

GOALS VALUES AND  
THE PLANNING PROCESS

THESIS FOR THE DEGREE OF M.U.P.

MICHIGAN STATE UNIVERSITY

EARL MARVIN BLECHER

1964

FEB 28 1987  
ASNO  
MAY 2 1987  
UNIVERSITY OF CALIFORNIA



3 1293 10391 1313

[Illegible handwritten text]

## ABSTRACT

### GOALS VALUES AND THE PLANNING PROCESS

by Earl Marvin Blecher

Urban planners have been faced with the problem of both defining and understanding community goals and values and building them into the planning process. To achieve this, they are charged with two major tasks; first, to understand the nature and characteristics of goals and values as they relate to individuals and communities, and second, to develop a meaningful approach to the planning process itself so as to build goals and values into it.

For urban planners, it is fruitful to think of planning as both a planning and decision process, employing the "unitary" and "adaptive" approaches. The former deals with the community in its totality, placing primary concern on it as an end product. The latter focuses on the processual functional aspects of community systems.

In positing goals and values in the planning-decision process, the traditional approach has been "meliorative," Here, ends or goals are formulated only after problem identification and analysis have been completed. A "peremptory" approach, however, may be more useful. In this case, ends or goals are selected at the outset, then function for "alternative generation" and "alternative testing," allowing for the notion of choice. As "alternative

generators, " they are used directly to synthesize proposed solutions, generating and formulating constraints and criteria which need to be satisfied. As "alternative tests, " they are used to test the satisfactoriness of proposed solutions in achieving desired outcomes or actions.

In functioning as criteria for choice, goals are either opportunity areas for desired outcomes, or constraints in limiting perceived opportunities. A constraint can also be viewed as something which is to be avoided. Hence, if goals function as desirable consequences, constraints are undesirable or prohibited consequences. Constraints of this type are referred to as "restraints. " In addition, goals are "intrinsic" or "instrumental" in nature, as well as "active" or "contextual. " They can also be postulated at various levels of generality. In order to understand their worth as criteria for choice in concrete circumstances, it is necessary to reduce them to more specific operational terms by relating them to the "means"of their attainment.

The relationships between community goals and values and the physical environment are particularly significant in urban planning. The paramount problem here is in bridging the gap between goals and values and physical-spatial form. In order to achieve this bridge, it is fruitful to view the community in both "spatial" and "aspatial" terms, with normative-cultural, functional-organizational, and physical aspects of each view. From this, a mode of reasoning can be developed which allows one to move more readily

from the "aspatial" to the "spatial" characteristics of the community. This model allows for a meaningful assessment of changes made in one aspect and its impact on another. It also stresses the distinction and close relationship between the physical environment and the activity systems accommodated by the environment. Accompanying this is a scheme for viewing urban structure and form in terms of activities (adapted space) and flow systems. In addition, other approaches for relating goals and values to the physical environment are discussed.

Finally, a model is developed for building goals and values into the planning-decision process, with emphasis placed on peremptory goals. Goals are related to decisions made at various levels while being continually brought down to the "means" of their achievement by reducing them to more specific operational terms. The model also stresses continual feedback so that specific decisions are assessed in terms of their merit in achieving stated goals.

GOALS VALUES AND THE PLANNING PROCESS

By

Earl Marvin Blecher

A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

MASTER IN URBAN PLANNING

School of Urban Planning  
and Landscape Architecture

1964

9 31502  
1-27-65

## ACKNOWLEDGEMENTS

The author wishes to thank the many people who have encouraged him during his graduate studies at Michigan State University. Appreciation is expressed to his parents who were always encouraging, and to the Urban Planning Faculty who always presented new challenges.

Deep appreciation is expressed to Professor Sanford Farness for this helpful assistance in thinking through this thesis.

The author also extends his thanks to Miss Marge Kern and Mrs. Janice Dien for typing and to Miss Linda Barson for editing assistance.

Lastly, but most important, the author's sincerest thanks go to Professor Stewart Marquis who as his thesis advisor inspired, encouraged and laboured through the many hours with him in researching and writing this thesis, and who truly epitomizes the word "teacher."

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS . . . . .	ii
LIST OF FIGURES . . . . .	v
 Chapter	
I. GOALS VALUES AND PLANNING . . . . .	1
The Planner's Dilemma . . . . .	1
Defining Values and Goals . . . . .	4
Group or Community Values and Goals . . . . .	6
II. THE NATURE OF PLANNING AND DECISION-MAKING . . . . .	9
Ways of Defining Planning . . . . .	9
Unitary And Adaptive Approaches . . . . .	14
Unitary Approach . . . . .	14
Adaptive Approach . . . . .	15
Combining The Two Approaches . . . . .	18
Synoptic Decision Making . . . . .	19
Disjointed Incrementalism . . . . .	23
Synoptic (Adaptive-Unitary) VS Disjointed Incrementalism . . . . .	24
III. GOALS AND VALUES IN THE PLANNING DECISION PROCESS . . . . .	28
Positing Goals In The Process . . . . .	29
Goals and Constraints . . . . .	32
Constraints And Problem Identification . . . . .	38
Constraints And Projections . . . . .	40
Constraints And The Planning Process . . . . .	41
Constraints As Negative Goals (Restrains) . . . . .	42
IV. FORMULATING GOALS . . . . .	48
Problems of Goal Evaluation . . . . .	48
Intrinsic And Instrumental . . . . .	48
Active And Contextual . . . . .	49
Inducements And Contributions . . . . .	51



TABLE OF CONTENTS -- Continued

	Page
Rendering Values Explicit . . . . .	52
Levels of Goals and Values . . . . .	52
Criteria For Intermediate Goals . . . . .	54
Goal Conflicts . . . . .	55
Relating Goals To Means . . . . .	57
V.    GOALS VALUES AND THE PHYSICAL ENVIRONMENT .	64
Foley's Approach . . . . .	67
Advantages of Foley's Model . . . . .	75
Lynch and Rodwin's Approach . . . . .	77
Webber's Approach . . . . .	80
Functional-Behavioral Approach . . . . .	82
Unitary Approach Emphasizing Form . . . . .	87
Integration Of The Unitary And Adaptive Approaches ..	92
VI.   SUMMARY AND CONCLUSIONS . . . . .	93
Determining Goal And Building Them Into The Process . . . . .	96
A Theoretical Model For The Planning-Decision Process . . . . .	98
Further Avenues Of Investigation . . . . .	103
BIBLIOGRAPHY . . . . .	104

## LIST OF FIGURES

Figure		Page
1.	Distinguishing Characteristics Of The Unitary And Adaptive Approaches To Metropolitan Planning . . . . .	17
2.	Types of Decision Situations . . . . .	22
3.	Meliorative Oriented Decision Process . . . . .	29
4.	Peremptory Oriented Decision Process . . . . .	31
5.	Community Expression Constraints (Opportunity Areas)..	35
6.	Restrains As A Negative Goal. . . . .	44
7.	Regional Goals, Their Interrelationships, And Various Means Of Attaining Them. . . . .	61
8.	A Approach To Metropolitan Spatial Structure . . . . .	66
9.	Relationship Of Values To The Physical Environment Spatially Conceived With Emphasis On The Symbolic Value Of Space. . . . .	70
10.	An Alternative To Figure 9 With The Functional Levels In The Background . . . . .	71
11.	Relationship Of Values To The Physical Environment With Emphasis On Physical Environment Aspatially Conceived . . . . .	72
12.	Relationship of Values To The Physical Environment Spatially Conceived With Emphasis On Functional Levels.	73
13.	Schematic For Small-Scale Decisions . . . . .	84
14.	T. C. M. P. C. 's Model Relating Values To Large-Scale Design Forms . . . . .	86
15.	Compatative Analysis Of Development Patterns . . . . .	91
16.	Goal Oriented Planning-Decision Model . . . . .	100

# CHAPTER I

## GOALS VALUES AND PLANNING

### The Planner's Dilemma

Urban planning has encountered numerous obstacles over the past years. One of the major obstacles is that plans, once formulated and arrived at through what is known today as the planning process, are often ignored, not implemented, or as in most instances changed drastically. In cases of drastic change, we find that what were once rational solutions to problems and critical needs become, in fact, irrational disjointed answers to highly complex phenonema. This results from the lack of a common base for the goals and values on which plans are predicated either explicitly or, more often, implicitly.

Because of the lack of a common base for goals and values, planners are continually faced with the problem of knowing whether their plans are truly applicable to the communities for which they are planning. They are also concerned with the fact that the plans they make are based on their own value system and these values are built into the plans, often implicitly. They will convince people that these are appropriate plans and when ultimately carried through, it is the planners' values which will be achieved. These values might be in conflict with those of the community and, if carried through, social dysfunctions might ensue. On the other hand, if the plans do not reflect the values and goals of the community, they might never be implemented, which is often the case.

This perplexing problem is not new and has continually been in the forefront of the planning profession, emerging in the old cliché "planning is for people." Since it is a truism that planning is for people, it is necessary to know and understand their goals and values and build them into the planning process.

If the planner is to deal with problems and methods of making plans and of establishing a framework for public and private decisions affecting the physical environment, "he needs a plan of action, and a strategy for dealing with situations, so that desired ends may be attained through a kind of action research which will help people to realize, regulate, or change their ideas, expectations and behavior."<sup>1</sup> However, this plan of action cannot be developed until a desired value system and goals are agreed upon. Thus, it is necessary that the planner be cognizant of the prevailing values and goals of the community.

The planner's job is not only to discover the values and goals of those for whom he is planning, but also suggest various alternative choices within the framework of those goals and values. Communities are faced with the problem of deciding on their future direction of development. Lloyd Rodwin suggests that in deciding on the direction, "both a knowledge of the present trends of the community and thinking through the goals is essential.

---

<sup>1</sup> Lloyd Rodwin, "The Community," Social Science and Community Action, ed. Charles R. Adrian (East Lansing, Michigan, The Board of Trustees, Michigan State University, 1960): p 48.

The former indicates some of the possibilities; the latter provides criteria for choice."<sup>2</sup> Once the values and goals which provide the criteria for choice are agreed upon, the planner can suggest and encourage specific development policies.

Development policies and plans based on present value systems and goals provide the testing ground of many of the hypotheses we have for the future. It is what we do today, in terms of decisions and plans based on present goals and value systems, which bind us to the future. "How we live, the changes we desire, the values we seek - not in the abstract, but in the living present - or near future, - the way we try to realize these values, are all part of this endless process of planning and of making commitments with the future."<sup>3</sup>

Analysis and clarification of social goals and values and of groups and institutions intended to foster them, is extremely fruitful in understanding the dynamics of social and cultural change rather than viewing the community as static. It can also help in determining levels of satisfaction with the existing environment and identifying and ranking desirable amenities. Since the planning process seems esoteric and arbitrary to the layman, the clarification of goals can enhance the citizen's understanding of the plans. By building goals into the planning process, the governmental decision-making process becomes more democratic.

---

<sup>2</sup>Ibid.

<sup>3</sup>Ibid. p 49

## Defining Values and Goals

In order to determine the meaningful values and goals in the community and build them into the planning process, it is essential to define what they are.

Philip P. Wiener states that "values are felt desires, and value-judgements are ideas or hypotheses about what we need to satisfy or harmonize these desires."<sup>4</sup> It is accumulated ideas and felt desires expressed in values and goals which motivate men's actions. Radhakamal Mukerjee feels, however, that "values are not only motivations underlying the behavior of man in society, but also heuristic principles that explain both individual behavior in relation to the physical and social world as well as an objective social relationship, behavior and social systems."<sup>5</sup> As heuristic principles, they function in disseminating that which is most meaningful in decisions. As principles which explain social relationships, they are imbedded in the dominant status-scheme and institutional pattern of a social culture; in which case they "are facts, i. e. social uniformities, or laws, that govern actual social relations and behavior as well as norms that guide individuals and societies to certain coherent and common standards and ideals of behavior."<sup>6</sup>

---

<sup>4</sup>Philip Wiener, "Values In the History of Ideas," Aspects of Value, ed. Frederick C. Bruber (Philadelphia, Pennsylvania, University of Pennsylvania Press 1959): p. 46.

<sup>5</sup>Radhakamal Mukerjee, The Philosophy of Social Science (London, Macmillan & Co. Ltd. 1960): p. 1.

<sup>6</sup>Mukerjee, op.cit. The Social Structures of Values: p. vii.

As to what goals are, Jefferson Fordham suggests that "if values may be spoken of as a moving or guiding element, goals or objectives are means of value - realization."<sup>7</sup>

We see then that values have two basic characteristics. They are standard guiding "principles" of thought and conduct in moral, aesthetic, and related situations offering a basis for performance and choice. And they are something desired or placed in high position of likes by the individual in this system of preferences that govern action. A goal is something which is to be achieved or strived for.

Davidoff and Reiner distinguish between values and goals by stating that "Values may be expressed as moral statements or as statements of preferences, of criteria, or of ends - more particularly goals."<sup>8</sup> Moral statements take the form of what ought to be, while preference statements take the form of what the individual prefers or values highly. Value ordering plays a significant role in determining preferences. It dominates behavior and overrides individual actions in the pursuit of goals. A shift in the value ordering, since behavior does consist of movement toward the most highly valued part of one's total image, even without a change in the rest of the image, can produce profound, even revolutionary changes in behavior. It can shift immediate goals to secondary positions and vice versa.<sup>9</sup>

---

<sup>7</sup>Jefferson B. Fordham "Planning for the Realization of Human Values" Planning 1960 (American Society of Planning Officials): p. 2.

<sup>8</sup>Paul Davidoff and Thomas A. Reiner "A Choice Theory of Planning" Journal of the American Institute of Planners (Vol. XXVIII. No. 2 May 1962).

<sup>9</sup>Kenneth Boulding "Organization and Conflict," (Journal of Conflict Resolution I-2, June 1957): p. 127.

Values also have characteristics of being intrinsic or ends values and extrinsic or instrumental or means values. In both cases the attitude and situations are different for the individual. In intrinsic or ends value, the object or phenomena is valued for its own sake while in extrinsic or instrumental value, the object or phenomena is valued as a means to an end. In this case there is a sense of relationship to other objects or situations.

We see, then, that values have been defined in numerous ways. In relating values to the planning process, they will henceforth be defined as statements of preference in achieving desired ends. Values as moral statements, i. e., referring to the moral behavior of people, will be left to the purview of philosophers. Values as statements of preference can be viewed either as goals (something strived for) or abstractions placed high in a value ordering system, such as beauty or democracy. Abstractions which are highly valued are usually something we have. If conscious effort is made to pursue and achieve them, they become goals. For example, a high value can be placed on "democracy" as an abstract value, but when a conscious effort is made to achieve it, it becomes a goal.

#### Group or Community Values and Goals

For the planner an understanding of the functioning of values and goals in individual behavior is only the first step in helping him devise plans for people. He must also understand how individuals function within the community or group situations and what is the nature of individual values and goals in these situations.

To talk about communities one must, of necessity, talk about culture, for the two are symbiotic. Communities reflect their culture



and only by an analysis of culture can we draw boundaries around a community. The larger community will reflect the overriding culture and the lesser community will reflect the sub-culture. Within a culture we find a given set of institutions operating as the common frame of reference. The functioning of institutions reflects the reasons and goals for both their establishment and continuance, and with an understanding of their functions we are better equipped to assess their goals.

"Culture refers to all the things that a group of people inhabiting a common geographical area do, the ways they do things and the way they think and feel about things, their material tools and their values and symbols."<sup>10</sup> Culture is also a product of the history of the community. Since the value system and cultural system are one, the values of the past shape the cultural present.

A community is comprised of many people with a multiplicity of emotions, feelings, values, attitudes and goals. What makes for a community is that they are all operating interrelated as well as independently, each having a basis or influence on the other.<sup>11</sup>

When dealing with group or community values and goals, we find they are expressed in two ways. On the one hand, members of the group might have the same basic goals and preference sets, and group values and goals are not the aggregate of the individual member but are a common

---

<sup>10</sup>Robert S. Lynd Knowledge for What (Princeton, N. J., Princeton Press 1940): p. 19.

<sup>11</sup>Melvin Rader "The Human Values of Community" (A Mimeo, No Reference)

denominator. In this instance values and goals are shared by the group members. Boulding states that "one should perhaps say integrated rather than shared"<sup>12</sup> as the values and goals of the members may be somewhat different and yet fit into a unified whole. This will allow for members to belong to many groups simultaneously.

In situations where groups or communities take on personalities of their own, it appears that individual values and goals are transferred into something else. Groups or communities of this type are cohesive and coherent organizations having characteristics of what Boulding calls an "epi-organization,"<sup>13</sup> possessing as a system many of the properties of an individual such as image, goals and values. What gives the community its unitary character or personality is the existence of the integrated images, goals and values of the individuals and their (the individuals') images, values and goals regarding the group itself.

---

<sup>12</sup>Boulding, op. cit. p. 129.

<sup>13</sup>Ibid.

## CHAPTER II

### THE NATURE OF PLANNING AND DECISION-MAKING

There is a critical need for a more effective means of ensuring that community goals and values are expressed in the planning process. Herein lies a major force for moving the field of urban planning, not only into the realm of acceptance, but even more important, into the realm of being highly valued.

In searching for a better means of building goals and values into the planning process, and trying to develop a model expressive of this means, it is necessary to begin with an analysis of the nature of the planning process itself.

#### Ways of Defining Planning

The ways of defining the planning process are myriad. In one sense it can be viewed as a process of problem-solving, whereby a sequence of actions is arrived at to best alleviate a given problem. In this case, the concern is oriented toward the existing situation which needs confrontation. In another respect, as Banfield suggests, "planning is a rational way of deciding what to do and how to do it. This means that, ideally, the planner takes account of all possible alternatives, the consequences of which would flow from each alternative, and on the basis of this knowledge, chooses that course which will maximize the attainment of ultimate ends."<sup>14</sup> In this decision-making process, the most appropriate selection is to be made from

---

<sup>14</sup>Edward C. Banfield "The Field of Planning" (Mimeo, No Reference)

a given set of alternatives. However, whereas decision-making is usually restricted to choices among given alternatives, planning as a process incorporates the formulation of ends, as well as identifying and expanding the universe of alternatives.<sup>15</sup> The two major aspects of this notion are: (1) that the process includes the search for the means of achieving desired ends in resolving problems or eliminating undesirable situations; and (2) that it embodies the achievement of a future state of affairs, manifesting the most highly desired values and goals.

