The core notion of this monograph is that processes of social change and adaptation can be best understood through the integration of "macro" concepts of social processes and development with a systematic statement of the basic "micro" processes at the individual psychological level. The monograph demonstrates that a body of useful knowledge and theory does exist for the level of individual development and adaptation. From the field of psychoanalytic theory, ego psychology and social psychology are drawn sets of interrelated propositions. These propositions systematically interrelate micro with macro concepts of development and change by means of a model developed expressly for that purpose. The approach outlines crucial variables in the nature of self-organization, conceptualizing the relationship between self and environment in a framework different from that usually adopted in the literature. At a minimum, then, the monograph extensively explores the micro level of change as it is known in ego psychology and proposes alterations in micro level concepts. (Author/TA)
a publication of the

STANFORD INTERNATIONAL DEVELOPMENT EDUCATION CENTER (SIDEC)

SCHOOL OF EDUCATION

STANFORD UNIVERSITY
SELF-IMAGE AND SOCIAL CHANGE
TOWARDS AN INTEGRATED THEORY
OF CYBERNETIC BEHAVIOR

BY DENNIS CONSTANCE SIMS

The research reported herein was performed pursuant to a contract titled "The Content and Instructional Methods of Education for the Economic-Political-Social Development of Nations" (Contract Number OEC-4-7-062597-1654) with the Office of Education, U.S. Department of Health, Education, and Welfare.

Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Stanford International Development Education Center (SIDEIC)
School of Education
Stanford University
Stanford, California, U.S.A.
1971
The research reported herein was performed pursuant to a contract titled "The Content and Instructional Methods of Education for the Economic-Political-Social Development of Nations" (Contract Number OEC-4-7-062597-1654) with the Office of Education, U.S. Department of Health, Education, and Welfare, which supported the publication of this monograph.

Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Stanford International Development Education Center (SIDE)C

School of Education
Stanford University
Stanford, California, U.S.A.
SIDEC STUDIES ON CONTENT AND METHODS OF EDUCATION FOR DEVELOPMENT

Sub-series on Occupational Education and Training


OET-6. Factors Associated with the Migration of High-Level Persons from the Philippines to the U.S.A., by Josefin Carles Cortés.


Sub-series on Education and the Formation of Social and Civic Attitudes


Sub-series on Education and the Rural-Urban Transformation


ACKNOWLEDGEMENTS

I wish to thank those members of the faculty of Stanford University who took time away from their many departmental and independent activities to give freely their advice and support throughout the development of this manuscript. Professors Robert B. Textor (Education and Anthropology), Charles A. Drekmeier (Political Science), Hans N. Weiler (Education and Political Science), Nathaniel L. Gage (Education and Psychology) and Lewis B. Mayhew (Education) cheerfully undertook this additional burden. Particular merit is deserved by Professors Textor and Drekmeier who read the entire manuscript and provided many instructive comments.

I am also pleased to acknowledge the support, emotional, financial, and editorial, provided by my wife Jerrilyn through the years in which this monograph was in preparation.

Dennis Constance Sims

Stanford, California
August 1970
FOREWORD

By Robert B. Textor

Dennis C. Sims, now a professor at Atlanta University, is a general behavioral scientist with a broad interest in integrating theories of change at both the micro and macro levels. His monograph seeks to develop theoretical constructs relevant to human behavior generally but applicable specifically to the problems of educating people whose lives will be changed by the process of rural to urban transformation. This is an ambitious and exciting undertaking and, like other efforts in broad scale theory building, Sims' Norm Set Theory is inevitably highly controversial. This is the nature of seminal ideas. At the very least Sims' work will serve to generate a broad range of provocative research hypotheses, and it may thus be viewed as a theoretical benchmark against which to test on-going empirical research and as a reference standard in bringing a measure of commonality to research already completed. It was used in this way to bring to a common focus the studies undertaken in the general field of "Education for Rural to Urban Transformation" under the USOE contract at the Stanford International Development Education Center.

But more than this, the work has distinct practical applications. Dr. Sims himself has had occasion to apply his theoretical framework to concrete problems involving the urban occupational adjustment of recently rural Chicano residents of Santa Clara County, California, where he worked as Director of Research and Planning for the Santa Clara Skills Center; and his work there, in turn, was based on earlier ethnographic field work on the rural-urban transformation in the Oaxaca Valley of Mexico.

This is not a bedside book. It is not easy reading, but those who make the effort of examining carefully Sims' key concept of the "norm set" in Chapter 3 will find that the reward will justify the effort. They will have received stimulating insights into a new approach to the study of problems that may well be at the core of human resource development for decades to come.

Stanford, California
March 1971
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>INTRODUCTION AND SCOPE OF THE PROBLEM</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>INTRODUCTION AND SCOPE OF THE PROBLEM</td>
<td>1</td>
</tr>
<tr>
<td>II</td>
<td>A CRITIQUE OF SOME CURRENT THEORIES OF SOCIAL AND DEVELOPMENTAL CHANGE</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Models Assuming Rational Decision Making</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>The Utilitarian Dilemma</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Sociological Models</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Role Theory</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Operating Culture</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>&quot;Role&quot; and &quot;Operating Culture&quot; Compared</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
<td>26</td>
</tr>
<tr>
<td>III</td>
<td>A FORMAL MODEL OF THE SELF, AND DERIVED PROPOSITIONS</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Definition of Self</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>The Self-Image Model</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>&quot;Norm Set&quot; Compared with &quot;Mazeway&quot; and &quot;Schema&quot;</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>&quot;Elements&quot; as They Relate to Norms</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Multiple Self-Images</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>A Deductive System of Propositions</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>58</td>
</tr>
<tr>
<td>IV</td>
<td>FURTHER COMMENTS ON THE NORM SET MODEL</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>The Problem of Boundaries</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Internalization of Norms</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Sanity and Insanity</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Porosity</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Conscious and Unconscious Elements</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Developmental Aspects of the Self-Image</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>76</td>
</tr>
<tr>
<td>V</td>
<td>SOME RESEARCH ALTERNATIVES: A PRELIMINARY STATEMENT TO AN OPTIMUM RESEARCH STRATEGY</td>
<td>79</td>
</tr>
</tbody>
</table>
### CHAPTER VI
**AUTONOMY AND LEGITIMACY: SYSTEM CONTROLS**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of Autonomy</td>
<td>84</td>
</tr>
<tr>
<td>Biological Base and Psychological Structure</td>
<td>87</td>
</tr>
<tr>
<td>Free-Floating Resources</td>
<td>88</td>
</tr>
<tr>
<td>Conflict-Free Elements</td>
<td>89</td>
</tr>
<tr>
<td>Self-Society Relationship</td>
<td>92</td>
</tr>
<tr>
<td>Some Remaining Problems</td>
<td>95</td>
</tr>
<tr>
<td>Failure of Autonomy</td>
<td>98</td>
</tr>
<tr>
<td>Why Legitimacy</td>
<td>103</td>
</tr>
<tr>
<td>What is Legitimacy</td>
<td>106</td>
</tr>
<tr>
<td>The Legitimating Process: Self-Image and</td>
<td>110</td>
</tr>
<tr>
<td>Social Mapping</td>
<td></td>
</tr>
</tbody>
</table>

### CHAPTER VII
**SOCIAL CHANGE: CULTURE, THE SELF-IMAGE, AUTONOMY AND LEGITIMACY**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategies of Approach</td>
<td>113</td>
</tr>
<tr>
<td>Culture and Legitimacy</td>
<td>115</td>
</tr>
<tr>
<td>Culture, Stress, and Legitimacy</td>
<td>115</td>
</tr>
<tr>
<td>Dimensions of Culture and the General Theory of the Machine</td>
<td>117</td>
</tr>
<tr>
<td>An Example from Current American Life</td>
<td>119</td>
</tr>
<tr>
<td>Obstacles to Change in the Ideological Domain</td>
<td>121</td>
</tr>
<tr>
<td>Social and Cultural Dimensions Affecting Information Processing</td>
<td>121</td>
</tr>
<tr>
<td>Similarity between the Existing and the Desired Alternatives</td>
<td>128</td>
</tr>
<tr>
<td>Ideology and the Selection Process</td>
<td>128</td>
</tr>
<tr>
<td>Hierarchy of Adaptive Responses -- Some Propositions for a General Theory</td>
<td>129</td>
</tr>
<tr>
<td>Social Change and Legitimacy: The Ideological Area</td>
<td>132</td>
</tr>
<tr>
<td>Revitalization and Cognitive Dissonance</td>
<td>136</td>
</tr>
<tr>
<td>Social Change and Autonomy: The Instrumental Area</td>
<td>140</td>
</tr>
<tr>
<td>Consensus: Necessity or Illusion?</td>
<td>143</td>
</tr>
<tr>
<td>Boundaries of Variation and Stability</td>
<td>146</td>
</tr>
<tr>
<td>Limits of Instrumental Social Change and Side Effects</td>
<td>147</td>
</tr>
</tbody>
</table>
### CHAPTER VIII

**NORM SET THEORY APPLIED TO PROBLEMS OF EDUCATION FOR THE RURAL-URBAN TRANSFORMATION**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Rural-Urban Transformation</td>
<td>150</td>
</tr>
<tr>
<td>The &quot;Entry Situation&quot;</td>
<td>151</td>
</tr>
<tr>
<td>Responses to the &quot;Entry Situation&quot;</td>
<td>153</td>
</tr>
<tr>
<td>Important Background Factors</td>
<td>156</td>
</tr>
<tr>
<td>Graduated Transformation</td>
<td>158</td>
</tr>
<tr>
<td>The Relevance of the Model for Education and Training</td>
<td>160</td>
</tr>
<tr>
<td>An Educational Program for Chicano Adaptation to Urban Organizations</td>
<td>163</td>
</tr>
<tr>
<td>Summary</td>
<td>170</td>
</tr>
<tr>
<td><strong>EPILOGUE</strong></td>
<td>173</td>
</tr>
<tr>
<td><strong>BIBLIOGRAPHY</strong></td>
<td>175</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION AND SCOPE OF THE PROBLEM

The core notion of this monograph is that processes of social change and adaptation can be best understood through the integration of "macro" concepts of social processes and development with a systematic statement of the basic "micro" processes at the individual, psychological level. The monograph will demonstrate that a body of useful knowledge and theory does exist for the level of individual development and adaptation. From the field of psychoanalytic theory, ego psychology and social psychology will be drawn sets of interrelated propositions. These propositions will systematically interrelate micro with macro concepts of development and change by means of a model developed expressly for that purpose.

Chapters III and IV will stress the nature of the self, and a model will be developed of self-organization, self-maintenance, and self-development. Several innovations in a theory of psychological development will be proposed, and from this theory an approach to the development of mature adults at the individual level will be described.

Our approach will outline crucial variables in the nature of self-organization, conceptualizing the relationship between self and environment in a framework different from that usually adopted in the literature. At a minimum, then, the monograph will extensively explore the micro level of change as it is known in ego psychology and propose alterations in micro level concepts. These alterations will then be used to relate micro level changes to theoretically important dimensions of cultural, political and social change on the macro level. On this basis, the chapters that follow will discuss concepts and levels of analysis which are explicated by the model: autonomy, especially in reference to capability, motivation and goal setting; legitimacy and value allocation in reference to the concept of "political culture," and finally acculturation and cultural change. The discussion of adaptation and change will first outline a hierarchy of levels of personality organization and the implications of change at each level in terms of psychological costs and benefits. The second part of the discussion of adaptation and change will discuss means and techniques employed to alter various levels of personality organization and the effects which these means have upon psychological processes. Conditions necessary for effective change at the various
levels will also be discussed. The first half of the monograph discusses the basic nature of the self, the levels of self-organization, crucial relationships to propositions important in selected areas of social science theory and, finally, the requisites and effects of attempted adaptation in selected areas of self-organization.

The second half of the monograph will attempt to illustrate the utility of the innovations proposed in the model by applying it to two broad approaches to modernization and development. The first analysis will apply the knowledge of basic processes to the concept of political culture. Currently, popular approaches to political development will be presented and a revision in line with micro processes will be proposed. The second analysis will approach the dimensions of acculturation as they have been extensively discussed in anthropology.

Social and developmental processes have been the subject of investigations in all of the social sciences. Anthropologists have concerned themselves with acculturation and revitalization movements and community development. Political scientists have concerned themselves with political development, political culture, revolution and evolution. Social psychologists have concerned themselves with mass movements, leadership and conformity. Sociologists have concerned themselves with general theories of social action and change, changes in social stratification and mobility, and community development. Economists have concerned themselves with economic growth and development. Educators have addressed themselves to educational development and national development. Psychoanalysts have worried about the motivations for development and motivations to accept the costs of individual transformations. Unfortunately, however, very little has been done to relate these various levels of approach to one another. While some excellent partial integrations have been attempted, particularly in the study of achievement motivation and cross-cultural child rearing, a systematic attempt to relate what psychologists view as necessary theoretical propositions concerning individual change to propositions viewed as being equally necessary for macro change and development by sociologists, anthropologists and political scientists has yet to be made, as far as we know.

