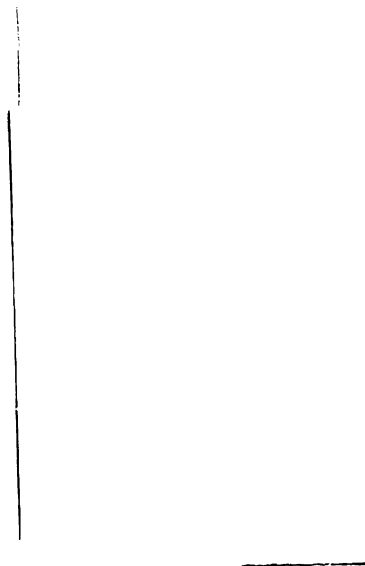
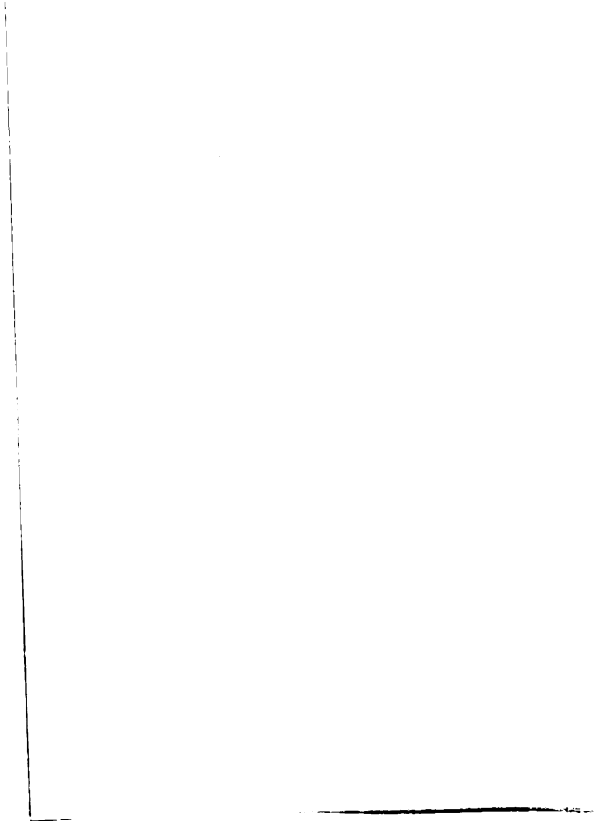


THESIS





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Abstract

The need to substantiate urban planning decisions through the use of logical reasoning has compelled planners to search out new ways of understanding how cities are formed. Often times, because of overanxiousness to find understandable and logical processes, urban specialists have explained multi-faceted problems of human settlement with oversimplifications and fragmented descriptions. A view of the entire urban complex as people live it is the focus of this thesis. Urbanists discover the perceptions of subcultures within cities look upon and give meaning to urban form is required to fully comprehend urban phenomena. Probing into symbolic meanings of things, spiritual rather than purely literal meaning, is a field of study requiring the planner's attention. To be able to recommend change in urban form, urbanists must be cognizant of how present forms were established and the meanings people give to these forms.

The Thesis presented here studies symbolic meanings of urban form in two major parts. Part I deals with three basic concepts of symbols, perception, and space. Terminology is established and the basic ideas are researched. A suggested theory is then formulated to depict processes of giving symbolic meanings to form.

Part II proceeds to construct a methodology for gathering information about urban form to be complemented by other already established studies carried on by comprehensive planning organizations. Basic concepts explored in Part I are applied to studying the significance of city design as an outward manifestation of people's goals and intentions.

The major conclusions to this thesis are noted as follows:

- All forms of human perceptions can be thought of as symbols. The human powers enabling people to conceptualize and symbolize are the bases of man's civilization. Meaningfulness in life stems from our capacities to give symbolic meaning to physical objects.

- The highest forms of symbols are the living symbols, pregnant with meanings. Impossible to fully define or consciously comprehend, these symbols are what men dedicate their lives to, and expose one's full potential of human capabilities.

- Perceiving forms in the urban environment is predicated upon the cultural context passed on from one generation to another. The process of perceiving involves the gathering of sense data and the interpretation of that information filtered through the cultural idiosyncrasy of the person.

-Spatial forms of the urban region are outward expressions of Man's concepts, feelings, goals and intentions.

- Urban Planners need to direct their efforts into the understanding of urban forms in the context of the meanings and feelings these forms embody.

- Symbolic meanings of spatial forms may be assessed through the study of function, aesthetics, accessibility, and amenity that forms possess.

- It is important that the planner become involved with the feelings of people in the urban region and perceiving the symbolic meanings of forms, first hand.

-Any study designed to investigate actual phenomena in the field requires testing before a refined procedure can be formulated.

SUGGESTED THEORY AND PROCEDURE FOR
PERCEIVING SELECTED LEARNINGS OF THE URBAN FORM

A Thesis

Presented to

The School of Urban Planning and
Landscape Architecture
Michigan State University

In Partial Fulfillment
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Master of Urban Planning

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INTRODUCTION

Studies designed by planners to gain knowledge and understanding of urban phenomena have evolved through time. In seeking to find new pathways and approaches to a better comprehension of city development, this thesis explores and attempts to expand on one aspect of our visual environment--symbolic meanings. Part I deals with basic concepts related to the values people possess regarding the visual city, and the processes involved in perceiving symbolic meanings and spatial forms. Part II is an endeavor to incorporate the ideas and theory presented in the first part into a basic study framework as a portion of a comprehensive planning program in delineating human activities and the symbolic form of the city.

Key terms and ideas underlying the thesis are defined in the following glossary:

Symbol: culturally derived varied understandings or meanings uniquely human, embodied in spatial and non-spatial forms. (example: proper names--New York City, the Golden Gate Bridge).

Sign: (signals) usually a one-to-one correspondence of meaning to object: wet pavement is a sign that it has rained recently.

Typology of Symbols: All human perception is symbolic.

Classified into major kinds of symbols and their interpretations follows:

Literal - Interpretations of specific functions of spatial forms. Includes meanings of factual, scientific, concrete and quantitative terms. Example: The spaces between these particular buildings have the following dimensions...required for light and air...large enough to allow for a peak hour traffic flow of 1500 cars at a speed of 45 m.p.h.

Spiritual - Interpretation of forms going beyond the mere physical dimensions and literal meanings into the realm of human feelings, qualitative measurements and aesthetics. Example: The spaces between these particular buildings give a feeling of intimacy and enclosure....

Spatial Expressions of Symbols - The architectonic elements, natural features and the spaces created.

Non-spatial Expressions of Symbols - Social institutions and inter-human relations which underlie spatial expressions--laws, feelings, concepts.

Discursive Forms of Symbols - Spoken forms of expression. Example: language in the strict sense.

Presentational Forms of Symbols - Pictorial or visual

forms of expression. Examples: line, tone, color, pattern.

Archetypal Motif of Symbols: The original impressions of universal symbols which constantly reappear throughout man's history. Example: The mother--could motif.

This thesis will primarily explore the spiritual, spatial, presentational symbols and forms. Continuing with our glossary:

Symbolic meanings: The interpretations people give to spatial objects and spaces derived from their culture (feelings, concepts, values).

Spatial Objects: Physical matter defined only by its physical dimensions occupying space.

Functional: Used here in the strict sense of the literal meanings and purposes of a spatial object.

Artifacts: Man-made objects embodying symbolic meanings.

Perceiving: Most often will be used as the comprehending of spatial objects through the combined processes of the senses and the culturally conditioned human mind.

Spatial Relations: The result of arrangements of spatial objects or forms.

Aesthetics: That mode of perceiving that deals with ex-

pressive forms. Qualities of spatial forms (line, color, texture, rhythm) which convey an emotional meaning or reaction.

Ingesibility: That quality in a physical object which gives it a high probability of evoking a strong image due to its specific functions as well as its spiritual meaning; dependent upon the observer's cultural content and on the own quality of the object.

Amnesia: Inability of the perceiver to give symbolic meanings, even at the literal level, to spatial objects.

Cultural System: The way of living and modes of thinking and feeling passed on from one generation to the next.

Cultural Subsystems: The concepts, ideas, thoughts, goals, and values--modes of thoughts and feelings classified according to their goals. Examples: economic--maximizing return; interpersonal relations--self giving.

Subculture: A group of people within a certain culture who hold various symbolic meanings in common.

Geographic Groupings: Groupings of people who reside in differentiated, broad patterns within the urban region. These groupings consist of cosmopolitans, urbanites, suburbanites, villagers, rural dwellers,

ethnic villagers, and slow dwellers.

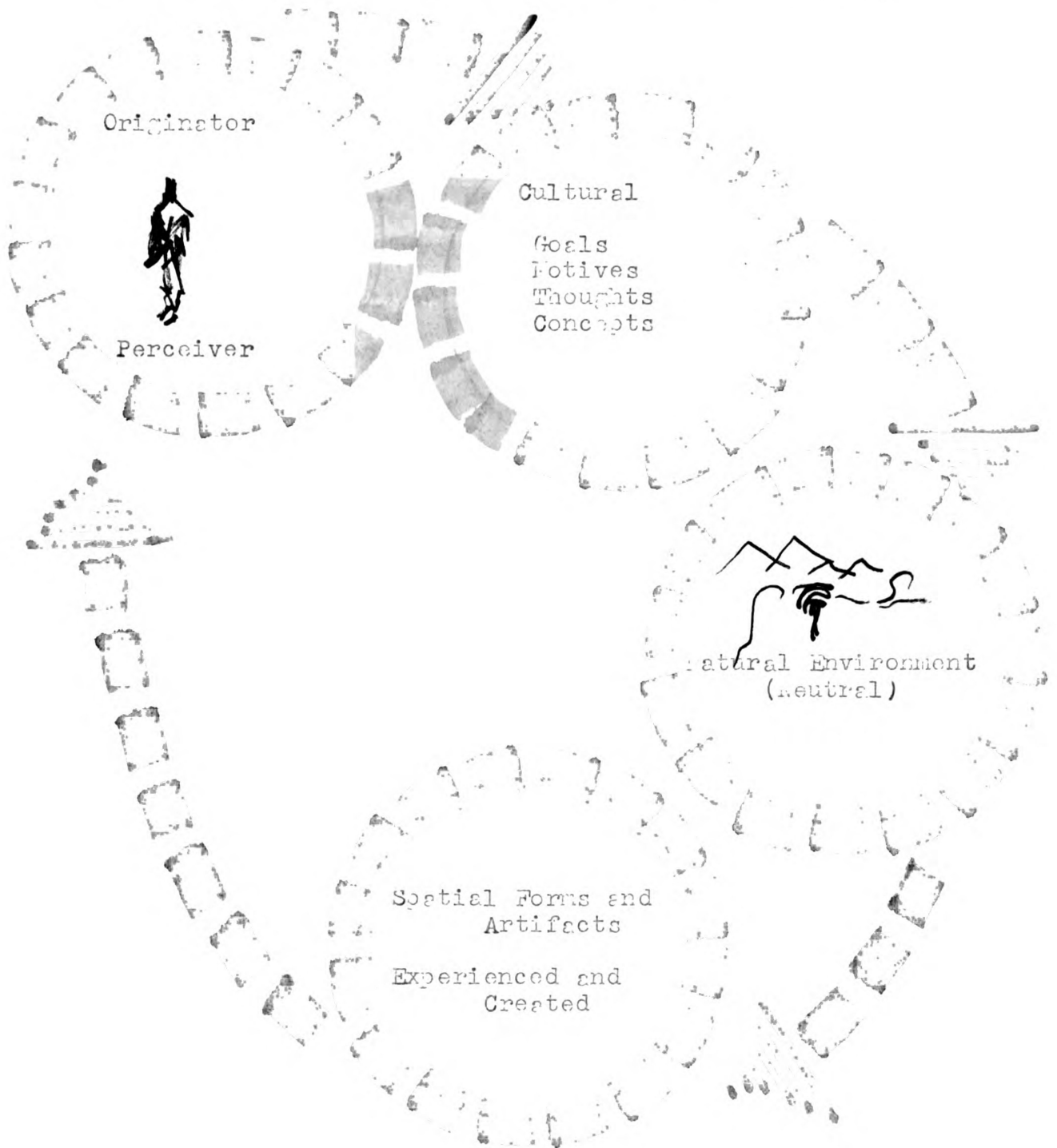
Symbolic Spatial Forms and Relations Study: The proposed study which attempts to assess the symbolic (especially spiritual) meanings of spatial forms and relations.

The premise of the thesis is that culturally derived symbolic meanings of spatial forms and relations, found at various scales of the urban region, need to be consciously and systematically considered in policy making and planning procedures. As depicted in Diagram 1 - Origins of Experiencing Spatial Forms and Relations - the perceiver views the natural environment through the perspective of his cultural goals, motives, thoughts and concepts. The natural environment is neutral until man interprets natural objects into forms which are partly determined by how he thinks and feels. Engaged with the forms of nature, man then creates his own artifacts and experiences these as spatial forms and relations. Artifacts, in turn, affect the perceiver's cultural content as do discursive forms and people.

In an effort to understand the symbolic meanings of city forms, it is apparent that study of the cultural systems of people is necessary. A search for comprehending the processes of symbolic meaning, spatial forms and

relations, and perceiving meanings and forms is undertaken in this thesis. Methods for studying symbolic meanings of spatial artifacts as part of the planning process are suggested.

ORIGINS OF EXPERIENCING SPATIAL FORMS AND RELATIONS



PART I

INTRODUCING THE CONCEPTS

SYMBOLS AND SYMBOLIC MEANINGS

Efforts to convey a comprehensive understanding of the urban complex need to be directed into the area of symbols. This would involve the study of spiritual meanings as well as the traditional investigation of only literal meanings. Symbols will be used here in the sense of man's visual artifacts and forms embodying certain meanings common to subcultures within the city. Planners have for a long time dealt with the spatial arrangement of artifacts and literal functions without attempting to represent the transcendental symbolic significance of these artifacts in a systematic, conscious manner. We will, in this section, look at the basis of symbols, how they operate in the urban environment, and speculate on their significance in today's complex city.

As people travel throughout the urban region, engaged in activities or transporting themselves to and from activities, they are constantly bombarded by visual impressions and other sense data. The spatial relations of structures--their spiritual meaning, inaccessibility, and esthetics--are the kinds of meanings that people gain from

experiencing space. Other types of impressions of space, although they are all intertwined and interact with one another, are of the more literal type--scale, economic, and efficient. We will primarily be concerned with the former meanings, being cognizant of the interdependence between the two general types of impressions, and also realizing that these meanings are culturally derived.

To Symbolize - A Basic Need

Like eating and sleeping, the need in man to symbolize is basic to him and also unique to him in comparison to all other forms of life. "The power to understand symbols... is the most characteristic mental trait of mankind."¹ All of man's artifacts reflect the capacity in humans to symbolize, but the importance of the meanings involved has fluctuated throughout our existence on earth and our level of consciousness. "Long before the world appeared to consciousness as a totality of empirical things and a complex of empirical attributes, it was manifested as an aggregate of mythical powers and effects."² Mythology, ritual, language, art, magic, religion, esthetics, and poetry explain, interpret and give meaning to things transcending literal comprehension. Grasping the meanings

¹Susanne K. Langer, Philosophy in a New Key. New York: The New American Library, 1958, p. 70.

²Ernst Cassirer, The Philosophy of Symbolic Form. Vol. 2, New Haven: Yale University Press, 1955, p. 1.

of cities requires, once again, common spiritual symbols--existing and newly created--for activities, functions and artifacts have become too complex to comprehend only in literal terms.

The fluctuation of symbols during historic eras is related by Sorokin: "The Middle Ages was the age of symbols....Art was profoundly symbolic....Already weakened in the fifteenth century the symbolic genius declined entirely in the seventeenth century."³ Today's abstract art could be interpreted as a symbolic expression of the chaotic times we live in. However, our cities, architecturally, are not as meaningful as they once were. "On the whole, they (architects) do agree that the society has long been starved for symbols in its building."⁴ The basic need of man, to symbolize, has not been satisfied in the urban structure and form.

The above statements should not imply that we can simply create or recreate symbols based on visual artifacts for these symbols have sociocultural origins, thus order must stem from the cultural system before artifacts can

³Pitirim Sorokin, Social and Cultural Dynamics (Boston: Porter Sargent Publisher, 1957), p. 132.

⁴John Purchard, "Symbolism in Architecture" in The Historian and the City (Cambridge: MIT Press, 1963), p. 101.

embody this new order. Symbolic meanings, whether they be meaningful or insignificant, ordering or implying chaos, can only be thought of as symptoms, reflecting the cultural and social order, and meaningfulness of mental concepts and percepts.

Symbols as Language

Words which make up a language are good examples of symbols, for without the understanding of the meaning of words, the simple visual form of words have no significance (although some languages do rely on visual form). As a language, the symbolic meaning of city form and structure might prove a revealing way to understand and explain (to some extent) not purely the physical interpretation of objects but a more meaningful, cohesive apprehension. We shall discuss the literal and transcendental interpretations of objects later on. The important point here is: "If city form is as Jakob Fokera asserts 'a language for human behavior' and if language does have a creative function, then architecture may reveal to a society that is fragmented and unfulfilled healing patterns of human behavior that could be revealed in no other way."⁵ Although

⁵Hirsch, Werner Z. (ed.), Urban Life and Form (New York: Holt, Rinehart and Winston, 1963, p. 24.

we are speaking of architecture here in terms of individual buildings, the spatial relations between buildings and other architectonic forms can also be related to expressing a language. An example of the language of the city is expressed by Alfred Kazin in A Walker in the City as he returns to Brownsville, the place of his childhood.