Edward C. Banfield states "there is an important measure of agreement on the nature of the planning process as a generally applicable mode of procedure."<sup>16</sup> This can be seen by a review of numerous definitions of students of various fields of planning. Patrick Abercrombie, whose approach has been through city planning, has written:

Planning occurs when mankind in the group makes a definite and conscious effort to model or mold his environment; natural human growth takes place when mankind is unconscious or unconcerned with its general form. . . the touchstone of what constitutes a planning scheme is the matter of relationship, the accommodation of several units to make a completely harmonious whole. . . Planning is a conscious exercise of the powers of combination and design.

Lewis Mumford, who is also a city planner, believes:

We have to develop what Patrick Geddes called

---

<sup>15</sup>Davidoff, op. cit. p. 15.

<sup>16</sup>Banfield, op. cit.

'the art of simultaneous thinking.' Specialists, as such, cannot plan. Mumford says, for planning involves the job of coordinating specialisms, focusing them in common fields of knowledge, and canalizing them in appropriate channels of common action. . . in every department of art and practical activity, we must learn to deal, not with specialized interests and atomic elements, but with elements in association and generalized interests, we must deal with organisms, function and environment, with place, work, and people, with political, economic, cultural, and aesthetic life, taken as integrated and re-integratable wholes. A plan is, in essence, an attempt to put such integration in graphic or dramatic form.

A lawyer and leader in the city planning movement, Alfred Bettman, writes:

The essence of planning is that there be a general plan, which grows out of the recognition that the justification for any part of anything, the service which any part can fulfill, can be ascertained only by a plan of the whole by means of which selection, locations and extent of each part may be determined from its relationships to the other parts and to the whole. Thus, by means of the general or outline planning of the whole, the process of selecting and locating the parts will tend to produce the benefits of adjustment and coordination and avoid the wastes of maladjustments.

A leader in the scientific management movement, H. S. Person, identifies planning as:

The function of determining and defining the major component objectives of an undertaking enterprise; discovering and evaluating factors conditioning their achievement; and formulating the specifications of a series of predetermined executing acts that will affect achievement with maximum precision and a minimum expenditure of the energies utilized.

John D. Millett, a specialist in the field of public administration, and George E. Galloway, a political scientist, have simpler definitions of planning. For Millett, "the job of planning reduced perhaps to its most elementary aspect, is the constant task of defining and sharpening the objectives," while for Galloway, "planning is merely a process of coordination, a technique of adopted means to ends, a method of bridging the gap between fact-finding and policy-making."

Finally, we view definitions of planning as postulated by two sociologists, Karl Mannheim and E. C. Lindeman. For Mannheim, planning is a mode of thought which "not only changes individual links in the causal chain and adds new ones, but also tries to grasp the whole complex of events from the key position which exists in every situation." E. C. Lindeman, on the other hand, writes that:

Planning is a product for positing a socio-economic goal, marshalling resources for its attainment, applying appropriate techniques, and releasing essential human energies. An economic plan is not merely a future goal, but a goal conceived in ideal terms. . . . Planning is not merely an engineering, or an economic task, but also a psychosocial one; that is, a scheme for redirecting human behavior in terms of a reintegrated collective purpose. . . . Philosophically considered, planning represents a desire and a method for creating new wholes out of parts which have become so far fractionalized through lack of collective control, as to have lost their functional relevancy.<sup>17</sup>

---

<sup>17</sup>Ibid

Although there are significant differences among the many definitions, there is also a considerable common base of agreement on many of the propositions, and mutuality among those that are different. In assessing the varying definitions of planning, we find some extremely useful points which should be considered. These points will also be the basis for the concept of planning which is to be developed in this thesis. Among them are that planning is a process which is a deliberate and rational way of discovering, defining and shaping ends or goals, and structuring them in a system of priorities. To do this, planning must also discover and evaluate ways to reach the objectives by formulating executing acts for achievement through the measurement and appraisal of facilities available, (this will be discussed later in this thesis as "means" planning and assessing of opportunities and constraints), and the marshalling of available resources.

Planning is also preoccupied with the functional relation of parts to the whole, dealing with the organism function and environment taken as integrated and re-integrated wholes. The justification of any part is its service relationship to other parts and to the whole, searching for an optimum, maximum, or condition of equilibrium or balance. Since the planning process seeks to direct change, i. e., to order events in accordance with ends or goals, there is an implied need for a particular power capable of agreeing on goals and taking into account the methods of attaining them.

The methods of effectuation arise out of a systematic treatment of goals and the ways of achieving them.

### Unitary And Adaptive Approaches

#### Unitary Approach

In the preceding definitions of the nature of planning and the planning process, two main themes stand out. One is the necessity for dealing with the community in its totality, focusing on a grand design and oriented toward a desirable future state. This holistic approach is described by Donald L. Foley <sup>18</sup>as a "Unitary Approach" to planning. The "unitary approach" stems from the early days of city planning when architects, landscape architects and civil engineers dominated the field. The idea was to have a design team prepare a plan for a governmental unit whereby the city was viewed as having spatial, physical form that could be portrayed on a map. The traditional means for communicating such a plan is through a Master Plan or Comprehensive Plan dealing with the city as a totality. As Foley states, "here planning is viewed as an activity dedicated to forming a picture of a future physical environmental pattern for a community, and to fostering development and control measures as will best ensure that the community will develop toward that future pattern. In short, a future spatial pattern is proposed as a goal."<sup>19</sup>

---

<sup>18</sup>Donald L. Foley "An Approach to Metropolitan Spatial Structure" Explorations into Urban Structure Webber, et al. University of Pennsylvania Press, Philadelphia, Pennsylvania, 1964:

<sup>19</sup>Ibid. pp 56-57.



Here we see that goals and values are usually those expressed by the design team, often preaching large change and utopian solutions. The "unitary approach" began to shift somewhat after WW II with attempts to incorporate a statement of what were believed to be community goals predicated on numerous assumptions regarding the future. In addition, there would be included a list of planning principles usually related to spatial arrangements. However, the "unitary approach" would primarily be concerned with an "end product," or "future outcome."

#### Adaptive Approach

The second major theme found in the myriad definitions of planning, views the city as a complex interaction of diverse and functionally interdependent parts, with the parts evolving over time as they seek to adapt to the ever-changing contexts around them.

The approach to planning for this type of environment Foley calls the "adaptive approach."<sup>20</sup> Here the focus is on process (rather than product), particularly the interactions that take place on a daily or short-term cycle, (i. e., commuting, shopping), rather than on a longer-term cycle, and the forms of the city systems and the final product manifested.

The "adaptive approach" stems from the depression, and economic and social planning. It also takes roots from the earlier decision-making

---

<sup>20</sup>Ibid.

processes of business management. Here the major concern was to deal with immediate problems. Decision-making was basically decentralized dealing with parts of problems or sub-problems, and thus the call for change was small. Policies and controls were major tools for effectuation.

The planning process for the city in the "adaptive approach" would first seek to gain a full understanding of how establishments and households interact (via the myriad actors involved), and how the community develops over time. "It would then seek to identify alternative development policies and to examine the probable implications of each, in the light of certain established criteria, as to a desirable future condition or optimal decision-making conditions. Planning, according to this approach, would seek to influence various of the development forces at work, rather than aiming for a future metropolitan form as a goal."<sup>21</sup>

Figure 1 is a description of the distinguishing characteristics of the "unitary" and "adaptive" approaches to planning, as seen by Foley.

---

<sup>21</sup>Ibid. p. 57.

FIGURE 1

Distinguishing Characteristics Of The Unitary And Adaptive Approaches to Metropolitan Planning

Nature of the Characteristic

Unitary Approach

Adaptive Approach

1) The plan toward which Long-range locational-physical plan: Policies and proposals constituting courses





### Combining the Two Approaches

There has been an attempt on the part of planners to integrate the basic principles of both the unitary and adaptive approaches, in order to deal more effectively with the community as a total functioning system. The process would treat the community as a total system, taking into consideration the processual and functional organizational aspects of the components. In addition, there is concern for an over-all policy framework and a corresponding "plan" proposing future spatial arrangement of the community.

Since the planner is involved with social decision-making, Banfield states that "he needs to know how goals (values) are formed, ranked and expressed by social groups and how decisions are reached among conflicting goals... Because he must analyze goals, discover a hierarchical structure of goals, distinguish instrumental from ultimate goals, translate general goals into operational targets, and establish criteria of collective choice, the planner is very much concerned with the nature of values and value systems."<sup>22</sup>

A process embodying the idea of rational decision-making, dealing with the community as a total system and building into the process the goals and values expressed by the community, would first advance the goals to be achieved and the values held in the community, and then consider all of the

---

<sup>22</sup>Banfield, op. cit., pp 8-9.

possible alternative means of achieving them, and possible consequences of pursuing each alternative, calculating the likelihood of each alternative reaching the goal, and finally choosing the best alternative among those considered.

Such a process is extremely difficult to achieve. This is particularly true of its comprehensive treatment of the community value system which, in itself, is an agglomeration of many diverse and conflicting forces.

### Synoptic Decision Making

Braybrook and Lindblom feel that the "ideal" way of making policy (choosing among alternatives after careful and complete consideration of all possible courses of action and all their possible consequences, and after an evaluation of those consequences in light of a set of values), is an intellectual treatment of a problem and is not very practical.<sup>23</sup> This method of decision-making, which they call "Synoptic," aspires to a high degree of comprehensiveness. The authors feel that such a level of comprehensiveness is an ideal rather than an achievement. They believe it is impossible to achieve such a complete canvassing of all policies and a completely full account of the consequences of each alternative policy under analysis.<sup>24</sup>

---

<sup>23</sup>David Braybrook and Charles E. Lindblom A Strategy of Decision: Policy Evaluation As A Social Process, The Free Press of Glencoe, Collier-Macmillan Ltd., London, 1963: p. 40.

<sup>24</sup>Ibid. p. 14.

They are also of the opinion that the multiplicity, instability and fluidity of values, and conflicts among values and combinations of values, and social disagreement about values, are fundamental stumbling blocks which the analyst must overcome if he is to fruitfully use the rational-deductive system, or welfare function, in the "synoptic approach."

In addition, they view this approach as having other limitations which fail to adapt in any specific way to the following:

1. man's limited intellectual capacities
2. his limited knowledge
3. the costliness of analysis
4. the analyst's inevitable failure to construct a complete rational-deductive system or welfare function
5. interdependencies between fact and value
6. the openness of the system to be analyzed
7. the analyst's need for strategic sequences to guide analysis and evaluation
8. the diversity of forms in which policy problems actually arise.<sup>25</sup>

In view of the obstacles frustrating an approximation of the synoptic ideal, Braybrook and Lindblom maintain that problem-solvers

---

<sup>25</sup>Ibid. p. 113.

utilize adaptive strategies for decision-making, notably the strategy they call "disjointed incrementalism." However, the strategy of "disjointed incrementalism" lends itself best to specific types of situations relating to the nature of the change involved and the level of understanding, in terms of the problems, alternatives, goals and consequences. They see the decision-makers confronted with four basic types of situations, illustrated by Figure 2.

The structure of decision situations can be viewed along two continuum. The horizontal continuum ranges from large change to incremental change, and the vertical ranges from situations of high to those of low understanding. "Whether a change is large or small depends on the value attached to it and this value can vary from person to person."<sup>26</sup> However, in society, there is a convergence on what changes are large and small because people make issues of the same things, and they tend to agree on the factors for the explanation of change. On the continuum showing understanding, we go from situations where there is a high understanding regarding goals, values, alternatives, constraints and consequences, to a situation of low understanding.

Braybrook and Lindblom believe that where there is large change, such as in quadrants one and four, the synoptic or rational-deductive methods of decision-making are, in fact, ineffectual because the analyst cannot achieve the state of comprehensiveness necessary, and that the limitations and stumbling blocks previously enumerated for synoptic

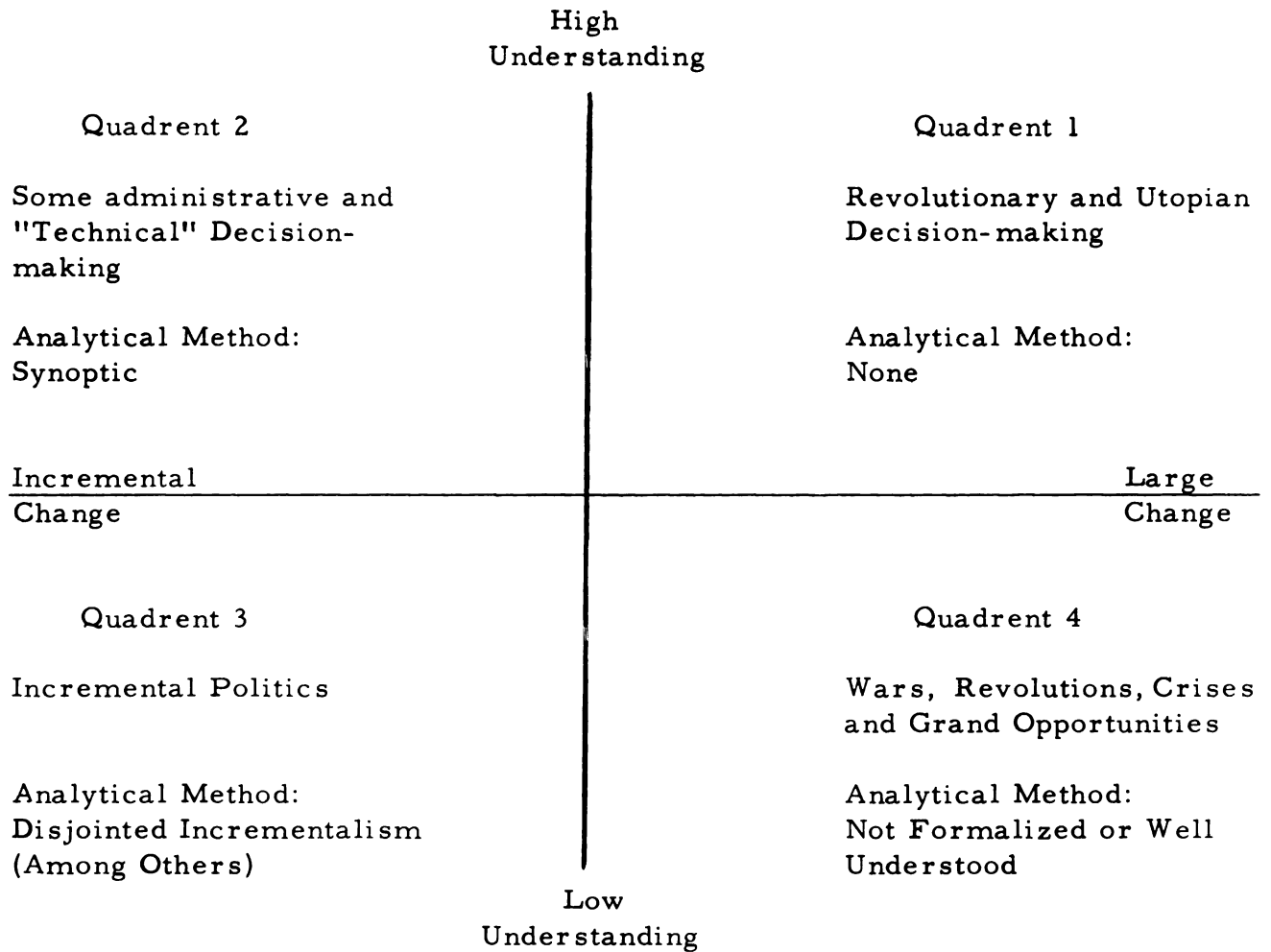
---

<sup>26</sup>Ibid. p. 62.



FIGURE 2

## Types Of Decision Situations



Source: David Braybrook and Charles E. Lindblom, A Strategy of Decision: Policy Evaluation As A Social Process, The Free Press of Glencoe, Collier-Macmillan Ltd., London, 1963: p. 78.

decision-making are operative here. In certain situations, such as some administrative and technical decisions where there is a high degree of understanding, closed systems and minor changes, the synoptic method of analysis is applicable. However, where there is little understanding of the situation in terms of goals, values, alternatives and problems, and where systems are open and consequences manifold, they feel that the most appropriate analytical method for decision-making is "disjointed incrementalism."

#### Disjointed Incrementalism

Disjointed incrementalism is "decision-making through small or incremental moves on particular problems, rather than through a comprehensive reform program. It is also endless; it takes the form of an indefinite sequence of policy moves. Moreover, it is exploratory in that the goals of policy-making continue to change as new experience with policy throws new light on what is possible and desirable. In this sense, it is also better described as moving away from known social ills rather than moving toward a known and relatively stable goal."<sup>27</sup> Hence, it is remedial, serial and exploratory rather than comprehending the possibilities of broad change. The analyst "concentrates his evaluations on what we call margins or increments; that is, on the increments by which value outputs or value consequences differ from one policy to another."<sup>28</sup>

---

<sup>27</sup>Ibid. p. 7.

<sup>28</sup>Ibid. p. 85.

Because he is margin oriented, the analyst refrains from giving judgements relating to particular policies before the marginal differences between a policy and its alternative have been compared. The authors call this characteristic of the strategy of disjointed incrementalism con-sorting on points of procedure with "miliorative" values rather than with "peremptory ones."<sup>29</sup> They state that "the distinction between meliorative and peremptory values is a distinction between two views of the necessity of inspecting alternatives before passing judgement on a policy. In a meliorative approach, judgements about accepting or rejecting any policy must wait upon a comparison of that policy with alternatives to it. In a peremptory approach, certain characteristics are looked for on the basis of which policy would be approved or disapproved taken by itself, without any attention necessarily being given to alternatives. Clearly, the margin-dependent feature of the strategy makes it meliorative rather than peremptory, for it requires that the evaluation of any given policy reflect the marginal differences between that policy and alternative ones; and these differences cannot be discovered without comparisons."<sup>30</sup>

#### Synoptic (Adaptive-Unitary) VS Disjointed Incrementalism

We see then that an attempt to combine the "unitary" and "adaptive" approaches postulated by Foley (which Braybrook and Lindblom would call

---

<sup>29</sup> Ibid. p. 147.

<sup>30</sup> Ibid. p. 150

the "Synoptic" method), has many stumbling blocks to overcome. More efficient methods must be devised to attain a higher degree of understanding, both of the community's problems and future needs. This includes the assessment of the myriad goals and values in a peremptory fashion and bringing them down to more specific levels so that judgements on alternative policies can be meliorated in order to most effectively meet the criteria of the original goals. In establishing peremptory goals and values as with the synoptic approach, an assessment of all alternatives is not a requisite since the goals themselves function as criteria for choice.

