" and suggest that buildings belong in the realm of personal artifacts. Another is to emphasize the privileged role of the architect in disseminating personal and/or professional values. Both amount to the same thing in the end: they claim hegemony of the subjective over the objective.

To say that buildings are things-in-the-world seems another banality, but again it is not. It is rarely accepted as a fundamental condition of architecture, but more as a necessary evil.

Problems, in architecture, are nearly always stated in subjective terminology. Rarely is there any suggestion that this is impossible. Rather, a myth is propogated: personal or subjective problems can be resolved separately and distinctly from the context or situation in which they occur.

We cannot even observe a situation without changing it, much less act upon or within it. This is now an accepted fact within the sciences: it is time for architecture and design to be reconciled to it. Independent or autonomous action is impossible.

The issue on which the sciences and arts differ is not in the personal-public or subjective-objective realm. There should be no fundamental difference here. The sciences are not less subjective than the arts. The idea of "knowledge" itself is simply that of a consensual value judgement.

So, "objectivity" does not mean "scientific," although a good deal can be learned from the sciences in this regard. To be objective in architecture means simply to be aware of consequences; further, to take external (supra-problematic) factors into account in the initial formative stages of thought.

The real differences between the arts and sciences exist in the perceptual-conceptual dichotomy. The goals are different. The arts use concepts as a means to a perceptual end; the sciences reverse this sequence.

# Contributors

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Books Aren't Just for Kids," **Bulletin, Geography and Map Division, Special Libraries Association**, July, 1976; "Early Mound Building: Some Notes on Kids' Dirt Play," Annual Meeting of the American Association for the Advancement of Science, February, 1976.