This brief description of the "state of the art" is not meant to disparage the progress already made in social science. Whatever value this monograph might have could not have been realized if each of these various disciplinary approaches had had to be thought out anew. The complexity of the domain of behavior described by these various approaches in part accounts for the few attempts to synthesize
propositions across disciplines. Perhaps the late David Rapaport best stated the difficulty of deriving such a synthesis when he observed:

We have some idea why this process is so slow. If logic, methodology, and mathematics were the pace-makers of development in sciences, this development could be fast enough in psychology. But the pace-maker is not methodology -- it is human invention. ("Developmental projects," "crash programs," and "inter-disciplinary teams" are effective only in highly developed sciences or else in situations where the make-shifts of pooled ignorance are the most that can be had.) Methodology, since it deals with relationships of concepts, all of which are potentially valid, can go on continuously, building ever-new "castles in Spain." But human invention consists of discontinuous events, each of which requires long preparation since in it an individual's thought patterns must come to grips with patterns of nature, and only those rare encounters in which a unique human thought pattern actually matches a unique pattern of nature will matter. If the match is not specific and precise, or if the individual is not prepared to recognize it, or if he does recognize it, but is not ready to use it, the moment is lost.

The investigator of development is presently confronted with a welter of propositions. One purpose of this monograph is to outline the various levels of choice which are open to the investigator. What difference does it make, for example, to focus on operating cultures rather than on roles? Or on personality or on ego psychology? Or on set rigidity? Or on broad scale cultural or "pattern" variables, e.g., instrumental orientation, universalistic orientation, achievement? The list can be extended to the point where the different bases of choice among alternatives are themselves called into question. Thus, the original "irritant" which stimulated work on this monograph was: Given the multitude of cross-cutting propositions, where does one start and how does one proceed?

In this effort it is necessary to ignore disciplinary boundaries and the distribution of the literature as it has occurred for

---

historical or scientific reasons within the various disciplines. Although we begin with a critique of some selected viewpoints representative of major concerns within the disciplines, we do not attempt to provide a representative sample of the literature on development or modernization or growth in the various disciplines. This monograph is not even intended as a survey of the ideas and concepts pertaining to the topic of development. It is, though, intended as a systematic statement and, insofar as the present state of knowledge allows, a deductive theoretical system. As David Rapaport pointed out in a similar undertaking, "A systematic statement need not follow the emphases of the literature. Its emphasis should be dictated by systematic considerations."2

2 Ibid., p. 8.
CHAPTER II

A CRITIQUE OF SOME CURRENT THEORIES OF SOCIAL
AND DEVELOPMENTAL CHANGE

The intention of this chapter is to discuss propositions,
models, and theories which have been advanced in several disciplines
to account for processes of economic and social development. The
theories under discussion will pertain to both macro and micro levels
of analysis. The objectives of the discussions are to indicate the
major assumptions, contributions and shortcomings of these approaches
and to extract the requisites of a general theory.

Models Assuming Rational Decision Making

Perhaps the most common image which comes to the layman's mind
of planned social change, modernization or development is that of a
group of economic analysts or industrialists or natural resource ex-
tractors scheming and plotting, developing and planning, and carrying
on the everyday business of the economy. This image is one which
flows from a conception of economic development being basically a
process of more and more of the same order of activity which already
exists, or the importation and transplantation of activities and
techniques which exist elsewhere in order to increase organization
and efficiency by slow increments in a new environment. It is, per-
haps, natural enough that the first concepts of development or
modernization conformed to this image. Likewise, concepts of poli-
tical modernization involved the transplantation of western European
or American models onto the governmental systems of developing nations.

The problem with this approach is that it assumes that trans-
planted institutions will function effectively without careful match-
ing of their goals to the pre-existing local environment. It is
assumed that the goals and functions of an institution can be chosen
without respect to their effects in their new environment or that the
new environment will gradually adjust to these effects and accept the
institution's intended goals and functions. It is hoped that the re-
sult will be a process of accommodation which will occur quite
naturally with little forethought or planning. It will not be neces-
sary to examine the history of the outcomes of various importations
and transplants to criticize these assumptions; by now their inadequacy
has passed into common knowledge. (Even the theories of Marx and Lenin have been reinterpreted to provide for many roads to socialism, thus allowing for differential adaptation to local conditions.)

More refined economic models of development have attempted to provide for local acceptance, to plan for integration of various subsystems and subsectors of the economy, to develop reasonable rates of foreign trade balancing inflows and outflows of capital, and to maintain currency reserves. These economic models have provided a number of sophisticated attempts to compensate for varying local conditions neglected by the more naive propositions suggested by the former paragraphs. One difficulty which remains is the assumption that development and modernization are fundamentally "rational" processes, "rational" in the sense of being a reasonable outcome of conscious planning with provisions for difficulties. One further assumption common to economic planning is that if institutions are established with the requisite degree of sophistication, the personnel necessary to implement the goals of these institutions will be recruited where they already exist among the local populace, or a sufficient number will be imported from the outside (usually from the country of origin of the planner) to maintain and run the new institutions. For some activities and processes which are essential to modernization, such models are appropriate. For example, in highly technical matters, such as import and export financing or technical advice on the construction of capital equipment and its supportive services, it probably makes no difference, at least in the short run, if the personnel are imported or recruited locally, so long as technical skills are all that are necessary.

Where the advice concerns the construction of institutions themselves, and the adaptation of institutional goals, such purely technical considerations are not sufficient. In operations research, for example, planning provides for the presentation of open alternatives, given a specified level of resource employment. The value choice among the alternatives and the value choice of what degree or extent of uncommitted resources are to be allocated are not choices which the operations analysts or the technical advisor can make. The value basis for these decisions must come from the sociocultural setting and the psychodynamics of the decision-maker himself.

This general limitation, which applies to operations research, can be extended to larger areas of economic theory. The technical specification of what is needed for a given institution assumes that the alternative goals for which the institution is to be developed have already been considered; however, this is the core of the choice in modernization. For this choice, technical specifications are not sufficient. Indeed, the very existence of some types of institutions rather than others -- for example, public versus private corporations -- may be a heated issue in a given setting. More fundamental, however,
and in spite of numerous recent advances in manpower planning, there
still remain numerous difficulties in insuring the availability in
sufficient numbers of persons in the right places in response to the
existing rewards and reinforcements for persons equipped with skills
and the intensity or motivations to man's institutions as they were
originally planned. Generally, manpower planning assumes that it can
stipulate how many of what kind of personnel are going to be necessary,
but it is up to other existing institutions to actually satisfy these
requirements.

It is not the intention of this monograph to examine the
numerous and sophisticated models of the economy which have been
developed in recent years except to point out choices in sociocultural
assumptions which underlie the economic process. Foremost among those
is that of the "rational" man.

The Utilitarian Dilemma

Long before operations research and manpower planning, the
problems of a purely rational approach to social action were insight-
fully diagnosed by Talcott Parsons. Utilitarianism in economic theory

---

1See for example Michael K. Evans and Lawrence R. Klein,
Programmed by George N. Schink, The Wharton Econometric Forecasting
Model (2nd enlarged edition). (Economics Research Unit, Department of

2Talcott Parsons, The Structure of Social Action (Evanston,
tarian systems of action, Parsons noted that it is basically atomistic,
that is, its analysis of social action employs the rational act as its
unit of analysis. This is quite similar to economic theories and to
cost analysis and operations research, the latter being mutations of
greater sophistication from basic economic theory. In these theories,
action is perceived as rational according to an efficiency criterion.
That is, pursuing ends possible within the conditions of the situation
by means which are chosen from among those available to the actor as
the means best adapted to the ends for reasons understandable and veri-
ifiable by positive empirical science. Parsons quite accurately points
out that there are four fundamental features to this theory: atomism,
rationality, empiricism, and unlimited ends. The latter is not ex-
licit, but is rather implied by the theory which postulates nothing
with respect to the relations of ends to each other, and only speci-
fies relationships between means and ends. The utilitarian schema is
embraces most of the features essential to the "rational man" model and is probably the best known of the many possible variants of the positivistic approach to social action and its successors.

The assumptions of the theory involve several difficulties. Atomism is assumed to be the basic feature of the determination of the ends of action. However, if all the ends of action are decided in the rational unit act, then if the ends of action are not random, it must be because the actor could choose his ends on knowledge of empirical reality. (Positivism would insist on scientific knowledge of "reality" and allow the actor some freedom of choice.) But if this is to be assumed, a subtle contradiction has been introduced into the "theory." A choice within the atomistic act contradicts the distinctions of the ends from the situation, for the unit does not contain the sufficient conditions of its perpetuation. We will amplify our remarks on the contradictions by looking at the process which is being hypothesized. Amplification of the model of action underlying the utilitarian position will serve the purpose of highlighting the changes in the theory of action being proposed in this monograph in Chapter III.

The model of behavior postulated by utilitarian theory is one in which the actor is claimed to make a prediction of a future act based upon the present. But if all is going to be determined from the present -- as the assumption of atomism requires -- then action is determined entirely by its conditions, which in utilitarian theory include both internal and external states. However, such action must be a process of adaptation determined by environmental conditions and not by a choice of ends from some cognitive network. The "theory" is either assuming atomism, or rationality -- but not both. Either the actor, the active agency, is an independent factor in the choice of ends in action -- required by atomism -- or the actor is a dependent factor. But if the actor is independent, the ends of action must be random. The latter is an impossible situation; if the ends within a unit of action are random -- divorced from actor and environmental conditions -- then how does the actor decide? Random choice is not rational. On the other hand, the system might be contrasted with Positivism, where the only selective standard is positive science emphasizing the cognitive elements. The problem, of course, in the positivistic scheme is that all action is of an intelligible order, but there is no provision for affective motivation.
hand, if random ends are denied, then the ends of action are not independent of the conditions of the situation and cannot be distinguished, as the "subjective" and "objective" aspects of the situation are merged in a rational unit act. If the rational unit act is maintained as the unit of analysis, the ends must vary freely; if the ends do not vary freely, the actor's knowledge must be fully adequate to the realization of his individual goal in any given situation. All the alternatives contradict one assumption or another. Even at that, not all the incongruities have been explored, as the movement from "fact" to "value" is ignored in the theory.

This discussion rather firmly establishes the need for some unit other than the rational act for the basis of social analysis. It also relates to the basic problem which economic models face.

This brings us back to the point which was made about manpower planning and operations research. The purposes of institutions, the goals of planning, the ends of action must be supplied from somewhere. The former techniques for development and modernization take the ends as given on the assumption that the ends which will be made available in the operating situation can be accommodated to present existing techniques and that there are no contradictions in the implementation of the ends.

The optimism of these assumptions is not always justified. Quite frequently, if not always, the development planner perceives his situation from a different cultural and psychological context than is perceived by members of the host culture, and he chooses, according to his values, ends which are appropriate (or "comfortable") for his own techniques. The incongruities which result can probably be discovered in any local newspaper during discussions and debates of the U.S. foreign aid policy. A hidden evil here is that if a foreign set of means is adopted by a host culture, it is quite possible that the belated discovery will be made that because of cost factors the goals (or a much more limited range of goals than had been anticipated) were adopted together with the means.

Sociological Models

Here we discuss contributions of two prominent theorists, Talcott Parsons and Marion Levy, primarily because their theories of social structure and of roles place useful constraints upon the conceptualization of the relationship between the inner structure of individuals and the structure of reinforcements and sanctions in the larger society. The model developed in Chapter III is indebted to their writings and will refer frequently to them. Additionally, their concepts of social change and of legitimacy enabled us to extend the
concept of norm sets to these processes. Therefore, before proceeding with the model it may be helpful to review the starting points in previous theory upon which this monograph is based.

Parsons: General Theory of Action and Pattern Variables

Although there are quite a few differences between Parsons' and Levy's conceptions of social action and the nature of the variables or dimensions with which one is to analyze and explain action, they have some features in common. Both focus on how an observer categorizes action along analytic dimensions such as universalism-particularism, or affectivity-affective neutrality, or achievement-ascription. The description of the nature of action in a society and the delimitation of the kinds of action defined as appropriate for given institutions within the social structure then become the basis for a set of hypotheses. These hypotheses or predictions focus on behavior in relation to specified environment and in relation to probable changes in the environment as well as in relation to long-range goals enunciated for and by the society.

Parsons' major contribution has been in calling attention to the importance of norms in orienting social action. He advances beyond George Herbert Mead's conceptions, which directed attention to the importance of attitudes of others (or "alters") in the formation of the self.3


Thus, the attitudes of others are probably of first rate importance in all human learning, but are particularly crucial in motivating the acceptance of value orientation patterns, with their legitimation of the renunciations which are essential to the achievement of a disciplined integration of personality. Without this discipline the stability of expectations in relation to their fulfillment which is essential for a functioning social system would not be possible. It is highly probable that one of the principal limitations on the social potentialities of animals on other than an instinct basis, lies in the absence or weakness of this lever.