The strategy of disjointed incrementalism falls far short of an effective method of decision-making for urban communities. Since it is not comprehensive in its approach, it deals with parts of problems or sub-problems, ignoring the forces which make the community a unified system. Adaptive-unitary or synoptic planning, on the other hand, with its postulation of peremptory values, has the advantage of forcing consideration of the basic value-questions involved. For example: What, in a given instance, is a good environment? In merely meliorating value questions, the tendency is for arriving at outcomes which quite often are not satisfactory solutions, resulting in the continued existence of the same problems.

Secondly, the strategy of disjointed incrementalism is only applicable in situations which do not necessitate large measures of change. This is contrary to the whole philosophy of American life, where change is built into our society particularly in the technological realm which, in turn,

has manifold effects on our social structure. It is situations such as this where the need for planning and an assessment of goals is particularly imperative.

The strategy does not lend itself to all planning situations, nor does it attempt to assess the gamut of ramifications of goals by trying to develop a larger design for goal attainment. It is primarily concerned with the immediate, ignoring the longer-run future, and thus, deals with problems in a narrow context. Since it is oriented toward remedial solutions moving away from social ills, it ignores the possibility of moving toward desired goals or states. In addition, it is unrealistic in its treatment of incremental change since, even in increments of change, there must be some criteria for deciding on which increments of change, hence a need for peremptory evaluation of some nature. The fact that the strategy is exploratory raises doubt whether it can be as exploratory as the comprehensive approach which looks at the "totality" of decision situations.

The fact that it is comprehensive does not preclude the planning process from being flexible or serial. We find that actions are often made in staged or phased basis, ultimately oriented toward a larger design.

We see then, that the synoptic approach to decision-making is similar to the integration of unitary and adaptive planning. Disjointed incrementalism or unitary or adaptive planning, taken by themselves, are not effective in solving the complex problems of our society or in dealing

with the future. Synoptic decision-making or unitary-adaptive planning, on the other hand, with its comprehensiveness and concern for the longer-run future as well as the immediate, is of far greater significance to urban planners. It is this approach which will be referred to as the "planning-decision process."

## CHAPTER III

### GOALS AND VALUES IN THE PLANNING DECISION PROCESS

In an attempt to develop a comprehensive planning process embodying the best elements of both the adaptive and unitary approaches, the proper structuring of community goals and values within the process is a critical element.

Goals function as the benchmark for courses of action in human behavior, whether it be of individuals or groups within the community. This is true whether behavior is oriented toward the process of searching for satisfactory solutions to existing situations, or geared toward the achievement of a desired state of affairs to come.

Goals which underlie actions play a guiding rule in two basic ways. These are identified by Simon as "alternative generations" and "alternative testing."<sup>31</sup> In the former, goals may be used directly to synthesize proposed solutions, generating and formulating constraints and criteria which need to be satisfied; in the latter, goals may be used to test the satisfactoriness of the proposed solutions in achieving the desired outcomes or actions. Thus, satisfactoriness implies a criteria for making judgements concerning preferred states or state.

---

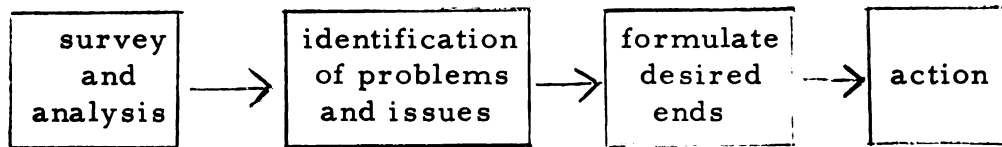
<sup>31</sup>Herbert A. Simon "On the Concept of Organizational Goal" Administrative Science Quarterly, 9-1, June, 1964: p. 7.

### Positing Goals In The Process

A planning process which embodies the use of goals both for alternative generation and alternative testing is distinctively different from many traditional approaches to decision-making. The traditional approach began with an initial survey and analysis of given situations, identification of the problems or issues at hand, and then proceeded to formulate a desired state or goal to be achieved which would hopefully alleviate the problem or meliorate the issue. This meliorative-oriented approach has been one of narrow scope in a cause-effect-solution pattern. The process can be viewed by Figure 3.

FIGURE 3

#### Meliorative Oriented Decision Process



Such an approach is shortsighted. In the real world people have many goals and values (often conflicting). Thus the process of planning is one of determining the most appropriate action through a sequence of choices. Davidoff and Reiner<sup>32</sup> see the choices which constitute the planning process made at three levels: (1) selection of ends and criteria (Goals), (2) identification of a set of alternatives consistent with these

---

<sup>32</sup>Davidoff and Reiner, op. cit., p. 2.



general prescriptions, and the selection of a desired alternative, and,  
 (3) guidance of action toward the determined end.

Although there has been a great reluctance in planning to start with ends, the key to planning, as they see it, is in placing goals formulation first. They state, "Even where goal selection is placed first, there is a tendency to underplay this and to return to familiar territory - survey and analysis."<sup>33</sup>

They further feel that "we do not understand the logic that supports ventures in research before objectives of the research have been defined. Such emphasis on research is premised on an ill-founded belief that knowledge of facts will give rise to appropriate goals or value judgements. Facts by themselves will not suggest what would be good or what should be preferred. To illustrate this point, a factual survey of housing conditions in a given area would not give rise to a value judgement or a goal in the absence of an attitude about the way people ought to live in residential structures."<sup>34</sup>

The second major shortcoming of the first approach is that it neglects to consider "choice." Edward Banfield states that "the process by which a plan is rationally made may conveniently be described under four main headings."<sup>35</sup> (1) The analysis of the situation where every

---

<sup>34</sup> Ibid. p. 15.

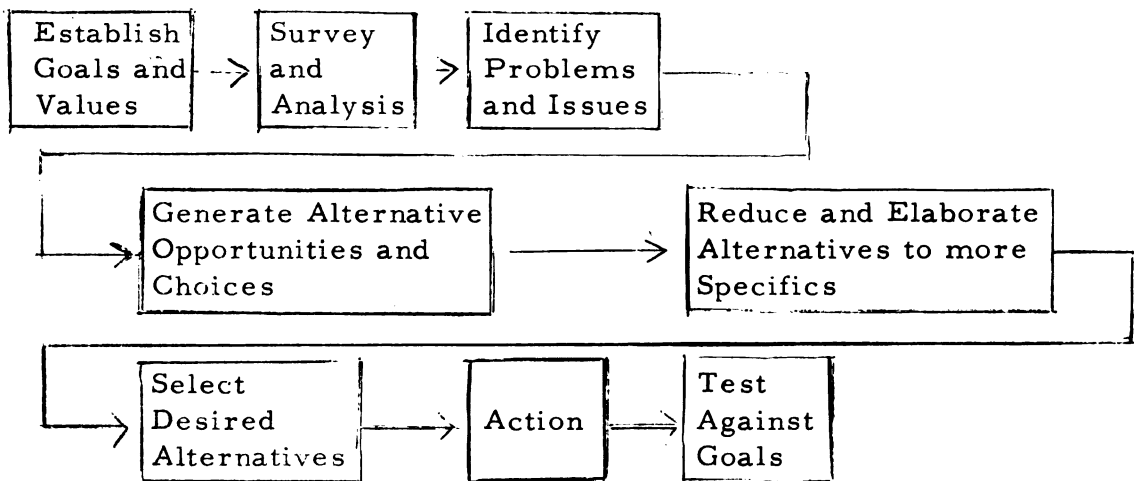
<sup>35</sup> Edward C. Banfield "Ends and Means in Planning" UNESCO International Social Science Quarterly Vol XI, No. 3, 1959: p. 362

possible course of action which would lead to the attainment of ends sought is considered; (2) Ends reduction and elaboration, where ends are reduced to more specific or operational terms before they can serve as criterion of choice in the concrete circumstances; (3) Design of courses of action, with elaborate consideration of alternatives and consequences; and (4) the comparative evaluation of consequences. Thus, in this approach, choice is a substantive element.

Thus the major features of the second approach which is peremptory oriented, (drawing on Davidoff and Reiner, and Banfield), can be illustrated by Figure 4.

FIGURE 4

Peremptory Oriented Decision Process



### Goals and Constraints

In attempting to identify goals so that they can function as criteria for problem identification and solution formulation, the planner is faced with a task of exceeding complexity. This is particularly true "since the goal of an action is seldom unitary, but generally consists of a whole set of constraints the action must satisfy."<sup>36</sup> In addition, decisions are usually made in sets, whereby each decision establishes constraints within which other decisions must be made. Charles Granger calls this "objectives within objectives, within objectives."<sup>37</sup> The problem, as he sees it, is to relate grand design objectives to the much more limited objectives lower down the line.

Constraints, as they relate to goals, can function in two different ways. In one instance, within the hierarchy of decisions, we might find that the goals of a higher organization establish the opportunity area and the limits for goals of a lower organization. We might find, for example, the objectives of a zoning ordinance which reflect a "community goal" would function as a limiting force upon the action of property owners. The property owner's goal would be to maximize the profit from the development of his lands. The community goals, however, (as effectuated through the zoning ordinance) would be tempered by allowing non-conforming

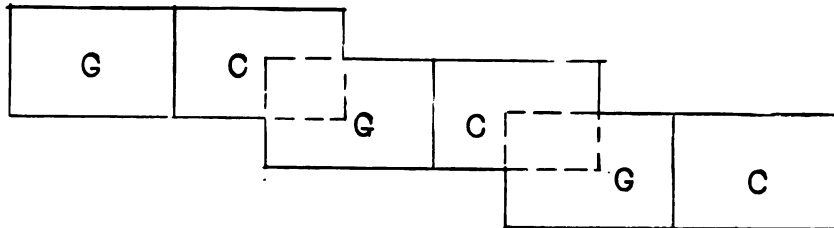
---

<sup>36</sup> Simon op. cit. p. 1.

<sup>37</sup> Charles Granger "The Hierarchy of Objectives" Harvard Business Review, 42-3, May-June, 1964: p. . 63.

uses to exist.

Thus we see the following relationship between a hierarchy of goals:



The goal of a higher organization would act as a constraint on the lower one, but would be tempered by the goal of the lower one. Hence the constraints would function as a framework delineating the opportunity area for lower levels of goals, defining basic limits or criteria which must be achieved.

In establishing goals, we find that certain basic survival values must be met, such as food, shelter, etc., or that resource capabilities or higher governmental laws and policies establish limits to the types of goals which can be pursued.

If a local community were to begin defining its goals for development, these goals would be expressed within the confines of both the opportunities open to it and the limiting factors of what can actually be achieved. These limiting factors can be viewed as constraints upon which goals can be realistically expressed. This is depicted in Figure 5 as "Community Expression Constraint." These limiting

factors are as follows:

Human and Natural Resource Capabilities. These capabilities, such as available natural resources, education levels and technological skills of the population, available capital, etc., establish the opportunity area towards which goals can realistically be strived. For example, the State of The Region, 1964, a report prepared by the Southwestern Pennsylvania Regional Planning Commission, states, "Probably the biggest single factor limiting the region's attractiveness as a production location is the unsatisfactory composition of its present labor force."<sup>38</sup>

Dominant Cultural Values. The value system of the larger society (i. e., U. S.) is a dominant factor in spelling out the types of values and goals within which the community must function. For example, we find that in the U. S. today, the national attitude toward segregation, or economic determinism has significant bearing upon the value system of individual communities.

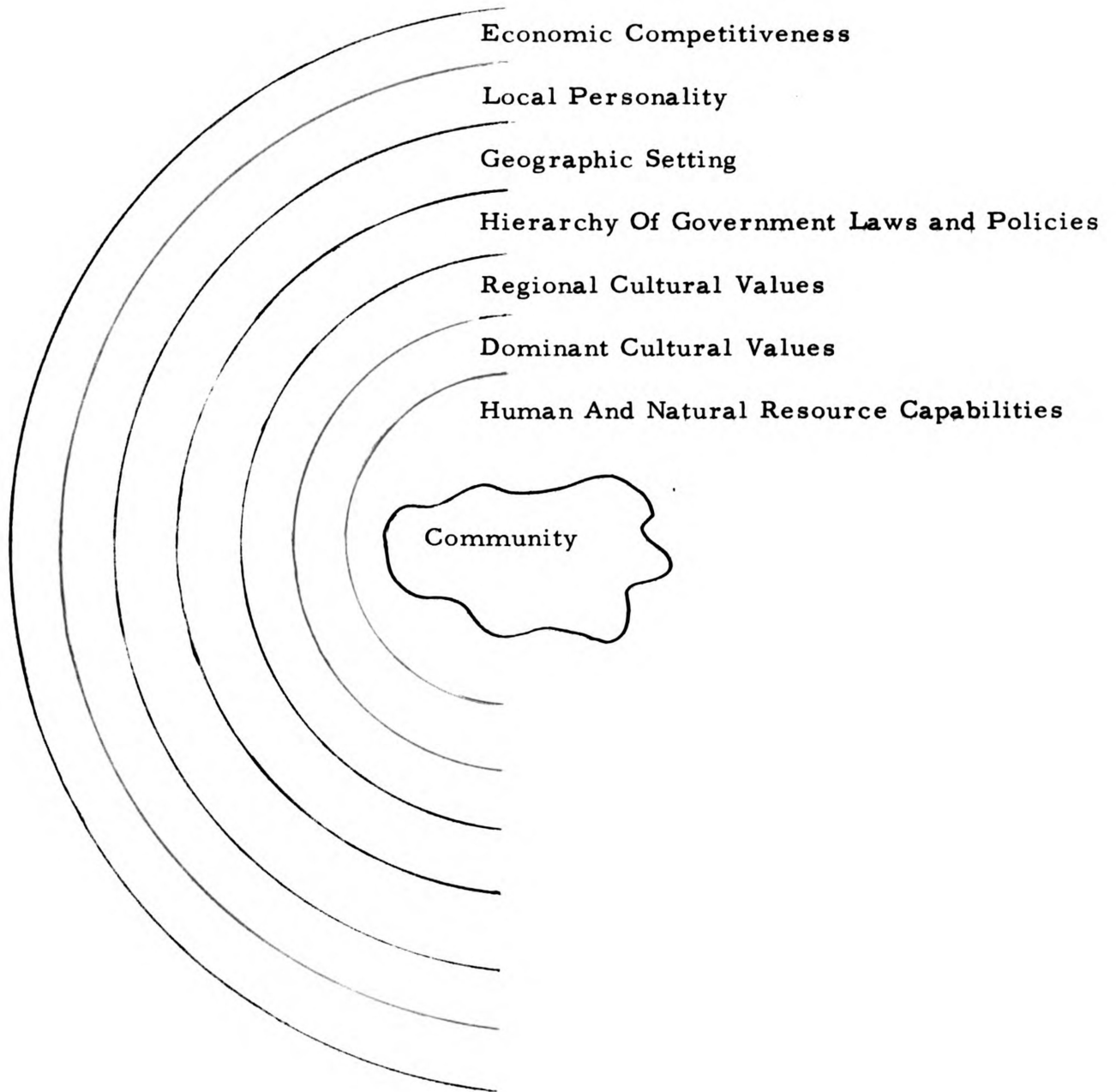
Regional Cultural Values. This plays the same type of role as the dominant cultural values but is related to a geographic region.

---

<sup>38</sup>Southwestern Pennsylvania Regional Planning Commission  
State of the Region 1964 - A Staff Report: p. 15.

FIGURE 5

COMMUNITY EXPRESSION CONSTRAINTS (OPPORTUNITY AREAS)\*



\*The Sequence is not intended to show a hierarchy of order.

Hierarchy of Government Laws and Policies. Federal, State and local laws, policies, programs and goals are restricting forces for limiting the scope of opportunities in the establishment of community goals. In respect to extension of opportunities, Federal and State programs, for example, provide a broad range of avenues open to local communities for solving some of their problems. The Southwestern Pennsylvania Regional Planning Commission State of the Region 1964 report, is cognizant of this type of constraint. It states, "Other spokesmen are calling for specific programs which are aimed at accomplishing things which could be broadly defined as goals of a regional nature. This year Governor William Scranton presented a State of the Commonwealth Message which enumerated a program which would effect the future welfare of the Southwestern Pennsylvania region. Even the President's annual State of the Union Message contains a broad national framework with impact on this region."<sup>39</sup>

Geographic Setting. As part of the opportunities for pursuing goals, the framework of geographical location must also be considered. Human settlement patterns relating to climate, terrain, transportation systems, water bodies, mountains, and relationship to other urbanized areas (being close or isolated), are major criteria for consideration of goal attainment. Likewise the artifacts or pattern within an urban center where the community is situated, such as public service or transportation facilities, are limiting factors.

Local Personality. Each community has what might be termed its own "local personality" and value system. These might take the form of the nature of activities conducted, such as a resort area or manufacturing area; or they may be expressed in heterogeneity or homogeneity of the population; or they may be provincial or cosmopolitan in outlook.

Economic Competitiveness. Most communities do not exist in a vacuum but are, in fact, related to a larger system of communities. In defining its goals, a community must be cognizant of its competitive position within the larger setting in order to realistically assess

---

<sup>39</sup>Ibid. p. 45.

what goals are, in fact, achievable. The SPRPC study states, "the absolute level of educational attainment of the region's population is low, relative to competing industrial areas... it would be nice, of course, if we could wait for new industry to come into the area which would automatically generate the upgrading of the labor force which is required. The problem is that there is little reason to expect the process to work in this direction, and at least some effort to provide more suitable labor for the kind of industry that could locate in southwestern Pennsylvania is required initially."<sup>40</sup>

#### Community Expression Constraints (or opportunity areas)

are different in their nature and characteristics. Some can be seen as internal to the community while others are external. For example, local laws and policies are an internal matter while Federal laws and policies are externally imposed. Secondly, we also find that, while some constraints function as parameters (being fixed in nature, such as the fulfillment of a basic level of human needs), there are many constraints which are variable and can readily change. Examples of this are laws and policies on all levels, cultural values, resource capabilities, etc. However, the crucial question facing the community is its power of control over variable constraints. Internal control of goals and constraints by the community is far greater than control over external variable goals and constraints. In most cases, these are uncontrollable as far as the community is concerned, although they may be influenced.

---

<sup>40</sup> Ibid. p. 15.



### Constraints and Problem Identification

Besides setting the framework for goal attainment, constraints or opportunity areas establish a base for problem identification, the elimination of which becomes a goal.