"The smell of damp out of the rotten hallways accompanies me all the way to Blane Avenue. Everything seems so small here now, old, faded-in, more rundown even than I remember it, but with a heart-breaking familiarity at each door that makes me wonder if I can take in anything new, so strongly do I feel in Brownsville that I am walking in my sleep. I keep burbling awake at harsh intervals, then fall back into my trance again. In the last crazy afternoon light the neons over the delicatessens bathe all their wares in a cosmetic smile, but strip the street of every personal shadow and concernment. The torches over the pushcarts hold in a single breathe of yellow flame the acid smell of half-sour pickles and herrings floating in their briny barrels. There is a dry rattle of loose newspaper sheets around the cracked stretched skins of the 'chincy' oranges. Through the kitchen windows along every ground floor I can already see the containers of milk, the fresh round poppy-seed evening rolls. Time for supper, time to go home."

Standards or measurements for assessing the qualitative nature of a culture is found in the ability of the culture to hold in common norms, rules and beliefs. The deficiency

⁶Alfred Kazin, A Walker in the City (New York: Harcourt Brace and Company, 1951).

of cohesive powers of common understandings are often times noted as the reasons why urban structure appears confusing and chaotic. Language symbols do not merely stand for something else. They also indicate the significance of things for human behavior, and they organize behavior toward the thing symbolized. To be comfortable in the city--in the widest sense of these words--requires the formulation of one's relations with it....⁷ Commonly held interpretations of the symbolic significance of a dominant institutional visual form--say city hall--are not widespread and even symbolize negative values, therefore the importance of city hall as the focal and reference point to people is not strong. "...there is no longer one building or group of buildings that symbolize the central ideas of the time, but a multitude of buildings for very different purposes."⁸

Thus, the unifying ability of symbols, provided they are meaningful, commonly held and perceptible, can be of great importance to a highly ordered and organized society.

⁷Richard R. Wohl and Anselm L. Strauss, "Symbolic Representation and the Urban Milieu", The American Journal of Sociology, Vol. 63, No. 5, March 1958, p. 532.

⁸E.A. Guthrie, The Twilight of Cities (New York: The Fresno Press of Glencoe, 1902), p. 40.

The problem lies in constructing or identifying a language of symbols taken from present day forms and artifacts of the city and combining these with non-spatial symbols such as the spoken and written word. "S.I. Mayakawa has established a structure involving stages in the communication among people and the creation of societies. The first stage he calls 'Organization around a Physical Symbol', the second 'Organization around Verbal Symbols', the third 'Organization around Shared Perceptions'".⁹ We are entering the stage of 'Shared Perceptions' which will allow for greater interaction between people and thus increased knowledge and understanding.

Shared Perceptions might take the form of a central open space within a city where all subcultures within an urban region may actively take part and identify themselves with the space for different reasons--an informal meeting place for young and old, a place to watch others and be watched, a place for community activities and a place simply for leisure and relaxation. A central open space in large metropolises could provide the vehicle by which entire populations could, as in early settlements, understand and visually grasp, emotionally the whole region and...."live

⁹Purchard, op. cit., p. 373.

with a sure sense of place in it."¹⁰

Symbols Understood

After probing into the area of symbols, symbolization, symbolic form, etc., it was noted that a clear conception of these ideas would require much more extensive thought and study. The ability to symbolize is similar to abstracting and conceptualizing, however, there are myriad facets to this central theme. The idea here, then, is to introduce some central thoughts on symbols, primarily by philosophers, in order to obtain a glimpse of the deep, complex nature of the subject. Alfred North Whitehead wrote down his definition of symbolism in 1927, as follows: "The human mind is functioning symbolically when some components of its experience elicit consciousness, beliefs, emotions and usages, respecting other components of its experience..."¹¹

Meeting up with an unfamiliar object in space, the viewer relies on his past experiences and cultural indoctrination to interpret what he sees and even shapes what he sees. If one observes a new building under construction,

¹⁰Lawrence Laworth, The Good City (Bloomington: Indiana University Press, 1963).

¹¹Alfred North Whitehead, Symbolism, Its Meaning and Effect (New York: Macmillan Co., 1927), p. 6.

one attempts to identify its function and purpose by its shape and the context within which it is being built. The mere comprehension that it is a building requires certain previous cultural knowledge while the intended function of the structure might only be guessed when the metallic lettering is placed upon the front entrance--"City Disposal Plant". A two step operation is carried on in the mind of the perceiver--sensing the form and interpreting the meaning.

Literal versus spiritual: It can be said, really, that all human perception, thinking and feeling are symbolic expressions in the broadest sense of the idea of symbols. Culturally, however, it appears that we have agreed to separate the process of interpretation into two distinctly different aspects; the quantitative, factual or literal classification and the qualitative, ideal, spiritual nature of interpretation.

Joseph Russell Passonneau relates, "When the mind associates with form, experiences (or meanings) that do not inhere in the forms themselves, this is probably the beginning of uniquely human intellection of symbol making..."¹² Literal meaning versus spiritual meaning is pointed up in

¹²Hirsch, op. cit., p. 10.

his statement and is an important concept to grasp. The functional aspect of a street connotating the meaning of providing a channel for the movement of goods is the literal interpretation. 'Street' in the spiritual sense may have the connotation of death or that home is close at hand or the "path", the "way" as a life direction, etc.

Carl Jung emphasizes the above idea in the following quote:

"What we call a symbol is a term, a name, or even a picture that may be familiar in daily life, yet that possesses specific connotations in addition to its conventional and obvious meaning. It implies something vague, unknown, or hidden from us...Thus a word or an image is symbolic when it implies something more than its obvious and immediate meaning."¹³

Symbol versus Sign: Jung's definition of symbol excludes the function of communications.

"What he means by 'symbol' covers something altogether different from the function performed by language in any of its forms. A particular five-letter word, for example, 'chair', may be taken as a symbol of a particular wooden object; or a given Greek letter may be used as a symbol for an abstract mathematical formula--or a certain flag may stand for a particular country. Regardless of the strength or extent of the connotations that may be attached to such 'symbols', they all denote something definite. Each of them refers to something that is ascertained in advance, and the purpose of the symbol is to convey a meaning that is already known. Jung holds

¹³Carl G. Jung, Man and His Symbols (Garden City: Doubleday and Co., Inc., 1964), p. 20.

that what is involved in such a situation is not a 'symbol'--according to his definition--but only a 'sign'. It serves only a 'semiotic' function when a word or figure is used as an 'analogous or abbreviated expression of a known thing.' What is to say, when a definite known object is taken as a point of reference the 'symbol' for it is really only a 'sign' by which it is designated and therefore specifically limited in its meaning. When, however, a figure or object is used to refer to a 'relatively unknown thing', its function is not semiotic but 'symbolic'. Very often a single object serves as both a sign and a symbol, under different circumstances. Jung describes an instance of this in the case of the Cross in Christianity. 'The explanation of the Cross as a symbol of Divine Love', he says, 'is semiotic, since Divine Love describes the fact to be expressed better and more aptly than a cross, which can have many other meanings. Whereas the interpretation of the Cross is symbolic which puts it above all imaginable explanations, regarding it as an expression of an unknown and yet incomprehensible fact of a mystical or transcendent, i.e., psychological character, which simply finds its most striking and appropriate character in the Cross'...The characteristic of the symbol is that it opens up beyond itself, touching in the form of a representation something that the understanding does not fully encompass, but into which it wishes to reach...The symbol as Jung defines it, does not come from the world of outer experience...They emerge through the autonomous processes of symbol formation in the psyche, and they are therefore prior to sensory experience.¹⁴

To continue to follow Jung's theory of symbols would seem to count futility concerning the urban planner's attempt to assess symbols based on intellectualizing about visual forms. The purpose for including Jung's ideas here

¹⁴Ira Propoff, Jung's Psychology and its Social Meaning (New York: Grove Press, 1953), p. 141-142.

is to expose to the reader the depth at which symbols may be understood and interpreted. To have the planners utilize the concept of symbols, however, we must assure that symbols can be defined, recognized and included as basic factors for decision making. A more useful set of definitions of signs and symbols, for our purposes, follow:

"A sign indicates the existence--past, present or future--of a thing, event or condition....A fall of the barometer or a ring around the moon is a sign that it is going to rain."¹⁵

A symbol is any device whereby we are enabled to make an abstraction."¹⁶

"The fundamental difference between signs and symbols is this difference of association and consequently of their use by the third party to the meaning function, the subject; signs announce their object to him, whereas symbols lead him to conceive their object."¹⁷

The term 'signal' can be substituted for 'sign' thus conveying the notion of signals to our senses as well as signs which are explicitly recognized--bells or lights. (Langer). These terms will be expanded upon when dealing with communications theory as applied to symbolic meanings and social relations.

¹⁵Langer, op. cit., p. 58.

¹⁶Susanne K. Langer, Feeling and Form (New York: Charles Scribner's Sons, 1953), p. xl.

¹⁷Langer, Philosophy in a New Key, p. 61.

Considering symbols as vehicles for interpreting meanings, they then not only organize beliefs but could be used to obtain and formulate beliefs.¹⁰ In terms of city form and structure as embodying symbolic expressions, organization through perceptible symbols would not be their only significance. Symbolic forms might also work in a creative manner--people would gain new meanings or at least become more conscious of old meanings. The efforts of many people to introduce nature into built up areas of cities has symbolic meanings in the objects themselves as well as a more inclusive meaning for the entire city, a closer relationship with nature, etc. In accord with Jung's way of thinking, this may be the revitalizing of an archetype motif of universal symbols that have been dormant in man's unconscious and are now being reintroduced through social action.

Another distinction between signs and symbols is the relatively limited meanings of signs and the variations of interpretations of symbols. "Any one concrete and individual sign refers to a certain individual thing... (in contrast) a genuine human symbol is characterized

¹⁰Hirsch, op. cit., p. 20.

not by its uniformity but by its versatility."¹⁹ This added dimension of symbols may be the very factor that will stifle any experimentations to classify symbols according to common beliefs of subcultures. On the other hand, without various interpretations, symbols would not present the challenge they do and would not possess the significance to man that they do. The real significance of symbols is that they surpass simply apprehending objects physically and serve as living objects for man. If we only interpreted objects as being functional or non-functional in a literal sense to our own egos, it would be a rather dull existence. Symbols have the ability to bind men together and "provide a way for the individual to see and to understand the outer world in a way that would not be possible for him without his particular symbol."²⁰

Symbols and the City

The planner, along with the rest of a urban population, must attempt to grasp the complexities of the urban environment symbolically and imaginatively as well as

¹⁹Cassirer, Ernst. An Essay on Man (New York: Doubleday Anchor Books, 1953), p. 56-57.

²⁰Proffoff, op. cit., p. 100.

literally.²¹ Complexities referred to here can be interpreted as the cross currents of activities, the intricately woven transportation network, the sprawling, distracting and constructing city which strain the minds of most men. Traditional quantitative studies have, in general, only considered the literal meanings of human settlement--numbers of population in the region--marketing analysis--transport capacities. Attempts to study qualitative aspects of the city in a systematic way--spiritual meanings--esthetic consideration--imageability--often are considered as separate projects tacked onto the end of comprehensive programs designed to study the urban situation.

The planner needs to treat logical parts and even the entire city as expressive artifacts. By thinking in such a manner, the urban expert can open up new vistas to a apprehending city form and meaning. Complex as the urban milieu may appear at a first glance, continuing inspection and sharpened perception reveals symbolic meanings emphasizing a certain order amongst the turmoil. The trouble is that we see what we want to see and first impressions often block out any further possibilities or new avenues of understanding. Preconceived ideas work in the same manner--

²¹Wohl, op. cit., p. 527.

if you expect to see nobility but a row, grimy steel mills when in Pittsburgh, that is exactly what you will see--and miss other elements.²² To be sure, people are preconditioned culturally as to what they perceive; however, conscious expectations are also factors affecting seeing. Vernon brings out the point that there is a complex interaction between expectation and need concerning perceiving. If a situation is ill-defined, the viewer may perceive something appropriate to his need--he expects it to be there. After prolonged frustration of not being satisfied, visually, he will cease to expect satisfaction.²³ This may account for many of the negative meanings people give to city form due to chaotic visual patterns which characterize today's cities.

Kevin Lynch contends that the sphere of stability, security, and well being of people depends upon their 'imageability' of the city. He notes the importance of symbols (although he does not dwell on the subject) by stating that the "...symbolic organization of the landscape

²²Ian Fairs, The American Landscape (New York: Random House, 1965).

²³H.D. Vernon, The Psychology of Perception (Baltimore: Penguin Books, 1962), p. 127.

[Illegible text]

may help to assuage fear, to establish an emotionally safe relationship between man and their total environment.²⁴ The ability of symbols to be 'pregnant with meaning' (Jung) and enlightening man regarding the unknown are probably the reasons why fears of the uncomprehensible whole are dispelled by symbolic organization.

Wohl looks on the city as setting problems of meaning. "The streets, the people, the buildings, and the changing scenes do not come already labeled. They require explanation and interpretation."²⁵ The meanings spoken of refer to symbolic representations. The interpretation of the objects found in the city is the endeavor planners should undertake through the mind and cultural content of the citizens.

Wohl also sees instability of symbolic representation within a city. The changing nature of a city (i.e., economic boom, influx of immigrants) creates instability which is a fact of life and in some way has to be coped with by the urban person. Jung's views on archetypal symbols are

²⁴Kevin Lynch, The Image of the City (Cambridge: The MIT Press, 1960), p. 127.

²⁵Wohl, op. cit., p. 527.

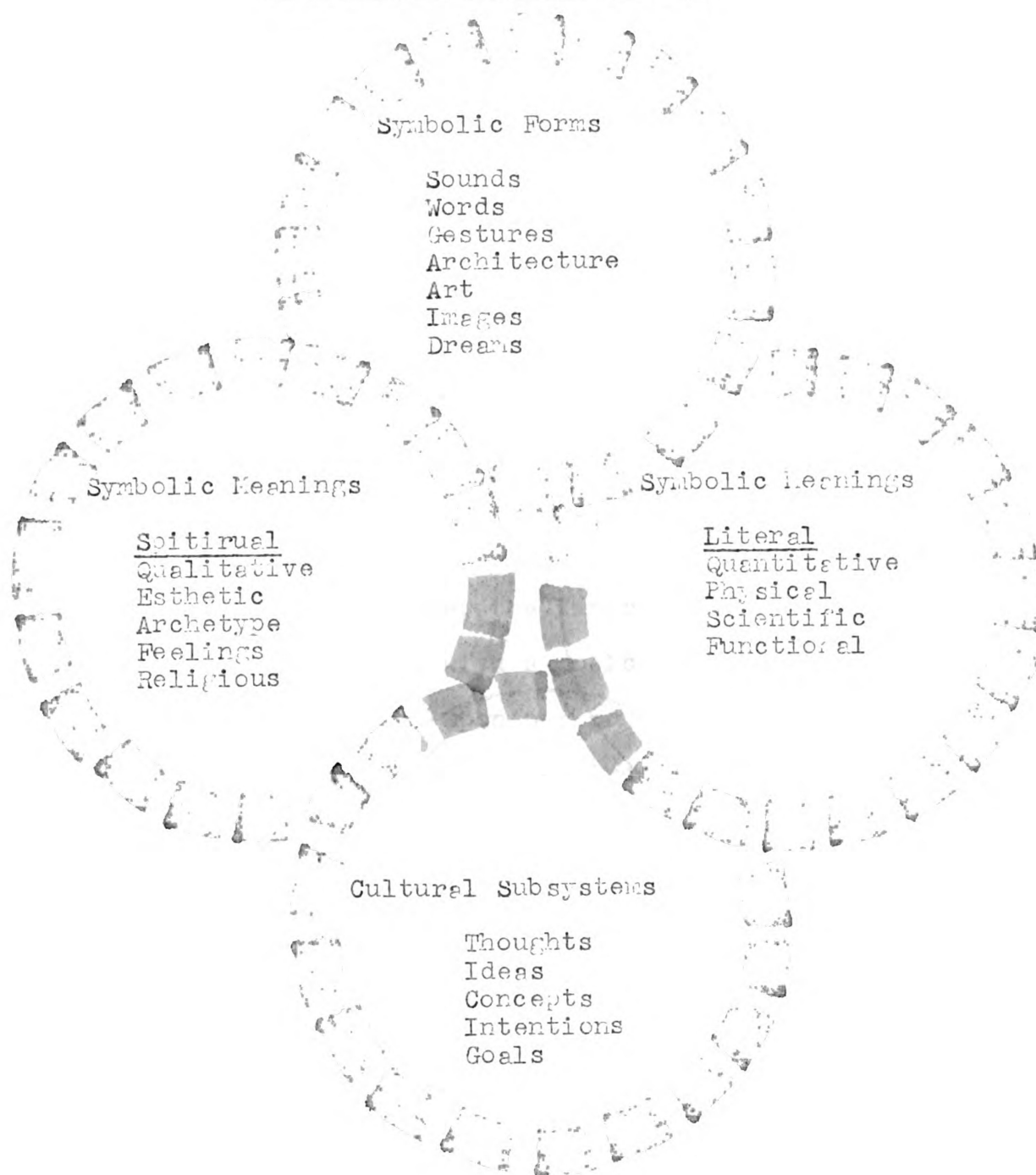
contradictory to Wohl's statements although they are speaking at different levels. Ideally, it seems that symbols should remain constant and universal but most do not in the real world. Consistency is more easily grasped as Jung points out, in the unconscious and dream worlds where 'archetypes' of symbols are embedded deep within our psyche. Motifs of these universal symbols reappear visually throughout history--i.e., the child and old motifs.