See also: George Herbert Mead, Mind, Self, and Society (Chicago: University of Chicago Press, 1934).
In Parsons' work the attitudes of others are important insofar as they lead to his delimiting what is known as the "pattern variable." In a discussion of "the institutional integration of action elements," Parsons notes that "it is inherent in an action system that action is, to use one phrase, 'normatively oriented.' To analyze the degree of integration of motivation of actors with normative cultural standards, Parsons developed the pattern of value orientation intending to account for "the element of contingency" of the orientation of one actor to another. These patterns are thus concerned with the possible modes of orientation in a motivational sense to a value standard or, alternatively, to pattern variables of role definition: affectivity versus affective neutrality, self-orientation versus collectivity orientation, universalism versus particularism, achievement versus ascription, specificity versus diffuseness. In another place Parsons re-states his definition more concisely, "a pattern variable is a dichotomy, one side of which must be chosen by an actor before the meaning of a situation is determinate for him, and thus before he can act with respect to that situation."

This approach has a certain utility, especially in the analysis of macro patterns of role expectations and of institutional performances. However, when applied to the individual and to the prediction or explanation of the dynamics involved in maintaining and producing the role orientation patterns, Parsons' model needs to be supplemented by a theory which would indicate congruencies between expectancies at the micro level and role patterning at the macro level. Looking ahead, we note that Parsons abstracts the pattern variables by focusing upon the content of the need gratification dimension, particularly with respect to either its minimum requisites or its adequate requisites for functioning. The emphasis here then is upon content and the analysis of content of roles along the dimensions which have just been listed. Not discussed is an implication which follows from the assumption, at first sight a reasonable one, that all social action is normatively oriented. The assumption implies that if there is choice among ends and the choice is governed by norms, the norms must be ordered if the ends are going to be selected. The ordered property of norms is not a part of Parsons' or Levy's system. However, we cannot overlook the fact that the content of a behavior under consideration by an actor may

---

5 Parsons, op. cit., p. 36.
either determine or decisively influence the normative ordering which is applied to that domain of behavior; alternatively, a prior patterning of norms may be fixed at some point in an individual's life cycle and be applied indiscriminately to all domains of behavior. Thus, at least in this respect, there is an indeterminacy in Parsons' model.

Levy: Theories of Action and Dimensions of Modernization

We turn now to a discussion of Levy's macro theory of social dynamics, particularly as presented in his Modernization and Structure of Societies. Our general observations made earlier concerning purely macro theories will also apply to Levy's model. Additionally, many of the observations and criticisms to be made concerning Levy's propositions are equally applicable to Parsons'.

For the analysis of social change, Levy's model represents a distinct advance over Parsons' model insofar as it was developed to deal specifically and explicitly with modernization. Levy thoroughly examines the commonalities of social relationships and aspects of social relationships as they are found in all societies. He then turns his attention specifically to distinctions among these commonalities in relatively modernized and relatively nonmodernized societies. Not the least among Levy's merits in this respect is the clarity of his style and the logical tightness of his presentation. One result is that direct comparison of Levy's model with Parsons' model is often quite difficult due to differences in style and manner of presentation. Levy develops in excellent detail a presentation of the common elements of society, common organizations, common relationship aspects and


9Levy defines a relationship as "any set of social structures that define the action ideally and/or actually in terms of which two or more individual actors interact." Op. cit., Vol. I, p. 133. He selects for attention those "aspects" of relationships which meet two criteria:

First the distinctions should be ones that are relevant for any relationship. Second, the subsidiary
common problems. He also develops a model of the main lines of variation among societies and focuses his discussion on the variations as they pertain to modernization. He is specifically concerned with the problems which modernization poses for social stability in modernizing countries, as compared with social change in relatively modernized countries. His two-volume work is too lengthy to be discussed here in great detail; therefore, we will focus on those aspects which are most readily complemented by a micro analysis. This discussion will then be followed by a more general treatment of Levy's theoretical position and some of the problems which it contains.¹⁰

We might start with Levy's discussion of ideal and actual structures.¹¹ He draws at length on the necessity for integrative mechanisms in ideal structures and the accompanying ranges of variation or deviation from the ideal in the actual structures. He goes

categories or aspects should be ones in terms of which some variability is possible. If a given subcategory has only a unique value, it is only useful as a constant in hypotheses about all relationships and can only be a variable in distinctions between relationship and non-relationship structures. Op. cit., p. 136.

Levy proceeds to distinguish six aspects of any relationship and six polar distinctions appropriate to corresponding aspects. Op. cit., p. 136-7 ff. Levy's polar distinctions are derived from F. Tönnies and T. Parsons. Cf. the discussion of Parsons' pattern variables supra. Levy's insistence upon the polarity in opposition to the dichotomous nature of these variables mistakenly generalizes polar micro qualities to the macro level. I would call this a variation of the ecological fallacy insofar as properties of one unit are extended to properties of the whole system without proper regard for dynamics. A system composed of many bipolar individuals need not preclude a continuous dichotomous appearance on the whole. Here it seems as if Parsons is on sounder ground.

¹⁰ Regrettably, this discussion will focus on aspects of the theory which need supplementation. These comments should not detract from the excellent work Professor Levy has done in clearly locating problems of social theory and delineating those areas requiring attention. In the long run, it is a more important contribution to have located key areas which current interest has neglected, and to have raised significant questions, than to have been concerned with exactitude in a passing fashion or to be correct in the initial approximation of the "answer."

¹¹ See Ibid., pp. 26-30, 426-430, and 796-797 et passim.
on to note that some of the significant effects of modernization are to increase discrepancies. Most usefully he points to the effects of demographic changes on the structure of the family and the family's socialization capability. Careful attention is given, also, to the fact that many structures in a society may be altered without the creation of new ones to take over their necessary functions. Although it is very worthwhile for the theoretician to concentrate on the macro level, and although Levy provides a starting point from which to attack many problems and from which to begin analysis of the effects of change in social structure, we are still left with the problem of dynamics.

Ideal-actual discrepancies are perceived by individuals. An effort to locate areas within the society which are more sensitive to these discrepancies would bring us closer to an operational level. However, first it is necessary to define and study the nature of the ideal-actual discrepancy at the micro level. Here it would seem that the propositions developed by the social psychologists in the area of balance theory, dissonance theory, and congruity theory would be most helpful. Chapter VII of this monograph will bring out these points more clearly.

Somewhat the same can be said for Levy's discussion of social change, particularly the rate of social change, which Levy considers as a variable in itself. Indeed, to be strictly logical, one should argue that increases in the ideal-actual discrepancies in themselves constitute a subcategory of social change as a phenomenon. But if social change is a variable, its effect is most likely to be different among different personality structures. Given that society recruits and socializes different individuals such that individuals with similar behavior patterns occupy strategic roles in the society's decision system, then the degree of tolerance of ambiguity and a corresponding rate of social change among individuals in strategic positions is an important distinction to be made in addition to the gross rate of change itself. The gross rate of change, however measured, will become more important as an index to the extent to which we can discriminate the differential impact of its components within the population.

---


13 There is the possibility that for some society, the rate of social change might have a uniform impact upon the population. However, there is no reason to expect this probability to be very high.
The variation in impact of social phenomena, such as the rate of change, is related to several important questions. Social movements and the social trends which are extracted therefrom are said to appeal for different reasons to different participants to achieve similar effects -- at least in observed behavior. Following the presentation of the model in this monograph, we shall discuss some important questions which are necessary to determine what are the limits to the range of inclusion.

General Discussion of the Sociological Models

Although Parsons and Levy differ on some points, their theoretical frameworks possess certain features in common which from our present vantage point can only be regarded as defective. One such feature is a static bias, which is a much more serious defect in the case of Parsons, who simply assumes that the maintenance of the social system is unproblematic. The general ground for so assuming is that if a social system were not viable in its main essentials, it would not persist long. Humans do, indeed, reveal a sometimes amazing capacity to make even a bad system work. However, this does not eliminate the need to consider and explain distinctions among societies in terms of their abilities to function and to adapt to their respective environments. Levy, on the other hand, does discuss some of the factors which contribute to the dynamics of change. Unfortunately, however, his presentation does not seem to cover a wide enough range. The dynamics of change that accrue from discrepancies in ideal and actual behavior, or from the amplification of change which is developed from an increase in the rate of change, seem to be by and large second-order factors. What combination of elements at the individual level produce these changes is not discussed in great detail, other than to note the attractiveness or penetrating power of modernized society or advanced society. The difficulty is: How does the analyst move from the appeal of certain elements which increase action on universalistic or rational or non-affective dimensions to changes in the social structure brought about by particular individuals? The impact of the appeal is at the micro


level. The analysis of the effect is at the macro level. The gap between the levels seems to remain as large as ever.

Another problem concerns the dimensions that are to be chosen as relevant. Levy's paradigm for analyzing "aspects of any relationship" and Parsons' "pattern variables" are claimed to be sufficient to handle the analysis, if not of all social relationships, then at least of all aspects of social relationships which are important to modernization. This is a dubious assumption, given the wide analytical gap between the micro input in terms of the solvent effects of modernized society and the macro analysis of the effect of this solvent upon a society experiencing modernization. We have no intention to go into great detail on this, but, for example, where would secrecy versus openness fit in the scheme proposed by Levy? ... or extrovertism versus introvertism?16 At what particular levels of society are specific personalities demanded as requisites for crucial roles? Just where

---

16 Professor Levy has commented upon the significance of these additional dimensions in implying a need for a less complicated level of analysis:

Two colleagues, Miss Kazuko Tsurumi and Mr. Andrew Effrat, have suggested further developments of this scheme. Miss Tsurumi has suggested a communications aspect with a polar distinction between secret and open relationships. Mr. Effrat in an unpublished paper has suggested a volitional aspect with a distinction between voluntaristic and nonvoluntaristic relationships plus some six mixed forms. Both suggestions are promising, but I have not explored them enough to use them here. One of the rough rules of thumb of theory, however, is that once one exceeds six or seven distinctions on any one level (and these two aspects would give us eight) some more general less complicated level should be sought.

these personal attributes can be found in terms of the occupants of the roles in a given social structure then becomes an important dimension which may or may not override the remaining dimensions.

This is a prelude to a further problem. Levy maintains that the prerequisites for attaining modernization in the present era may not be the same as the requisites for maintaining modernization. On a small scale this difference is indicated by the difference between the skills which are required to set up and organize a particular development versus skills which are required for maintaining the organization or development. Levy even ventures the hypothesis that a society with appropriate orientation for modernization during its traditional state may not be any better off than societies with inappropriate orientations in its traditional state. Prerequisites for development and requisites for maintenance of development may differ to the point where the normative orientations favorable to modernization are themselves maintained by structures which are dissolved or residually obsolete in the modernization process. As an example, we may note the interim functions of some particularistic kinship structures in, let us say, the capital formation aspect of the rural-urban transformation.

The solvent effects of a universal standard of scientific change are intensively dwelt on by Levy with respect to the transitory nature of some institutions in modernization. However, this does not resolve the initial problem: What mixture of decision rules (categorized as universalistic versus particularistic, etc.) is appropriate for the maintenance and achievement of modernization for a given society? In David McClelland's work, The Achieving Society, one discovers how complex this mixture can be. But if high achievement is possible in the Soviet Union and in the United States, and in the Inca Empire of Peru, with very different combinations of normative orientation in social structures, how does one go about determining for a given society which mixes are appropriate?

A related problem is that of discriminating among actor motivation sets within a given population of actors. What sets are compatible

17 Although this principle has been developed with great sophistication by students of self-organizing systems it is by no means original with them. Professor Charles Drekmeier of Stanford noted the relevance of Machiavelli's work to this proposition. See Niccolò Machiavelli, The Prince and the Discourses (New York: Modern Library, 1950), see pp. 103-117 on the conditions of founding Rome, Cf. pp. 167-175 on the conditions for maintaining liberty in a corrupt state.

with the development in the society of some social structures rather than others? Is it possible for a trend or movement or organization to appeal to many different types of motivations to achieve the same end results? The issue here is: Can the organization be formulated in such a way as not to violate conceptions of traditionally appropriate appeals to motivation and yet incorporate those appeals which are necessary to recruit from a large population of actors? Can it at least recruit from a population large enough to fill all the roles essential to the organization's maintenance and development? For example, in Muslim countries an appeal to particularistic and religious sentiment on behalf of planning and organization of the economy, or some subsector of the economy, would directly contradict Islam's ingrained precepts that only Allah may know the future. Thus, the devout Muslim would maintain, not only that it is futile to attempt to plan, it is downright heresy. If a policy-maker wishes to plan modernization and development, and also wishes to recruit the skills of a large portion of the populace, what appeal can he make in terms of the existing "traditional" structures of the society which will not frustrate his recruitment attempt?19

One further problem which follows from this is the failure by either Parsons or Levy to account for the aggregation or association of some values with each other in the public culture and the isolation of other values from each other in the same public culture, as these values pertain to specific areas of action. The range of behaviors to which a given norm applies and the norms which are associated with it is an interesting aspect of public culture which these two theorists only tangentially discuss, perhaps in part because both of them tend to focus upon the content of a dimension and the relationship of actor behavior to the content of a specific norm.