In the Southwestern Pennsylvania Regional Planning Commission State of the Region Report, 1964, it is found that the region's dearth of jobs is under extreme cyclical vulnerability. This can be viewed in part as an external uncontrollable variable. The unemployment problems they face, however, are also due to internal structural characteristics of their economic base "and have their roots deep in the historical development and present structure of the regional economy."<sup>41</sup>

We also find that a natural resource for the region is the abundance of coal which fostered a high level of employment. However, due to external variables such as the decline in the national demand for coal and a marked steady decline in the amount of manpower required per unit of production, the opportunity area has been changing.

The report cites other examples where the opportunities are constrained. In the case relating to local values, they find that "unlike some of the other metropolitan areas in the Northeast, such as New York, which have maintained steady growth through the emergence of new

---

<sup>41</sup>Ibid. p. 10.

industries as the old ones dispersed throughout the nation, this region has remained unusually heavily committed to its traditional industrial specialties. A persistently high degree of specialization indicates an inability, at least up until now, on the part of the region to adjust to economic change. This rigidity seems to underlie the areas's persistent unemployment problem."<sup>42</sup>

In its assessment of constraints or opportunities for the expression of its desired goals for future development, the report views the constraints or opportunities as either assets or liabilities. In attempting to determine their goals, they state that "exactly where, within the wide range of possibilities the future will actually unfold, depends in large part on the development policies which are undertaken and their effectiveness. That is why a careful assessment of the region's assets and liabilities is important in the formulation of any action program designed to maximize the potential of the region."<sup>43</sup>

Although they fail to cover the gamut of the community expression constraints or opportunity areas previously enumerated, they do attempt to analyze what, to them, are the critical assets and liabilities. These are listed as: land forms, water resources, minerals, historical features, transportation systems.

---

<sup>42</sup> Ibid. p. 12.

<sup>43</sup> Ibid. p. 24.

### Constraints and Projections

One additional feature of assessing Community Expression Constraints or opportunity areas in relation to goal formulation should be mentioned. This is in relation to their projection into the future. The necessity of this is threefold: (1) it helps understand and establish community wide goals; (2) it provides reference points for the development of policies in attaining these goals; and (3) it gives guidance for making decisions now in regard to what needs to be done to insure desired future development.

The S. P. R. P. C. State of the Region 1964 report states:

The reasons for assessing the region's assets and liabilities above should be made clear: it is the wise and careful exploitation of its assets and, the removal of or adjustment to its liabilities, that will insure the maximum development possible for Southwestern Pennsylvania. Thus, in part, forecasting the region's future means anticipating the reaction of the region to the challenge of the transition which faces it. Forecasting the region's future for its own sake is not the ultimate purpose for analysis of the economy. The real questions that must be faced are, what kind of economic growth might be possible with a truly ambitious development program, and also what kind of growth - or perhaps decline - is in store if the region fails to make any real attempt at revitalization? It is the answers to these kinds of questions which provide the basis for understanding and, hopefully, a community-wide consensus as to the degree of development effort to be expended. Such estimates of the range of possibilities which the future holds provide reference points for policy; in other words, they give guidance for the making of decisions regarding what needs to be done now to

insure maximum future development.

For some policy decisions, estimates of future magnitudes are germane, for example, the relevance of future automobile traffic to a decision as to whether or not to build a bridge. But even in cases like this, it is the evaluation of the differences, which the implementation of the intended policy would make, that really counts in the final decision on whether or not to undertake it. The look at the region's future contained in this section will not be an attempt at fortune-telling pure and simple. Rather, it will attempt to sketch out realistically the range of development possibilities available to the region, depending on past trends, the region's assets and liabilities, and, perhaps most importantly, on the strength of the region's reactions to its own development potential.<sup>44</sup>

### Constraints and The Planning Process

The analysis of constraints is of particular importance in what Banfield calls the "analysis of the situation" aspect of the planning process. In deciding upon courses of action, Banfield states that the "planner must work within certain conditions which are fixed by the situation, especially by the resources at his disposal... and the obstacles in his way. His opportunity area consists of the courses of action 'really' open to him, i. e., those which he is not precluded from taking by some limited condition."<sup>45</sup> However, in defining the opportunity areas really open to him, it is imperative that he not become over zealous and limit the available choices. As we have seen, existing constraints are often variable and can be changed.

---

<sup>44</sup> Ibid. p. 36.

<sup>45</sup> Banfield, "Ends And Means Planning", op.cit., p. 362

In addition, the existing constraints might, in fact, be the cause of particular problems at hand; therefore, consideration of their elimination is necessary.

Davidoff and Reiner believe that constraints should be imposed only after choice is expressed. They state that "all too often, planners first predict the nature of the future, then help set in motion programs that fulfill this prophecy, and thus limit men's aspiration. Planners should not let such predictions about the future limit the range of choice; for control can alter the future and can make predicted outcomes improbable. However, evidence revealed through prediction can suggest undesirable aspects of a course of control."<sup>46</sup>

#### Constraints as Negative Goals (Restraints)

We have seen that constraints can function to delineate perceived opportunities or limits in the establishment of goals. However, in another sense, a constraint can be something which must be avoided. In this respect, we can conceive of goals having polar opposites, that which is to be achieved and that which is to be avoided.

Hence in this situation, if goals function as essential or desirable consequences used to synthesize or identify alternative systems, outcome or actions, constraints would be undesirable or prohibited consequences

---

<sup>46</sup>Davidoff and Reiner, op. cit., p. 8.

which are to be avoided. Constraints of this type will be referred to as "Restrains."

Problems exist not only when there is failure to achieve positive requirements or desirable outcomes which become a goal, but also when there is failure to avoid a negative requirement which can be viewed as a constraint. We like to think of planning where we first choose our goals and then find the most efficient way to attain them; however, in reality, we are often not sure what are the most highly valued ends. Consequently, we find greater agreement on the constraints (that which is to be avoided) than we do on goals (that which is highly valued and strived for).

For example, in the State of the Region, 1964 report, it is stated that "In every year since 1950, the region's unemployment level has not only been far above the 4 per cent 'goal' set as a national target... but substantially greater than the average level in the nation as a whole."<sup>47</sup> Thus, the goal is the avoidance of a certain state of affairs.

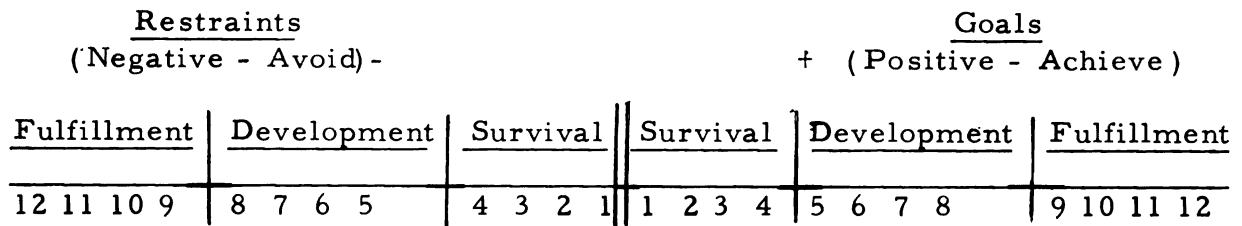
---

<sup>47</sup>S. P. R. P. C. op. cit., p. 9.

Constraints used in this sense can be depicted by Figure 6.

FIGURE 6

Restraints As A Negative Goal



In this model, both goals and constraints are placed in a continuum which may be related to a value system. Starting from the middle, goals and constraints can either be for survival, development or fulfillment. The Twin Cities study titled, Values and the Planning Process, states "the roots of man's relationship to the world would seem to stem from a desire for personal survival and once accomplished, personal fulfillment."<sup>48</sup> Survival values are motivated by fundamental drives as instinctive to man as to other creatures. They can be viewed as goals which relate to such things as security, sustenance and continuity. Development values are those which helped free man from devoting all his energies towards the will to live. These are such goals as stability, cooperation, organization, surplus,

---

<sup>48</sup> Values and the Planning Process, Twin Cities Metropolitan Planning Commission, St. Paul, Minnesota, The Joint Program-Design Section - Paper No. 8, July, 1963: p. 4.

efficiency, flexibility, freedom, etc. Fulfillment values relate to non-utilitarian activities and allow the achievement of symbolic identity. These refer to man's relationship to the spiritual world, truth, beauty, recreation, love, etc. The range on the continuum from survival to fulfillment relates to "needs" which are valued and "wants" or "desires" which are valued.

As one proceeds from one level of the continuum to the next (survival to development to fulfillment), the lines of demarcation are not clear cut and the process is one of merging into "grey" areas rather than clear delineation. We might also find that in many instances, as man attains a higher state of existence, what may be valued as fulfillment in one society, may be valued for survival in another. For example, the value placed on an ideal may be fought and died for in one society, while people of another are willing to give it up. We might also find, for example, one society viewing the maximum level of unemployment for survival of its economy as 6 per cent, while in another society this would be viewed as a development or even fulfillment value.

The goals can be used for "alternative generation" where one goal is measured against another and a specific utility will be perceived. However, when a goal is measured in the entire system, constraints are used for alternative testing and we may find an entirely different alternative will achieve the maximum marginal utility. This perhaps would not



be the most highly valued outcome, but would "satisfy" the most criteria and balance off the most constraints.

The State of the Region 1964 report illustrates an example of conflict between an achievement goal and avoidance constraint. The report states:

It might be that the quickest way of providing employment opportunities for the unemployed within the region would be to retrain them quickly and relatively economically for fairly low level occupations in manufacturing operations requiring comparatively little skill. Aside from certain problems of feasibility, with respect to maintaining both a high wage sector and a low wage sector in manufacturing industries at the same time and in the same region, such a policy would also have the likely effect of providing the region with a substantial increase in employment in industries which had relatively low growth characteristics. Thus there might be a conflict between most expeditiously solving the problems of unemployment of those currently unemployed, on the one hand, and on the other hand, changing the industrial structure so that it will have a maximum growth potential for future development.<sup>49</sup>

The value scale on which goals and constraints are ranked, will allow for the evaluation of the entire system, identification of what is willing to be sacrificed, and where the final choice will be made in the range between maximum and minimum levels of attainment.

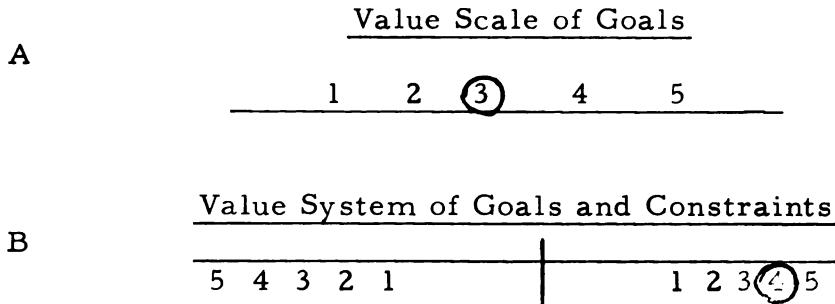
Thus we might find the formulation of a goal which, when taken *singularly*, will have a higher value than an alternative goal, but, in a

---

<sup>49</sup>S. P. R. P. C. , op. cit. , p. 63.

system of goals and restraints with direct interrelationships existing, an entirely different outcome may be preferred because it satisfies ends and criteria for the system as a whole.

Hence we can depict the different analysis as follows:



In schematic A, goal 3 is most highly valued, while in schematic B outcome 4 is most highly valued since it meets criteria for the system as a whole.

The significance of these two situations is suggested by Herbert A. Simon when he states that "In the decision-making situation of real life, a course of action to be acceptable, must satisfy a whole set of requirements or constraints. Sometimes one of the requirements is singled out and referred to as the goal of the action. But the choice of one of the constraints, from many, is, to a large extent, arbitrary. For many purposes, it is more meaningful to refer to the whole set of requirements as the (complex) goal of the action."<sup>50</sup> Hence in a system of goals and constraints, the final choice must take into consideration the entire complex of choices and effects.

---

<sup>50</sup> Simon, op. cit., p. 7.

## CHAPTER IV

### FORMULATING GOALS

#### Problems of Goal Evaluation

In attempting to formulate a set of goals, the planner is faced with numerous problems. This relates to goal conflicts, the nature of "satisficing" and the contextual elements of goals. The State of the Region, 1964 report states, "where adequate knowledge is especially lacking is on the relative priorities among goals. In other words, there is an insufficient understanding of just how much of one goal the community might be willing to forego in order to secure greater accomplishment of some other goal - especially in those cases where goals may be in conflict."<sup>51</sup>

#### Intrinsic and Instrumental

One method of comparing goals is in terms of both their intrinsic and their instrumental worth. "Values exist in a hierarchy. The hierarchical relation of values provides a means for whatever testing of value is possible. A value may be tested, that is, understood and its reasonableness assessed, by specifying values of a lower level it subsumes and by comparing it with other lower-level values as a means to achieve values of a higher level."<sup>52</sup>

In analyzing the value scale (goals and constraints) as a system, it is necessary to consider that an action will result not only in effects upon

---

<sup>51</sup>S. P. R. P. C. op. cit., p. 63

<sup>52</sup>Davidoff and Reiner, op. cit., p. 8

primary goals having intrinsic value in the hierarchy of values, but also that it may have contextual effects of an instrumental nature.

### Active and Contextual

In addition to its intrinsic or instrumental worth, "an end may be thought of as having both active and contextual elements. The active elements are those features of the future situation which are actively sought, the contextual are those which, while not actively sought, nevertheless cannot be sacrificed without loss."<sup>53</sup> They can be viewed as unintended secondary consequences, either positive or negative.

It is essential to identify the contextual as well as active elements of an outcome in order to realistically assess the cost from the action to the achievement of the goal. William B. Shore points out that "quite often the full cost of many individual choices that shape the metropolis do not fall on those who benefit: driving to work during rush hours, for one; polluting air and water another; receiving necessary service on large lots a third. And there are many ways in which personal choices affect the metropolitan pattern but the resulting metropolitan pattern is not deliberately chosen."<sup>54</sup>

The State of the Region, 1964 study illustrates an example of how the ultimate decision regarding a conflict of value between two organizations has contextual elements affecting the region as a whole. The study states,

---

<sup>53</sup>Banfield, "Ends and Means Planning," op. cit., p. 362

<sup>54</sup>William B. Shore (In a section on Public Opinion and Goals for Planning), Proceeding of the 1963 Annual Conference, Milwaukee: p. 187

11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

"It is clearly recognized that business must try to hold down its production costs. Similarly, a labor union must try to secure the highest possible earnings for its members. On the other hand, the Commission recognizes that the outcome of such negotiations vitally affects the region's economy. It is important, then, that the parties involved understand the impact of their negotiations on the greater community, and consequently, the impact upon their own interests in the long run."<sup>55</sup>

We might find, for example, that the contextual elements are constraints which must be avoided. This would then necessitate a careful consideration of the goals, assessing the costs and benefits accrued from the pursuit of the active element.

Banfield further states that "the planner cannot pick and choose among the consequences of a given course of action: he must take them all, the unwanted along with the wanted, as a set. This evaluation, therefore, must be in terms of the net value attached to each set."<sup>56</sup> In decision situations such as this, the choosing of the alternative which best satisfies the "set" of consequences is essential and optimizing plays a lesser role.

Difficulty arises, however, in trying to strike a balance between unlike intangibles. "If all values could be expressed in terms of a common numerical index (e. g. , prices) this would raise no great difficulty."<sup>57</sup> The final choice of consequences, however, often must be decided in situations

---

<sup>55</sup> S. P. R. P. C. , op. cit. , p. 14

<sup>56</sup> Banfield, "Ends and Means Planning, " op. cit. , p. 362

<sup>57</sup> Ibid

such as "whether x amount of damage to a beautiful view is justified by y amount of increase in driving safety."<sup>58</sup> Thus we might view the damage to the beautiful view as the constraint, and increasing driving safety as the goal. In conflict situations such as this, the resolution can be explained in terms of goals or value premises that serve as inputs to decisions.<sup>59</sup> Behind goals are motives which are the causes leading to the selection of some goals rather than others as premises for specific decisions.

#### Inducement and Contribution

In trying to resolve the above situation, we might draw on motivational theory formulated by Barnard and Simon. This theory of motivation explains the decisions of people to "participate in" and "remain in" organizations where it is "postulated that the motives of each group of participants can be divided into 'inducements' (aspects of participation that are desired by the participants) and 'contributions' (aspects of participation that are inputs to the organization's production function, but that generally have negative utility to participants)."<sup>60</sup> Thus, the inducement in the decision between sacrificing the beautiful view is the y amount of driver safety, while the contribution is x amount of beautiful view which becomes the input to making the decision and has negative utility. The objective is to maximize or, at least increase, the inducements (or benefits) in a decision, while decreasing or minimizing the contributions.

---

<sup>58</sup>Ibid.

<sup>59</sup>Simon, op. cit., p. 3.

<sup>60</sup>Ibid. p. 11

In the planning process the balance between inducements and contributions is a major constraint in choosing alternatives. In order to be successful, it is imperative that the decision-making process guarantee the maintenance of a favorable balance of inducements to contributions.

### Rendering Values Explicit

Without some mechanism of evaluating alternative choices between goals, it would be impossible to reach a decision as to the proper balance between contributions and inducements. In order to attain this, it is necessary to relate goals to the alternative means used in their achievement, and have a better understanding of the relationship between values and the physical environment.

#### Levels of Goals and Values

Goals and values are often postulated in a wide range of generality which can lead to numerous difficulties. In order to avoid confusion, it is important to have the same level of generality. Lynch and Rodwin state that "When constructing a rational system for guidance in any particular situation, what must be built up is a connected hierarchy of goals, considering possible alternatives only at the same level of generality and checking lower levels for their relevance to upper levels of the system."<sup>61</sup> Thus, we must consider what was referred to by Granger as "objectives within objectives."

---

<sup>61</sup>Kevin Lynch and Lloyd Rodwin "A Theory of Urban Form"  
Journal of the American Institute of Planners, XXIV, 1958: p. 208



In a hierarchy of objectives as to their level of generality, we find that the more general objectives have the advantage of relative stability. The higher up the scale of generality, the less the rate of change. However, even the broad objectives are subject to change over long-range periods, and since the physical form of cities is relatively fixed for longer periods, it is necessary to be cognizant of value changes. The more general objectives are also applicable to more situations for larger groups.

Although general objectives have the advantage of being "applicable to more situations for larger groups over longer spans of time,"<sup>62</sup> they have the corresponding disadvantage of lack of precision, and difficulty of application in any specific problem. This suggests a need for a greater effort to organize and compartmentalize objectives into classes that are useful for various decision situations. Lynch and Rodwin state that "very often in goal systems of real life, such general objectives may have very little connection with objectives further down the list, being, rather, top-level show pieces, or covers for hidden motives. The operating goals are then the intermediate ones, those which actually regulate action. To develop a rational set of goals, however, the connection must be sought out, or the motives that are the true generalized goals must be revealed. The aim is to produce a system that is as coherent as possible."<sup>63</sup> Consequently goals

---

<sup>62</sup>Ibid.