Symbolic expression and provident planning or good arrangement, Langer emphasizes, are miles removed from one another. Planners, in studying this one facet of the urban complex (symbols) should keep this dichotomy in mind. We are not attempting to provide the answers to good spatial arrangement but the significance of created space. "The concepts of arrangement in space and creation of space are constantly interchanged...But architecture is a plastic art and its first achievement is always, unconsciously and inevitably, an illusion, something purely imaginary or conceptual translated into visual impression."²⁶

To symbolize, we have shown, is a basic need of man as well as a uniquely human process. Diagram 2 - Symbolic Forms and Meanings - shows the various forms symbols take

²⁶Langer, Feeling and Form, p. 93.

and the types of meanings given to these forms. The basis of giving meanings to these forms is found in the cultural subsystems of the people. How are symbols apprehended? Investigation into the process of perceiving (in a visual sense, and thinking and feeling) will proceed in the following section. Perception and symbols will then be combined with the concepts of space to form a basis for viewing city space in symbolic ways.

SYMBOLIC FORMS AND MEANINGS

VISUAL PERCEPTION AND SHAPING SPACES

We have been using the term 'perception' previously in the rather broad context of understanding or apprehending. Now turning to a more detailed and specific meaning of perception, an attempt will be made to convey, more fully, how exactly we do see and understand.

Perceiving and Knowing

"Vision shares with speech the distinction of being the most important of the means by which we apprehend reality."²⁷ Although we will not get involved in the mechanics of seeing here, the importance of what we see will be discussed. As with symbols, the ability to visualize is dependent upon our conditioning based on past experiences. The urban environment is filled with complex visual objects and it is through our simple perceptual processes that we select and edit until a meaningful hierarchy of significant shapes arises."²⁸

The idea that our visual senses have been dulled in

²⁷Georgy Keeses, The Language of Vision (Chicago: Paul Theabald and Co., 1961), quote by S.I. Noyshewa, p. 10.

²⁸Keeses, "Notes on Expression and Communication in the Cityscape", Daedalus, Winter 1961, p. 152.

the urban city is put forth by Sydney Williams.²⁹ Because of the monotony, sameness, and lack of interesting spaces that a person encounters in his daily life, he becomes apathetic to his surroundings, thus his senses, which are basic in gaining experience are blunted.

In conjunction with the above, Lowenthal states that, "Sensing can take place without external perception (spots before the eyes; ringing in the ears), but so expressive a phrase as 'the mind's eye' is current...because there is something very like seeing about having sensory mental images."³⁰ The two go hand in hand, the eye and the mind, if any meanings are to be gained by sensing other than reflex action. The formulation of symbolic images (spiritual and literal meanings) is an area of investigation by planners, artists, philosophers and psychologists.

Symbolic Image Building

A basic requirement for symbolic image formulation is at least one operating sense, a functioning human mind, and a person possessing a cultural background. Unlike other animals, the human capacity to symbolize allows him to

²⁹Sydney Williams, "Urban Esthetics", Form Func. Review, Vol. 25, #2 (July 1954) Reprint.

³⁰David Lowenthal, "Geography.....", Annals of the Association of American Geographers, Vol. 51 (1961), p. 250.

lead a wider and fuller life even with some of the senses impaired, i.e., Helen Keller.

"The experiencing of every interaction between external physical forces and internal forces of the individual as he assimilates, orders and molds external forces to his own measure. The external forces are light-rays bombarding the eye and producing changes on the retina. The internal forces constitute the dynamic tendency of the individual to restore balance after each disturbance from the outside, and thus to keep his system in relative stability."³¹

Sherman questions the usefulness of the concept of 'imagesability' as put forth by Lynch.

I accept 'imagesability' as a recognized concept-- 'Images' of forms and ideas do exist with only tenuous ties to the original source of impetus... Nevertheless, I question whether the portrayal Lynch gives of a city's image is helpful in urban design in anything but a limited way...Interest in the city goes considerably beyond wanting to know where you are and may, without difficulty, ignore all reference to form even where location is concerned."³²

Images combined with the concepts of symbols, however, do have a greater significance to the urban designer; for the symbolic meaning element is interjected into all of what we see and consequently more meaningful elements of the city can possibly be conceived of. Those who feel their environment is not shaping their activities and

³¹Kepes, The Language of Vision, p. 10.

³²Stanley L. Sherman, "On Forming and Re-Forming Towns and Cities", Journal of the American Institute of Planners, Vol. 29, No. 2 (May 1963), p. 137.

outlooks (and vice versa) are only turning a deaf ear. To these people, the unconscious intake of impressions is operating more than the conscious. Images, related only to knowing where one is, are narrow as Sherran points out. Images also convey symbolic meanings in an individual's life whether one is aware of it or not. "The image does not represent the 'thing', it is the thing; it does not merely stand for the object but has the same actuality, so that it replaces the thing's immediate presence."³³ Structured in this sense, the image has vast importance to people and therefore to urban designers. The dimension of spiritual meanings of things is added to the literal interpretations.

The importance of the social environment in forming images needs to be brought up at this point. Sorokin's definition of social objects and the sociocultural system applies to image building. (Diagram 3) The sociocultural system is composed of three components; the person, the vehicle or artifact, and the meaning components. The all important meaning component is composed of the main body of culture and cultural subsystems. These cultural

³³Cassirer, The Philosophy of Symbolic Forms, Vol. II, p. 38.

Sociocultural System

Human Component

Cultural Subsystems
Political
Economic
Esthetic
etc.

Learning Component

Artifacts
Social Action

Vehicle Component

subsystems are the concepts and percepts found within the culture. Based on Sorokin's categories, cultural subsystems are composed of Philosophy, Religion, Social Relations, Economics, Political, Scientific, Ethical, Aesthetics and Technical. Now there are groups of people--subcultures--within an urban region who experience similar concepts and percepts. Each subculture of people will have varying ties with the cultural subsystems of concepts. Now each group formulates images and perceives the visual world depends upon the balance found within the cultural subsystems. The meaning component of Sorokin's socio-cultural system directly refers to the cultural subsystem set of concepts. Thus human and artifact components are given meaning through these concepts.

Frequency and vividness are two additional factors in image building discussed by Vernon and Hirsch. "It often happens that when we perceive something rather vividly, or when we perceive it so frequently as to become thoroughly familiar with it, we form a mental image of it."³⁴ Hirsch points out vividness by stating, "A setting of such variety can be 'consistent' with the esthetic growth of the city or the larger areas. It should be visually vivid and well

³⁴M.D. Vernon, op. cit., p. 34.

structured and thus project a clear and satisfying image.³⁵ He is dealing with esthetics (an area to be covered later in this paper), but the applicability to our broader understanding of images can be appreciated.

In learning to find one's way around a neighborhood or city, a system of images are established about the relative positions and distances of roads, houses and other natural features. Thus images are integrated with perceptions to form interpretations of the surroundings.³⁶ The memory system of individuals must be taken into account also in gaining images. Familiarity with visual objects is a rather strange and paradoxical process. As visual impressions of an object stack up within the recesses of the mind, the test of time is applied to the object as in the arts, which proves the real worth or significance of the object. Urban environs, when first experienced, can be characterized in myriad ways depending upon the situation of the viewer. Usually unfamiliarity breeds fear and these emotions affect one's images. As time passes and fears and insecurity in new surroundings subside,

³⁵Hirsch, op. cit., p. 7.

³⁶Vernon, op. cit., p. 135-137.

one's perceptions become more acute and where confusion and chaos was once visualized, of say a certain street order, and even beauty is apprehended. As we continue along the time continuum, increased familiarity may result in the person becoming oblivious to the visual quality of the street or possibly even viewing it with contempt.

Education and Seeing

Education in visual forms as embodying symbolic meanings or essences of the city have been de-emphasized in recent years. Paracelsus states "...the hidden character of things is to a certain extent expressed in their outward forms."³⁷ "A belief that external evidence is deceptive or at best inconclusive, and that the search for reality must eventually go beyond the visible and tangible is very much part of our philosophy of education... 'we shall perceive that the appearance which meets the eye is something of significance, and (we) shall not allow it to be degraded to mere shell which hides the essential from our glance'.³⁸ The clash between Phenomenology and

³⁷F.L. Wright, The Living City (New York: Praeger House, 1958), p. 1.

³⁸....., Notes and Comments, Landscape (Spring, 1958), p. 4.

Ontology schools of thought is pointed up in the previous quote; phenomenology classifies and describes phenomena without any attempt at explanation while ontology deals with the nature of being or reality. There seems to be overlap between the two schools with a fuzzy demarcation line separating them. Investigation of the subject matter presented here--symbols, perception, form and spatial relations combines the two viewpoints by pointing up the importance of spatial forms, and also understanding how these forms are shaped. However, at this point we are trying to emphasize the significance of form in phenomenological terms.

Returning to education, Solbo relates:

"Perhaps education...has failed to orient us toward critical examination of the most external of variables (no matter how even subtle), our physical environment. Perhaps our concern with the social environment...has blinded us to the physical landscape which is a direct specific and indicative expression of it."³⁹

Illustrating two separate schools of thought--the physical and social approaches--this quote reveals the confusion in today's thinking concerning perceiving and

³⁹Garrett Solbo, American Institute of Architects Journal, p. 26.

knowing. The term 'physical' is a poor choice here for physical objects are only represented in scientific modes of understanding. City environment perceived by citizens is predicated upon and associated with social meanings denoting social modes of understanding. If we are conditioned to perceive city form simply as signs or encodings of literal meanings only, the spiritual meanings will be overlooked.

Tenant to the above are views expressed by Weber.

"Architects and architecturally oriented metropolitan planners are prone to regard the physical plant of the metropolis as an end in itself, since its visual qualities are so apparent to all who use the metropolis. I would contend, on the other hand, that the paramount function of the physical plant is to accommodate the kinds of activities performed there and to accommodate the interactions among individuals....⁴⁰

Accommodate is the key word here -- or it is the quality and effectiveness of accommodations that provides the symbolic meaning for its users. In closing this discussion, it can only be noted that both physical and social approaches, unfortunately defined, are necessary in struggling with urban problems; more combining and integrating is required, and the 'either or' approach does not hold--they are not mutually exclusive to one another.

⁴⁰Helvin M. Weber, "The Urban Place and the Nonplace Urban Realm" in Explorations into Urban Structure, Philadelphia: Univ. of Penn. Press, 1968, p. 100.

One final note on education, Lynch interjects, "In the development of the image, education in seeing will be quite as important as the recording of what is seen....they together form a circular process: visual education impelling the citizen to act upon his visual world, and this action causing him to see even more acutely."⁴¹ Hirsch concurs with Lynch and although he is speaking of the esthetic mode further states, "Art and audiences grow together. Ours has become largely a verbal society, and while most instructors think that freshmen in college are verbally crippled, their verbal skills are highly sophisticated compared with their visual skills."⁴² Knowledge of artistic spatial forms (line, color, texture) as a visual language is required for people to give greater symbolic meanings to physical objects.

Gestalt Theory

The Gestalt Theory related to perception, although there are others, is worth understanding at this point--at least reviewing the major elements. The word Gestalt

⁴¹Lynch, Image of the City, p. 120.

⁴²Hirsch, op. cit., p. 25.

means form and it is the 'whole' of the form that Gestaltists are concerned with.

"....Köhler and Hofka (two of the early formulators) emphasized the fact that normally our percepts always possess some kind of form or arrangement...we have a tendency to modify the formal qualities of what we perceive, particularly when this consists of so-called 'meaningless' shapes, that is to say, figures drawn on paper which do not represent anything else."⁴³

All artifacts contain some level of meaning or they would not have been conceived, not withstanding archeology findings and some art forms where no concept or idea of their organization can be found. However, the symbolic rather than the literal meaning is our concern here along with the significance of meaning to man. Commonly held meanings on the city scale are important to cultures and society as a whole. 'Meaningless' shapes are modified to fit the concepts and feelings of the culture--if no meaning can be associated by a certain culture, the shape might be discarded or changed to satisfy some meanings embodied within that particular culture.

Some people feel that the traditional shape of cities--development around a strong central core of activity--is dissipating and could even be non existent today. Attending

⁴³Vernon, op. cit., p. 52.

a conference focusing on "The Future of the Central City", Roger Croighton stated, "Holding a conference on this subject (The Central City) might be compared to holding a conference in Salem in the 17th Century on the functions of witches. Such a conference would presuppose that witches do in fact exist."⁴⁴ He goes on to point out many of the traditional functions of the central area--church, shopping, banking, theater--that are no longer carried out only in the so called core city. Although possibly attempting to generate further discussion, he does point up changes occurring in city shape. Lochberg states:

"The explanation for observed shape is not simply that certain specific shapes have been learned. There are evidently laws of organization at work--factors that depend on the relationships between the parts of the patterns of stimulation. These laws of organization form the heart of Gestalt theory, which is an alternative to structuralism... Their demonstrations show quite organically that now we will perceive a whole object cannot be predicted simply by adding up our perceptions of the parts, and that, indeed, the parts may become unobservable when combined with other parts."⁴⁵

The specific laws of organizations referred to will

⁴⁴The Future of Central City, 6th Annual Conference, Organization of Cornell Planners, Cornell Univ., Ithaca, N.Y.

⁴⁵Julian E. Lochberg, Perception (Englewood Cliffs: Prentice Hall Inc., 1964), p. 59.

not be reviewed here but the context within which a shape is found (the organization) has a great deal to do with perceiving a certain shape. The idea of looking at the whole first and then the parts is generally the opposite approach to what is being done in scientific investigations.

In conclusion, on this section of perceiving and symbolic image building, these processes have close ties with symbols and meanings. Viewing the metropolis, the person formulates images--strong or weak--literal and spiritual--meaningful or insignificant--which, in combination, make up a part of the total picture of how we apprehend the city.

SPACE AND SPATIAL FORMS

The last of the three basic concepts that underlie this thesis--space and spatial forms are most difficult to grasp and organize (symbols and perception being the other two basic concepts). Spatial considerations of the physical city are extremely important in planning and much has been written on this subject. Spatial forms are closely associated with visual perception and cultural values in the context of this thesis. The concept of spatial forms will be narrowed down to a study of the interactions occurring between people within and affected by the spatial organization. Proper spatial organization for city structure will not be dealt with but rather the significance of space as 'living symbols' to people will be examined.

Space Apprehended

"No longer does man see space as the backdrop for his individual self; no longer does he see his world as a dynamic part of a much larger organism. He doesn't observe space; he is immersed in it."⁴⁶ Thus Edmund Bacon identifies

⁴⁶Edmund Bacon, "Architecture and Planning", American Institute of Architects Journal, (June 1961), p. 69.

the importance of space--we are an integral part of the concept itself. Depending on where we are located in the city's space will determine our apprehension of spatial forms at any given point in time. Langer supports this by stating, "Prosaically speaking all life is in space; and to take possession of space can mean nothing but to occupy it physically."⁴⁷

Space may be visualized symbolically in spiritual or literal terms if maintained within the parameters of our definitions. Literal spaces would be the quantitative measuring of distances and volumes. Spiritual spaces, occupying the same physical sphere as literal spaces, includes the functions, activities and human meanings ascertained from spatial experience and cultural predisposition.

Pereira relates, "The apprehension of mathematical or symbolic space would depend on the extent of the mind's ability to intellectualize and inquire; also on the mind's capacity to construct abstraction, perceive essences and form symbols."⁴⁸ Apprehending the concept of space is

⁴⁷Langer, Feeling and Form, p. 94.

⁴⁸Pereira, The Nature of Space, p. 5.

inexorably tied in with cultural aspects as is evidenced by highly unique settlement patterns in various countries. Form, of course, is the essence of the organic level of understanding and the non-spatial--concepts and ideas--are superimposed upon forms.⁴⁹

Perceiving Space

Formulation of percepts in dealing with space is separated here from the conceptualizing of space covered above. Conceptualizing about space and perceiving space interrelate as De Louwe brings out:

"Men live and think in a complex space which has been organized for them and by them. But their behavior and their thoughts depend much more on the way in which they perceive and understand this space. According to their different social classes and to their different cultures, they perceive and attach a meaning to physical objects differently. They arrange things in their mind according to their own particular ideas. Gradually, they tend to reorganize the space in which they live, according to these ideas."⁵⁰

This process occurs as an individual grows up learning different meanings of his culture or subcultures. He goes

⁴⁹Edward T. Hall, The Silent Language (New York: Fawcett World Library, 1959), p. 179.

⁵⁰Paul-Henry Choquet De Louwe, "The Social Sciences Urbanism and Planning", International Journal of Cooperative Sociology, Vol. 4, No. 1, March 1963, Retyped, p. 10.

on to say that:

"Town planning should...be dominated by the desire to use all the available techniques to create the framework best fitted to the social structures, and not to change social structures and behavior patterns to fit a technical evolution we should no longer be able to control."⁵¹

De Loure's reference to the social structures bears upon the social and institutional structures in their state of evolving existence. The problems that planners face are distinguishing these structures and plotting their courses of change--past and future. If we simply rely on technical evolution (machines, i.e., automobile) to take the lead and change our modes of living, it would result in the proverbial tail wagging the dog. "Social systems and urban patterns (social structures) are the external expression of man's purposes--his ideas."⁵²

Dimensions of Space

"The concept of space as an unlimited or three-dimensional void--a kind of extrapolated perspective...is still, of course, the ordinary man's concept...The indications that it is now proving inadequate are so

⁵¹Ibid., p. 20.