19It is probably best if the whole issue can be sidestepped early in the development program. In order to sidestep the issue it is necessary to co-opt, isolate or eliminate leaders of the traditional sector. Once the issues have been drawn and the initial stages of polarization entered, it becomes difficult to bridge the gap between competing elites with independent communication channels. Professor Robert B. Textor of Stanford has suggested in a personal communication that the approach of defining planning as "Allah's will" might be fruitful. Unless such an approach can obtain a legitimating facade via counter-traditional elites or through co-optation, separate communications channels may result in a situation where this message would be effective only with marginal groups whose decision rules are based partly on modern and partly on traditional standards. However, in the next cycle, some of the "converts" may achieve sufficient success in both traditional and "modern" terms to become role models for future "converts."
Looking ahead to our own model, we note here that content cannot be separated from normative structure. A given range of content may imply a hierarchical superordination or subordination to another set of norms also applying to the area of behavior being considered. The question of which norms are linked in subordinate or superordinate hierarchy then cannot be resolved by focusing on the content of the behavior alone. One must inquire into the relationship between the requisites of a role in terms of an individual's behavior and the nature and boundaries of the norm which controls this behavior. Later we will show the necessity to inquire into the location of these norms in terms of hierarchical priority vis-a-vis other norms in a norm set, and in terms of hierarchically ordered norm sets subsumable under a given self-image held by a given actor at a given point in time.

In concluding this subsection, we might note that all these problems are interrelated: The problem of the order in which a set of norms is linked, the problem of which norms are separated or aggregated, the problem of what are the dynamics at the micro level which produce a change at the macro level, the problem of what contribution is made by the history of developmental processes in the rate of change, the problem of what solvents are found in the modernization appeal and how it differentially affects some levels of social structure and public culture rather than others, and the problem of what is the correct mix of dimensions for a particular culture to enable it to attain and maintain modernization. The fact of this complex intertwining of problems makes crucial the strategic decision as to the proper starting point for the construction of a theoretical framework that will embrace both macro and micro considerations. It is our position that the key to these interrelationships concerns the organization of an individual's self-concept and the nature of defenses which pertain to specified levels of behavior. This micro-macro framework will be explicated in the chapters that follow, but first it is necessary to round out this chapter by examination of two other important approaches found in the literature, namely theory concerning roles and theory concerning the "operating culture."

Role Theory

The key elements in the concept of social role consist of positions, expectations and behavior. Each person is said to occupy a position in the social structure, that is, a status; each person has certain expectations with respect to others' actions, and in regard to these expectations each person is said to have norms which govern his behavior in this particular position or status. The combination of these elements results in what is called the "social role." An approach favored here would define social role in terms of actor behavior, governed
by the norms of the actors in socially important positions. At the micro level, the actor occupies a position in a structure governed by a set of ordered norms, which in turn orders behaviors, rights and duties which are attached to the position. The position is in turn linked by social perception to a number of other positions.

Ralph Linton and a number of others who have followed him have conceived of roles as the dynamic aspects of status. This might be restated by thinking of a status as a knowledge or cognition of rights and duties, attaching to the person who behaves in a specific setting or within a defined range with alters. Role, then, is a set of expectations based on knowledge attached to a position. A further refinement is noted in the definition, in that a set of expectations for a role is divided between ego and at least one alter and that the area of actions to which the expectations pertain is "socially important." Thus, a number of behaviors which are governed by mutual expectations need not be called roles; for example, most of the behaviors defined in etiquette as proper dining behavior or behavior for "eating in a restaurant" need not pertain to status positions for, with the exceptions of very young children and the infirm, they apply to almost everyone.

Unfortunately, "role" is subject to so many different usages that a particular author's use of the term might mean anything from the actual behavior performed by an actor to the sets of norms governing the behavior. At the latter end of the continuum is Ralph H. Turner who stresses role-taking in order to shift emphasis "away from the simple process of enacting a prescribed role to devising a performance on the basis of an imputed other-role." Turner contributes to the clarification of the "socially important" boundaries of roles by describing two criteria which are applied to determine if an actor is performing some role, i.e., in Turner's view acting by virtue of some unifying element in terms of a purpose or sentiment. To determine if a given combination of behaviors constitutes a role Turner asserts that we must determine if an actor applies internal criteria to assure himself that "what he has in mind is actually a role" and external criteria which validate the interaction by reference to a generalized other.


22 Ibid., p. 23.

23 Ibid., pp. 29-30.
Internal validation lies in the successful anticipation of the behavior of relevant others within the range necessary for the enactment of one's own role. The internal criterion means that a given constellation of behavior is judged to constitute a role on the basis of its relation to other roles.

The external validation of a role is based upon ascertaining whether the behavior is judged to constitute a role by others whose judgments are felt to have some claim to legitimacy.

The next element of role theory, that of expectation, deserves careful consideration. There must be at least two holders of the expectations which pertain to a given role. This important point has been examined quite thoroughly by Neal Gross, Ward Mason and Alexander McEachern, insofar as consensus of expectations cannot be assumed. The degree of consensus among alters and between actor and alter is an empirical variable. We postulate both an ordered arrangement of expectations held by relevant alters and variation in the degree to which the alters are perceived as relevant to the actor and in the degree of mutuality in perceptions of content of expectations.24 The degree of consensus, then, which pertains to a certain role and the degree of consensus which is perceived by the actor leads to consideration of a final concern: behavior in terms of the perceived expectations. Behavior in this sense cannot really be discussed without treatment of incentives and sanctions.25

The problematic nature of behavior in role positions should call attention to the need for considering consensus of expectations as an empirical variable and the weighing of incentives and sanctions in role behavior.

These considerations lead us to suggest a revision of role theory, a revision essentially embodied in the Norm Set Theory which this monograph advances as its central contribution. With all due respect for the influence stemming from the recruitment and selection in


matching roles and personnel, and for socializing or preparing people "to want to do what they must do," there still remains an area not beyond the reach of social theory in which individual preferences and choices vary with idiosyncratic factors. Individual selection is not random. The kinds of personalities which are recruited to particular roles do not display all possible reflections of the plasticity of that element sometimes called "human nature," but, rather, there are constrained limits to the amount of variation which would be found in a given culture within given areas of roles and role behavior. The point is that there remains an area of individual variation and individual selection which need not necessarily correspond with the "acceptable" range of variation in the expectations of significant alters in the counterposition to a given role.26 An individual's preference hierarchy, or his perception of his situation, may indeed lead him to act as the role demands him to act, which is another way of saying as significant alters demand him to act. That is, he acts in response to consensus and sanctions without necessarily producing an identity between the individual occupying the role with his preferences, and the expectations which alters have built into their perception of the role and its position.

26 The macro corollary of this proposition has been stated by Dennis Hume Wrong in commenting on Kingsley Davis, Human Society (New York: Macmillan, 1949), p. 368. Wrong notes that Davis' position on social stratification requires unequal rewards favoring the "more important, highly skilled and physically and psychologically more demanding positions." However, if these are to be filled Wrong emphasizes that Davis' position "does not deny that a particular distribution of rewards prevailing in a given society may vastly exceed the minimum necessary to maintain a complex division of labor." Dennis Hume Wrong, "Functional Theory of Stratification: Some Neglected Considerations," American Sociological Review, Vol. 23 (December, 1959), p. 774. Wrong then cogently observes that once "these positions have been filled their very importance and dependence on scarce skills give their incumbents the power not only to insist on payment of expected rewards but to demand larger ones." Ibid. In relation to the text we should even note that part of this payment can include greater variation for the occupant of the position which may or may not entail greater conformity for an occupant of another position. I am indebted to Professor Charles Drekmeier for calling attention to this article by Dennis Hume Wrong.
Operating Culture

Ward Goodenough coined this term, which he defines as a selection, from among an available repertoire of alternatives and responses, of an appropriate response to a situation. The selection is made from the total "private culture" of the individual which includes his perception of the "public culture." There are a number of problems with Goodenough's definition and a revision is here proposed to make it more useful. Instead of considering every alternative equal to every other alternative, we are probably on sounder psychological ground to consider subsets of alternative behaviors. Thus, an operating culture would be an alternative which is comprised of a subset of behaviors. The interesting question then becomes: What is the organizing principle behind this subset of behaviors? It is the position taken here that these relevant subsets of behavior are organized under a distinct self-image. A subset is selected from a domain of possibilities by reference to ordered, that is, balanced, congruent or consonant norms. The model proposed in Chapter III views the individual as acting under the influence of a self-image (or, by virtue of a self-image) which controls behavior by relating social stimuli to a normative hierarchy. In other words, the selection among alternative behaviors is based upon the overall state of the individual's system, the perceived elements of the situation, and a mapping process. Selection is a mapping process among cognitions and affects, related to past performances and evaluations as they are associated with the perceived aspects of the present situation.

"Role" and "Operating Culture" Compared

The reader may have noticed that the basic mapping process employed is the same for either roles or operating cultures. Thus, the essence of the conceptual difference between the two, as far as analysis is concerned, lies not in process, but perhaps in structure. This immediately leads one to inquire what could be the difference between operating culture and role, or are they merely two different ways of looking at the same phenomena? Both focus upon mapping. The question of whether a person is selecting role-appropriate behavior from his repertoire of role responses, or whether he is selecting operation culture from a repertoire defined as a private culture, is academic. The objective of the basic process in both is to maintain and further a social identity and to maintain a selection process based on a current, ongoing, and homostatic self-image.

A difference between these two concepts can be established in terms of the areas of behavior to which they extend. The question of whether or not a larger degree of extension is necessary depends on the problem being analyzed. Of a subset of behavior in an operating culture, one might say that there are three logical possibilities. Subsets could be larger than, smaller than, or co-extensive with the area of behavior and perception requisite for performance of a given social role. Although this is an empirical question, methodologically one might ask whether it makes any difference. For example, a military officer, who is also a father, may have an operating culture; that is, a set of integrated behaviors under his image of himself as a military man, which either includes or does not include a father role. It may make some difference to his behavior whether he has a separate self-image of himself as a father isolated from his image of himself as a military man. But whether the analyst chooses to regard his military-man operating culture as including the role of father does not seem to be particularly important one way or another. The important question is: What is the identity which the individual perceives to pertain to his enactment of behaviors as a father with respect to his enactment of behaviors as a military man?28

The key to this whole process, the governor of the system, is the self-image which is functioning at the particular time of observation.

28Note here that the influence of a group in its shaping of the identity and attitudes is crucial. Whether one refers to operating cultures or roles is not particularly important. The stability of self-concept is related to a continuing congruence of motivational disposition, alternatives of self-satisfaction, within self-concept. In turn, the congruence of motivational disposition and satisfaction with the self-concept is a function of social relationships as a whole and depends upon the reinforcement of the concept: the self as an actor, interacting with significant others and the self identifying with the positive images which these others project. That is: What is perceived to be positive in the images projected by the others? In this sense social expectation, a component of role, can reinforce and shape the formation of the controlling self-concept. From another view, this self-concept could control an operating culture. The effort to maintain a role which requires an operating culture that is negatively cathected can be quite stressful to the individual. See the literature on cognitive dissonance theory, particularly as related to the taking of a public position in conflict with previously stated attitudes. As for the need for the maintenance of a steady state of reinforcement to a self-image, some experiments have been done in sensory deprivation which seem to confirm this need. This leads us to the topic of motivational disposition and other alternative, self-satisfying concepts. These are discussed next.
We are concerned with the range of stimuli to which one self-image rather than another is responsive (step-level functions, thresholds).

Self-concept, self-image, self-perception: These are all roughly comparable and they will be used interchangeably for the purposes of this monograph, although it is noted that for specific problems one might wish to distinguish among them at the psychological level.

This brings us back to the difference between operating culture and roles as foci of analysis. An advantage of an analysis of a particular behavior from the standpoint of role theory is that one begins to look for certain kinds of positions in a structure, their relationship to the range of behavior, and especially to the range of individual variation in this role position. A disadvantage is, of course, that the role situation, or stimulus, is often ambiguous; one is not quite sure from what the respondent is selecting.

Corresponding, but reverse, advantages and disadvantages exist for an analysis from the operating culture standpoint. One begins by examining a person's response repertoire, and attempting to locate a style appropriate in several roles. It is assumed that individuals tend to transfer across situations, behaviors which have been positively reinforced in the past experience. Consequently, ambiguous situations will stimulate the memory of past experiences as associated with an aspect of the situation or projected into it -- the operating culture. Operating culture analysis, therefore, allows the analyst to proceed in situations where roles are undefined, ambiguous, or even not yet determined. On the other hand, the nature of the relationship between perceived stimulus and individual response is much less well defined.