<sup>63</sup>Ibid.

must be evaluated in terms of their intrinsic or instrumental nature.

We find, however, that it is often exceedingly difficult to refer instrumental goals back to the more fundamental values. Hence decisions must be guided by the intermediate, more concrete, goals which are more graspable and can be referred to more quickly and easily. City building, however, is rather stable and changes slowly over time, hence, goals should be brought to the highest level of generality so as to insure that decisions which are binding over long periods of time relate to the most meaningful goals.

#### Criteria For Intermediate Goals

We see then, that in order to establish goals which are meaningful for guidance toward action, it is often more fruitful to focus upon intermediate objectives. Hence, given a set of basic values in the society in which to operate, we are faced with the problem of establishing criteria for intermediate goals. Lynch and Rodwin suggest criteria for the choice of goals. They state that "If they are rational, they should be internally consistent. There should, moreover, be some possibility of moving toward their realization, now or in the future. Otherwise they are simply frustrating. To have operational meaning, they must be capable of being contradicted, thus permitting a real choice. And finally the goals must be relevant to city form, since there are many human objectives which are little affected by environmental shape."<sup>64</sup> In addition to Lynch and Rodwin's criteria, goals

---

<sup>64</sup>Ibid.

should also be guides to action in that they facilitate decision-making; they should be explicit enough to suggest certain types of action; they should be suggestive of tools to measure and control effectiveness; they should be cognizant of internal and external constraints; and by being internally consistent, they should be compatible with the complex set of goals as well as capable of being related to the broader and more specific goals at higher and lower levels.<sup>65</sup>

#### Goal Conflicts

Goals are not isolate phenomena but are related to other goals and the "means" by which they are attained. In the formulation of goals there is less likelihood of conflict between them on a general level. However, once the level of detail shifts to the specific means to be employed in attaining the general goals, there very well may be some disagreements. For example, we may find a situation where there is a high value placed on a healthy clean living environment for all citizens of a community. A possible means of achieving this could be through urban renewal. However, a related value may exist which precludes government intervention in the housing market. Consequently, conflict arises between the two values because the possible "means" of obtaining one goal is antipathetic to the other goal. Hence various considerations must be analyzed. There may be an attempt to find other "means" which do not raise the issue of the

---

<sup>65</sup> Granger, op. cit., p. 65

initial goal, or a change in the value placed on either of the goals or "means" itself.

A good example of conflict between the value of a goal and value of a "means" is depicted in the S. P. R. P. C. study. One of the goals is to provide more employment opportunity in the future. A possible "means" of achieving this is to "reorganize public service into rational service areas: The Commission recognizes that this recommendation will be a "hot one." But the fact remains that, in a fierce struggle with other regions for the location of new or expanded industries, the provision of modern and efficient governmental services can play a crucial role in whether a location gets a new plant or not."<sup>66</sup>

The process of rendering a value explicit by defining a specific pursuit also reveals the way in which the value may be transformed into a goal statement. For example, we may find a value such as "the C. B. D. is a desirable feature of the City." The transformation of this statement into a planning goal is: To maintain the level of investment in, and the output from, the C. B. D., so as to preserve it. Statements of this nature raise many questions which must first be answered before a course of action or plan is initiated to implement the goal. "In speaking of preserving a C. B. D., is the implication that the C. B. D.'s activity should be maintained

---

<sup>66</sup> S. P. R. P. C., op. cit., p. 17

at its current level, or at its current level relative to a certain region as a whole? Or, does 'preserve' mean that the older business district should be maintained as a central focus for particular functions: trade, exchange, recreation, etc.?"<sup>67</sup>

To answer these questions one would have to relate them to other values. Hence, in relation to the level of activity, we would have to determine whether growth was valued as a goal, and if so, what kind of growth. As to the C. B. D.'s function, we would have to determine what functions are valued. For example, the community might place a high value on the function of entertainment. Therefore, we might find a goal to maintain the C. B. D. as an entertainment center for the community, region, or even the whole country (as an example, New York City).

#### Relating Goals to Means

Since goals are vague and diffuse the postulation of effective techniques of reducing them to more specific and operational terms would allow for a greater understanding of their value in serving as criterion of choice in concrete circumstances. This relates to what Banfield calls "ends reduction and elaboration."

One method of achieving this is through policies planning. In a recent masters thesis, Stephen Nelson describes an effective approach of reducing goals to policies. The first step is the use of "strategic policies."

---

<sup>67</sup>Davidoff and Reiner, op. cit., p. 13

These are policies "which can be used to define more specifically the courses of action which will lead to goal attainment. Strategic policies first set forth descriptions of outcomes which will supposedly meet the criteria prescribed by the goals."<sup>68</sup> These are strategic outcome policies. In urban planning, they usually deal with the broad land use relationships, urban form, desirable distribution of employment, the flow of people, and so forth. They might be considered similar to planning "principles."

Once strategic outcome policies are formulated, "strategic action policies" should be formulated "as the broad actions necessary to promote and create these outcomes. They ought to cover such matters as rate of growth, rate of change, priorities for growth and change, and the degree of interaction between components."<sup>69</sup> The next step would be the establishment of tactical policies. "Tactical policies are decision rules concerning specific methods of procedures for achieving the strategic policies. They are, in effect, strategic policies extended down the hierarchy to the operational level where they can be directly translated into action. They include subdivision design and improvement standards, renewal priorities, capital improvement priorities, taxing policy, financing techniques, and so forth."<sup>70</sup> The difference between "strategy" and "tactics" as they relate to policies and plans, can be described in terms of their level of concern. "Strategy" is more

---

<sup>68</sup> Stephen C. Nelson, The Policy Planning Approach in Urban and Regional Planning: A New Dimension in the Planning Process, Masters Thesis in Urban Planning, Michigan State University, 1964, Unpublished.

<sup>69</sup>Ibid.

<sup>70</sup>Ibid.

related to the external level, analyzing critical variables during the planning process. "Tactics" tend to be more detailed plans with their major focus of attention being geared to the operations level.

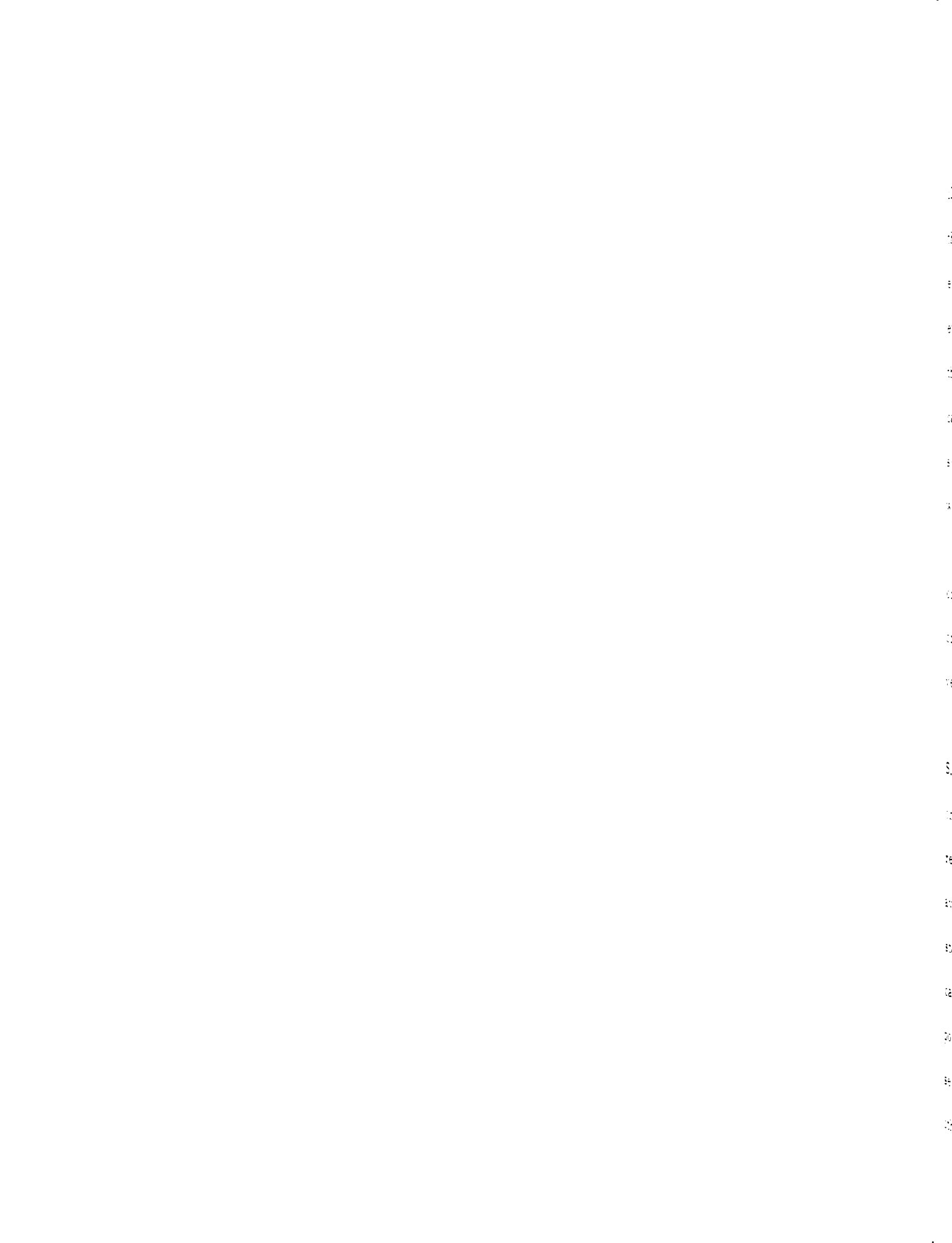
Thus, in the case of the goal to preserve the C. B. D. , a series of policies would be postulated to preserve land uses for theaters, cinemas, night clubs, etc. , and the attendant function necessary to foster this, such as hotels, restaurants, cafes, etc. These policies would be accompanied by such plans as to provide parking facilities, municipal expenditures for a convention hall, a concert hall, or using urban renewal as a tool to foster this goal.

Therefore, we see that to implement a general goal of preserving the C. B. D. raises another set of goal alternatives. In addition to ramifications of one goal leading to others, the specification of goals in terms of alternatives implies greater complexity in the entire sequence of goal attainment. "That is to say, any particular goal combination obviously involves several successive investigative cycles of action before a choice is made. Such systems of linked investigative actions, bear a resemblance to what will be recognized from decision-making theory as 'decision-chains.'"<sup>71</sup>

The S. P. R. P. C. report provides an excellent example of

---

<sup>71</sup>F. Stuart Chapin, Jr., "Foundations of Urban Planning" Urban Life and Form, ed. Werner Z. Hirsch, Holt, Reinhardt and Winston, Inc., New York, 1963: p. 228





illustrating interrelationships between goals and various means of attaining them (see Figure 7). Here goals are classified under three categories, i. e., economic goals, social goals, and physical development goals. Interaction exists among each classification of goals themselves and between each of the three categories as well. Thus we find the achievement of an economic goal can be predicated not only on the attainment of other economic goals but social or physical development goals as well. Functioning in this respect, we can say they have instrumental as well as intrinsic value.

Similarly, the possible means of accomplishment listed under one goal may also be pertinent to the attainment goals of the same category or of other categories as well. We may conclude that goal specification is very complexly interwoven with other goals, and into the action sequence.

As stated in the report, the chart is only a partial listing of S. P. R. P. C. 's adopted goals and alternative means of attainment. The ones selected for portrayal indicate a salient characteristic of the interrelationships, namely, the factor of "multiple payoffs," whereby the available means will help accomplish more than one goal. The report states, however, that "the multiple payoff effect brings with it a note of caution; the side effects of a course of action may be negative, as well as positive, so that in making gains toward a specific goal we may find ourselves taking 'one-step-forward-and-two backward.' The attainment of other desired goals may be hampered if we are not careful in the selection

# ATTAINING GOALS

EC

A. AD  
OP  
FU  
TH

ment and technical competence of the labor force  
of health services

ional investment advantage  
n a more competitive basis

B. INP  
ME

of industrial land  
et Imperfections

2(1)-

tion on job alter

C. STA

men or seconda

3(1)-0

D. OR  
ILY

1(1)-3

E. EFF  
RES  
PRI  
TON  
PUB

2(2),

Renewal  
ontrols for A  
de Features  
ystem  
for Future D  
nce to Impro

KEY

a Regional Planning  
, 1964.

IN THIS CHART — SEE TEXT.



of action action programs. This consideration demands that we evaluate our courses of action well and know to what extent we are willing to sacrifice some ground on one thing in order to gain more on another."<sup>72</sup>

Illustrative of this is a common problem faced by most of the underdeveloped countries. Their basic problem is a lack of investment capital which is necessary to stimulate economic development. A means of obtaining capital is through pursuing a loose fiscal policy. However, such a policy has negative side effects in that it creates inflation. Hence they are faced with the decision of maintaining stable currency to achieve an immediate goal, or sacrifice so as to attain a long-range goal of increased economic development.

We see then, that through the process of rendering goals more explicit by interweaving them with other "goals" and "means," we, in fact, perform the last two aspects of Banfield's process. In "designing of courses of action," we have seen that they were considered within the context of their interrelationships with the courses of action which succeeded them. At its most general level, a developing course of action to satisfy goals and strategic outcome policies implies a description of the key actions to be taken or the commitments to be made. These constitute the premises upon which any less general course of action is selected, e. g., at the

---

<sup>72</sup>S. P. R. P. C. (Message) op. cit., pp. 9-10.

programme or operations levels (strategic action policies and tactical plans).<sup>73</sup> In the "comparative evaluation of consequences," we are in a position to more clearly assess the relationship between inducements and contributions.

---

<sup>73</sup>Banfield, "Ends and Means Planning," p. 363.

## CHAPTER V

### GOALS, VALUES AND THE PHYSICAL ENVIRONMENT

In our study of goals and values as they relate to the planning process, our focus is upon "urban planning." Hence, in making urban planning our subject of concern, "we are immediately specifying a locus for the study and practice of planning. We are identifying a specific kind of locale, with a particular economic life, political context, and social organization. We are making this entire microcosm a subject for study, but focusing attention on particular choices on the kind of living environment and the means for achieving each that assures the best possible accommodation of the residents' goals of urban life."<sup>74</sup> Thus our effort in understanding these goals and values not only focuses on the planning process, but also urban structure and form.

As was depicted in Figure 7, interaction exists between economic social goals and physical development goals. This relates to what Donald L. Foley refers to as the relationship between "aspatial" and "spatial" aspects of urban environment. It is in understanding the bridge between the concern for spatial arrangements and aspatial approaches to community organization that we can more thoroughly assess the relationship between values and the physical environment.

---

<sup>74</sup>Chapin, op.cit., p. 218.

Goals and values in urban life have been traditionally viewed in aspatial terms, without direct regard for the spatial. "Spatial refers to a direct concern for spatial pattern, i. e. , for the pattern in which culture, activities, people and physical objects are distributed in space. Conversely, aspatial refers to a lack of such concern for spatial pattern."<sup>75</sup>

The spatial structure of any particular city is deeply rooted in the culture of the past as well as in the function it serves in the present; hence the student of urban planning seeks important clues from the present design as a product of the values in the history of the city, as well as in the values of the people who live there today.<sup>76</sup> Values, however, "tend to be general and amorphous and defy ready translation into physical terms, and yet the metropolitan planner legitimately asks how he may know whether the physical environmental scheme he is proposing facilitates or impedes the achievement of stated values,"<sup>77</sup> and whether the stated values restrain and impede evolving activity systems; or impede a functional physical environmental scheme which facilitate the activity system.

Therefore, there is a continuing need to bridge, more firmly, the gaps between the relationship of values and the physical environmental aspects of the community and between the aspatial and spatial aspects.

---

<sup>75</sup> Foley, op. cit. , p. 23

<sup>76</sup> Chapin, op. cit. , p. 243

<sup>77</sup> Foley, op. cit. ,

A conceptual framework that seeks to bridge this gap has been developed by Donald L. Foley, (see Figure 8).

FIGURE 8

## An Approach To Metropolitan Spatial Structure

	A, Aspatial Aspects	B, Spatial Aspects
1. Normative or Cultural Aspects	<p style="text-align: center;">1A</p> <p>Social values; culture patterns; norms; institutional setting; technology</p>	<p style="text-align: center;">1B</p> <p>Spatial distribution of culture patterns and norms; values and norms directly concerned with the qualities and determination of the spatial patterns of activities, population, and the physical environment</p>
2. Functional Organizational Aspects	<p style="text-align: center;">2A</p> <p>Division and allocation of functions; functional interdependence; activity systems and subsystems, including persons and establishments in their functional-role sense</p>	<p style="text-align: center;">2B</p> <p>Spatial distribution of functions and activities; linkages (functional relations spatially conceived); spatial pattern of establishments, by functional type</p>
3. Physical Aspects	<p style="text-align: center;">3A</p> <p>Physical objects; the geophysical environment, man-developed material improvements, people as physical bodies; qualities of these objects</p>	<p style="text-align: center;">3B</p> <p>Spatial distribution of physical objects; the resulting spatial pattern formed by this distribution of land forms, buildings, roads, people, etc., distribution in space of varying qualities of physical objects</p>

Source: Donald L. Foley "An Approach to Metropolitan Spatial Structure" Explorations Into Urban Structure, Webber, et al., University of Pennsylvania Press, Philadelphia, 1964: p. 24



### Foley's Approach

Foley's model focuses on the characteristics and interrelationships of selected phenomena viewed in other frames of reference than simply either spatial or aspatial aspects of the environment. It can also enhance the effectiveness of multiple types of research in different disciplines concerned with the identification of urban problems and the search for rational and acceptable solutions, by elucidating the inter-relatedness between political science, economics, sociology and anthropology (which relate to aspatial), and urban planning, landscape architecture, and geography( which focus more on the spatial aspects).