⁵²Stanford Warren, "Planning Process and Environmental Health", paper presented at Conference on Environmental Health, University of Michigan, Ann Arbor (March 1964), p. 6.

numerous...⁵³ Man needs to become more sensitive to the meanings of spatial relations, in a conscious way, in order to form a language. Spaces are living expressions of the culture and have meaningful content. Dimensions of space, therefore, can take on all the dimensions of cultural subsystems (i.e., political spaces are found within the jurisdictional boundaries of political units). Visual spatial patterns and spatial relations are derivations gained from the underlying non-spatial cultural concepts. The balance between various modes of concepts at any one point in time gives the total impression of a space apprehended by an individual or subculture. A change in one element or concept affects the total balance and all other outlooks are altered to maintain the balance. If economic, scientific, and technical subsystems are emphasized to a greater extent than before when dealing with, for example, a street or roadway, greater conscious effort will be placed upon making these spaces more efficient, economical, and exact in engineering design and detail. Other cultural concepts will also adjust--possibly a de-emphasis in the political jurisdiction concerning where the road will be

⁵³Owen Jarfield, Saving the Appearances (London: Faber and Faber, p. 132.)

placed. Technical considerations may override political aspects.

"Literally thousands of experiences teach us unconsciously that space communicates."⁵⁴ The communication's dimension of space in conveying symbolic meanings is often times too obvious that it is seldom spoken about. By comparing how various countries handle space, cultural origins in perceiving space can be realized. Feelings are interwoven into how space is organized. A simple example is the space between people in various cultures as they talk to one another. In Latin America, speaking to a person across a desk symbolizes aloofness and intimate conversation can only occur when the closing space is several inches at the most. If business associates or clients attempt such close speaking contact in this country, one automatically steps back.

Ethetics of Space

Looking at the city's spaces in esthetic dimensions is a fresh artistic way of perceiving a metropolis. Since the insurgence and subsequent collapse of the 'City Beautiful Movement' in the early segment of the 20th Century, there

⁵⁴Hall, op. cit., p. 119.

has been relatively an obvious lapse in considering esthetic modes of thought applied to urban spaces because of the overemphasis on economic thinking. Esthetic visual spaces would result if the proper balance of cultural subsystems was achieved. As things are today, economic and technical modes are far too heavily weighted in considerations of space, repressing many of the other valid concepts.

From a mechanistic point of view, a spatial system is meaningful when it has great utility and is efficient. On the contrary, "to consider the city solely as a work of art is to take a limiting, not to say inadequate, view. Roger Fry is quoted as saying, "...our reaction to works of art is a reaction to a relation and not to sensations or objects or persons or events."⁵⁵ In a poetic sense, "Space that has been seized upon by the imagination cannot remain indifferent space subject to the measures and estimates of the surveyor. It has been lived in, not in its positivity, but with all the partiality of the imagination."⁵⁶ Here, 'indifferent space' is being used in a similar manner to our quantitative, literal, scientific space.

⁵⁵Sherman, op. cit., p. 136.

⁵⁶Gaston Bachelard, The Poetics of Space (New York: The Orion Press, 1964), p. 31, introduction.

CONNECTING SYMBOLS, PERCEPTION, AND SPACE

Having come to grips with our three basic concepts of symbols, perception, and space, it is quite obvious that they have already been linked together in each major section emphasizing one of the basic ideas. Sorokin's socio-cultural system explained previously is one system of unification utilized. Taking a step backwards now, we will first discuss general systems theory as a means of comprehending the whole and then investigate several alternate systems encompassing the main concepts of symbols, perception and space. This investigation should then formulate the organizing theory to be utilized when structuring a study framework. The study will endeavor to assess and analyze symbolic meanings of visual spatial forms embodied in urban regions.

Systems Theory

Regarding the city complex as a system is predicated on the holistic school of thought versus the atomistic school. Holistic view--"...records the universe as a great hierarchy of entities, each following its own path of historical development...the universe is recognized as a System of systems..." Atomistic school--"...the universe is made up of ultimate particles, each of which is simple,

indivisible, and permanent. All observable changes are due to the reversible social rearrangements of these particles resulting from their motions and mutual influences.⁵⁷

Definitions of systems follow:

"In its broadest sense a system is any set of interrelated components...Any system must contain at least two interacting components, or it is not a system."⁵⁸

"...a system is a sequence of states of any interacting population, each state being a function of preceding states."⁵⁹

"Social System: a consistent whole with meaningful causal ties between its components and between the subordinated and coordinated systems."⁶⁰

Concerning the usefulness of a systems approach to the city, Meier states, "A city is a complex living system. Its anatomy and composition can be studied and analyzed like any other living system."⁶¹

Systems, through social science approaches, speculate in regards to the whole and the meaningful causal ties in

⁵⁷Lancelot Wayne, Accent on Form (New York: Harper & Brothers, 1954), p. 55-56.

⁵⁸Alfred Kuhn, The Study of Society (Homewood: Richard D. Irwin, Inc., 1963), p. 33 and 43.

⁵⁹Richard L. Meier, A Communications Theory of Urban Growth (Cambridge: MIT Press, 1961), p. 2.

⁶⁰Sorokin, Sociocultural Change, Space and Time, p. 94.

⁶¹Meier, op. cit., p. 3.

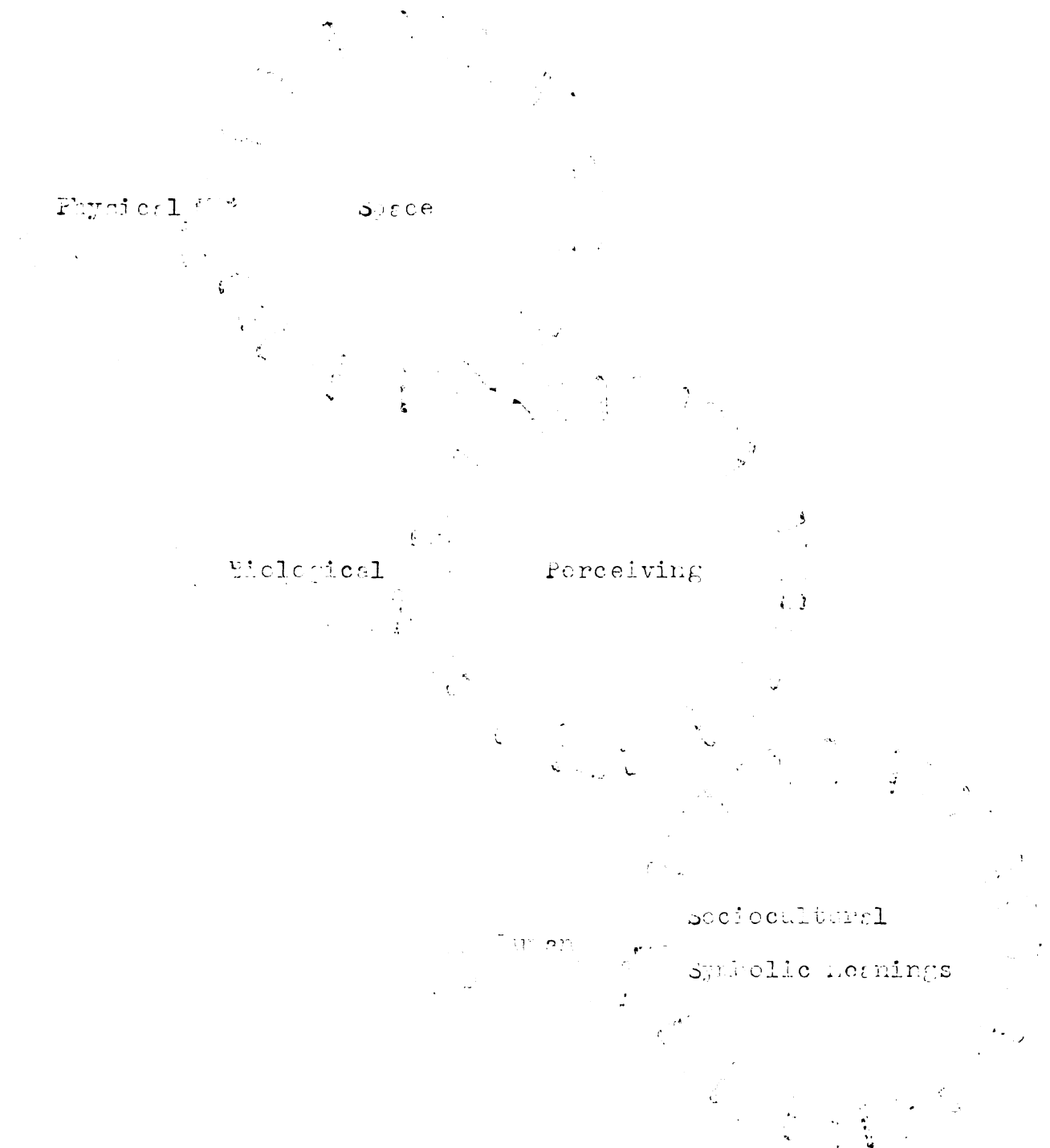
the elements of the system and with other systems. The cry for a comprehensive, all inclusive approach is an old one in city planning and systems theory, at least partially, answers the need.

Ecological System

The three major concepts--symbols, perceiving and spatial configurations might be incorporated into an ecological approach to a regional system. This complements Sorokin's sociocultural system which organizes social phenomena. The biophysical realities of man must also be taken into account. Before proceeding further into ecology, we need to comprehend the various levels of thought and reality--physical, biological and sociocultural--each possessing unique concepts. (Diagram 4)

The physical or inorganic realm relates to inanimate objects while the biological or organic world deals with life sciences. The causal factors or forces are external in the physical world and internal in the organic world. The third realm, sociocultural or human is the man-made symbolic environment with its symbol system of meanings. Causal principles are logical--meaningful as compared with physical--chemical and organic principles the other two worlds possess. We must attempt to keep these three basic

THREE BASIC LEVELS OF REALITY



worlds distinct and not intermix terminology and concepts except as analogies. The often used analogy of the city as a medical patient and being diagnosed and operated upon by the doctor (planner) is carried to literal interpretations. This is mixing the organic level with the human level of reality.⁶²

Returning to the ecology system and how it might tie together and organize our major concepts, which as a matter of fact could be thought of as representing the three major levels of reality. Space--the physical level of meanings (Physical objects) perceiving--the organic level of meanings (literal) and symbols--the human level of meanings (spiritual). Ecology would be used here as the relationship between the physical, organic and human symbolic meanings with reference to spatial forms as outward expressions of the social and cultural patterns.

Physical space and social relations are formed into 'living space'--having meaning to humans through the perceptual process. How we see things and therefore conceptualize things is the basis for how things are created and new spatial forms constructed. As man evolved his

⁶²This paragraph based on memorandum written by Sanford Farness, I.S.D. Urban Planning 620, Fall 1964.

concepts, his natural environment affected his patterns of living. Natural native materials were utilized to construct useful objects and also as symbols (the natural things themselves--rocks, mountains) of mythical gods which explained unexplainable phenomena--life and death, storms, etc. Today, the symbols of super human all-knowing power is explained and continues to serve that function. Many feel that our present symbols are no longer 'pregnant with meaning' and we are searching for different symbols. For many of us our tie with nature is now quite far removed but the basic forms still exist in natural settings and, although shrinking in size the opportunity for people to commune with nature is present. Man-made development will never replace the natural setting but it can be adapted to facilitate the essential man-nature relations (transportation and living accommodations, etc.). Nature's symbols, once alive and experienced by people again, will then affect his concepts and percepts which in turn shape his urban environment. This does not suggest, by any means, that nature should be reintroduced into the city by attempting to copy natural settings and mixing man-made elements and natural elements together. Nature needs to be surrounded by nature, not by man-made artifacts. To be sure, as stated above about introducing man-made things in nature, the

placing of natural objects and open spaces in the urban region could symbolize man's relationship with nature, but it is destructive to combine both as in Wright's 'Broadacre City'. So the ecological man-nature relationship is important to understand in formulating a organizing concept. How spaces in and out of the city are to be treated could have an ecological basis.

Message System

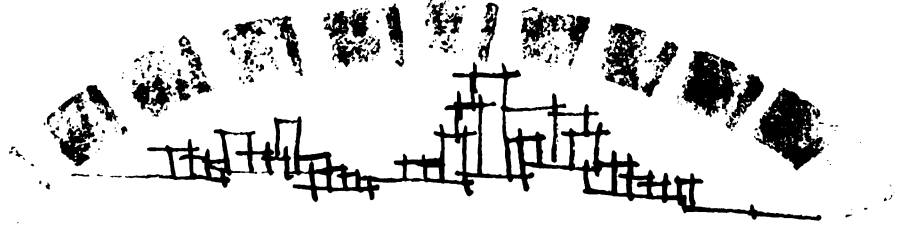
Brown speaks of the 'message system' as she states:

"Let us examine the city as a 'message system'(messages) may be functional...they may be expressions and symbols...messages may be general ones, meaningful to all citizens, or specific to some group, or personal and individual. But usually these levels are all interwoven."⁶³

It is pointed out that there are two general classifications of messages--functional (literal) and symbolic (spiritual) and that there are three different scales at which messages are meaningful--all cultures, subcultures, individuals. Traditionally, planning has been concerned with functional messages related to the entire population or to individuals. Studies are required to investigate symbolic messages as meaningful to subcultures or some group. (Diagram 5)

⁶³Denise Scott Brown, "The Meaningful City", American Institute of Architects Journal, Vol. XLIII, No. 1. Jan. 1966, p. 29.

MESSAGE SYSTEM



The City

Identity
Physiognomy
Location Relative to

Entire Culture

Subcultures

Individual

Meaningful To

Sender - Creators

Channel - Sources

Lessons - Learnings

Receiver - Perceivers

Literal Lessons
(Learnings)

Spiritual Messages
(Learnings)

Concerning what aspects of the city give messages, the system of 'heraldry' is pointed up by Brown: "... heraldry--(the city's) written and graphic signs...In general it may be said that positive use is not made of visual symbols, and that the systems of signs and signals in American cities come close to anarchy."⁶⁴ Brown separates this 'heraldry' system of signs and signals from a system of physiognomy of the city as conveyant of understanding. The location pattern of building and spaces is another message giver as she notes, "The important civic building is placed at the end of the axis or on an eminence."⁶⁵ In our previous discussions of symbols and spaces, we have assumed the idea that building and spatial relations are the signs and symbols that are spoken of by Brown as heraldry aspects of the city. Consequently, the entire system of artifacts, written, graphic, three dimensional, spaces can be thought of as conveying meanings besides accommodating activities.

Heier brings up several other useful points concerning messages:

"...an increase in the communications rate is a prerequisite of socio-economic growth, but overloading of communications channels causes distress

⁶⁴Ibid., p. 30.

⁶⁵Ibid., p. 30.

and discrimination...The language that must be shared by sender and receiver is based upon collating symbols to objects and operations and an ordering of these symbols when presented according to commonly accepted rules."⁶⁶

Both noun and verb are speaking of the signs that spatial forms serve as, and are really not relating to the spiritual symbols embodied in spatial forms. Jung points out symbols have little to do with communications by signs. Discursive forms of language are also in a different realm than our presentational forms of the city and do not possess the possibility of gaining insights instead of simply gathering facts. The very forms of objects must be looked at and not looked through.

Planner's Emotional Involvement

Expressed many times previously, the facts we assemble and how we perceive and comprehend depends upon our set of concepts formulated within the culture and its subsystems. Objectivity, expressed as a great need today in planning literature, has had side effects and overtones of aloofness and detachment from emotions and feelings. The planner must become involved with the feelings of the community, if we follow through with our explanation here of the important function of cultural ideas manifesting our exterior

⁶⁶Leier, op. cit., p. 2 and 9.

environment. The planner is like a reporter at the scene of an exciting, emotional event, (a families reunion with a lost child as an example) attempting to describe what is transpiring for the listeners and also interpreting the feelings of the participants by associating with the situation--how would I feel if I were the parent and how do they feel as interpreted by their outward actions--anger, relief?

Can the reporter remain objective?--only in the sense that he interprets the people's true feelings. The feelings (spiritual meaning) that transpire need to be related for gaining a complete picture of the situation.

Can the drama of the lost child be compared with the planner describing and studying the city? The dramas of city activities and development are exciting and these events need to be reported to the people by the planner. The feelings that spatial forms and events embody are a large part of synecolic meanings and therefore a large part of knowledge about the urban phenomena. The crux of the discussion here is a plea for planners to become personally involved in communities under study through comprehensive studies and reporting events directly from the scene. Planners, claiming the distinction of being urban generalists,

must therefore involve themselves with subjective meanings and values of the people which shape the urban environment. Objectivity in relating literal meanings of city form is a valid goal and criticism is well founded when speaking of planners, imposing their own values as the criteria for interpretation and standards to be strived for, but to carry this over into disregarding any subjective thinking of people is completely fallacious. "A limitation to planning procedures today", Farness relates, is the refusal to identify human decisions and actions as primary causal factors creating our settlement patterns and problems.⁶⁷

Important to note also is the involvement planners, as people, have in the very thing they are studying. It is not similar to observations of chemical reactions within yourself and immediately around one. The importance of studying human developments, activities, and people has great intrinsic value and meaning for it is an effort to learn of oneself at the sociocultural level.

As De Louwe points out, a general scheme "...cannot be obtained by asking for the opinions of each individual, (for his mode of living is not neatly formulated at the

⁶⁷Farness, "Planning Process.....", p. 6.

conscious level) but only by looking at men, by studying their behavior, living with them and thinking with them. To a certain extent we know its (19th Century City) externals and their development but we do not know the society of which they should be the outward expression."⁶⁰

As planners become increasingly analytical--it is obvious that some degree of direct contact with the actual area under study will be lessened. Land use surveys do require field work (aerial photography is eliminating field work to some extent) along with traffic surveys and attitude surveys, however these are often delegated to non-planners. Devising a study of the symbolic meanings of spatial arrangements would involve the planner getting out from behind the desk and conference table and out into the very environment he is designing for and studying. This does not necessarily mean a thorough geographical orientation of a city (street names, etc.--signs of the city) but rather the feeling--the areas of importance to people that never show up on land use or any other kind of study map. As the citizens make the city their own, so the planner must make the city his and become a part of the city.