Another way of looking at this problem is that in analysis of role responses, one may view role expectations of self and alter in previous behavior in the role as forming a level of input. This structure of input then becomes an interesting factor which would not necessarily be detected in a focus upon operating culture. Looking ahead, we note that several interesting hypotheses relevant to self-organization can be generated by employing the degree of structure of the role as an independent variable. Additionally, role expectations and the behavior of alters have positive and negative effects on the self-image. Furthermore, there is some evidence that the taking of a public position contrary to a previous attitude but reinforced in a role will change the attitude.29

The major advantage of role analysis is that it sensitizes one to the match of specific attitudes, reinforcements, and behaviors. Analysis from the standpoint of operating culture is not as sensitive in this respect. On the other hand, operating culture does sensitize one to the behavior repertoire of an individual and the selection process among alternatives. The total strain on the individual of adopting, let us say by deliberate contrivance, an operating culture which contradicts or strains existing modes of operation (for example, a non-authoritarian anthropologist adopting a very authoritarian operating culture for the purpose of field work) might seriously endanger the individual's psychological stability. Looking ahead, the focus upon selection will generate hypotheses relating types of selection to configurations within the self-organization.

The important point is that it is inefficient to analyze a situation by initially asking, "Is the individual selecting a preferred role behavior, or is the individual selecting a preferred behavior within this operating culture?" Role analysis may be more delimited than operating culture. Operating culture may cover interrelationships to larger units of the "personality" than role analysis. But neither tool helps the analyst get at the core of the stimulus situation unless he also asks: What is the governing self-image in this situation? The conclusion is that a frame of reference for both analyses can be established by a thorough discussion of the nature of the self-image, and, as we shall see, of norm sets subsumed thereunder.

Conclusions

In concluding these remarks on economic, sociological and anthropological models and the levels of analysis associated with them, we note that there have been various difficulties in proceeding from micro to macro analysis. We note also that there have been problems in separating concepts which are used in the various approaches to micro and macro analysis. A basic difficulty in the macro approaches is the assumption that the goals of the actor are in some way congruent with his position in the social structure. In these various approaches one has difficulties in handling the question: What is the nature of the "input" from the public culture from which the individual selects the stimulus to map on his private culture? In the aggregate, all the actors compose all the roles, or all of the public culture. Where in this system does one discover a discrepancy? -- that is, a

discrepancy in the whole as a functioning unit? Holistic analysis seems to be impeded by this logical problem, although partial analysis is not. One can account for a limited sector of change or behavior by reference to socialization-recruitment problems. Or, one may adopt the ceteris paribus assumption. However, this assumption is precisely what must be avoided in studying the process of modernization or guided developmental change. An objective of modernization is to proceed to a step-level threshold where the whole society enters the famous "take off" process. Given these objectives, the operating cultures of the actors and the public cultures which are changing have to be changed through some medium for which present macro analyses of a society do not provide.

Pointing to contact with other societies as the mechanism for sustaining change avoids more than it explains, and the process of transmitting change in relation to existing structures is not in the least clarified. What is needed is the identification of the point of impact and a framework of analysis built around that point. A clue to the elements needed to describe the structure and process leading to the step level transformation of the system has been gleaned from the untenability of present assumptions of equal access among actors within their private cultures in selecting an operating culture. Profiting from this difficulty in the operating culture approach, the model to be proposed in the next chapter will be built around the hierarchical organization of the self-image. From this organization a set of propositions linking macro and micro theory will be generated.
CHAPTER III

A FORMAL MODEL OF THE SELF, AND DERIVED PROPOSITIONS

Chapter III takes its main theme from this quotation:

It may be that a single conceptual model, based not upon summary reductionism but upon gradual coalescence, may be created which is usable both for that portion of psychology that deals with the individual interacting with his fellows and with that part of anthropology which deals with the approximations of individuals to cultural forms and with the growth and change of cultures insofar as these arise from individual variation.¹

In this chapter we present, in rather formal fashion, a model of the self. This model, and propositions derived from it, are conceived in such a way as to foster the analysis of social change simultaneously at both the micro and macro levels. By way of overview, a self consists of one or more self-images; a self-image consists of one or more norm sets; a norm set consists of one or more norms; a norm consists of one or more elements. Typically, "one or more" means "several."

"Self," "self-concept," and "self-image," are terms that have enjoyed a long history of use in psychology and in social science. Interest in the "self" as an explanatory concept has undergone both periods of fascination and periods of neglect, and this history has produced a substantial volume of literature.² This literature contains, as one might expect, a considerable diversity of usage and precision in usage. One writer characterizes the empirical literature pertaining to these theories of self and self-concept as containing a


bewildering array of hypotheses, measuring instruments and research
designs.\textsuperscript{3}

We shall not review the many definitions which have been pro-
posed in the literature but instead shall examine some considerations
necessary to the selection of a definition and the derivation of a
model. In general, we shall be concerned with the self as an object;
however, when we discuss boundary maintenance functions and specific
processes within the model the psychoanalyst would probably consider
these to fall under the heading of self-as-subject or ego. As most
of these distinctions do not affect our present purposes we shall re-
gard "self," "self-concept," and "self-image" as being roughly compar-
able and interchangeable.\textsuperscript{4}

The major problem with comparing definitions of the self is
to limit the range of inclusiveness. One has to be concerned with
definitions of identity, ego, ego autonomy, identification, social
identity, social objectification, personality, and a host of related
concepts and factors which accompany them. In this work we are mainly
conscened with the nature of the self-concept. This necessitates the

\textsuperscript{3}Ruth C. Wylie, The Self Concept: A Critical Survey of
Pertinent Research Literature (Lincoln, Nebraska: University of
Nebraska Press, 1961), p. 3.

\textsuperscript{4}For a discussion of some of these distinctions and their
importance see Erik H. Erikson, "The Problem of Ego Identity," in Erik
H. Erikson, Identity and the Life Cycle in Psychological Issues,
Monograph No. 1 (New York: International Universities Press, Vol. 1,
1959), pp. 101-164. In Erikson's terms the model will frequently be
used as self-as-object; however, when we discuss various boundary-
maintenance functions we will be referring to ego processes, ego-ideal
and self-as-subject. These distinctions might become significant for
the application of the model to particular psychoanalytic problems --
particularly those of balance among particular maintenance processes,
whether they be internal or external to the system.

For a very instructive guide to related concepts for psycho-
analytic purposes see David Rapaport's succinct paper, "A Theoretical
Analysis of the Superego Concept," in Merton Gill (ed.), The Collected
Papers of David Rapaport (New York: Basic Books, 1967). Refer parti-
cularly to his discussion therein of the distinctions among internali-
zation, incorporation, introjection and identification, pp. 696-700.
definition of concept which, in turn, requires the formation of a concept, thus leaving rather irreducible elements.5

Definition of Self

The self is an operational product, arrived at through comparison, contrast, and generalization. Man depends upon the reflective character of his human consciousness for production of the self; i.e., the thought of an individual reflecting back upon experience related to the present or the imagined situation.6 It is difficult to extend this definition, for comparison, generalization, contrast, and restriction constitute the process of concept formation. Through delimitation and inclusion by these processes one reduces an original mental image to fit certain observations until irrelevant or contradictory classifications are excluded. Just as a concept is an operational product, the self is also an operational product.7 That is, one's self-concept is one's thought reflecting upon itself.

5 However, see Saul Amarel, "On the Automatic Formation of a Computer Program which Represents a Theory," in Marshall C. Yovits, George T. Jacobi and Gordon D. Goldstein (eds.), Self-Organizing Systems 1962 (Washington, D.C.: Spartan Books, 1962), p. 107. "Here, we use the word 'concept' as the symbolic entity whose extensive definition would be the total membership of the set of data correspondences in the domain of interest."


7 Leo Schneiderman has an interesting reinterpretation of Jean Piaget's position in The Child's Conception of the World (New York: Harcourt, Brace, 1929). Schneiderman takes Piaget's assertion that in the beginning the child cannot discriminate self and world to mean that the distinction between self and non-self is built up slowly and continually, and possibly is never perfect. Some related ideas will be discussed when we take up boundary maintenance. Here we are interested in the discussion as it bears on the difficulty of defining the self-concept:

The very act of conceptualizing the self as a distinct entity must be the result of many different varieties of experience.... One might hypothesize that the individual comes to recognize events that produce in him
What we are interested in is, therefore, not so much definitions of self and self-concept, but a selected aspect of the definition. Our argument will be that the most significant component of this self-concept is the self-image. One's self-concept might include a plurality of self-images. Each such self-image is an integrated hierarchy of balanced norms.

The Self-Image Model

To restate the matter, we are concerned with the basis of the product and will later be concerned with the processes of its formation, the self-image, which as a continuous function is a set of organized norms. The interactive nature of these norms and the manner of their grouping remain to be described. Additionally, their control function and the significant dimensions of the environment affecting their permanence will be discussed.

intense emotional reactions, as different from events that are 'mild' though self-related, too. The individual's ability to focus on emotion-arousing events would seem to have some bearing on the completeness of his developing self-concept.


Our definition of the self-image, in effect, stated the basic component of the model (see Diagram 1).

Diagram 1
Self-Image W

Norm Set \( W_A \)
----------------
Norm Set \( W_B \)
----------------
Norm Set \( W_N \)

A given conception of the self is represented here as a self-reflective product, a hierarchy of norm sets. For simplicity's sake only one self-image is portrayed in conjunction with a linear ordering of dominant and subordinate norm sets. The sets are ordered with respect to an average expectable environment in a hierarchy of preferred activation within that image. Each set may be described as consisting of one or more norms and a coherent series of associations and values.

This is an appropriate point to note the distinction between values and norms. Values are broad channels or boundaries of choice. They incorporate the generalized goals of action and the directionality

There are many kinds of chains, ladders, variations in linkage and depth in terms of internal feedback characteristic of potential hierarchies. A more complex organization could be used to introduce the ordering of a norm set. Here we chose to keep things simple. However, the choice of a linear model gets us into difficulties later when we attempt to describe changes in process. For a good discussion of the problems of linear models, see Roy C. Grinker, "A Model for Relationships among Systems," in Roy C. Grinker (ed.), Toward a Unified Theory of Behavior (New York: Basic Books, 1956), pp. 17-23. For a discussion of significant properties of these hierarchies relative to selected environmental dimensions see our discussion in Chapters VII and VIII of this work. For an incisive treatment of the structural properties and differences among self-organizing systems see Nihajlo D. Mesarović, "On Self-Organizing Systems," in Marshall C. Yovits, George T. Jacobi and Gordon D. Goldstein (eds.), Self-Organizing Systems 1962 (Washington, D.C.: Spartan Books, 1962), pp. 9-36.
of choice. In this sense, values are akin to limits among perceived ends. They express the desirability of action. In contrast to the rather general nature of values, norms are the regulators of action. They may be conscious or unconscious, but they are the rules by which a system selects and processes inputs and selects and processes outputs.

We are largely in agreement with Rudolf Heberle's definition:

Social norms are defined as all commandments and inhibitions, of general validity to individuals linked together in a social entity, which regulate the conduct of those individuals toward one another and toward outsiders. These regulations gain validity from the agreement (consent) - expressed or tacit of the individuals; they may be norms autonomous or heteronomous; and they may be followed from conviction of their rightness or merely to avoid the detrimental consequences of disobedience.

In our view norms are not self-sustaining entities, but exist in a reinforcing set. The set is a steady state and is a product of interaction between the system and the environment. In interaction with the environment, the system is positively or negatively reinforced and elaborated or diminished. The potential of a system is approximated from a given state of organization through interaction with the environment. If the system's organization is such as to permit utilization of adequate resources in this interaction the result is a series of intermediate stable states. The stability of these states arises from the absorption from the environment of a certain degree of information.

---


12 More precisely what is absorbed is negative entropy, negentropy, which might be any input from the environment. Entropy may be conceived as a homogeneous state in which matter and energy are completely diffused. In such a state the system would contain no information, i.e., would be completely random. According to the Second Law of Thermodynamics all closed systems tend toward entropy. Open systems incorporate from the environment information or negative entropy which might also be conceived of as organization. Correspondingly, an input to a system is defined by the system in relation to its environment. The meaning of the input thus becomes the organizing work which the system performs with the input. See note 39 below.
incorporated in the hierarchical structure of organization. Chapters VI and VII will explore properties of this structure of norm sets in relation to properties of the environment which are crucial to the viability of a given state of the system. The degree of viability will be assessed in our later discussions of the autonomy and legitimacy of systems, i.e., self-reflective systems. Prior to a discussion of a general theory we must understand the basic unit and its significance within our model.