"Introduced as a separate and cross-cutting classification is the distinction among the three levels or aspects shown as 1, 2, and 3 in the diagram."<sup>78</sup> The "normative or cultural aspects" level would include the culture and the rules by which men live and the process by which consensus is sought and achieved. "The normative aspect of urban life, in sum, includes both the formulation of goals and the designation and enforcement of approved means for seeking these goals."<sup>79</sup>

In the second level, "functional organizational aspects" refers to the functions which are allocated and interpreted within a community or among communities. "Functional organization, in contrast to culture and

---

<sup>78</sup>  
Ibid. p. 25

<sup>79</sup>  
Ibid.

norms, tends to focus on the complementarity of different functions and roles to deal more directly with on-going activities and interacting people. This section of the diagram is thus conceived as including activities, and hence, activity systems and subsystems."<sup>80</sup>

The "physical aspect" embraces the geophysical base for community life; "the man-built modifications of this base, including buildings, streets, and major facilities; and people as physical objects occupying space, requiring transportation, etc."<sup>81</sup>

Foley makes the assumption that "the typical approach to the normative aspect of community life is essentially aspatial (i. e., that it mainly deals with values and norms without being concerned with spatial arrangements). For example, students of the city may seek to isolate those main values that residents seek in the city when migrating there. But the identification of these values is not likely to provide direct clues to the city's spatial pattern. A high value on consumer goods may encourage certain kinds of manufacture and retail trade, but will give little indication as to whether factories and stores will be concentrated or dispersed within the urban area. On the other hand, a stress on home ownership, by its implicit emphasis on low-density development, may suggest a rather dispersed urban pattern."<sup>82</sup> Hence, in the context described, Foley places

---

<sup>80</sup>  
Ibid.

<sup>81</sup>  
Ibid., pp. 25-26

<sup>82</sup>  
Ibid., p. 26

the normative aspect of community structure essentially in cell 1A.

He feels, however, that "cell 1B, by contrast, encompasses two variants: the spatial pattern by which cultural traits are distributed, and those somewhat special values and norms that bear directly on the character of the spatial patterns of communities, with these populations, their activities, and their physical base."<sup>83</sup>

The move from cell 1A to cell 1B depicts one manifestation of social values as they relate to spatial aspects. We find, however, that values are also related to functional organizational aspects aspatially and spatially conceived, and physical aspects aspatially and spatially conceived. Hence, the indirect relationships between values and space as shown in Figure 8.

The main feature of the resulting framework is the pivotal place of functional organization in mediating the relationship between the norms and values that we share, and physical environmental planning (i. e., between top and bottom in the diagram), and in providing a particularly strategic point to analyze the transition between aspatial and spatial (i. e., from right to left, or left to right).

In understanding goals and values and their relationship between aspatial and spatial manifestations, the planner is faced with three basic types of situations. The first is where values are related to the physical

---

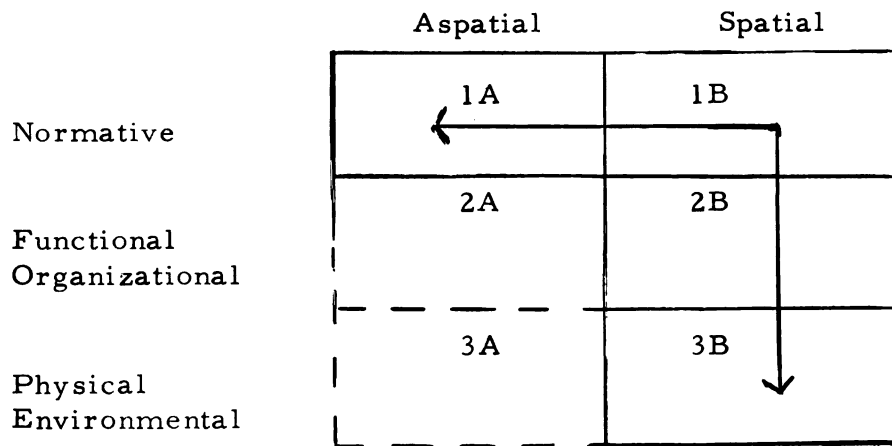
83

Ibid.

environment spatially conceived, utilizing the normative spatial aspect (Cell 1B). Here, the mode of reasoning sees the primary concern for values as to their spatial arrangement (Cell 1B), stressing "the importance of the physical environment as artifact. The physical environment, in many important ways, serves to perpetuate community traditions and to provide a sense of orientation within, or to, the community. Hence, the physical base tends to carry or to symbolize important values."<sup>84</sup> This mode of reasoning is illustrated in Figures 9 and 10, and stresses the symbolic value of space, such as the spatial distribution of culture patterns and norms.

FIGURE 9 \*

Relationship of Values To The Physical Environment  
Spatially Conceived With Emphasis On The Symbolic Value of Space



An alternative relationship: primary concern for values as to spatial arrangement(11

\*Adapted from Donald L. Foley "An Approach to Metropolitan Spatial Structure"  
Explorations Into Urban Structure, Webber, et al., University of Pennsylvania  
Press, Philadelphia, 1964: p. 24

<sup>84</sup>Ibid. p. 34.

FIGURE 10\*

An Alternative To Figure 9 With  
The Functional Levels In the Background

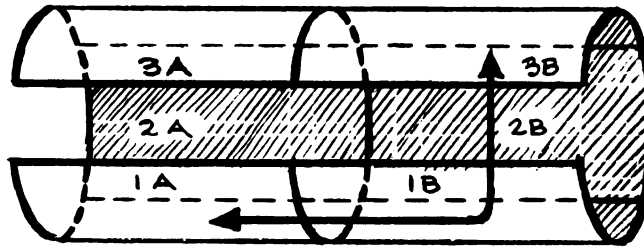


Diagram is rolled around so that the physical environment is placed next to the normative level. (The functional level is still in, but remains in the background.)

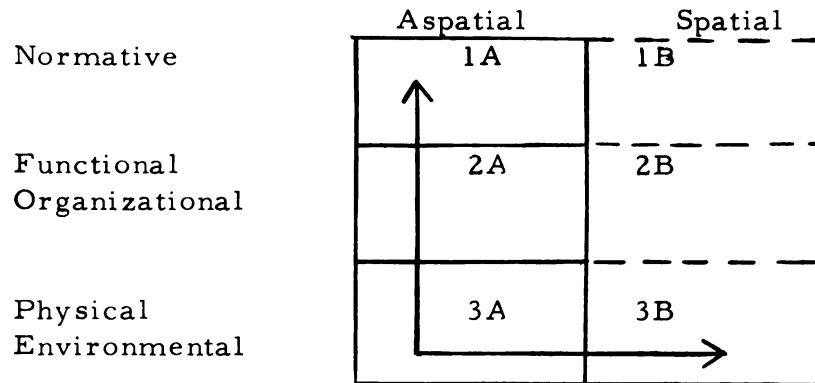
An alternative direct relationship between values (1A via 1B) and the physical environment (3B)

The second situation is where the primary concern is for values to be related to the physical environment aspatially conceived (with the emphasis on Cell 3A). This second mode of reasoning sees those concerned with activities concentrating on the particular immediate kind of setting they seek (Cell 3A), rather than focusing on spatial pattern (Cell 3B). For example, value placed on single family homes, as a physical artifact aspatially conceived (Cell 3A), is the primary concern. From this illustration, we can depict the implications of its impact on the spatial arrangement of the physical artifacts (Cell 3B). This mode of reasoning, where the primary concern is for the immediate physical environment, is illustrated in Figure 11.

\*Adapted from Donald L. Foley "An Approach to Metropolitan Spatial Structure" Explorations Into Urban Structure, Webber, et al., University of Pennsylvania Press, Philadelphia, 1964

FIGURE 11\*

Relationship Of Values To The Physical Environment  
Spatially Conceived With Emphasis On Physical Environment  
Aspatially Conceived



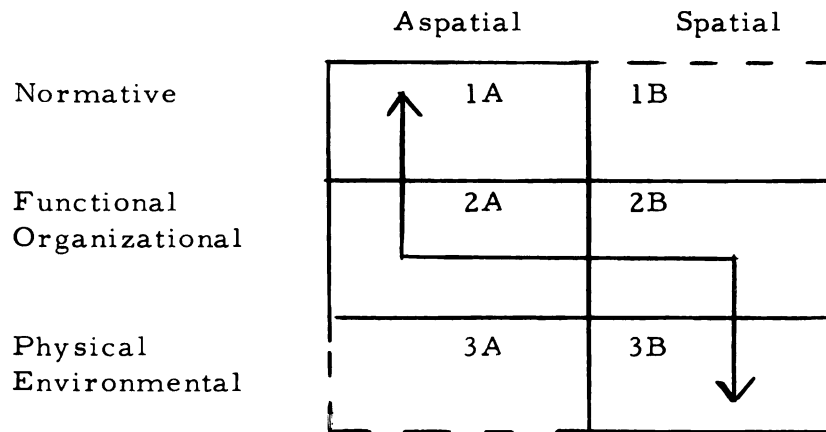
An alternative relationship: primary concern for immediate physical environment (3A)

The third mode of reasoning is where values are related to the physical environment spatially conceived, with primary emphasis on moving from the functional organizational aspects aspatially conceived, to their spatial conception (Cells 2A and 2B). This is illustrated in Figure 12.

\*Adapted from Donald L. Foley "An Approach to Metropolitan Spatial Structure" Explorations Into Urban Structure, Webber, et al., University of Pennsylvania Press, Philadelphia, 1964

FIGURE 12\*

Relationship Of Values To The Physical Environment  
Spatially Conceived With Emphasis On Functional Levels



The main relationship, with functional organization  
(2A and 2B) as pivotal

The relation between functional organization spatially conceived (2B) and functional organization aspatially conceived (2A), is of critical importance to the physical planner since he is responsible for recommending spatial patterns of what are, in effect, functional activities. This raises critical questions as to how much difference it makes for the functioning of an activity system whether it is arranged in one spatial pattern or another.<sup>85</sup> The activity system can be of numerous types viewed in different relationships. This will range from activity system with the major relationship between a manufacturing concern and its sources of energy, materials and

<sup>85</sup>  
Ibid., p. 45.

\*Adapted from Donald L. Foley "An Approach to Metropolitan Spatial Structure" Explorations Into Urban Structure, Webber, et al., University of Pennsylvania Press, Philadelphia, 1964

labor; or between the manufacturing concern and the commercial distributors of the product; or activity system between commercial outlets and their customers. Similarly, one can see the same types of relationships between governmental services (i. e. , schools, libraries), and the using population. The relationship between 2A and 2B is also of major concern as to the types and extent of activities which will ensue in a community. "The chances of persons establishing social interaction are proportional to the amount of spatial contact between these persons."<sup>86</sup> Thus it is of paramount importance for an analysis of the relationship between 2A and 2B be considered in order to enhance the value system of the community and the achievement of particular goals.

This is of particular importance when we go one step further in the assessment of the relationship between functional organizations spatially conceived (2B), and the physical environment spatially conceived (3B). In generating alternative means of goal attainment, we find, for example, that "the spatial patterns of the physical environmental channels for communication and transportation will provide certain opportunities for certain restraints on the spatial pattern of interaction within a functioning activity system."<sup>87</sup> This influence on interaction among persons or units of the activity system is not only dependent upon the channels for communication and transportation, but also on the land use arrangements themselves.

---

<sup>86</sup>  
Ibid.

<sup>87</sup>  
Ibid. , p. 44.



### Advantages of Foley's Model

A particular advantage of this model is that it allows for a more meaningful assessment of changes made in one aspect and its impact on another aspect. "For example we may ask: What will be the effect of a new freeway network on the functioning of a metropolitan area? This in terms of our framework, readily divides into: (a) to what extent and in what ways will the new freeway system, as a physical facility (3B) encourage changes in the actual potential spatial interaction patterns of the community (2B); and (b) what is the effect of these potential changes in the spatial interaction pattern (2B) on the functional organization of the community (2A)"<sup>88</sup> The same question could be postulated as to a new shopping center or a particular density pattern. In addition, for generating alternative choices for problem elimination, the problem can be identified in one of the cells and traced through a sequence of interrelationships within the framework.

The conceptual scheme is of particular value when generating alternatives for goal attainment. The fact that it stresses activities and functional organizations rather than relying too heavily or exclusively on values, is of particular significance since "it furnishes the planner with a more palpable set of requirements for which to plan than do values, as they

---

<sup>88</sup>Ibid., p. 46.

are usually presented. It is one thing to state that what is sought is a 'balanced community'; it is quite another to translate this into criteria sufficiently tangible to provide planning guidelines. Similarly, a plea for more open space must be stated in terms of the desired qualities of this open space and the activities that it is to accommodate. It makes good sense to plan for the functional organization that is geared to facilitate high-priority values, and then to design the physical environment so as to provide the best setting for this functional organization."<sup>89</sup>

The scheme also stresses the distinction and close relationship between the physical environment and the activity systems accommodated by the environment. This allows for a more fruitful understanding of the effectiveness of particular alternatives in "activity systems" goals and the consequences which might ensue. As Foley states, "if the physical planner comes to think in terms of the proposed scheme he will be encouraged to take into account the ways in which the physical environment he recommends facilitates or impedes various activity systems that are accommodated by that environment."<sup>90</sup>

Foley's scheme also helps in clarifying the distinction between physical and spatial which would facilitate a more lucid understanding of the nature of goals and values. (As was previously discussed, "spatial" refers to a direct concern for spatial pattern, i. e., for the pattern in which culture,

---

<sup>89</sup> Ibid., p. 42.

<sup>90</sup> Ibid.

activities, people and physical objects are distributed in space. The physical aspect embraces the geophysical base for community life, including the man-made aspects of this base). Two key characteristics of the scheme are that it allows for the use of both a "means" orientation to illustrate the role that values play in studying interrelationships among the different process systems functioning in the urban milieu, and also the use of a "place" concept as the counterpart of an "ends" orientation to examine relatedness of urban phenomenon in space.<sup>91</sup>

In an analysis of his model, Foley points out that there is considerable similarity between his classification system and one developed by Kevin Lynch. Lynch, however, fails to differentiate between physical and spatial. Foley summarizes the categories as follows:<sup>92</sup>

Our Categories	Lynch's Terms
Cultural or normative aspects	Objectives, goals, criteria
Functional organizational aspects	Activity <ul style="list-style-type: none"> <li>a. Localized activity</li> <li>b. Flow</li> </ul>
Physical aspects	Physical facilities <ul style="list-style-type: none"> <li>a. Adapted space</li> <li>b. Flow space</li> </ul>

### Lynch and Rodwin's Approach

In an article titled "A Theory of Urban Form," Kevin Lynch and Lloyd Rodwin integrate the goal emphasis of a normative approach with the

---

<sup>91</sup> Chapin, op. cit., p. 220.

<sup>92</sup> Foley, op. cit., p. 5.

function emphasis of an analytical approach. They feel that what is lacking in relating form to goals is a systematic consideration of the objectives, particularly a consideration of the possible range of forms.<sup>93</sup>

In studying goal-form relationships, the approach is "concerned with how alternative physical arrangements facilitate or inhibit various individual and social objectives. It is an approach directly keyed to action; it would, if perfected, suggest optimum forms or a range of them, once aspirations had been clarified and decided upon."<sup>94</sup>

They first deal with the problem of analyzing urban form, and then develop an analytical system for the examination of form. They feel that such a system of analysis must have categories which meet the following specified criteria:<sup>95</sup>

- (1) Have significance at the city-wide scale, that is, be controllable and describable at that level.
- (2) Involve either the physical shape or the activity distribution and not confuse the two.
- (3) Apply to all urban settlements.
- (4) Be capable of being recorded, communicated, and tested.
- (5) Have significance for their effect on the achievement of human objectives and include all physical features that are significant.

---

<sup>93</sup> Lynch and Rodwin, op. cit., p. 201

<sup>94</sup> Ibid., p. 202.

<sup>95</sup> Ibid., p. 202.

The scheme they develop views urban structure and form in terms of activities (adapted space) and flows of people, goods, and messages (flow systems). For a more exact analysis, subcategories are developed. "Subcategories of the analytical system are typology of space and flows; the quantity of these spaces and flows; their density, that is, the intensity with which spaces and channels fill a unit area; what the authors call grain, which takes into account differentiation and separation in space of the major activity and flow elements of the city; focal organization, or the spatial arrangements of key points as they relate to one another and the whole urban pattern (for example peaks of population density or key traffic intersections), and space distribution, or the gross pattern of space arrangements."<sup>96</sup>

The schema sees the specification of intermediate and specific level goals organized and grouped in terms of their relevance to the descriptive categories. The authors state that "Such organization is simply a tactical move, but a crucial one. It involves running through the list of descriptive categories of city form, and choosing (by intuition or prior experience) those general objectives that seem most relevant to that aspect of form."<sup>97</sup> The framework also finds goals can be affected by more than one form quality with various combinations existing.

They feel that, once the general goals are arranged in terms of the descriptive categories and patterns of adapted space and flow systems,

---

<sup>96</sup>Chapin, op. cit., pp. 235-236.

<sup>97</sup>Lynch and Rodwin, op. cit., p. 210.

and once a general context of culture and activity has been chosen, a more concrete level of analysis is possible. "The level should be specific enough to say that 'City A is closer to this objective than City B.'"<sup>98</sup> However, the meaning of terms must be put in an operational, and often quantitative way. "For example, 'What density of spaces allows a reasonable journey from home to work' might become: what density (or densities) allows 75 per cent of the population to be within 30 minutes time distance of their place of work, providing no more than 10 per cent are less than 5 minutes away from their work place? Different city models could now be tested by this criterion."<sup>99</sup>

Once the analytical categories of urban form are established and groups of objectives are cast in relevant operational terms, we are then able to bridge the interrelationship between goals and form. In addition, goals are used in this approach as an integral part of the theoretical construct, rather than being externally imposed.

### Webber's Approach

Closely related to Foley and Lynch is an approach to goals developed by Melvin C. Webber. Webber's approach also has "functional" emphasis. He focuses upon functional interdependencies, where linkages are expressed as interactions, and deals with urban communities as functional processes. However, he feels that by tracing the spatial configurations of communications and transportation channels, buildings, and activities, we can deal

---

<sup>98</sup>Ibid.

<sup>99</sup>Ibid.

with the processual correlates as a structural form phenomena - as a static arrangement - and by dealing with them simultaneously we can conceive of the urban community as spatially structural processes.<sup>100</sup>

"At the heart of structural urban processes is social intercourse - the business transactions, the exchange of information, the intricately complex web of interactions - through which urbanites deal with each other and by which they satisfy the interdependencies upon which their livelihood and their welfare depend."<sup>101</sup> Hence, an understanding of the valued interdependencies will enhance a clearer conception of their relationship to space. Space can either foster or intervene as a barrier against the nature of independencies by providing varying degrees of accessibility for interaction.