⁶⁰De Louwe, op. cit., p. 6 and 7.

Conclusion - Part I

Through research and thought we have inspected three basic concepts and how they relate to and affect one another. Perceiving is dependent upon cultural and social modes of thought in conveying or interpreting the meanings of spaces found within the urban structure. Symbolic meanings--probably the most tenuously linked to spaces and perceiving has a wide spectrum of interpretation and understanding. Used here, symbolic meanings are spiritual qualities of artifacts in that their meanings go far beyond mere literal interpretation and moves into the realm of feelings and intuitions. Jung's interpretation that one is reaching out eagerly for the meaning which barely eludes one's grasp is a good one. Even though one does not completely comprehend the living symbols in his life, they serve as direction givers in opening up a person's full potential. Religion, patriotism, humanitarianism are all movements to which people dedicate their lives and contain symbols moving beyond literal reasoning.

Our task in Part II of this thesis will be to formulate a study to be conducted by planners and other professions concerned with urban phenomena, in which symbolic meanings of urban spatial relations will be identified in the urban region. It is assumed that symbols

are embodied in visual artifacts of man. Esthetic modes of thought, inaccessibility of urban forms and spatial relations as outer expressions of symbols, are the keys to exploring symbolic meaning in the environment.

Meanings found within the shape, form and structure of cities are of great value to the planner as he investigates the workings of the metropolis. How he communicates, categorizes and interprets, especially the spiritual meanings, is the problem which has not really been answered yet. Extensive studies would have to be undertaken in classifying symbols by subcultures, identifying specific meanings of artifacts to each subculture, and formulating studies to accomplish the previous two objectives. Here, we have only dealt with theory and not its application to any appreciable extent.

Another important field of study would be relating a symbolic study to other surveys and analyses that urban planners undertake. To discover the significance of information on symbols in formulating plans would require study also. What we are seeking is stated by Brown, "Our need is to find that good base upon which subsequent encrustations of meaning and association can form as richly and with as much individual variation as the talents of

the population admit--to find that order within which
variety becomes meaningful, and the changing whole
intelligible and beautiful.⁶⁹

⁶⁹Brown, op. cit., p. 32.

PART II

APPLICATION OF CONCEPTS

NEED FOR CONSCIOUS SYSTEMATIC EFFORTS TO UNDERSTAND AND CONSTRUCT MEANINGFUL CONCEPTS

The first major part of this thesis dealt with the concepts of symbols, perceiving and space in introductory and explanatory modes. Each concept was explained for its applicability to urban planning theory and also understanding processes which link up seeing with symbolic spatial forms. It was concluded that what a person perceives with his sense mechanisms is extremely important in formulating mental images and symbols. Also noted was the idea that cultural modes of thought affects the form and meaning of what we see. In fact, conceptualizing is a prerequisite to seeing objects and giving these objects meanings.

Everything we see is symbolic, it was concluded; however, there is a vast range of meanings applied to objects and spaces. On one end of the continuum we have the quantitative, exact, literal interpretation and on the other end, qualitatively exact, presentational forms of understanding. The qualitative meanings of cities are the foci for this thesis. Planning studies along with other

endeavors to comprehend the city have been, by far, overweighted with quantitative data and little systematic thought given to human feelings and the spiritual side of urban life. With this disregard for qualitative aspects, our cities have become, to us, only conglomerates of functions to serve the self rather than a living city, pregnant with meaning.

Part II of this thesis is an experimentation in studying and surveying the qualitative aspects of cities and reporting upon findings for the edification of city builders, decision makers, and the citizenry, besides the planners' own enlightenment. The study classifies the entire population of an urban region into geographic groupings--cosmopolitans, commuters, suburbanites, villagers, ethnic villagers, ruralites and slum dwellers. Five scales of symbolic spatial form perception are separated out.

Establishing a Feed

In previous sections of the thesis, we have reviewed underlying concepts leading up to their importance to planners and others concerned with city forms. Symbols, perceiving, and force were ascertained in a rather pure intellectual sense. Now, we shall attempt to accept and incorporate these basic concepts into a practical working

study designed to increase the depth of understanding the essence of the city.

Ermond Bacon, an architect-planner, will look disdainfully at such a study, calling it divestitory action by the planner instead of facing up to the decisions planners should make. The intuitive process of artistic reasoning is what Bacon puts his faith in. The urban expert needs to take a strong, imaginative, creative, and bold stand on design issues, Mr. Bacon states, and let the democratic process compromise and mold the final resultant solution.⁷⁰ A student in an academic environment, however, is able to seek out ways to probe deeper into theoretical application so as to support his forthcoming boldness, imagination, creativeness and, most lively, tempered contribution to the planning process and to the city.

The major purpose of such a visual survey, which will be outlined below, is to increase awareness and consciousness of just what the city is and what it has evolved from. General citizens, decision makers and city builders, with greater knowledge of city development could then better

⁷⁰Ermond Bacon, Proceedings of Fifth Annual Conference of Cornell planners, 1961, Planning for Urban Aesthetics, p. 5.

understand their roles in the urban environment and the times that are the setting of the stage. All people are individuals with feelings and sensitivity shaped by culture and surroundings. Greater knowledge of the essential nature of the culture he is involved in can actually supply him with greater freedom instead of inhibiting his talents. Results of the study would convey in words and pictures, a systematic, logical breakdown of symbolic meanings and spatial forms for reflection. An important point the study should reveal is identifying the need to incorporate qualitative design considerations into comprehensive studies right at the initial research stage. A systematic approach to such an investigation is imperative for fitting it with other more traditional studies of land use, circulation, etc. Before going into the study itself, let us examine the ideas of increasing awareness.

Loss of Innocence

The foregoing introduction leads us into discussion concerning a systematic procedure for urban design. As man became increasingly conscious of himself and explaining phenomena occurring around him in scientific terms, he began losing such symbolic learning. Once, he formulated

a rationale about natural phenomena--life, death, fire, storms--in mystical terms related to gods and many other meanings. We now explain these events in biological and meteorological terms--a more literal interpretation, although ritual concerning life after death still has many meanings to many people. So, through the ages of man, a certain complexity in understanding has been lost and has been slowly replaced by scientific discoveries and interpretations. Self-consciousness is bearing upon urban form today--what is the real city? What are the processes of decay and rejuvenation? And, so too, we are explaining in mechanistic, scientific, quantitative terms. (ex. 'the residential district is located between...', 'the overall density is...', 'the fl. recreation is...', 'average family size is...', 'lot size is...', etc.). Quantity measurements of the phenomena are profuse, but no attempt is made to assess the transcendental meanings of these structures and plots--it's too subjective, too personal, and to some, too insignificant. We are seeking knowledge of city form so must include the full range of meanings. (transcendental (spiritual) as well as literal).

Our innocence is lost. And once again, of course, the innocence once lost, cannot be regained. The loss

demands attention, not denied."⁷¹ So Christopher Alexander introduces his contribution to a systematic process of design. Using mathematical logic he establishes a procedure for coping with complex design problems. We can no longer afford to hide behind intuitive thinking, standing above the real problems of cities requiring solution. Facing up to problems rather than circumventing them is expressed by Alexander, as Bacon also emphasizes. The similarity of the two men's approaches (Alexander and Bacon) stops there. Bacon, if this reviewer is interpreting correctly, relies upon a visual presentational form of artistic reasoning for his designs, whereas Alexander is proposing a scientific, mathematical, logic conveyed in a discursive form of writing. The two approaches are dialectically opposed in the methods by which problems are met.

The study of symbolic spatial forms under consideration here is a combination of the intuitive and scientific modes of thought. Intuition is used here in the form of artistic reasoning which utilizes presentational or visual

⁷¹Christopher Alexander, Notes on the Synthesis of Form. Cambridge: Harvard University Press, 1964, p. 11.

symbols as a means for conveying meanings and communicating. Systematic in approach, the organization of our study will only be invoked in order to provide a uniform, logical procedure. Mathematics will be introduced at the elementary level and it is recognized that intuition is in play when formulating the study and especially when identifying symbolic meanings and organizing them by various subcultures.

Deliberate Attempt to Create More Meaningful Cities

Along with the above cry for a systematic formulation of studies, there is a parallel movement to consciously introduce aesthetic thinking in designing cities. In early American settlements of colonial times, communities grew in logical sequence and changes occurred slow enough to enable builders to be cognizant of their surroundings. Today, changes happen so rapidly and the scale of development, once measured by walking distances, has practically no boundaries for measurement in human terms. The machine scale (i.e., autos, elevators, etc.) has helped create our present sprawling inhuman scale of urban development. The interdependence of early Americans also facilitated the unity of purpose exemplified in the physical forms.⁷²

⁷²Henry Fagin, Robert Weinberg (ed.), Planning and Community Appearance. New York: Regional Plan Assoc., Inc., 1951, p. 1-2.

"What came naturally under conditions of life long since vanished, we must now do deliberately. We can build complex and beautiful communities only to the extent that the desire to do so becomes a compelling motive for the whole community--for our citizens, our builders, and our public officials."⁷³ Added then, is a plea for not only conscious design, but also awareness of esthetic considerations incorporating them for their own sake. Artistic reasoning of a sort is called for here. Ferness relates that achieving esthetic form expressed meanings one cannot say in words and results from artistic reasoning. This is just as valid a reasoning process as our presently over-weighted economic thinking. A truly conscious effort is needed to blend artifacts, originating from various outlooks and concepts, into a unified whole and discover meaningful symbols that would other wise be arbitrary.

Those stating that form should follow function are usually speaking of our narrow literal definition of function. In the text of a speech on esthetics and the ambiguity of such a doctrine, the following quote seemed appropriate for this discussion: "...consider...a doctrine as apparently

⁷³Ibid., p. 13.

straight forward as the claim that architecture should be functional...but functional for what? The carving decoration, car cycles on Gothic cathedral gables seldom serve to hold the building up, but are they not perhaps functional in some broader sense as a religious edifice?..⁷⁴ Compared with a functional traffic pattern consideration, the aesthetic has to be based on a different set of explicit principles of artistic reasoning (i.e., design elements, dynamics, tensions, balance, etc.)

For this very reason when dealing with non-utility, non-economic symbols and meanings, the value of a survey designed to provide some richer symbolic values for future design solutions is heightened considerably. Planning agencies on all scales are continually searching for reasons, justifications, and cases for their plans. A symbolic spatial form survey revealing highly technical symbols, or lack thereof, and possibilities where the potential is great for introducing symbols, can become one additional factor of the many considerations involved in making future decisions. Urban renewal agencies are beginning to consider symbolic representations in their choice of renewal sites, taking advantage of the visual

⁷⁴Frank K. Sibley, Planning for Urban Aesthetics, p.3.

impact gained along expressways leading into the city. The Community Renewal Program of the City of Detroit is a case in point. One major criteria used by the high level decision makers for assessing priority of renewal projects is the location of the project site. If the site has substantial visual potentials from the standpoint of being seen as a person enters or leaves the city on an expressway, that site might take priority over a site comparable in every other aspect (degree of deterioration, social debt) except the accessibility of being viewed to heighten the city's image. The validity in this example is questionable, in that a false impression of the city could be achieved, but the idea of symbolic expression is fresh. The worst consequences that could proceed by prostituting the central theme of symbolic meaning is applying a fake facade, so to speak, upon what the city really is. What the city really is must be tied, again, with the cultural values held by the inhabitants and no amount of outward window dressing can change this reality. The symbolic meaningfulness needs to run through the entire artifact, not being simply a surface impression. The outward forms of symbolic expressions must be honest and authentic. Once the viewer discovers the real essence of the city behind the front, he will react in a greater

negative fashion than before. This is the dialectic method of logic based on the concepts of contradiction and opposites of man. (Love and hate, freedom and collectivism, etc.). Symbols possess a polarity of feelings--negative as well as positive. Speaking of negatives and positives, let us now investigate the positiveness resulting from our symbolic spatial forms study.

A Positive Approach

It is extremely important that this symbolic spatial form study, along with the myriad of other basic data gathering, be maintained in a positive manner of investigation. A contrast can be shown by identifying the literal meanings and the spiritual, qualitative attributes of spatial relations found in the city. Drawing up information and locating sections of the urban environment possessing only negative or falsified meanings would put the study in a pessimistic light. The positive and meaningful elements should be pointed to rather than criticising dishonest symbols. Efforts must be expended to be objective in the sense of gaining a feeling for or information about subjective thinking of the subcultures studied.

A positive approach is not emphasized simply to be

collaborative, but inclined to resist the direct action-- the cause and effect relationship between how one thinks about a object, how one sees one's perception and coping powers. In turn the object as an artifact serves the person's concepts and concepts affect the form of the. Thus, if one feels, one finds, but if he finds it, the doors shall not be opened unto us.

To set up a study that of course a qualitative search for constructive information about symbolic meanings of spatial relations, the ultimate use of the findings should be used to help free the designer and the community in the process instead of used as a basis for regulation and preventative measures. "...stress inspiration rather than prohibition, creation rather than prevention."⁷⁵

The study design requires information to create new forms and symbols and not merely conserve forms already steeped in symbolic meaning.

⁷⁵Farin, op. cit., p. 10.

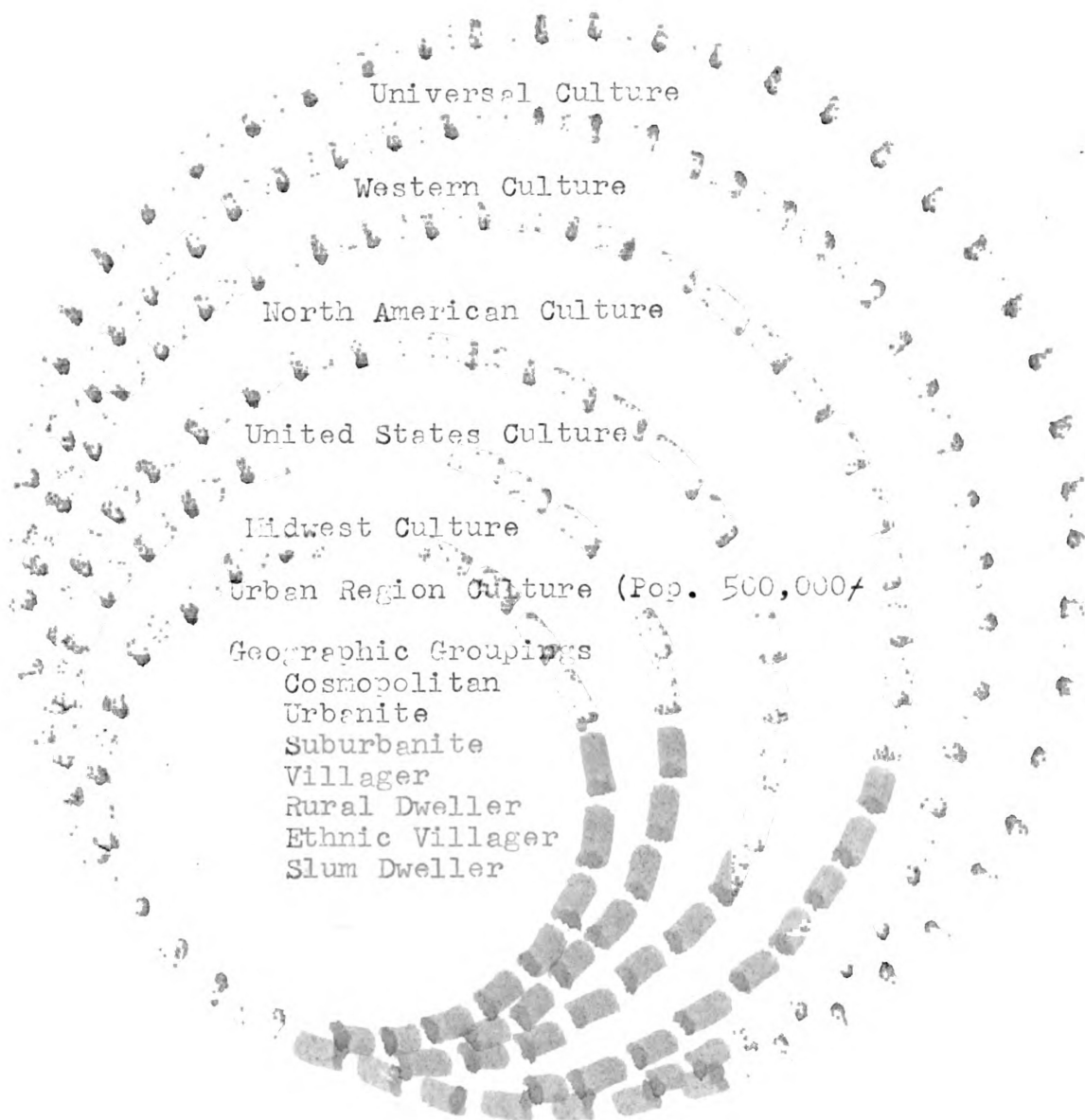
ESTABLISHING A LANGUAGE

In an endeavor to uncover new ways of approaching urban form, it was felt that specific concepts must be formulated. Several terms and categories are presented here for use when studying the symbolic spatial forms of the city. Most are from other sources along with an effort to present some original thinking. Reiterating the main purpose of the proposed study once again--it is an attempt to shed new light on visual form of the city; the symbolic meanings of spatial forms and the degree of meaningful artifacts in sections of the urban region.