"Norm Set" Compared with "Mazeway" and "Schema"

In Chapter II we distinguished some of the requisites of our unit in comparison with the concepts of role and operating culture. We would further like to distinguish norm set from two other concepts: the "mazeway," and the "schema." Anthony F. C. Wallace has attributed to the concept of the "mazeway" many of the functions of control which we attribute to "norm set":

> It is, therefore, functionally necessary for every person to maintain a mental image of the society and its culture, as well as of his own body and its behavioral regularities, in order to act in ways which reduce stress at all levels of the system. The person does, in fact, maintain such an image. This mental image I have called "the mazeway," since as a model of the cell-body-personality-nature-culture-society system or field, organized by the individual's own experience, it includes perceptions of both the maze of physical objects of the environment (internal and external, human and nonhuman) and also of the ways in which this maze can be manipulated by the self and others in order to minimize stress. The mazeway is nature, society, culture, personality, and body image, as seen by one person.

The concept of a "norm set" is considerably less inclusive in its components, although it does serve to organize the system's response to nature, culture and society. The content of the norm set acts to define the limits of perception; the content of the mazeway is the sum total of perception. Some of the complementary features of these two

concepts will be discussed in our treatment of system autonomy which Wallace also emphasizes.14

Jean Piaget's concept of schema15 is identical to the nature of a norm set in respect to being a steady state, and to being products of interaction with the environment. "Schema" are, however, more ambiguous in their nature. They process information in Piaget's theory mainly through accommodation and assimilation. We will be much more detailed in our descriptions of the maintenance processes of norm sets and will indicate several reasons for their more than transitory existence. Unlike schema, norm sets are based upon average expectable states of the environment and their predictive accuracy with respect to the satisfactions to be returned by behavior is a minimum requisite of their permanence.16

As one may infer from the discussion, the essence of a norm set is in its ordering. The maintenance of a given "state of the system"17 will depend upon both the content of the norm set and its

14 Ibid., "Furthermore, that regularity of patterned behavior which we call culture depends relatively more on the ability of constituent units autonomously to perceive the system of which they are a part, to receive and transmit information, and to act in accordance with the necessities of the system, than on any all-embracing central administration which stimulates specialized parts to perform their function."


16 One of the great difficulties with Piaget's concept is the borderline nature of the entity or function which it represents. The schema are purported to be structures but their rapid alteration in the process of information intake casts doubt upon this interpretation. See Philip E. Lewis' comments on structure in his "Merleau-Ponty and the Phenomenology of Language," Yale French Studies, Vol. 36-7 (1966), pp. 19-40: "We shall say that there is form wherever the properties of a system modify themselves for every change effected upon a single one of its parts, and on the contrary conserve themselves when they all change by maintaining the same relationship between themselves." Ibid., p. 39.

order, but it is the nature of the ordering which will crucially determine the capability to modify and acquire new content. There is a striking similarity across cybernetic organizations in terms of their ability to utilize information to perpetuate and reorganize their structure. As has been noted in biology:\(^\text{18}\) An organism has organization, an ordering of material in space and of events in time. Any random arrangement is an order; the essence of ordering is that some particular order, out of all possible ones, will be produced ... Of these, the ability to reproduce itself, along with any fixed aberration, is the most demanding and is especially characteristic of biology; and life has been defined as the "repetitive production of ordered heterogeneity." The guiding information is carried, and the given arrangement is imposed or reproduced by various means, from electric field around linked pyrimidines in nucleic acids ... through ... the metabolic and allied gradients of morphogenesis, the engrams of racial experience, to the coded tapes of calculators and the culture traits, especially language of civilizations.

Our thesis is that the norm set performs this vital function which through its structure incorporates the negative entropy necessary for the preservation of both psychological and cultural systems.


"Elements" as They Relate to Norms

Conceptually, we may distinguish various elements which are organized around the norms such as attitude, affect, evaluation, preference, predisposition, and value; these will possess properties reflecting the norm structure and its characteristics. Stated generally, one can say of this conglomeration that it will vary in its properties with the structure of the norm set and the process which it governs. For example, the norms in the dominant set under a given self-image may be expected to show higher coherence than those in a lower set within a given hierarchy. What we are describing may be diagrammed and is shown in Diagram 2.

For those curious about the possibility of operationalizing the propositions developed around the norm set a most fruitful line of attack might imitate the model provided by David Horton Smith and Alex Inkeles, "The OM Scale: A Comparative Socio-Psychological Measure of Individual Modernity," Sociometry, Vol. 29 (Number 4, December, 1966), pp. 353-377. In summarizing their findings the authors emphasize:

Yet to find that in all six countries basically the same set of items both cohere psychologically and relate to external criterion variables in a strictly comparable fashion is, we believe, a finding of the first importance. It strongly suggests that men everywhere have the same structural mechanisms underlying their socio-psychic functioning, despite the enormous variability of the culture content which they embody. Ibid., p. 377.

Interestingly enough, after this chapter had been drafted a reference was found in Ludwig von Bertalanffy, General System Theory (New York: George Braziller, 1968), pp. 212-14. In this work Bertalanffy, a biologist, refers to physical hierarchies which differentiate humans on biological bases from lower orders which stratify "layers to achieve mental function, centralization and hierarchic order." He finds a parallel to stratification of "the domains of instincts, drives, emotions, the primeval 'depth personality,' perception and voluntary action; and the symbolic activities characteristic of man." He further objects to the formulations of psychiatrists and psychologists which postulate conscious, preconscious and unconscious as a dominant hierarchy. In the latter objection we also concur. The model developed in this monograph proposes a substitute.
Diagram 2
Self-Image W

<table>
<thead>
<tr>
<th>Norm Set</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>W_A</td>
<td>Attitude</td>
</tr>
<tr>
<td></td>
<td>$A_1 \ldots N_1$</td>
</tr>
<tr>
<td></td>
<td>Cognition</td>
</tr>
<tr>
<td></td>
<td>$A_1 \ldots N$</td>
</tr>
<tr>
<td></td>
<td>Evaluation</td>
</tr>
<tr>
<td></td>
<td>$A_1 \ldots N$</td>
</tr>
<tr>
<td></td>
<td>Preference</td>
</tr>
<tr>
<td></td>
<td>$A_1 \ldots N$</td>
</tr>
<tr>
<td>W_B</td>
<td>Attitude</td>
</tr>
<tr>
<td></td>
<td>$A_2 \ldots N_2$</td>
</tr>
<tr>
<td></td>
<td>Cognition</td>
</tr>
<tr>
<td></td>
<td>$A_2 \ldots N_2$</td>
</tr>
<tr>
<td></td>
<td>Evaluation</td>
</tr>
<tr>
<td></td>
<td>$A_2 \ldots N_2$</td>
</tr>
<tr>
<td></td>
<td>Preference</td>
</tr>
<tr>
<td></td>
<td>$A_2 \ldots N_2$</td>
</tr>
</tbody>
</table>

In the diagram dotted lines have been inserted to indicate that within a given norm set subcomponents, elements, may be related to more than one of the norms in the set. In other words, a given element, for example an attitude, may exist with different preferences or cognitions or different drives, which are satisfied by or applied to that attitude in various interrelated norms. By way of illustration, we refer to the well-known example of the authoritarian personality syndrome. If we viewed this syndrome as a cluster of norms organized into a set, within this set we could distinguish desire to maximum respect as defined within the culture's status patterns to be the dominant norm. A number of interrelated attributes would also be likely to be found

---

in conjunction with the dominant norm. Hostility to the out-group is one of these attributes. That is, hostility to the out-group is a component of various norm sets commonly held by persons with other elements of the authoritarian syndrome.22

The norm of hostility to the out-group would control and be reinforced by actions based upon cognitions, preferences and values oriented toward an out-group. Various cognitions and preferences may all be coherently interrelated by this same norm utilizing the same attitudes or drives which are associated with other norms in the set as well. These elements may then be a source of reinforcement for the entire set even though directed toward a wide range of objects; thus, further increasing the area of control of the set with respect to the environment. For example, an element such as a defense orientation, projection, compensation, etc. could be utilized under this norm toward Jews, Negroes, other minority groups, or outsiders -- especially those with hair styles and costumes which would enable classification as social deviants -- or even in behavior toward strangers.23

Each norm in the set will thus have corresponding elements which are applied to situations as the situation is perceived. In Diagram 2, analytic distinctions among the elements were indicated for attitudes, cognitions, evaluations and preferences. In general, the term "element" of a norm set will refer to a component of the set bearing one or another of these four analytic labels.24


This passage also illustrates the significance of the structure of the norm set. If avoidance of interpersonal interaction were the dominant norm, the utilization of hostility to outsiders would likely produce quite different patterns of behavior than its utilization under a dominant norm which sought maximization of status respect and discriminated response according to perceived superior or subordinate status of an alter.

24This listing is not intended to be comprehensive or final; further work is progressing on details of the interrelationships across elements and norms.
To continue the previous example of the authoritarian personality in illustrating the different levels of self-image, norm set, norm and element, let us take the instance of the self-image of a hypothetical person who views himself as a "good military man" (and who also happens to have an "authoritarian personality"). For purposes of discussion, we will assume that this hypothetical individual might organize his norm set hierarchy around the dominant norm: "Maximize status respect." Norm set $W_A$ might then consist of this dominant norm plus related norms like: "Wear 'proper' dress; insist on correct treatment," etc.\(^\text{x25}\) Norm set $W_B$ might then consist of a dominant norm: "Obey all proper orders."

The elements of Norm Set $W_A$ might subsume an attitude, $W_{A1}$, such as, "Praise from those of higher rank is more welcome than praise from those of lower rank." Other attitudinal elements might include dispositions toward certain kinds of friends, social situations, etc. Cognitions under norm sets will generally define the content boundaries, for example, what is "status," what is a "proper order?" An evaluation under Set $W_A$ might be a judgment that status was increased or diminished by a particular behavior in the past or that following orders increases status. In this latter case the two norm sets ($W_A$ and $W_B$) included in this self-image would be perceived as mutually reinforcing. Under Self-Image $W$ and under Norm Sets $W_A$ and $W_B$ the individual might also have preferences such as desiring to receive the same snappy salute from majors that he receives from lieutenants.

We noted in passing that elements are applied according to perceptions of the situation. This underscores an important theoretical distinction between ideological and instrumental norms. The particular mix of elements might in one case be a highly evaluative, emotion-laden, preferential dominant norm which acts as a standard for assessing the applicability of all other norms in this self-image. Another mix of elements might be a cognitively intense, affectively weak norm which acts to assess the relative payoff of different behaviors. The affective-evaluative type we will call "ideological" norms, the cognitive type we will call "instrumental" norms. This distinction will be relevant to a later discussion of different problems in adaptation.

\(^25\)Theoretically, it should be possible to program these decision rules into a computer-simulated personality and research on this possibility was started in 1970.
Multiple Self-Images

This discussion has been proceeding on the basis of one self-image with various norm sets organized in some hierarchical form or another. However, it is unlikely that this is the normal case -- that is, individuals perceiving themselves with only one self-image. Although such extreme forms of monomania are not impossible, it is difficult to conceive of an individual and certainly not an entire society organized on such a basis. For one thing, differences in social contexts, e.g., distributions of wealth, differences in specialization and division of labor, differences in sex, age, and generation all contribute to the development of multiple self-images among discriminating humans. Another way of stating this is that there is a rough relationship between the basis of role differentiation and basis of self-image differentiation. This relationship is hypothesized to be more intense where the bases of differentiation overlap. This is probably most true with respect to the bases of age, generation and sex, e.g., the differences between a young, wealthy girl and an old, impoverished man.

Diagram 3 omits subcomponents of norm sets (see Diagram 2) to portray this addition to the model. Here, self-images will be labeled: W, X, Y, and Z, according to the organization of the corresponding norm sets represented in a linear hierarchy, e.g., A_W. This is then our basic model from which we will formulate a series of propositions as a framework of analysis of social behavior.

### Diagram 3

<table>
<thead>
<tr>
<th>Self-Images (N through Z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norm Sets</td>
</tr>
<tr>
<td>W</td>
</tr>
<tr>
<td>(A through N)</td>
</tr>
<tr>
<td>A_W</td>
</tr>
<tr>
<td>B_W</td>
</tr>
<tr>
<td>C_W</td>
</tr>
<tr>
<td>N_W</td>
</tr>
</tbody>
</table>

Thus, an individual may have more than one self-image. Within one individual the number of separate self-images is, however, typically quite limited and the process of deciding which of these self-
images pertains to which situations may be conceived of as a "superego" function.26

More than one norm set may exist within a given self-image and these sets will be hierarchically organized. The number and the complexity of configuration of norm sets under a given self-image may vary. Some norm sets may overlap between self-images; however, the dominant norm set will not overlap, as otherwise there would exist no decision rule to mediate and distinguish between the self-images.

The dominance of norms within a norm set is conceptualized as a cluster rather than, necessarily, as a uniformly ranked hierarchy, due to the limitations of human discriminatory capabilities. For this reason we posit norm sets with greater or lesser coherence. This degree of coherence becomes an index which we will later utilize in analysis of system-environment relationships as the degree of coherence and the mixture of elements within the norms, e.g., as ideological or instrumental, will have a significant bearing on the nature of adaptation to environmental disturbances.