Consequently, certain community goals can be defined in terms of linkages which become the means of formulating policies for their spatial distribution. Webber states that, "The spatial distributions of individuals and groups modify the natures and strengths of their linkages, as propinquity or distance to work to open or foreclose opportunities for contact. However invisible and intangible these networks of linkages are, they appear to me to be the important connections between the physical-locational environment, system of social organization, and the cultural and economic goals that communities seek. Plans intended to influence spatial arrangements have

---

<sup>100</sup> Melvin M. Webber "The Urban Place and the Nonplace Urban Realm" Explorations into Urban Structure, p. 80.

<sup>101</sup> Ibid. p. 81.

meaning and utility for social welfare to the degree that they affect these invisible linkages in salutary ways."<sup>102</sup>

### Functional-Behavioral Approach

The functional approach in relating goals to urban structure is not the only one. The behavioral emphasis in planning thought on urban structure and form, seeks explanations in terms of human behavior. F. Stuart Chapin, Jr., states that "Work at the University of North Carolina has both a function and behavioral emphasis. Under their approach function concepts are used to set forth regularities in space flow relationships, and behavioral concepts are used to determine conditions under which these space-flow relationships will vary."<sup>103</sup>

He states that,

The scheme views urban spatial structure as a product of a myriad of individual actions (households), private actions (firms and institutions), and public actions (government) developing out of varying motivations such as livability satisfaction, profit motivation, the public interest considerations and other bases of action. Some are 'priming actions' and some are 'secondary actions.' Tending to occur in particular related behavioral sequences, the priming actions are said to have a structuring effect on the spatial make-up of the city. Illustrative of these actions are highway location decisions, industrial location decisions, and public policy decisions relative to such services as water, sewers, or schools. Under this rationale, priming actions trigger the secondary actions: first actions by real estate developers, builders, and investors, and then a flood of actions by individual families, merchants, institutions, etc., which taken together, account for the broad, massive settlement pattern of the city.

---

<sup>102</sup>  
Ibid., p. 95

<sup>103</sup> Chapin, op. cit., p. 238



He further states:

In a loose and general sense, the intervening variables in this analytical framework which function between the decisions, on the one hand, and the end product urban spatial structure on the other hand, are such function elements as land use, density, and flow systems, with key decisions being conditioned to some extent by these elements at the same time that decisions, in turn, are making their influence felt in modifying the structure and form of the city. Growth multipliers are implicit in the prediction aspects of such a schema. Thus, it is expected that under a specified magnitude of growth, assuming a particular combination of public and private actions known to have a structuring effect on urban development, this schema will enable policy makers to estimate the impact that any particular set of decisions will have on urban structure.

Urban form is introduced into the rationals by linking particular action combinations with particular goal forms. Given a set of alternative goal forms, a magnitude of growth, and particular action alternatives for achieving these goal forms and accommodating this growth, the schema provides a basis for identifying the particular combinations of primary and secondary actions that tend to produce the spatial characteristics of each of the desired goal forms. Once it is known that the consequences of a particular set of actions will tend to produce a particular goal form, that goal form can be translated into a design proposal. 104

This approach of relating actions which are products of goals to goal forms, has particular relevance to the approach developed earlier in this thesis.

In Chapter 4, we saw that, in order to determine the consequences of alternative goals, it was necessary to develop policies and tactical plans.

Hence we were able to ascertain the relationship between the pursuit of stated goals and goal forms which they would produce. By viewing the

---

104  
Ibid.

product of a myriad of actions, we are in fact referring to what was earlier described as the "complex" goal of the actions.

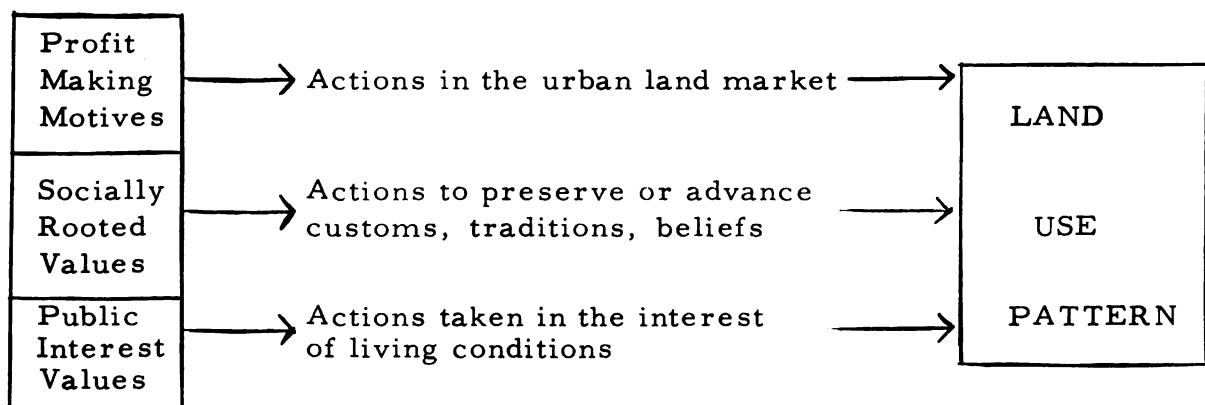
In addition, the schema, by enabling policy makers to estimate the impact that any particular set of decisions will have on urban structure, allows for a careful assessment of the active and contextual elements of the decisions. It also enables the policy maker to evaluate the merits of particular sets of decisions in terms of inducements and contributions.

The framework of Chapin's schema, for relating individual goals to goal forms, is closely related to one developed by the Twin Cities Metropolitan Planning Commission. In a report entitled Values and the Planning Process, they schematically illustrate the small-scale decision-making process and develop a model used to relate values to alternative large-scale design forms.

Figure 13 is the T. C. M. P. C. 's schema for small-scale decisions:<sup>105</sup>

FIGURE 13

Schematic For Small-Scale Decisions



<sup>105</sup>

T. C. M. P. C. , Values and the Planning Process, op. cit., p. 3<sup>c</sup>

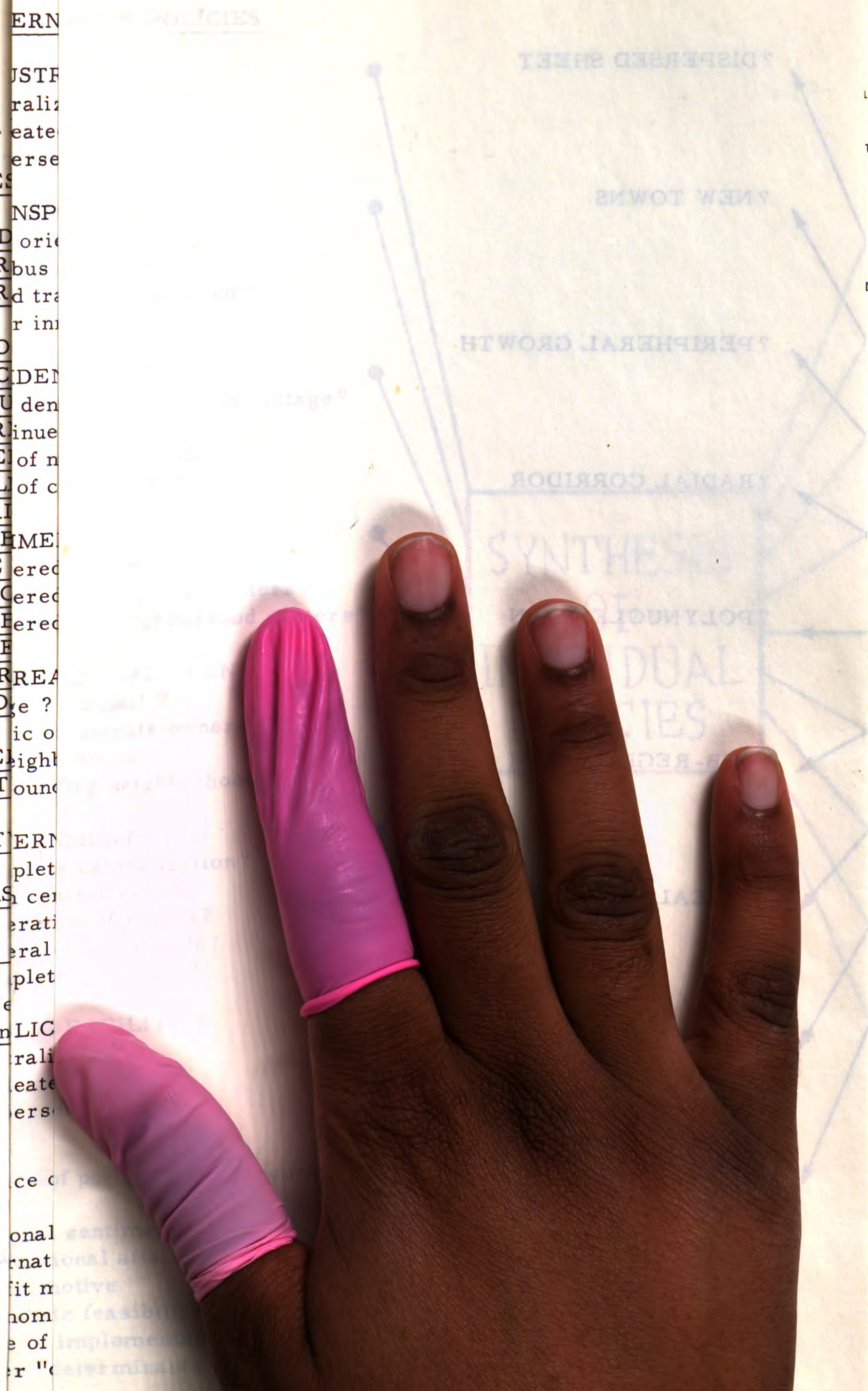
The schema is adapted from Chapin's behavioral approach and views the spatial structure as the product of myriad actions. These actions are predicated on varied and often conflicting motives.

Figure 14 is a model they use relating values to alternative large-scale design forms. For the sake of simplicity, they omitted the small-scale element. In their value oriented planning process, they begin by identifying selected values underlying human behavior. This is synonymous to Chapin's "Motivations." The values are then translated into planning goals relating to physical aspatial phenonema. The correlative here is to Chapin's "primary actions" which has a structuring effect on the spatial make up of the city. In the next step, they postulate alternative policies which have connecting links with their designated planning goals. They state that their Policies Choice is influenced by (1) the present metropolitan structure, population and economic predictions and (2) social (sacred) values.<sup>106</sup> (The influences on their policies choice as constraints or restraints are discussed in an earlier chapter). Here again we find a correlation to Chapin's schema in that the alternative policies constitute structure-function elements of the urban environment. They are, in fact, intervening variables in their analytical framework which function between the decisions, on the one hand, and the end product-urban spatial structure on the other.

---

<sup>106</sup>  
Ibid., p. 46

ERN  
 JUSTI  
 raliz  
 T. C. eate  
 erse  
VALUES  
 NSP  
 INDIVID oric  
 MATER bus  
 LEISUR d tra  
 r in  
 COMFO  
 DEMOC DEN  
 COMMU den  
 NATUR inue  
 COOPE of n  
 EQUAL of c  
 SECURI  
 FLEXI ME  
 SPACE ered  
 PRIVAC ered  
 NEIGH ered  
 CHOICE  
 HISTOR REA  
 ENCLOS e ?  
 ic o  
 CONSE ight  
 HEALT ound  
 SAFET ERN  
 DIVERS n cen  
 erati  
 eral  
 plet  
 \*Source  
 Plannin LIC  
 rali  
 eate  
 ers



ure.  
 n )

ce of p  
 onal gent  
 120 nati  
 it motive  
 nomic (eas  
 e of imple  
 er "ceter mital



The following scheme is an illustration of the correlation between the T. C. M. P. C. 's and Chapin's approach in relating values to urban structure.

<u>T. C. M. P. C.</u>	<u>CHAPIN</u>
Values (Comfort, privacy choice, etc.)	Motivations (livability satisfaction)
Planning Goals (Provide efficient water supply and sewage disposal)	Primary actions ( Public policy decisions relative to services)
Alternative Policies ( Residential density, transportation mode, etc.)	Intervening Variables ( Land use, density, flow systems)
Alternative Large Scale Urban Form (Dispersed sheet, lineal, new towns, etc.)	Structure and Form of City ( Goal Forms)

Although Chapin claims his approach has both a functional and behavioral emphasis, his schema seems to neglect the functional aspect. The T. C. M. P. C. study makes no provisions for dealing with activity and flow systems which have a direct relationship to form underlying these functions. In relation to Foley's model, they seem to operate in the normative aspatial( cell 1A) jumping directly to the physical spatial( cell 3B) with some vague reference to( cell 3A) the physical aspatial.

#### Unitary Approach Emphasizing Form

The approach they develop places significant emphasis on the planner's identification of a series of goal forms such as new towns, lineal, radial, polynucleated, etc., which serve as alternative goal preferences

for action decisions. They impute to these goal forms certain qualities which match up with the values, planning goals and alternative policies. We find here considerable similarity to the "Unitary Approach" toward planning, whereby the correspondence between goals and goal form is ex post facto. That is, the alternative design forms are arrived at without any direct correspondence to interacting functional activity systems. The emphasis is on physical artifacts geometrically arranged, and the adapted space it uses, with primary concern on visuality rather than functionality.

The unitary approach of relating goals to spatial form (whereby attempts are made to relate a series of goals to pre-defined spatial forms, i. e., radial, linear, etc.) is quite common. Both the Nation's Capital, Year 2000 report, and Maryland-Washington Regional District Report on Wedges and Corridors report, follow this same approach.

The Year 2000 Plan establishes a list of general goals for the region. The goals are predicated on a series of issues which they feel face the region. An example of an issue is "What practical alternative is there to the extensive use of high-cost sites within Metro-Center in accommodating this growth of the Federal establishment during the decades ahead?"<sup>107</sup> A goal they postulate which might relate to this issue is "Efficiency In the Use of Land."<sup>108</sup> In establishing goals, there is no

---

<sup>107</sup> A Policies Plan for the Year 2000: The Nation's Capital prepared by National Capital Planning Commission and National Capital Regional Planning Council, 1961:p. 20.

<sup>108</sup> Ibid., p. 29.

direct relationship between the "Issues and Goals." After deciding upon general goals, alternative growth patterns are discussed (i. e. , new towns, planned sprawl, radial corridors, etc. ) in terms of their ramifications and their possible acceptance or rejection by the people of the region. They conclude that the "radial corridor" plan has a decided advantage over the others, and series of policies are enumerated which would help achieve implementation of the plan.

Some of the significant falicies of this approach are:

1. The relationship between goals and the spatial pattern is extremely nebulous. There is no indication why one pattern or another could not accommodate the desired goals;
2. the general goals are not brought down to specific levels and related to physical- spatial ramifications;
3. once a spatial pattern is both known and chosen, it acts as a constraint in deciding policy, rather than being a resultant of policy decisions; and
4. once constructed, the forms are not adequately analyzed for their effectiveness in achieving the objectives originally set.

The Maryland National Capital Park and Planning Commission's report On Wedges and Corridors, is a somewhat better attempt to bridge the



gap between goals and spatial form. After discussing the nature of the region and projected needs, a series of goals are postulated. Four alternative growth patterns are analyzed in relation to the desired goals and an evaluation of each is made in terms of its effectiveness in helping achieve the stated goals. The trends and goals provide the yardstick for judging the desirability and adequacy of the alternative plans for the region. Finally, a summary evaluation of the advantages and disadvantages of each growth pattern is developed in chart form. (See Figure 15).<sup>109</sup>

The major drawbacks of this report is that it too failed to understand the gamut of possible alternative spatial forms by beginning with a few preconceived notions. The report also seemed to be geared to the justification of wedges and corridor plan. It did attempt to analyze the effectiveness of forms in meeting objectives, however, the effectiveness of each form seemed to be somewhat biased and did not clearly spell out reasons. For example, in the evaluation, since the corridor plan received a plus for all goals, it scored a 10, yet the satellite plan received a plus for 6 goals but only scored a +4.

This is due to weighing pluses against minuses. Because of the biases, sprawl is painted as all black and the corridor scheme as all white. Finally, we find the need for spelling out goals in greater detail, bringing

---

<sup>109</sup> On Wedges and Corridors A General Plan for The Maryland-Washington Regional District, prepared by The Maryland-National Capital Park and Planning Commission, 1962:p.148.

FIGURE 15

Comparative Analysis of Development Patterns

Goals	Alternatives			
	Sprawl	Average Density	Satellite	Corridor
1. Use land efficiently	-	0	+	+
2. Encourage an orderly conversion of undeveloped land to urban use.	-	+	-	+
3. Protect natural resources and encourage their proper use.	-	+	+	+
4. Maintain large open space.	-	0	+	+
5. Expand opportunities for outdoor recreation	-	+	+	+
6. Facilitate the orderly and efficient arrangement of public utilities and services.	-	+	-	+
7. Provide an efficient transportation system including rapid transit.	-	-	+	+
8. Encourage greater variety of living environments.	-	-	+	+
9. Invite imaginative urban design.	-	-	+	+
10. Assure implementation of the Plan.	+	+	-	+
<b>Total</b>	<b>-8</b>	<b>+2</b>	<b>+4</b>	<b>+10</b>

Source: Wedges and Corridors Plan, The Maryland National Capitol Park and Planning Commission, 1962:p. 148.

each down to a level of possible alternative means so as to more clearly analyze the comparative advantages systematically.

### Integration Of The Unitary And Adaptive Approach

In arriving at a spatial pattern which embodies the realization of more general goals, it appears more fruitful to apply some aspects of the "adaptive approach." That is to view the urban environment as a complex interaction of diverse and functionally interdependent parts with the major focus on process rather than product. By using Lynch and Rodwin's schema for understanding form, we would then be better equipped to understand the ramifications of process in terms of form aspects, and identify alternative development policies to examine their consequences in terms of form. Hence, we would "arrive at" a spatial pattern through goal identification rather than beginning with preconceived forms and trying to fit the goals to them. In using the latter method, there is a tendency to be too restrictive in terms of forms and susceptibility for neglecting or underplaying goals. By beginning with goals and understanding the urban process, we can arrive at the best functional arrangements in "spatial form."

## CHAPTER VI

### SUMMARY AND CONCLUSIONS

It is not easy to understand goals and values and their roles in the planning process, particularly since the complexities of goals are myriad and the process has not reached a stage of ultimate sophistication. Both goals and planning mean different things to different people, thus there is need for a common base of understanding; the search for such a base has been a major aim of this thesis.

For urban planners, it is fruitful to think of planning as a "planning-decision" process. This process should combine critical aspects of the unitary and adaptive approaches. Of particular concern is relating goals to decisions affecting the urban environment including spatial form, through procedures of means identification. The generation of alternatives so as to offer choice is a critical variable. However, an awareness of constraints will produce more meaningful alternatives.