In an effort to develop a conceptual framework for the study procedure, it would be wise to present the relevant components of the urban system at this time. Contained within the world is a hierarchy of cultural patterns of man, from a universal system down to the subcultures found in each country. Our definition of subculture is--a major grouping of people who hold, in common, concepts and who perceive, feel, and understand symbolic meanings in the same ways.

Western and Eastern cultures are major units of the universal culture (see Diagram 6). Each continent has further refined unique cultural patterns. The North American Continent, which we will be concerned with, can

Hierarchy of Cultural Patterns and
Geographic Groupings



be further divided into regions of subcultural patterns. The Midwestern region contains, as do many of the other regions, rural, urban and village subtypes of development patterns resulting from the mode of culture. Our study will focus upon the geographic groupings within a relatively large urban region of 100,000 people or more.

The seven classifications selected for use here are, generally speaking, so grouped that concentrations of each could be located spatially in the urban region. The geographic groupings are:

- (1) Cosmopolitans - the elite of our urban region, the very rich, the jet set--those whose boundaries of interaction are the world.
- (2) Urbanites - the largest grouping found in a metropolitan region are the middle class people that reside in large cities--within the urban structure of the city.
- (3) Suburbanites - those who reside in the distinct suburban pattern which has increased tremendously since World War II. Usually tied to the central city by work.
- (4) Villagers - Those people who reside in the small communities which ring the central city or are being swallowed up by the extensions of urban sprawl.

(5) Rural Dwellers - This distinct group is rapidly changing in makeup with a steady increase in non-farm people. Although, to some extent, rural values and outlooks are quite a bit different than the other groups. They view the social relations of the city, especially, in a different way than those people living in the more dense urban pattern. The rural group serves as the transition from urban to rural and are probably in a state of flux more than any other group at the present. With change comes fear and skepticism so we have a clue as to what their outlooks might provide us with.

(6) Ethnic Villagers - These are groupings of people with strong ethnic ties living in a close knit area of the city. Services and goods are provided primarily in the area. Place of work usually in close proximity to home.

(7) Slum Dwellers - Low class working and non-working groups residing in slum conditions.

(See Diagram 6)

Located in each of these seven people life groupings are further refined breakdowns of the subcultures such as age groupings, recent arrivals, education, trapped, permanent, transients, occupation, religion, and race. The

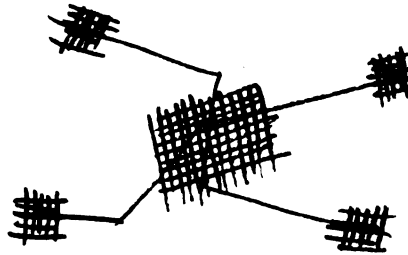
study, nonetheless, will operate within the workable limits of the seven geographic groups. Symbolic spatial forms and relations are made up of man-made artifacts and their patterns in space. These forms are the outward expression of the cultural patterns and the natural elements (topography, water, soil, foliage) of the landscape.

The scales at which symbolic spatial forms are perceived are additional components of the study framework. Five scales are defined: (Diagram 7) Regional, Subregional (composed of urban, suburban, village, rural, and natural), Neighborhood, Building Complexes and Individual Spaces (backyards, specific streets, etc.).

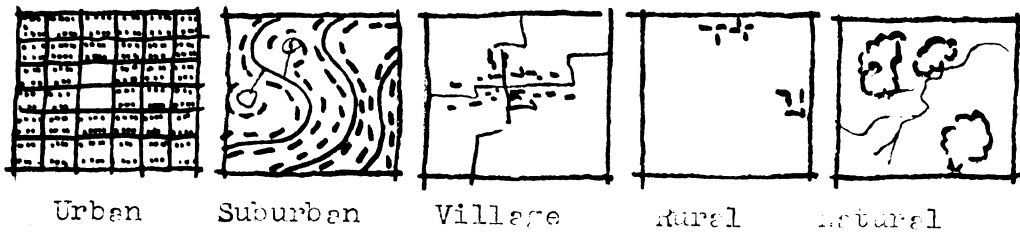
Having delineated both the subcultures and scales of space, the next component would be the symbolic meanings themselves. Divided into two parts, literal and spiritual interpretations, symbolic meanings of each subculture at each scale of symbolic forms will be investigated. Related to the literal interpretations of spatial forms, concepts such as quantitative measurements, specific functions of spaces, space requirements to satisfy biological needs, must be considered as well as technical, scientific, and economic modes of perceiving space. (The study will only evaluate the outward impressions of how functional the

SCALES OF SYNOPTIC SPATIAL FORMS

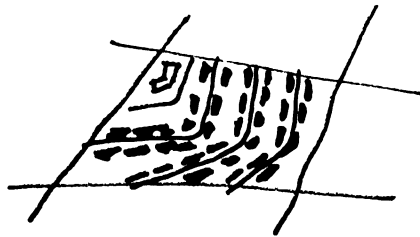
Regional Scale:



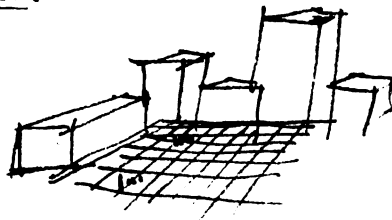
Subregional Scale:



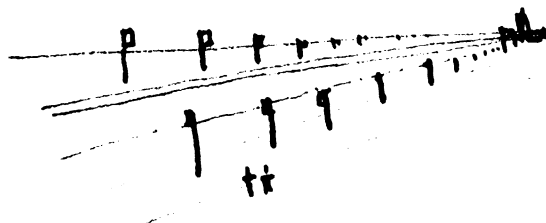
Neighborhood Scale:



Building Complex Scale:



Individual Space Scale:



form is). Spiritual meanings of spatial forms would involve artistic reasoning, the aesthetic, religious modes of thought, beauty and ugliness. (Study will assess these meanings through aesthetics of the forms). Inaccessibility of various spaces would be a combining agent, measuring both the literal and spiritual meanings. The condition of agnosia will also be used as a measuring device, noting the degree of meaning people derive from symbolic spatial forms. "Agnosia...is a condition...in which the individual perceives with his senses but cannot give meaning to what he perceives....he sees a large ornate building which could be a bank, a beer hall, or a parking garage."⁷⁶

The above ideas form the basic framework for the proposed study. A detailed review and rationale for each concept follows.

Subcultures and Perceiving

The reasons for reducing the entire population of the urban region into sociometric groups are based upon the contention that each subculture perceives spatial forms in a unique manner. Utilizing the geographic

⁷⁶Denise Scott Brown, "The Meaningful City", American Institute of Architects Journal, XLIII, No. 1 (Jan. 1965), p. 29.

groupings in the study might lead to a more refined classification of subcultures based on commonly held meanings. Their senses and minds give certain meanings to physical objects because of the balance within culturally derived modes of thought (economic, esthetic, ethical, scientific, etc.). Classifying the population in this manner, a refined picture of meanings contained in the urban milieu is brought into perspective. The variability of experiencing symbolic forms by each subculture needs substantiation.

Each subculture perceives symbols differently, depending upon; first, their general cultural background, secondly, their immediate situation and, thirdly, by what mode do they perceive spatial forms and relations (airplane, walking, auto, boat, mass transit, above two floors). The variations of spatial experiences can also be correlated with the subcultures.

Because of different situations (if we cite as an example the perception of the entire regional form) some geographic groups may not even perceive the form (slum dwellers) while other cultures may only perceive it in economic terms (urbanites cost-benefit reasoning).

Diagram 6 tabulates the factors which affect perceiving and ranks the scale and mode of perceiving according to their relative importance in comparison to other groupings.

VARIATIONS IN PERCEIVING IN GEOGRAPHIC GROUPINGS

Subcultures	Emotions	Ranked by* Mode of Perceiving	Ranked by* Scale of Experience
Cosmopolitan	Stable, Secure Confident	1-2-3-4-5	A-E-D-C-B
Urbanite	Threatened, Insecure	1-2-3-3-1	C-B-E-D-A
Suburbanite	Insecure, Inconcerned	1-1-1-2-3	E-D-A-B-C
Villager	Individualists Traditional	1-1-3-3-1	E-E-D-C-A
Rural Dweller	Linear mind	2-1-3-3-1	A-E-A-C-D
Ethnic Villager	Solidarity Isolation	2-3-3-1-1	C-E-D-B-A
Slum Dweller	Struggling Depressed	2-3-3-1-1	E-D-C-B-A

*Note: Ranked according to relative importance--1 and A being the most important

Key

- | | |
|----------------------|--------------------------------|
| A - Regional | 1 - Airplane |
| B - Subregional | 2 - Perception of ground level |
| C - Neighborhood | 3 - Above ground view |
| D - Fullway Complex | 4 - Automobile |
| E - Individual Space | 5 - Less explicit - land |

So, when air travel is ranked higher on the list for the cosmopolitan than the urbanite, it simply means that air travel is more prevalent and significant to the cosmopolitan than the urbanite. The same is true for the ranking of the scales of spatial experience. The feelings indicated for each subculture are only an example of possible generalities as to group position or emotional makeup.

Symbolic Spatial Forms and Relations

The forms and relations which the study will deal with are the buildings, structures, artifacts and the spaces created by those structures. Actual physically dimensioned space and objects all have symbolic meaning. The front yard, walkway, and entrance to a home have specific dimensions as to size, type of material and construction, and form (arch., winding path, door styles, etc.). The human meanings gained from the physical entrance might include a welcomed, intimate, warm, inviting interpretation and at the same time the literal meanings gained could be comprehended, such as--this is the way to the front door, the walk keeps your feet dry, and the door keeps the rain out.

Man's forms related to and shaped partially by the natural landscape would also come under study to establish

symbolic meanings of the environment. Most natural sections of our nation are, of course, first-modified in the form of selective timber cutting, water power, and access to roads, to name a few modifiers. However, a significant relationships between urbanization and natural features is what we are studying. What part do natural elements play in producing the resulting shape of spatial forms? What values are held for rivers, lakes, steep sloped, wooded areas, etc., in and around the urban region?

Symbolic Meanings

As used in our study structure, symbolic meanings are defined as feelings and messages people obtain from visual artifacts and their spatial relations. For example, street furniture, located within spaces of the urban complex, will be noted for their symbolic meanings along with their literal meanings. Urban spaces under consideration will be--those formed by buildings (streets, courts, plazas), park areas within the city, spaces along rivers or water bodies, and all other exterior spaces of the city. Most important will be the street spaces, for here is where a strong impression of the city is gained--downtown as well as residential areas. Spaces formed by other natural objects (trees, topography) will also be investigated for their symbolic meanings. The buildings,

themselves, will not be analyzed for their interior impressions and spaces, but only as exterior space shapers and as one element in shaping the total impression viewers obtain. For example, at the building complex scale, a hospital complex would be assessed for the meaningfulness of exterior spaces and impressions and not with interior space capabilities and functions.

Scales and Levels of Symbolic Perception

The degree of meaning that spaces have for people is the most important and most difficult part of the study. Brown states that meanings can be analyzed at three levels--individual, sub-groups of a culture and thirdly, commonly held meanings by all in the community. The proposed study will deal with the subculture meaning realizing the two other important levels--the individual and commonly held values in policy making for the entire urban region.

Meaningfulness itself can be defined for our purposes as the cultural values people give to objects and spaces. The meaningfulness of the object transcends the mere physical entities and we speculate on a higher level of abstraction. The various possible levels of abstraction gained from perceiving are depicted in Diagram 5. As man's awareness of the world about him has increased, so

LEVELS OF A STRUCTURE IN RELIGIOUS



Pure Sense Perception

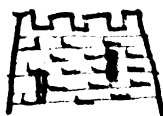


Home

something or little
meaning or interpretation
(unless if you kick it)



Literal Meaning Related to Self



(use to hide behind)



Literal Meaning Related to Others



(curve into wheel)



Spiritual Meaning Related to Self



(as a valuable stone to wear)



Transcendental Meaning Related to Others



(Religious Significance)

Note: Level of abstraction increased moving down the
Diagram

too, his interpretations of objects changed. It is interesting to note that present day man is much more pragmatic and literal (at a lower level of abstraction) than his ancient forerunners who gave great and significant meanings to natural phenomena, he could not explain in literal terms. It must be pointed out again that a distinction is being made between cultural objects experienced in a person's life in the city and physical objects of science. Cultural objects are things we confront everyday in social life whereas physical objects are found in the scientists laboratory, isolated from other human meanings.

The scale of spatial relations, which meaningfulness is a part of, will also require categorizing:

- (A) Regional: Learning's people live to the spatial forms of the entire metropolitan region. An overall image of the whole, including man-made, man's modified and natural forms.
- (B) Subregional: Urban, Suburban, Rural, Natural, Village - Depending upon the character of development found within any region, this sub-classification would logically break down the larger regional pattern.
- (C) Neighborhood: Moving from masses of development,

the meaning is new at the scale of personal involvement where images may be grasped in total by moving through the area. The above larger scale groupings require visualizing with the aid of scale models in order to delineate boundaries or by viewing the entire section from the air. In other words, the neighborhood is at such a scale that one can orientate oneself when in the area; knowing where the boundaries of the neighborhood are in relationship to where the person is within the neighborhood.

- (D) Building Complexes: Similar to neighborhood, but at a somewhat smaller scale, the focus here would be on the relationship of buildings and the spaces they form.
- (E) Individual Spaces: Scale here would be narrowed down to apprehending the symbolic meanings of objects and spaces within a person's field of vision. Meaningfulness of street furniture based on their use and their shape would be studied.

Having reviewed subcultures, forms, and scale of symbolic perception, we move now into that part of the study framework dealing with how we access symbolic

meanings in the urban region. Esthetics, imperability and agnoscia are three concepts whereby meanings may be measured.

Esthetics

Esthetic consideration in the study will follow the spatial categories previously established and will be based on professional study and review by citizens of each subculture. Esthetics are defined as qualities of spatial relations, and objects found within spaces which are pleasing and beautiful to the esthetic senses of people. Esthetics are one mode of thinking in the cultural subsystems. Closely tied in with agnoscia and imperability, it was still felt that esthetic distinction could be distilled out, thus giving us one more factor to consider in assessing symbolic meanings of the city. It is contended here that esthetics need not be disregarded in systematic studies simply because they are too personal. At this point we want to include all possible symbolic meanings which will result in a more meaningful study. Literal meanings of spatial forms as well as esthetics will also be included in the study. Esthetics are a result of literal and spiritual meaningfulness, and the study may reveal this correlation between practical use and esthetic elements of urban spaces. A disclaimer; if

it has great functional value. It also has an esthetic value. Esthetics would be perceived at the various scales of spatial forms and relations--Regional, Urban, Suburban, Village, Rural, Neighborhood, Building Complex, and Individual Spaces.

Each subculture, already introduced, perceives esthetics of spatial relations and forms in individual ways. Due to cultural content and social relations, the cosmopolitan geographic group would apprehend esthetic spaces differently than the suburbanite group. A narrow alleyway, esthetically pleasing to the cosmopolitan might appear to the suburbanite as the symbol of ugliness and a reminder to him of the reasons why he left the core city for the clean, sterile suburbs. In the suburbs, the large setbacks of houses from the street provides the esthetic quality of openness strived for by this subculture. This one example points up the variations groups give to esthetics, and the required differences in spatial patterns throughout the urban region.

Imagesability

A second method of measuring each geographic group's interpretation of symbolic spatial forms and relations is by studying the imagesability of spaces within the

region.

"The visibility: that quality in a physical object which gives it a high probability of evoking a strong image in any given observer. It is that shape, color, or arrangement which facilitates the making of vividly identified, powerfully structured, highly useful mental image of the environment."⁷⁷

To utilize the above definition of the visibility, we would have to modify the phrase 'in any given observer' to 'depending upon the subculture the observer belongs to'. We are then saying that imageability of a particular object or space will vary from subculture to subculture. The shape, color and structure of an expressway will be given a different imageability quality by ethnic villagers, being displaced by the road from the more urbanites gain by utilizing the roadway. Thus, we can speculate that individual subcultures would possess different criteria in gaining desired images of the urban scene.

The imageability of a pedestrian plaza in the heart of a city would change with subcultures. Slow dwellers might symbolize the space as a place where they can feel equally accepted by others in just being there. Rural dwellers may perceive an image of waste and luxury--their front porch serves the same purpose and besides, there aren't so 'dang' many people.

Spatial forms of a desired imageability of cities by each would possess clarity, order, and a strong underlying

⁷⁷Kevin Lynch, The Image of the City, p. 9.

decision concept of form, which will have all important meanings people wish to access. Utilizing Lynch's methodology for assessing accessibility (incorporating connecting field studies and citizens' perceptions) the study proposed here will attempt to carry the idea a step further by introducing questions given to objects as part of the survey. Having briefly shown the variations subcultures have in accessibility and set aside of urban spatial forms and relations, we now turn to our last research device, the level of amnesia (inability to give meaning to objects) people possess in perceiving forms and relations.

Amnesia

Changing outward forms and environments reflecting changes in social and cultural modes of living have brought about amnesia as Huxley points out (see introduction of *Earthlight: A Language*). Although new forms require some time for society to become familiar with, the convention for amnesia becoming prevalent in citizens today is that these new spatial forms are not accurate expressions of the functions they facilitate for the transcendental (spiritual) meanings forms once conveyed. City hall and government buildings (courts, offices, etc.)

once symbolized, in their form, tradition and authority. New forms of city hall today reflect little or no expression at all of the meanings people give to city government or the functions of city government. Although government is involved in peoples' personal lives more than ever, new buildings housing government functions are often set off by large open spaces, possessing arbitrary scales of architecture and sterile shapes.