A Deductive System of Propositions

Bearing Diagram 3 in mind, it is now appropriate to present a series of propositions, organized in deductive fashion, which are intended to be of utility in both holistic and atomistic analysis. The remainder of this chapter will be devoted to presenting this deductive system. In the next chapter, Chapter IV, the system and its underlying model will be discussed in a manner designed to locate gaps in our present knowledge and then to raise questions and problems pertaining to these gaps. Following this, in Chapter V, we will consider some relevant alternatives for the calculation of an optimum research strategy. Throughout, our concern will be not so much in setting forth what we already know, but in relating some subsectors of what is known to each other, and in indicating what remains to be done to gain the greatest profit from what is known in an area, in terms of what is not yet known.

The following propositions start from basic assumptions about human behavior and move to propositions generated by applying the concept of norm set to findings from broad areas of social science.

26 The limits upon the number of self-images and the relationship of this boundary maintenance problem between one self-image and another and the area of behavior over which a given self-image is regnant presents as yet unsolved theoretical problems.
1. Human behavior is organized.

1.0 It does not consist of random responses.

1.1 It does not consist of passive reactions.

1.2 It is an open system, cybernetic in its nature, i.e., a self-directing system adjusting output according to the state of the environment.²⁷

1.3 It occurs as a part of a set, and there are finite limits in an individual to the number of different, isolated sets of behaviors which can be retained, i.e., every behavior is not independent of all others.

2. Sets of behaviors are themselves organized under norms. Norms are the decision rules for behavior. The organization of behavior will thus reflect the interaction between the content and organization, the hierarchy, of norm sets and the environment as "perceived" by the system. (For this reason many of the following propositions, with appropriate changes in labels, could be applied across all types of cybernetic systems.)

2.0 Sets and their components vary in internal cohesion, salience, consciousness,²⁸ repression, defense mode, etc.

²⁷ A very good discussion of the differences among open systems steady states and cybernetic systems can be found in Ludwig von Bertalanffy, General System Theory (New York: Braziller, 1968), pp. 139-152. Von Bertalanffy also includes a noteworthy discussion of equifinality, pp. 142-145.

²⁸ A cautionary note against confusing controlling norms with idealized, conscious, public "norms" may be gleaned from Claude Levi-Strauss who observes:

A structural model may be conscious or unconscious without this difference affecting its nature. It can only be said that when the structure of a certain type of phenomenon does not lie at a great depth, it is more likely that some kind of model, standing as a
2.1 Norms are products of interaction between individual and environment.  

2.2 Norms do not occur randomly through individual development but reflect cultural patterning and need not be similar from culture to culture.

2.3 All norms are learned. Dominant norms tend to be learned from significant others in childhood development.

2.4 The bases of self-image differentiation are loosely related to the bases of role differentiation.


3. Norms are grouped by the individual in experience into norm sets.\(^{32}\)

3.0 Development of these sets reflects cultural organization. The content and structure of the sets may vary not only among cultures but within cultures.\(^{33}\) Subcultures depart from main cultures in terms of the structure and/or content of their norm sets.

3.1 A norm set is usually marked as a partial hierarchical ordering of the norms it includes, and is subject to the laws of balance, consistency, congruity, or dissonance.\(^{34}\) The essence of these laws, although varying in details is that when...
A and B are associated with each other in the same mind and one implies the negation of the other, pressure is generated in the form of discomfort. A and B may be norms, elements, i.e., attitudes, cognitions, evaluations, preferences, or other mental constructs and depending on the nature of the situation and other elements associated with A and B, these theories predict various types of outcomes. Typical outcomes might be: 1) reversing the valance of one of the elements, 2) isolating the elements from mutual association, 3) rationalizing the association by redefining the situation or elements, or 4) raising the level of frustration tolerance.

4. Norm sets, in turn, are hierarchically ordered. A given hierarchy of norm sets, taken together with their overall mode of operation, may be considered the equivalent of a self-image.

4.0 An individual may have more than one self-image.

4.1 A small number of self-images and their corresponding norm sets, can organize all of an individual's behavior through the advantages of hierarchy.35

4.2 Cognitive differentiation and isolation are essential mechanisms for functional adaptation and boundary maintenance of norm set.

4.20 Defense orientations function as input filters to norm sets.36

---

35 An interesting example of this process is presented by Erving Goffman, Presentation of Self in Everyday Life (New York: Doubleday, 1961). Goffman points out the numerous situational responses which can be incorporated under the same social front. It is not too great an extension of this line of thought to attribute the organization of a small number of social fronts around a coherent set of norms.

4.21 Defense orientations relate environment and memory as boundary maintenance processes.37

4.22 Continuity of memory can be maintained through selection of reinforcing items in either an incongruent environment or a congruent environment.

4.3 The hierarchic order of norm sets is maintained through feedback loops.38

4.30 New information is selectively perceived, and its meaning is a function of the system's degree or organization in the area to which the input is channeled and the degree of accuracy in the mapping of input on the memory of the system.39

37 For an interesting example of the way in which defense orientations function to maintain boundaries, see Leo Schneidermann, "Repression, Anxiety and the Self," in Maurice R. Stein, Arthur Vidich and David Manning White (eds.), Identity and Anxiety (Glencoe: Free Press, 1960), pp. 157-160. Schneidermann's descriptions of the differential sensitivity of the paranoid as compared with the repressive in relating self-images to emotionally intense events is an illustration of this hypothesis.

38 See 4.33.

39 The meaning of an indicative item of information to the organism may now be defined as its selective function on the range of the organism's possible states of orientation, or for short, its organizing function for the organism. It will be noted that this too is a relation. (It must be clearly distinguished from the organizing work done on the organism, which is the result of the exercise of this organizing function. Much confusion is caused by attempts to identify meaning with the change produced in the receiver.) Donald M. MacKay, "The Informational Analysis of Questions and Commands," in Colin Cherry (ed.), Information Theory: Fourth London Symposium (London: Butterworth's, 1961). Reprinted in Walter Buckley (ed.), Modern Systems Research for the Behavioral Scientist (Chicago: Aldine, 1969), p. 205.

In this context the norm set can be viewed as a representation of the social environment. Subsumed under it are various cognitive
4.31 Information is gathered on the efficiency of operation and on resources of the system to alter the output to the environment according to input.

4.32 Information comparison is achieved by mapping on norms and through testing subsystems.

4.33 Maintenance of control within an activated norm set is a function of test routine\(^{40}\) in the current as compared with subroutines testing past outcomes analogous to the current situation and testing extrapolations of the current situation upon rewards and costs in terms of governing norms.

4.330 The effectiveness of the test is a function of:

a) reliability and validity of current perception;

b) range of associations from memory applied to the current state;

c) accuracy of recall;

d) range of associations imagined from the current state;

maps of both social and nonsocial aspects of the environment into which input, information, is sorted. In 4.5 we will note the implications of the degree of organization of the sets for system functions.

e) accuracy of calculation of future states of the environment.

4.331 The decision to maintain or produce action governed by a norm set is a function of the outcome of the test routines and random inputs which filter through the selection system to affect current perception or range of associations recalled or projected.

4.4 Within a given self-image, norm sets with higher hierarchical rank may be recognized by properties differentiating them from the lower. In particular, higher sets should be found to:

4.40 be more differentiated;
4.41 be more coherent;
4.42 be more congruent;
4.43 be more intense in affect and apply to larger domains of behavior under that self-image.

4.5 Social reinforcement is essential for the maintenance of a structure of self-images and, likewise, for the ordering of norm sets within a given self-image, i.e., the self-image is better described as a steady state than as a passive structure.


42 "Steady state" is being used in a technical sense which may not be familiar to all readers. By a "steady state" is meant a stable range of variation in a system. This range is maintained by boundary maintenance and control or regulative processes which compensate for changes in environment. In this sense the system in a "steady state"
4.6 The power of a given self-image or structure of self-images may be defined\textsuperscript{43} as the ability to maintain the structure when faced with external challenges to that structure, or 2) as the ability to impose that structure on the environment.\textsuperscript{44}

displays a degree of independence around a stable base or equilibrium. The distinctive feature of a steady state is maintenance via a throughput of energy. The system absorbs and processes inputs in such a manner as to produce outputs stabilizing the environment's effects upon the system. Later chapters will discuss the variations in organization of this "steady state" and its implications for the norm set.

It should be noted in passing that psychological and sociocultural systems additionally display the attribute of equifinality -- the ability to reach similar end states irrespective of wide divergencies in starting point or input variation. There may be some argument about this but it is our opinion that for most individuals in most societies the stage of adulthood adapted to "average expectable conditions" in their culture can be considered an equifinal state. If one focuses upon the diversity of individuals within a society this may seem to be a rather difficult concept to apply. But the difficulty arises from asking the wrong question. Instead of focusing upon the range of diversity and vague consensus within the diversity we should focus upon the regulative controls which produce the outcomes. See Chapter VII for a discussion of variation and consensus.


\textsuperscript{44} See conformity experiments and Leon Festinger, "Theory of Social Comparison Processes" in Human Relations, Vol. 7 (1954), pp. 117-140, for interesting hypotheses.

Jean Piaget's comparisons of younger and older children are very instructive not only as to the importance of coherence but also as to the structure of self-image developed in interaction as a key to future autonomy. "Every observer has noted that the younger the child, the less sense he has of his own ego. From the intellectual point of view he does not distinguish between external and internal, subjective and objective." Op. cit., The Moral Judgment of the Child, p. 92. See his analogous comments on unexamined adult customs, Ibid., p. 94. See also Stanley Milgram, "Some Conditions of Obedience and Disobedience to Authority," in I. D. Steiner and M. Fishbein (eds.), Current Studies in Social Psychology (New York: Holt, Rinehart and Winston, 1965), pp. 243-265. An interesting discussion of conformity is also provided by W. Gamson, Power and Discontent (Homewood, Illinois: Dorsey Press, 1968).
4.7 The greater the internal coherence (ego strength) of a self-image, the less change will be effected by a given external input conflicting with the state of the system. (That is, the greater the ego strength, the higher the system transformation level.)

4.8 (Corollary of 4.7) The greater the coherence of environmental inputs, i.e., more highly organized the role systems, and the less the coherence of a self-image, the lower the transformation level, and the more subject the individual will be to change.45

4.9 The closer the environmental input is to the individual's values, the more differentiated the individual's organization of cognitions and responses (the higher the transformation state, higher discrimination).46


Proposition 4.5 noted that a minimum stream of inputs is necessary to maintain a steady state. By contrast, Propositions 4.7 and 4.8 are partial definitions of an upper threshold of input tolerance, above which threshold a stream of inputs might break down a steady state.

"Coherence" refers to a combination of: 1) content which reinforces or amplifies an initial state; plus, 2) a minimum of intensity, frequency, and duration, of content so as to absorb the capability of other systems (external to the individual) to generate input incoherent with a given external input. Additionally this minimum content must suffice to absorb internal capabilities of the receiving system to generate dissonant information, e.g., through random noise or fantasy.

4.10 An individual's freedom or autonomy within a situation is a function of the coherence of his activated norm set relative to coherence of the environment as discussed in 4.6 and 4.7. A multiplicity of self-images may be beneficial under environments which are isolated from each other. But see 6, 6.0.47

5. Given the selection of one response within a given norm set, the higher is the probability that the following selection will be from the same set given a greater internal coherence in the norm set than in the structure of the environment.

5.0 The consistent selection of a subset of behaviors under a given self-image may be analytically distinguished as the selection of an operating culture or the selection of a role (see Chapter II).

47 Any given system is adapted best to only a given range of environmental variation. Where social environments are insulated from each other a specialized norm set focused around that area can be developed. Under this environmental condition the person would have alternative sets satisfactory for insulated areas of interaction; thus the dissonance problems of setting priorities across widely divergent demands would be elided. This type of autonomy is rarer in the complex, high volume, universal communications of the current Western civilization where the advantage seems to lie with having a large range of areas of action under fewer self-images. Some of these self-images, however, might subsume comparatively large numbers of norm sets. See Gordon W. Allport, Becoming (New Haven: Yale University Press, 1955), pp. 82-84 for a description of the relationship between multiple action possibilities and the attainment of relative freedom. See also Chapter VI.

See also Heinz Hartmann, Ego Psychology and the Problem of Adaptation, op. cit, p. 23 for his presentation of the necessity of considering psychological adaptation to an "average expectable environment." Alvin W. Gouldner distinguishes between mutual interdependence and functional autonomy and gives examples of strategies to maintain autonomy in "Reciprocity and Autonomy in Functional Theory," in Llewellyn Gross (ed.), Symposium on Sociological Theory (New York: Row Peterson, 1959), pp. 241-270.
5.1 Selection of behavior from an operating culture, or selection of behavior appropriate to a particular role, is a function of the state of the system and the perception of the situation *cum* social stimulus (see 4.5-4.8).