In the analysis of the planning process, we have seen that goals are often not stated at the outset, but rather meliorated in solving problems. In a second approach, goals and values were established and choice of alternative outcomes included. There was, however, a lack of constant relationships between the goals and values and final action plans. As was

pointed out in the thesis, in order to most effectively build goals and values into the planning-decision process and relate them directly to detailed plans, we must evaluate them against the means as well as ends.

In relating goals and values to ends, planners are particularly concerned with urban form. Both Foley's and Lynch and Rodwin's schema for dealing with goals as they relate to urban form, allow for an effective integration of the adaptive and unitary approaches to the planning-decision process.

In treating the community as a total functioning system, we are able to build goals into the process by understanding the dynamics of human behavior as it is expressed in human actions. By focusing on process, we can understand the functioning and interacting of diverse parts and how they evolve over time. Whereas the unitary approach reflects values placed on a consensus with the conviction that agreement can be reached, the adaptive approach relies on the interaction and interdependence of the system (firms, people, government agencies, etc.). Hence, reliance is on pluralism of decentralized decisions and not the synthesis of a consensus. This is of particular relevance, since the synthesis, and what goes on in the magic black box used to achieve it, is still somewhat of an enigma.

The integrated approach allows for the comprehensive aspect of a unitary approach since it deals with the system as a totality; looks at the future; can be portrayed on a map; is concerned with the end product as an

activity as well as an event; bridges relationships between values and urban form, and accepts growth and change.

In the decision process, planners have concentrated on the outcome as an event (i. e. , form) rather than on outcome activities (functioning of the physical environment). The integration of the unitary and adaptive approaches is not concerned with preconceived form as a desired goal, but rather with the activity. Hence, a preconceived design is not a constraint in decisions on spatial form. The focus on outcome activities allows for a more effective evaluation of goal attainment and the establishment of policies for guiding the character and spatial patterning of the physical environment. It also seeks to influence development forces rather than aiming for specific form. This is particularly important since it is the dynamics of the physical environment which are crucial and not the static form per se.

In understanding the relationship between goals or social functions and spatial form, we must first begin with an analysis of the functioning of the urban environment and the activities contained within. By concentrating on preconceived forms without any direct correspondence to goals and values, we lose sight of the fact that, not only does form follow function, but form and function are one. Hence, preconceived spatial form embodies particular types of functional activities with value systems underlying them. Since form and function are one, by establishing a value system of desirable

functional, spatial activities, we actually express a spatial form.

Urban planners must rid themselves of the albatross of their architectural heritage, by distinguishing between architectural design at the building level and design of metropolitan form. A major concern of architecture is the aesthetic qualities of a particular design. This, however, has no relevance on metropolitan design, for it is not the aesthetic qualities of the design which are important in a metropolitan design form, but rather the functional aspects and activity systems contained within the design form.

#### Determining Goals and Building Them Into The Process

Throughout this thesis, the major focus has been on the analysis of the nature of goals and values as they relate to the planning process. We have seen that, in order for plans and decisions to reflect the goals and values of the community, it is imperative that they be built into the planning-decision process itself. The task of building goals and values into the process raises two basic problems. The first is the problem of determining what the goals and values of the community are. The second is how plans and decisions can reflect these goals and values.

In ensuring that plans and decisions reflect community goals and values, we find two basic approaches. On the one hand, the planning process itself can be opened up so as to allow a broad base of community participation

and representation of different goals and values. Through this approach, we see that the mere fact that a multitude of people are participating in the planning-decision process itself, the ultimate plans and decisions which are developed will reflect the prevailing myriad goals and values. In this approach, the underlying value system is implied and often not explicitly spelled out. There are many stumbling blocks to this approach, the most crucial being 1) it is difficult to get extensive diverse participation so that only a limited amount of goals and values will be pursued; 2) even if there is broad participation, it is difficult to arrive at a concensus; and 3) there are disadvantages when laymen participate in technical decisions since they are not trained to do so.

The second basic method of ensuring that community goals and values are built into the planning-decision process is for the planner to undertake various community studies, focusing on both people and their institutions. This direct contact with people enables explicit statements of goals and values to be expressed, and since the functioning of institutions embodies a system of goals and values, through the analysis of the institutional framework we can assess the goals and values being perpetuated.

There are four basic approaches to determining community goals and values in this second method so as to build them into the planning-decision process. The first entails the use of opinion polls, surveys, and interviews of the public in general, of key decision-makers, and of community leaders.



The second approach is through the analysis and study of established institutions such as laws, public and private policies, plans and budgets. The third approach focuses on prevailing attitudes as expressed through public hearings, press-content analysis, community organizations, and the use of sociological and anthropological studies. The fourth approach centers on an analysis of public and private resource allocations such as information flows, time allocation, space allocation, energy allocation, manpower allocation, and the allocation of money.

The major focus of this thesis has been oriented toward developing a fruitful procedure or model for building goals and values into the planning-decision process, employing the second method of determining goals and values (whereby the planner undertakes various community studies focusing on people and institutions).

#### A Theoretical Model for the Planning-Decision Process

In the preceding chapters, considerable attention has been given to an analysis of the nature and characteristics of goals and values, the means of attaining them, and various approaches to the planning-decision process for building in goals and values. In developing a model for achieving such a planning-decision process, an attempt has been made to incorporate the major notions and ideas previously discussed in this thesis.

We saw for example, that goals are defined as statements of

positive desires, as well as problem solution needs and restraints to be avoided. They can be viewed at various levels of generality ranging from broad peremptory value statements to very specific outcomes which must be achieved. In addition, we saw that policies were used for identifying the actions necessary to achieve the goals or outcomes, and an awareness of constraints provided opportunities for choice.

Figure 16 is a suggested model for building goals and values into the planning-decision process. It should be viewed as an initial statement of a theoretical planning-decision process warranting further development. The major feature of this model is that it places particular emphasis on relating goals to "means" as well as "ends," and attempts to incorporate some of the basic concepts of the thesis.

The model functions as follows:

Starting at the left side of the diagram, the first step is the design of a program based on broad goals and values. This design program enumerates the nature of the problem or task to be undertaken, i. e., Master Plan, Comprehensive Renewal Program, etc. From this we can determine a general area of data collection (illustrated as a feed-in from the lower portion of the diagram). The peremptory goal and value statements of this first stage are then postulated into more specific goals and restraints within the area of the design task. These goals and restraints help determine a more specific level of data collection.

PROJECTIONS

ICES

PROJECTING CONSEQUENCES OF PLANS

PEREMPTORY GOALS

PROGRAM DESIGN

MOTIVE: DETERMIN BROAD VALU  
DETERMIN TYPE OF DA COLLECTI

SELECTION OF DESIRED OF POLICIES

ALTERNATIVE ACTIONS - ACTIVITY FORMS - FUNCTIONING

SELECT ACTION - ACTIVITY FUNCTION

DATA COLLECTION SYSTEM

GENERAL DATA NEED

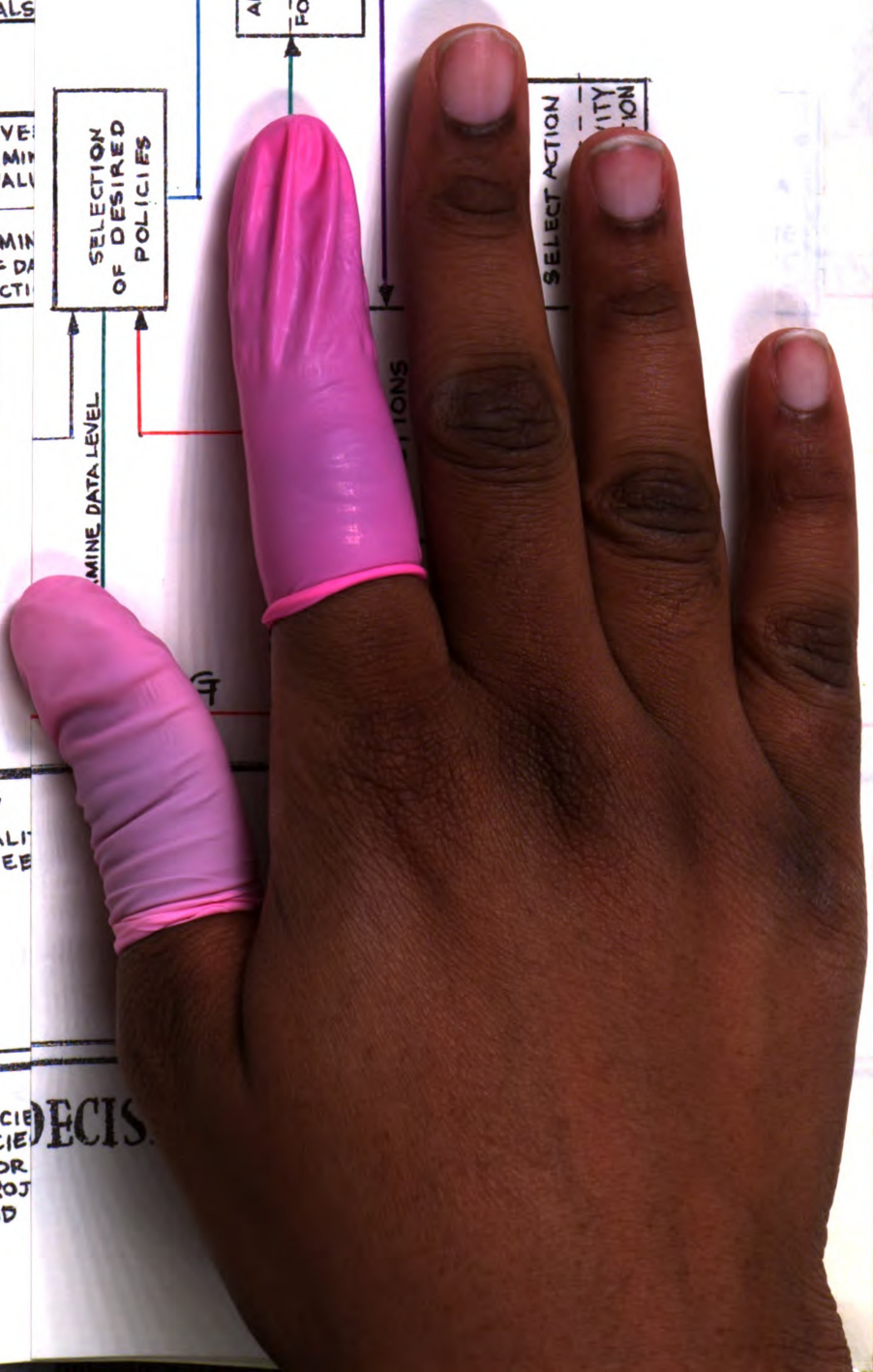
DETERMINE DATA LEVEL

KEY



GOALS, POLICIE  
GOALS, POLICIE  
UTILIZING OR  
FUTURE PROJ  
SELECT AND

DECIS





With the knowledge of more specific goals and restraints, we identify problems, issues, and constraints as liabilities, drawing upon overall data collected and specifically Community Expression Constraints. Community Expression Constraints are projected into the future (depicted on the top portion of the model) so as to assess future constraints and liabilities which are then fed back into constraints as liabilities and problems.

The more specific goals and restraints, along with the issues and problems, are analyzed, and act as alternative generators in arriving at alternative opportunity outcomes. This is also assessed from a more specific level of data collection. Projected Community Expression Constraints which spell out future problems also help determine alternative opportunity outcomes.

Alternative opportunity outcomes are projected to determine consequences. These alternative outcomes are then tested against the more specific goals and broad values and goals. Here the broad goal and value statements and the more specific goals and restraints are used as criteria for alternative testing. From this, the selection of very specific goals are made. Selection of very specific goals, in turn, determine the requirements for more specific data collection.

In the next major phase, very specific goals are generated into alternative policies. These alternative policies are projected for possible

policy consequences. Policy consequences are tested against the selected very specific goals, and also against other goal levels. Selection of desired policies is then made. This indicates what specific data collection is to be further employed. From selected policies are generated alternative actions relating to activity functioning and spatial forms. This has been drawn from specific data collected. The action alternatives are projected for possible consequences which are tested against selected policies and goal levels. From this evaluation, action plans are selected.

There are many advantages for utilizing the procedure employed in this model in the planning-decision process. First, it stresses the need for building goals and values into the process with emphasis on relating them directly to decisions made at various levels and stages. Second, rather than beginning with an attack on specific problems and presenting single solutions, the model emphasizes the need for first presenting peremptory goal statements and from this, analyzing the exact nature of the problem. It also allows for generating various alternative choices before selecting the most appropriate outcome for achieving desired goals.

A third advantage of the model is that it achieves a direct relationship between goals and values and final action plans through a continual feedback. In this respect, it constantly uses goals as criteria for decisions made at various levels so that specific decisions are assessed in terms of their merit in achieving desired goals.

### Further Avenues of Investigation

There have been many questions raised in this thesis, some of which have been discussed at length, while others open up new avenues for further investigation. There are three major areas which the author feels warrant this further investigation. The first relates to the various approaches for identifying community goals and values. We need to know for example, which approach is most meaningful to each different planning or decision situation. More specifically, when should we employ techniques such as surveys, sociological studies, public hearings, etc., and how can the planner best utilize the goals and values derived from them.

A second major avenue warranting further research focuses on developing more fruitful techniques and conceptual thinking for tying together aspatial and spatial aspects of the urban environment. This is particularly crucial when planners have to convey to the public the notion that values and preferences in one aspect have corresponding manifestations upon the other aspect.

The third area for investigation is the exceedingly complex problem of developing quantitative measures for assessing the manifold goals and values of not only the community, but of individuals themselves, so as to resolve goal conflicts.

It is these types of problems which are the new challenges to the planning profession, and when resolved, will help move the field of urban planning closer to the cliché "planning is for people."

## BIBLIOGRAPHY

### Books

- Adrian, Charles. (ed.) Social Science And Community Action.  
East Lansing, Mich.:Michigan State University, 1960.
- Bougle, C. The Evolution of Values. New York: Henry Holt and Co., 1926.
- Boulding, Kenneth. The Image. Ann Arbor, Michigan:  
The University of Michigan Press, 1961.
- Braybrook, David and Lindblom, Charles E. A Strategy of Decision:  
Policy Evaluation As A Social Process. London: The Free  
Press of Glencoe, Collier-Macmillan Ltd., 1963.
- Bross, Irwin. Design For Decisions. New York: Macmillan Co., 1953.
- Bruber, Frederick C, (ed.). Aspects of Value. Philadelphia Penn.:  
University of Pennsylvania Press, 1959.
- Chapin, Stuart F. and Wise, Shirley. (ed.). Urban Growth Dynamics.  
New York: John Wiley and Sons, 1962.
- Hall, Edward. The Silent Language. Greenwich, Conn.:  
Fawcet Publishing Inc., 1959.
- Hilliard, A, L. The Forms of Value. New York:  
Columbia University Press., 1950.
- Hirsh, Werner Z. (ed.). Urban Life And Form. New York:  
Holt, Reinhardt and Winston Inc., 1963.
- Kuhn, Alfred. The Study of Society: A Unified Approach.  
Homewood Ill.: Richard D, Irwin Inc. and The Dorsey  
Press Inc., 1963,
- Lynd, Robert S. Knowledge For What. Princeton, N. J.:  
Princeton Press, 1940.
- Miller, Eugene, G.A., Galanter, E. and Pribram, K.H. Plans And The  
Structure of Behavior: New York: Henry Holt and Co., 1960.



- Millikan, Max F. The Human Meaning Of The Social Sciences.  
Chicago, Ill.: The University of Chicago Press, 1955.
- Morris, Charles. Varieties Of Human Values. Chicago, Ill.: The  
University of Chicago Press, 1956.
- Mukerjee, Radhakamal. The Philosophy Of Social Science,  
London: Macmillan and Co. Ltd., 1960.
- Mukerjee, Radhakamal. The Social Structure Of Values.  
London: Macmillan and Co., no date.
- Webber, Melvin, et al. Explorations Into Urban Structure.  
Philadelphia, Pa.: University of Pennsylvania Press, 1964.

#### Articles and Periodicals

- Banfield, Edward C. "Ends And Means Planning," UNESCO  
International Social Science Quarterly, XI, No. 3 (1959).
- Boulding, Kenneth. "Organization and Conflict," Journal Of  
Conflict Resolution, I-2, (June 1957).
- Davidoff, Paul, and Reiner, Thomas A. "A Choice Theory of Planning,"  
Journal of The American Institute of Planners, XXVIII, No. 2  
(May 1962).
- Fordham, Jefferson B. "Planning For The Realization of Human Values,"  
American Society of Planning Officials: Planning 1960, (1960),  
(Paper read before the Annual Conference)
- Granger, Charles. "The Hierarchy Of Objectives," Harvard Business  
Review, 42-43 (May-June 1964)
- Lynch, Kevin, and Rodwin, Lloyd. "A Theory Of Urban Form,"  
Journal Of The American Institute of Planners, XXIV (1958).

- Shore, William B. "Public Opinion And Goals For Planning,"  
Proceedings Of The Annual Conference, American Institute  
 Of Planners, (1964), (Paper read before the Annual  
 Conference, at Milwaukee, Wisconsin, Oct. 1963).
- Simon, Herbert A. "On The Concept of Organizational Goal,"  
Administrative Quarterly, 9-1, (June 1964).

#### Reports

- Maryland National Capitol Park and Planning Commission,  
On Wedges And Corridors: A General Plan For The Maryland  
 Washington Regional District. Washington: 1962.
- National Capitol Planning Commission and National Capitol Regional  
 Planning Council, A Policies Plan For The Year 2000.  
 Washington: 1961
- Southwestern Pennsylvania Regional Planning Commission,  
State of The Region 1964. Pittsburgh: 1964.
- Twin Cities Metropolitan Planning Commission, Values And The  
 Planning Process, Design Section Paper No. 8.  
 St. Paul, Minnesota: July 1963.

#### Unpublished Material

- Banfield, Edward C. "The Field of Planning." (Mimeographed).
- Nelson, Stephen C. "The Policy Planning Approach in Urban Planning:  
 A New Dimension In the Planning Process." Unpublished  
 Master's Thesis, School of Urban Planning and Landscape  
 Architecture, Michigan State University, 1964.
- Rader, Melvin: "The Human Values of Community." (Mimeographed).

ROOM USE ONLY

MICHIGAN STATE UNIV. LIBRARIES



31293103911313