Dulled senses may also be a partial reason for amnesia. Spatial forms which do not reflect functions or positive meanings are ugly. Stephen Pepper states,

"We do not get continually used to most of them (ugliness). They do not...sink out of all consciousness, our perceptions have merely become very much dulled to them. They take a slow poisoning toll on our nerves. And...a beautiful city...still coarsens our nerves and coothes us with its scarcely perceived delights."⁷

Because of the lack of interest, function, and content in ugliness coupled with rapid change and peoples' increased awareness of the environment, our cities have not expressed the positive meanings which they feel urban environments should possess.

⁷ Sydney Williams, "Urban Aesthetics", reprinted from The Sun Planning Review, Vol. XXV, No. 2, quote by Stephen Pepper, The Basis of Criticism in the Arts, Harvard, 1940.

It might be interesting to speculate about the symbolic meaning of natural objects versus man-made artifacts and how differing forms affect synecdoche. Natural forms unlike artifacts have a much longer time continuum in their evolution of change, thus a uniformity of natural objects--all white pines have similar form, structure, and environment. Thus, even the sight of a small clump of white pine needles can evoke memory, illness, places and feelings of past experiences involving white pines possibly serving only as a backdrop to the central experience. The exact uniformity of size, color, shape, texture and form of white pine needles in this sense is a consistency that urban form cannot and probably should not match. Life seen and universality of object form are important in establishing meaningful and beautiful symbols and in reducing synecdoche.

Returning now to the causes of synecdoche, another factor requiring consideration is lack of education in visual forms. Discussed in Section I, education and seeing go hand in hand. Greater knowledge of meaningful forms of an abstract, non-utilitarian nature can enable a person or group to gain increased perceptibility of the urban surroundings and reduce the symptoms of synecdoche.

The proposed study in explaining symbolic spatial

forms and relations in the urban region may serve as an educational tool for planners and city builders. A more exact picture of the meanings city structure evokes could give a clue for future development and redevelopment decision. Involving decision makers and lay men in the planning process is critical to the success of any planning program. Not only are the ideas and feelings of the people included in citizen participation programs, but it also provides the opportunity for the public to become educated in understanding what spatial forms of the city mean in symbolic terms. The study could provide a way of looking at form and space in terms citizens had previously given little thought to. The entire planning process, from basic policy decisions to implementation of plans, could reveal the importance of human decisions and how people's actions are the primary source of shaping the city's form and structure. Previous planning studies have presented little to the public concerning a more exact interpretation of what feelings and spiritual meanings are evoked by city form and spatial relations. Our study, presented to the public, could have an impact upon future ideas and decisions coming from the mass clientele.

Identifying the level of agnosia among sections of the region, at different scales and by different geographic

groupings, would be helpful in, again, showing the variations in perceptions by subcultures. Where the ethnic villager may interpret his meanings into forms of his immediate environment--even in structures which he does not specifically utilize, in a functional sense, the remaining geographic groups, on the other hand, assign little symbolic meanings (agnosia) due to unfamiliarity, uneducated, or dulled senses.

Completed now, is the conceptual framework within which our study of symbolic spatial forms and relations will be structured. Geographic groupings, spatial forms and relations, esthetics in symbolic meanings, scales of symbolic perception, impercibility and agnosia have been identified as specified for use in the study. Geographic groupings and scales of experiencing forms were classified, facilitating the division of meanings to parts of the city by different groups within the city. Symbolic spatial forms and spaces were discussed to formulate a clearer picture of just what it is that the study is focusing on. The process of assigning symbolic meanings (literal and spiritual) to physical objects was shown to be based upon the way subcultures have formulated concepts, motives and feelings of people. The following section will now incorporate our framework into structuring the symbolic spatial forms and relations study.

SUMMARY OF THE STUDY DESIGN AND METHODS

SCOPE

The study, structured here, will attempt to combine both quantitative and qualitative data about the forms and relations of symbolic spaces. In addition, both literal and spiritual, will be interpreted.

Added to the standard planning studies of land use, transportation, etc., the observations from our symbolic study will be primarily visual observations of pattern, form and structure of the spatial city. These forms and patterns will then be interpreted into symbolic meanings which are classified by geographic groupings. A more detailed analysis of how our study will relate to other basic studies and future change and design of cities will be discussed in the Summary and Conclusions section.

One important point before going into the study procedure is that this study should be built into the framework consisting of all other basic studies. It should not be done as an after-thought or tacked onto the end. In goal formulation and policy decisions which are the basis for detailed study structures, the concepts of inaccessibility, esthetics and symbolic meanings must enter into the picture and become factors to be considered.

Current planning procedures have little grasp of the spiritual meanings of objects and have concentrated upon the strict functional and physical descriptions of urban phenomena. By describing the city in quantitative, literal terms, the mode of perception of those who use the study is also related to factual information. In a time when there is a constant cry for more quantitative procedures and quantitative information and resources in the field of urban planning, this thesis disputes the need to some extent. We do acknowledge the needs which require scientific data and methodology, but there must be parallel efforts to increase the effectiveness of understanding the qualitative, spiritual nature of city form and relations.

The study, to be conducted by a planning agency will be outlined here. No specific metropolitan areas will be chosen, but the survey could apply to a region containing 5 million people or more. Allocations of time and personnel required will not be noted because of the varying size the region could possess.

Steps taken to formulate and carry out the study of a region are introduced at this point.

Step 1: Establish boundaries of the series of perceiving symbolic spatial forms and relations (regional, etc.).

- Step 2: Locate residential concentrations of major geographic groups (conglomerates, etc.)
- Step 3: Devise methodology for identifying and measuring literal and spiritual symbolic meanings--intelligibility, aesthetics, amenity, function.
- Step 4: Specifications for conducting field survey--professional consultation and participation by people in geographic groupings.
- Step 5: Assessing results of field work--correlations and dividing data into subcultural classifications.
- Step 6: Converting data and analysis into graphic and written form for public consumption.

With this brief cursory perspective of the study, we will proceed first over the major objectives of the study and then the procedure itself.

Objectives of the Study

The main objectives of the study are to identify, inventory and measure symbolic meanings of spatial forms and relations found in the urban region. These meanings

will be interpreted and measured through the utilization of the concepts of esthetics, imageability and signification. These three, so called, measuring devices of symbolic meanings will reveal the variations each geographic grouping gives to specific spatial forms and relations. Location of esthetic and imageable forms, relative amounts of signification, and significance of spaces and forms to geographic groups in terms of specific function and satisfying higher needs will be investigated by the study. The most revealing investigation, from the standpoint of physical planning, would be location data as to just where these phenomena occur and to what degree.

Measurement in terms of counting numbers will be one of the more difficult parts of the study. However, it should be pointed out that we are not endeavoring to gain exactness in terms of number, but rather exactness in interpretations, of perceiving meanings, symbols, esthetics, etc., of the urban environment. A rating of sections of the city for meanings might prove to be the extent of any scientifically recorded recording. An additional and side purpose of this symbolic spatial study would be to combine the efforts and talents of all planning agencies in the region, from regional to

neighborhood groups, in providing data and impressions at various scales of the region. We now turn to the procedural steps in the survey.

Step 1 - Location of Each Spatial Scale (regional, sub-regional, etc.)

Upon scaled maps of the urban region, previously stated scales of symbolic spatial forms and relations need to be located. Below is the method by which boundaries are to be established.

- (A) Regional: Outer boundaries of the urban region we would probably attempt to correspond with the political limits of the countries and governments asked to participate in the study. Ideally, the region would consist of the central city, its hinterland and all smaller concentrations of population that are fully linked by the central area. The Standard Metropolitan Statistical Area (SMSA) set by the Department of Census could be utilized. Most metropolitan planning agencies cover concentrations influenced by the central city (but other have little to do with the core city) and, at least, establish the pattern of growth outside the major city.

Abutting metropolitan regions could be identified to give a more complete picture.

The basis for establishing boundaries at all spatial scales should be accomplished by aerial photos, land use data, characteristics of development patterns, and neighborhood information and located institutional complexes (i.e. CBD, civic center, industrial complex, etc.). At the Regional scale, spatial relationships would refer to the correlations between concentrations of development and over-all form the urban development system taken in the region.

We are saying here that the total form of the urban region's settlement pattern symbolizes and expresses dominant purposes and meanings of a culture. Recent changes in transportation networks incorporating expressways are result of values held by certain predominant subcultures, suburbanites and to a lesser extent, urbanites. This study will attempt to read values and meanings embodied in outward expressions of spatial objects. (re. accessibility, aesthetics, amenities, functions).

(B) Subregional: (urban, suburban, rural, village, natural) The metropolitan regional scale is divided into five subregions. The outer limits of each of these groupings are fairly simple to define although urban and

subregion to be a valid group. The point here is not to have distinct boundaries, but rather, in a general way, classify the region into areas where one of the five categories dominates. Pure forms of each subregion exist and are very distinctible, but the sliding and mixing occurring between all five will cause trouble if a too specific definition is being strived for. The importance of clear boundaries of subregions are not to be undermined but our interest here is only in classifying for study purposes. Symbols, spatial relations, aesthetics and images evoked should possess different meanings of meanings for the psychologic groups in each subregion.

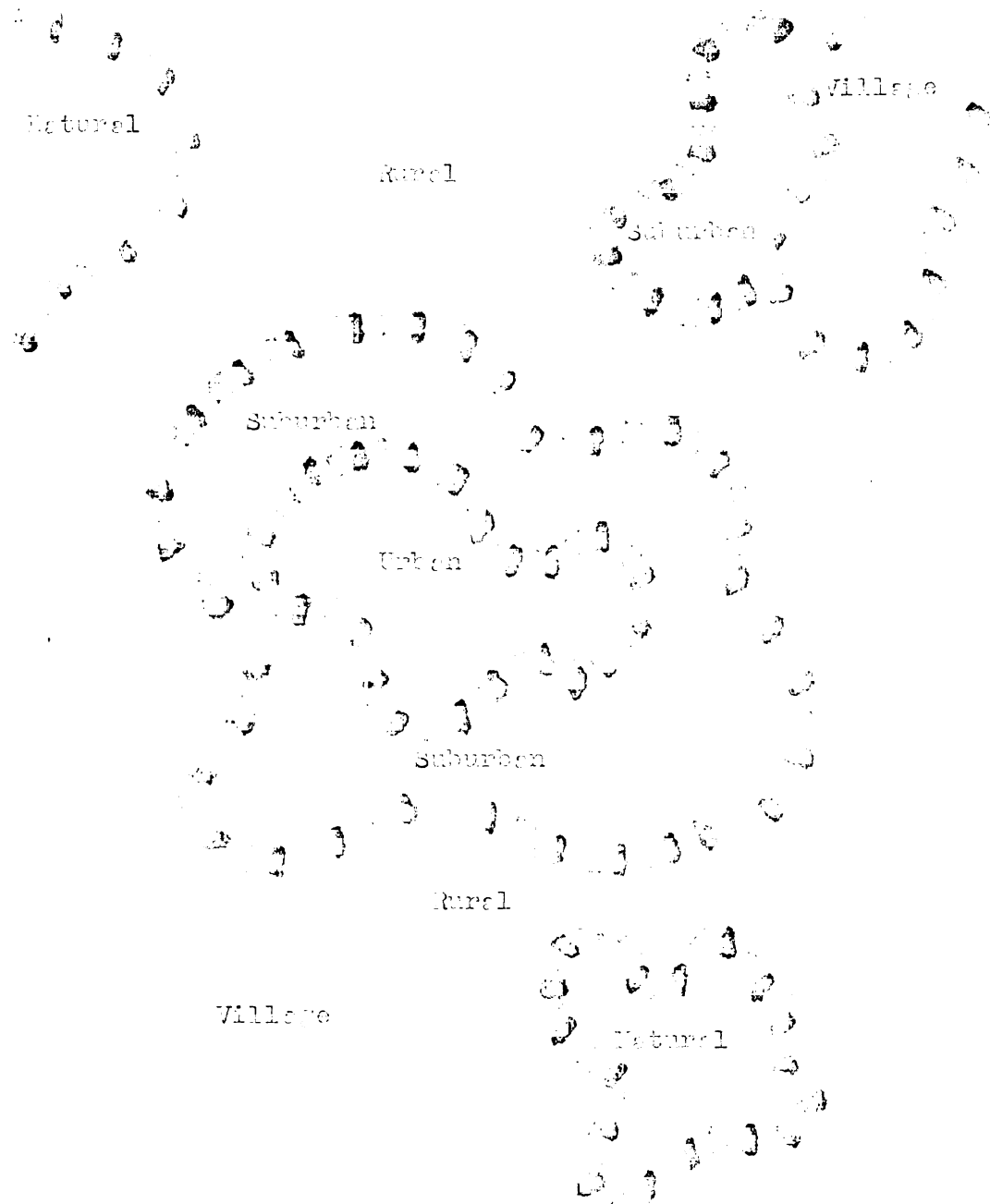
Fairly simple criteria would be established for classifying the region and some areas like a large park area might defy classifying, (is it natural, urban, or suburban?) but we are generally interested in the areas where habitation occurs. Criteria set to establish subregions would include population density as a major factor along with other obvious characteristics (a small town atmosphere versus a suburban settlement) which differentiate these four types of development. (Natural would have no development in its purest form). Metropolitan areas containing particular unique developments

(reports on military developments) could provide additional categories facilitating these special developments. The prominence of these special cases should be significant enough so as to be somewhat comparable with the other units in size or importance.

Spatial forms on the subregional scale would involve forms created by the various classified units (urban, suburban, etc.) and their relationship to each other: the mass of suburban development as an example and its spatial organization with the urban mass. See Diagram 10.

(C) Neighborhood: Found within the urban and suburban subregions, this more detailed breakdown of spatial forms, neighborhood, could be defined in conjunction with Community Renewal Programs that many cities have undertaken or are presently constructing. Neighborhood scale is primarily residential in character. The Building Complex scale (institutions, etc.) below, would generally encompass non-residential development of the urban system (except in the case of apartment complexes). If no CRP information is available, boundaries of neighborhood could be assessed from studying physical boundaries, ethnic groupings, neighborhood associations, school locations and character of the area to name a few. (type of development based on cost of housing, etc.).

SERIAL RELATIONS OF SPATIAL FORMS



Spatial relations at the neighborhood scale would embody the neighborhoods' physical relationship with surrounding development and relationships between masses of buildings with interdependent uses. (i.e. the spatial relations of the elementary school with the residential areas).

(D) Building Complexes: Groupings of structures which generally possess a preconceived design for fitting the forms together would come under this scale of spatial relations. The exterior spaces formed by the architectural masses would be analyzed and evaluated for their symbolic meaning, esthetics, amenity, and history.

Locations of such complexes could be attained from aerial photos and boundaries easily established. The Central Business District, although not having a unifying conscious design such as a shopping center (in actuality, the CBD could possibly be more ordered than a shopping center) would fit into this scale of spatial relations. The main criteria for this scale would be the presence of substantial masses of buildings and a main purpose or function. The study would deal with the meanings of their spatial relations and forms.

Building complexes are outward expressions of social institutions to achieve cultural goals or meanings of an

institution. What the survey hopes to reveal is how effective these outward forms express and symbolize the institutions. Other institutions coming under this category are: Civic Center, Industrial Parks, Apartment Complexes, College Complexes, Mental Institutions, Government Centers, and Medical Centers.

The importance of the street as a space where the area is viewed comes into play here as well as at the neighborhood scale. Pedestrians and people in vehicles experience the cityscape at this scale of detail as they move along the roadways and adjacent walkways. Visual impressions at these scales have a definite bearing on impressions at the largest scales of regions and sub-regions.

(E) Individual Spaces: Experiencing an individual space is the last and smallest unit of our continuum of spatial relations. A small exterior area as the entrance to a building (example, the area immediately adjacent to Michigan State University Library) or a residential backyard would be considered here. Random but typical examples would be reviewed to gain insight as to their symbolic and aesthetic meaningfulness. Boundaries would be established by the visual field of a stationary person located within the space.

Individual sources bring into focus other architectonic features (i.e., street furniture) other than building masses considered at previous levels. Symbolic forms and relations of these objects would be considered for their imagery, meaning and aesthetics.

Summarizing this first step of establishing scales of symbolic forms and relations, it must be said that overlap and redundancy will occur. Only a few instances will contain clear demarcations of boundaries which satisfy the precision-minded planner. Disregarding this obvious shortcoming and realizing that the attempt to classify spatial relations by scale serves only as the framework by which symbolic forms can be apprehended, the groupings should not be objectionable.

Step 2 - Locating Residential Concentrations of Each Geographic Grouping

A second major step to undertake in the study is locating and identifying the geographic groups which have been established for the study previously. (cosmopolitans, urbanites, suburbanites, rural, villagers and ethnic villagers). By locating areas where concentrations of these groups reside, two purposes will be served:

- (1) Professional staff personnel carrying out field work could simulate the visual experiences and

cultural content of each geographic group.

Knowledge of these characteristics of these groups
resid. will enable the professionals to follow
similar routes of travel and similar activities
that each group experiences in the urban region.
Example--simulate the activities of a typical
suburban man's day.

- (2) A survey of people in geographic groupings will
be based on interviews at the homes of these
people, thus a random sample can be drawn from
an area where it has been established there is
a 1:1 ratio of one group or another.

It is apparent that each geographic grouping can be
further differentiated into subcultures (age groups,
occupations, race, religion, etc.) However, we are attempting
here to only utilize this criteria in a survey that will
establish the residential pattern of settlements of our
seven broad categories of geographic groupings. Criteria
to be used to locate each subculture (after categorizing
based on survey findings) should include such factors as
the spatial location of the class system (example--upper
middle class, working class, etc.) concentrations of races
and religions and specifications of dwellings (lot size,
type, cost, floor area, etc., condition). All of these

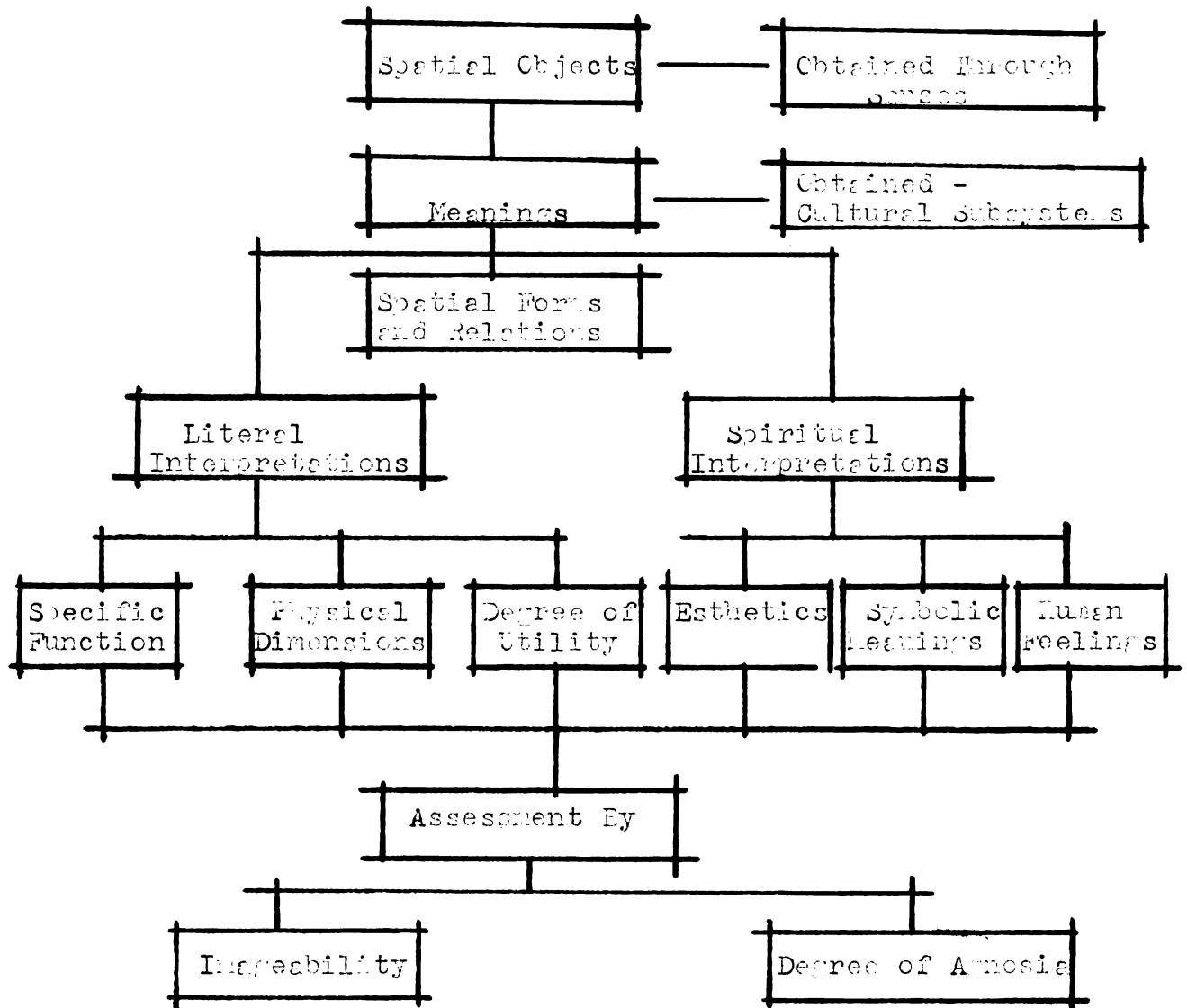
Factors could then be carefully superimposed upon one another in top form and boundaries of each subculture formulated. Here, as in determining areas of spatial forms and sociologic groupings, the boundaries separating subcultures will be indistinct but adequate for our purposes of locating generalized concentrations. Small enclaves and sections of extensive mixings of subcultures will be disregarded unless their size is significant enough to warrant establishing a mixed subculture category.

Step 3 - Methodology for Identification and Learning

Sociologic Meanings

Meanings given to spatial forms and relations are divided into two main classes--literal meanings and spiritual meanings. Diagram 11 gives an indication of how one might analyse meanings.

Literal and spiritual interpretations of spatial objects will not be uniform and it is hoped that a correlation will become apparent between the subcultures and the interpretive meanings of objects. For example, if the professional field worker simulated the cultural values of slum dwellers, the literal and spiritual meanings given to a specific street would be different than a suburbanites interpretation of that same space. Certain meanings, of course, are held in common by subcultures

RELATIONS GIVEN TO SPATIAL OBJECTS

(a street is to drive a car or, etc.) or society could not exist, but as meanings become more abstract or spiritual, differences of interpretation appear. We must also point out, again, the very close tie between the specific functions objects serve for subcultures and the more spiritual meanings and feelings. If a certain street is extremely functional (in the literal sense) it may be significant as to its spiritual meanings also.

Literal meanings of spatial objects and relations will be measured and assessed through visual observations and knowing what specific functions they provide and who uses them. Observations as to esthetics and rich symbols in sections of the city will measure spiritual interpretations. Imageability (ability of people and observers to form mental images of parts of the city) and the level of agnosia (inability to give meanings to spatial objects) will be ways of combining both literal and spiritual meanings. A high level of imageability and a low level of agnosia, generally speaking, require both spiritual and literal meanings.

Step 4 - Specifications for Conducting Field Surveys

Data gathered in the field would consist of three basic types of surveys:

- (1) Simulation Survey - based on simulating geographic groupings

- (2) Professional Mindlines Survey - Based on impressions achieved through surveyors own outlook
- (3) Citizen Participation Survey - Based on interviews with people in each geographic group

The sequence of conducting each survey would be as listed with (3) evolving out of the first two surveys. Surveys (1) and (2) should be conducted by the same professionals and could be carried out at the same time.

Field survey teams, composed of two professionals--one an urban planner, the other, a urban specialist in a related field, would conduct surveys (1) and (2). Sociologists, psychologists, artists, architects, landscape architects, conservationists, social workers, health specialists, and governmental officials could be utilized as the second man on each team. Each urban region would vary according to the human resources available for an undertaking of this nature. The people asked to take part in the survey should have an overall perspective of urban development and problems. In total, these specialists should have contact with all sectors of those living in the region. The simulation procedure would require professionals who could imaginatively 'project' themselves into other groups and perceive spatial forms through the eyes of other people. In briefings for all team members,

statements as to the situation of the geographic groupings to be simulated (i.e., broad motives, goals, ideas, feelings) will be made. Common routes and places of activities that people in the groups are used could be mapped out and observed during the simulation.

Information obtained from surveys (1) and (2) would take the form of written notes and sketches of impressions and uniform tabulation sheets. Typical forms for recording impressions could be structured as in Diagram 12.

Planning exercises that could be involved in the study and the scale of symbolic spatial forms that they might cover are listed below:

1. Regional - metropolitan agencies--regional, subregional (rural, suburban, natural, villages) scales.
2. County Agencies - subregional scale
3. City Agencies - subregional scale (urban, neighborhood).
4. Redevelopment Agencies - Neighborhood, building complexes, individual spaces.
5. Township Agencies - subregional (suburban, rural, natural, village) building complexes.

Other agencies and ad hoc groups that might contribute

TYPICAL FORM FOR RECORDING DATA - SURVEYS (1) AND (2)

Team Number _____ Date _____ Time _____

Mode of Experience: Stationary _____ Ground Level _____
Above 1st Fl. _____

Moving _____ Walking _____

Geographic Group: _____ Auto _____
(circle) C, U, S, V, R, EV, _____
SD, P _____ Plane _____Area Surveyed: (Index Number _____ Mass Transit
for Map) (Land) _____

Spatial Forms & Relations Experienced	Literal Function	Degree of Utility	Spiritual Symbolic Meanings
Examples	Agriculture Production	Low	High
Rural Farms	Buying and Selling	Medium	Low
Central Bus. Area			

Continued

	Esthetics Meanings	Level of Aesthetics	Imagability Rating
Rural Farms	7	1	6
Central Bus. Area	4	3	4

personnel to the survey could include:

- professional organizations (AIA, ASIA, etc.)
- art schools, centers, and institutes
- universities
- Departments of Health and Welfare
- City Betterment Organizations
- Departments of Conservation and Agriculture

The typical form for recording data (Diagram 1.) is explained here:

Spatial Forms and Relations Experienced: This column identifies the various elements observed in the survey area.

Literal--Function: Here we would put down the specific literal function of the forms experienced.

Literal--Degree of Utility: How useful and meaningful the spatial forms are in literal terms. Just how well the form functions in carrying out its literal purpose based on visual observations, could be rated high, medium, or low. Example--the circulation system of Grandor Shopping Center, Lansing, would be assessed a low rating of function.

Spiritual Symbolic Meanings: Difficult to assess, this column would contain first impressions, or 'feelings' experienced when viewing or becoming involved in the

forms and a conceptual component of the forms.

Aesthetic Quality: A number rating from 1 to 10 would assess the aesthetic quality of spatial forms as to their effectiveness or presence. (1 being the poorest rating ugliness, 10 the highest beauty). Written notes and sketches on impressions would also be supporting data.

Level of Amnesia: A number continuum, again, as in the above system (1 lowest level of amnesia, 10 highest level). The more desirable reading would be at the lower end--connotating a richer meaningful form. The level of amnesia would evaluate both literal and spiritual meanings of spatial forms.

Imagesability Rating: This rating would come after the survey is completed and field personnel attempt to recall meanings of various areas by drawing maps and written descriptions.

It should be understood that this survey methodology would require revisions after being tested in the field. These are only suggested first steps in shaping the survey and pilot studies and additional thought is required to formulate a more feasible study. The structure of Survey (3) citizen participation, we will not even attempt to outline. The only preliminary thoughts are that it would evolve out of the other two field surveys. The survey would consist of interviews of people classified into

subcultural categories. Diagram 13 should be helpful in understanding the basic outline of survey procedure and the relationships between the three basic surveys.

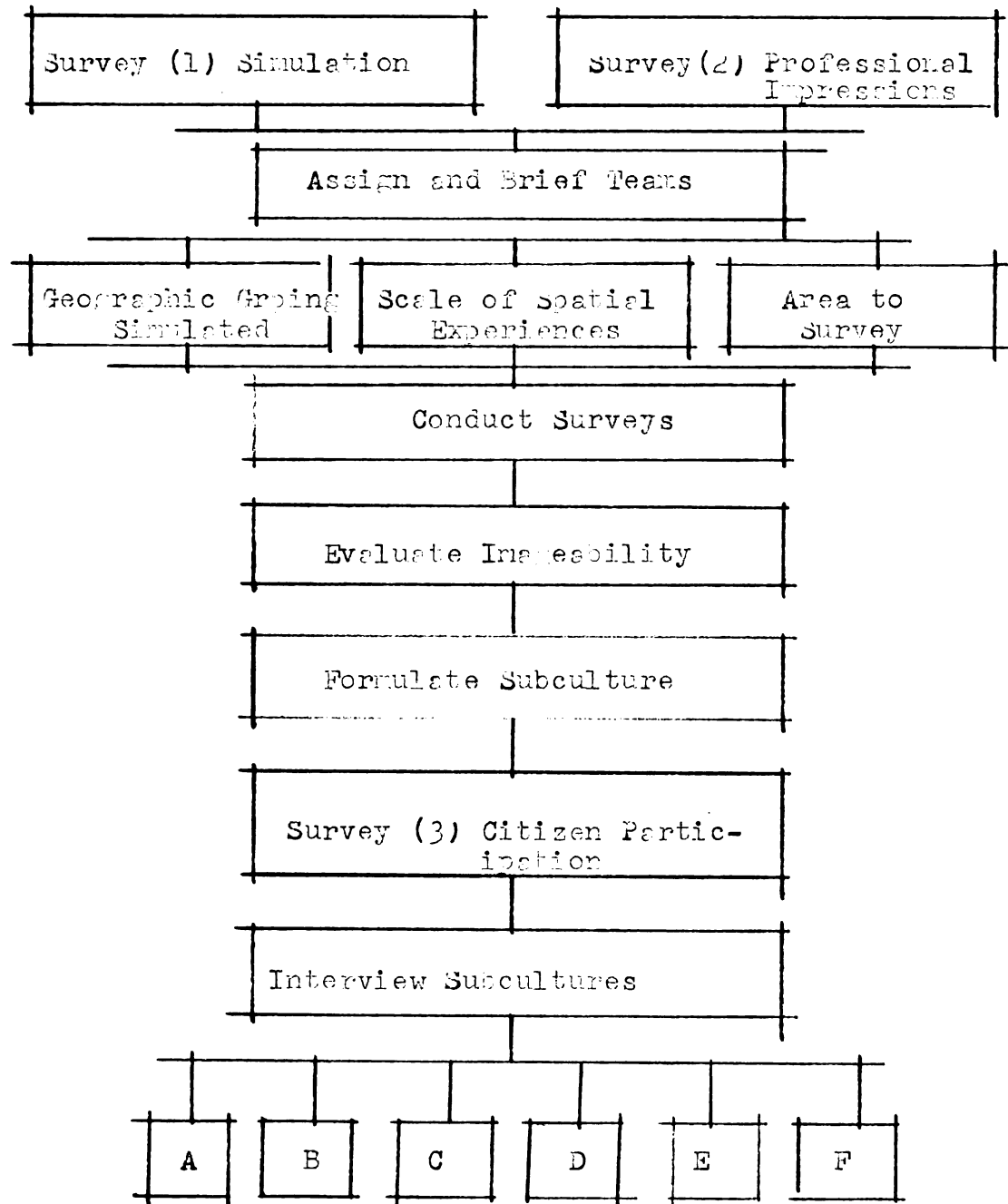
Step 5 - Assessing results of Field Work

After field observations and surveys have been completed, the information needs to be analyzed and correlations made. Before proceeding with the analysis stage, one additional factor, inaccessibility, needs attention. The field teams will attempt to recall mental images of areas where surveys were recently conducted. Making sketches and not referring to field notes, a determination could be made as to the relative inaccessibility of specific sections of the city as well as the entire urban region. The images apprehended would also be useful for future design studies and development decisions.

Data would be assessed, first of all, in the sense of comparisons between findings by each team. Ratings of esthetics, amenity and inaccessibility could be compared to see the correlations between them.

Step 6 - Converting Analysis into Written and Graphic Forms

Data and analysis of information would be presented in report form for planning agencies, commissions, political

PROCEDURES OF FIELD SURVEYS

bodies and the general public consumption. Use of tables, sketches and scaled maps showing areas of relative amounts of symbolic meanings would be utilized. The reports would also state the basic theories of symbolic meanings and the methodology of the study. Two reports would probably be necessary. Compiling information for staff consumption would include more candid observations and impressions whereas the other report requires laymen terms and generalized information. A slant towards education of the public needs emphasis in the second report.

SUMMARY AND CONCLUSIONS

The form and content of this thesis has evolved from the first stages of inception to the final revisions, however, the major premise has remained constant. The premise of this thesis is that efforts to understand urban phenomena need to be directed into the field of symbols and the processes of perceiving symbolic spatial forms and meanings. Planners, city builders, policy decision-makers, and the general public should understand that the city perceived, with all of its very complexities and problems, is a direct derivative of our cultural content and social institutions. Cities are conceived and built by man to serve as outward expressions of man. When forms emerge which are destructive to the well-being of people, we must first investigate and understand the causal factors--man's concepts and perceptions--which manifested these undesirable forms.

Part I of the thesis introduced the three major sets of concepts which formed the basis of our investigation--symbols and symbolic meanings, perception, and space and spatial forms. Each set of concepts were explored for their significance in studying urban form, their necessities as to how they function, and their interrelationality with the other sets of concepts. Organizing the series of

sociocultural and psychological aspects utilized to reveal the linkages between the three sets of concepts and as a framework for structuring a study in Part II of the thesis.

Part II is an attempt to apply the concepts and theory introduced in the first part. The application takes the form of a proposed study which identifies, analyzes, and measures the symbolic meanings of a ritual form and relations perceived within the urban region. A model for such a study was first identified followed by the study's conceptual framework which established a language to be used. Many of the concepts introduced in Part I were related to the specific terminology of the study. The procedures for conducting the study were then explained. Detailed methodology was difficult to formulate without testing and revising through the use of pilot studies.

The major conclusions to this thesis are noted as follows:

- All forms of human perceptions can be thought of as symbols. The human capacity within people to conceptualize and symbolize are the bases of man's civilization. Meaningfulness in life stems from our capacities to give symbolic meaning to physical objects.
- The highest forms of symbols are the living symbols,

argument with people. Therefore the self-reliance or considerable autonomy, which is characteristic of the Negro to his life, is an important potential of human civilization.

- Perceiving one's environment and its projection on the cultural context perceived are a generation to another. The concept of perception involves the gathering of messages and the interpretation of that information filtered through the cultural views of the person.

- Spatial forms of the urban region are outward expressions of man's concepts, feelings, goals and intentions.

- Urban planners need to direct their efforts into the understanding of urban forms in the context of the meanings and feelings these forms convey.

- Symbolic meanings of spatial forms may be assessed through the study of fiction, art, history, literature, and music that forms possess.

- It is important that the planner become involved with the feelings of people in the urban region and perceiving the symbolic meanings of forms, first hand.

- Any study designed to investigate cultural phenomena in the field requires testing before a refined procedure can be formulated.

BY HICKEY

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