6. Adaptation of norm sets to the environment can be accomplished through a wide range of psychological processes.

6.0 Some processes may produce reorganization in the norm sets.

6.1 We can classify most major reorganization processes as those of isolation, aggregation, assimilation and accommodation (see Chapters V and VI).

6.2 The effectiveness of each adaptation process is relative, and is a function of the relation between the organization of the system and its environment -- particularly the ratio of system resources to input variance.

6.3 The impetus for the generation of new norm sets comes from declining satisfaction produced by the interaction of the existing set with the environment.

6.30 Satisfaction is assessed through testing subroutines (see 4.2, 6.5).

6.4 Evaluative internal standards (or, ideological dimensions of action) are the determinants of the mode of adaptation (see Chapters VI and VII).

6.40 Processes of adaptation will be selected after first mapping on a sort between the "ideological" dimension as contrasted with the "instrumental" dimension (see Chapter VII).
6.41 If the behavior following the dominant norm set (or norm) does not pass test routines, behavior will be selected following subordinate norm sets (or norms) within the set or subordinate norm sets following a principle of "least effort." To the extent to which input can be perceived as applicable it will be applied to all existing alternatives prior to activation of the threshold of new norm set generation (see 6.5).

6.5 Norms initially acquired by pragmatic motivation for maximum reward and least cost may under appropriate environmental conditions be transformed into ideological status and subsequently become the basis of a new norm set48 (see Chapter VII).

6.50 Such a transition is dependent on a number of environmental factors, chiefly small group or reference group support.49

---

48 A useful perspective on this process is provided by Erving Coffman, Presentation of Self in Everyday Life (New York: Doubleday, 1959), p. 27 in his discussions of the utilization of social fronts and their autonomous development. An understanding of the process of transition at a deeper level is provided by Heinz Hartmann, Ego Psychology and the Problem of Adaptation, op. cit., pp. 25-27, 89-96 and passim. Processes of automatization have long been linked to neurosis; Hartmann's contribution was in linking automatization to processes of secondary autonomy. See especially Ibid., pp. 92, 94. Perhaps significant in this regard is the finding of Alvin Gouldner and Richard A. Peterson that technology has a somewhat greater weight in affecting social change than ideological conversion -- what they term "norm sending." Notes on Technology and the Moral Order (Indianapolis, Indiana: Bobbs Merrill, 1962).

49 See Talcott Parsons, The Social System (Glencoe, Illinois: The Free Press, 1951), p. 33. See also Charles W. Morris, "Introduction," to G. H. Mead, Mind, Self and Society (Chicago: University Press, 1934) which stresses Mead's concept of the generalized other. "The individual transcends what is given to him alone when through communication he finds that his experience is shared by others, that
Where the ideological focus of a new norm set is opposed to the ideological focus of action in the larger culture and small group interaction around the new focus cannot be isolated in space or time from the larger culture, small group support may not be sufficient to establish and sustain a new steady state (see Chapters VI and VII).

Under the above conditions of opposition and active confrontation the viability of the new set may become contingent upon the ability of adherents to successfully proselytize in the larger society.

Norm sets are not dispersed at random throughout societies, mass movements, organizations, or groups.

A wide variety of dominant norms (and, a fortiori of subordinate norms) can be adapted to a given environment.

is that his experience and the experience of others fall under the same universal...." Ibid, p. xxxix. See also Mead's comments in Ibid., pp. 138-9.

More than one equilibrium is involved in the establishment of this steady state and perhaps the reader has been left with an overly simplistic view of it. Heinz Hartmann presents a rather difficult but worthwhile exposition of four simultaneous equilibria: between individual and environment, between instinctual drives, between mental structures, between the synthetic function and the rest of the ego. See Ego Psychology and the Problem of Adaptation, op. cit., p. 39.

See L. Festinger, H. W. Riecken, Jr. and S. Schachter, When Prophecy Fails (Minneapolis: University of Minnesota Press, 1956). See also Chapter VII of this monograph.
7.1 Of the potential variety of norm sets which are viable in a given environment only a limited segment will be developed by a society, mass movement, organization or group.

7.10 The greater the number of bases of role differentiation and the greater the population of individuals, the greater the probability of variation in norm sets.

7.100 It will usually be the case that as one examines larger aggregates within the same larger system of human relationships, e.g., groups, organizations, mass movements, or societies, one will encounter a greater variety in norm sets.

7.11 (Corollary of 7.10) The larger the aggregate and the greater the division of labor or differentiation of function, the wider the range of dominant norm sets necessary among its members, if differentiation of function stems from differences in the bases of role differentiation as opposed to mere number, e.g., specialized knowledge, age, generation, wealth, sex.

7.12 (Corollary of 7.11) The larger and the more complex the differentiation of function in an aggregate, as in 7.11, the more representative the aggregate will be of the patterns of norm sets dispersed in that society.

Propositions 7.10, 7.11, and 7.12 are increasing functions over time provided that the ratio of variation in environmental input does not increase in proportion to free floating resources available to system regulators (see Chapters VI and VII).

Conclusion

Chapter III has presented a new conceptualization of the self-image. A simple elaboration of the concept of norm sets was applied to selected data from a number of disciplines to generate a deductive system of analysis. This series of propositions was extended over both micro and macro levels of analysis.

The next chapter will discuss the model in greater detail. Some further comments will also be made on the deductive propositions as they relate to other concepts in the literature of the behavioral sciences.
The purpose of this chapter is to discuss more flexibly the Norm Set Model presented in the last chapter, as well as the set of formal propositions. We shall relate the model to notions of personal style, culture, boundaries between system and environment, and processes of development in the child. For convenience in reference, we will again present Diagram 3.

Self-Images (W through Z)
Norm Sets (A through N)
\[
\begin{array}{cccc}
W & X & Y & Z \\
A_W & A_X & A_Y & A_Z \\
B_W & B_X & B_Y & B_Z \\
C_W & C_X & C_Y & C_Z \\
N_W & N_X & N_Y & N_Z \\
\end{array}
\]

Relationship of the Model to Personal Style

One question the reader might well have been asking is, "What is the relationship of the Norm Set Model to what is called personal style?" We would begin our reply by noting that the organization of norms and their contents is a matter of individual style and reflects adaptations of selected elements to the environment. We have already discussed "elements" on page 38 in terms of attitudes, cognitions, evaluations and preferences.

In thinking of personal style it is helpful to start by examining the layman's view of psychology. One of the first things that comes to his mind is that of "personality." If you ask him what he means by personality, he may say, "Oh, some people do some things differently from others." If pressed on the point, he will note that some people get angry sooner than others, others are able to work harder without stopping or getting frustrated; some persons, he will
say, are proud, others are humble, and he will relate a list of other traits. He may also claim that a given person is likely to respond in a somewhat similar manner across situations. As far as lay psychology goes, one may abstract numerous contradictions. Although most people are said to behave similarly, some people are said to behave differently in crisis situations than they do in "ordinary" situations. Other people are said to behave differently when they are in positions of power as compared to their behavior in positions of subordination, and so on. How one provides for these matters of style in personal behavior in terms of the model raises some interesting insights into what we have without too much specificity referred to as norm sets. Norm sets contain a number of items such as "drive," "values," "motivations," etc. The hierarchical ordering of these norm sets under a given self-image seems to account quite well for the observed phenomenon that when a person sees himself in a given situation, he acts as if his behavior were governed by a self-image appropriate to that situation. Thus, the activation of a self-image activates a limited choice from a hierarchy of norm sets. Note here that the model and theory of propositions which follow from the model nowhere state that an individual actually behaves with the self-image consciously in mind. Although from time to time this may in fact be the case, it is only necessary for the model that the individual behave as if he were governed by a given self-image. Thus, the model's applicability and utility depends upon its ability to predict behavior based on the individual's self-images whether or not the individual himself has consciously formulated or is even aware of the elements which are included in his self image.1

1One could further take the position that the task of science is to enable greater comprehension of reality and that all symbolic constructs which represent that reality are somewhat arbitrary. The "reality" of norm sets in this view is as meaningless as the model of matter adopted by contemporary physics -- vast empty spaces intermittently sprinkled with nuclei. Everyday experience is certainly difficult to relate to such a model, but this is not particularly significant. See, for example, John T. Doby, "Logic and Levels of Scientific Explanation," in Edgar F. Borgatta (ed.), Sociological Methodology 1969 (San Francisco, Jossey-Bass, 1968), pp. 137-154:

The recognition that scientific explanation is dynamic, not a static or fixed system, and that the structure and language of explanation are intended to make nature intelligible and not to correspond to man's daily or personal experiencing of it nor to serve as a map or picture of reality itself.

Ibid., p. 138.
To return to the matter of commonality of behavior across similar situations, one may say that when an individual behaves thusly, he is acting as if his behavior were governed by a hierarchy of norms applying across these situations. To account for different behavior in situations that seem, to the observer, to be similar, there are two major directions in which the observer should seek an explanation. First, the observer should look for differences in the state of the individual preceding this situation, that is differences in the state of the system affected by history and memory. Second, the observer should look for additional stimuli in the immediate situation which hitherto may not have seemed important, but which turn out to be important in the actor's perception. Stemming from these two kinds of observations, differences in behavior will usually be accounted for in one of two ways: 1) the self-image which usually operates in situations of this sort will be found to be in operation, but within this self-image a norm set other than the usual dominant one will have been activated; or 2) a different self-image (than the one usually operating in situations of this type) will be found to have been activated. This latter phenomenon is at the crux of the problem of how an individual can create, and adapt to, social change, and we will dwell extensively on this later.

At this point, however, we are concerned only with similarities of style. We have noted that there is no difficulty in accounting for similar behavior in similar situations. Similar behavior in different situations would suggest the subtle nuance of style. For example, a man who generally is spoken of as withdrawn and passive may be seen as a withdrawn and passive father or a withdrawn and passive bureaucrat, whether viewed analytically as operating from the same self-image or not. We must grant that it is not always easy to be sure, in any satisfactory and convincing fashion, whether an individual is operating from one self-image or two self-images in a case like this. Assuming that the above problem is not insurmountable (which we believe to be the case) we would quickly note that there is no theoretical reason why some norms common to one self-image should not also be common to another. For example, Norm Sets $A_X$ and $C_W$, in two self-images ($X$ and $W$) might be highly similar. Norm Sets $B_X$ and $B_W$ may not be so similar. Thus, there is a different set of priorities, depending on the self-image that has been activated. Speaking very generally, however, we take the position that the individual, if given a free choice in the matter, would probably prefer to act consistently, as for example between two roles which he frequently enacts and between which he would prefer not to make a distinction. However, if the social rewards and sanctions are such that the preferred behavior is not highly rewarded, then the dominant behavior will not be enacted, but a lesser alternative will be selected. This lesser alternative may be preferred under some other self-image. The test of this situation is to remove an individual to a situation where normal social rewards
and/or sanctions are not applied and see if the behavior remains the same or shifts to a less consistent position.\(^2\)

In summary, the Norm Set Model’s contribution to an understanding of individual differences is that it broadens the complexity and enhances the utility of the concept of an individual self-image. First, it provides for selection both in terms of the number of images and in terms of the areas to which their associated norm sets apply. Secondly, it provides for a number of norm sets arranged in a hierarchy of a given self-image, thus calling attention to the boundary problem between one self-image and another. Thirdly, it uncovers the importance of considering the number of norms which can be included within a given norm set, with particular emphasis upon the dominant norm set. Fourthly, it places crucial emphasis on sociocultural reinforcement as the primary basis of self-image organization. We believe that the model integrates typologies of individual differences better than would be the case if we were to try to explain differences in sensitivity to the environment by analysis in terms of differences in cognitive complexity or affect levels, or differences in locus or limits of control response or defense orientation, etc. These latter psychological explanations do not provide a sufficiently broad underlying typology. To summarize, it is our belief and our hope that the Norm Set Model can improve our understanding of broad cultural patternings among individuals both of psychological differences and of similarities.

### The Problem of Boundaries

The nature and kinds of boundaries and their porosity are of prime importance in any systems analysis. Research starts with boundary location; the adage that if you ask the right question, you have done half the work, illustrates a boundary-finding rule. Looked at another way, the process of determining what is the correct problem, what is the correct question to ask about the problem, involves the delimitation of a boundary of some system with respect to its environment and other systems in that environment. Of equal importance is the determination of the appropriate boundaries within a self system. Discussion in this section will serve as a heuristic for locating

\(^2\)Here see some of the experiments which have been done in the educational setting with authoritarian personalities, the attempts to alter authoritarian personality sets. Apparently, reducing social rewards to the point where authoritarian behavior becomes costly does produce less authoritarian or non-authoritarian reactions. Nevitt Sanford, *The American College: A Psychological and Social Interpretation of the Higher Learning* (New York and London: Wiley, 1963).
significant boundaries relevant to a consideration of a variety of problems involving the individual and social change.

Of the several significant questions which will be brought to bear upon our Norm Set Model, of key importance is the question: What is the environment? The relationship between system and environment has always been a difficult problem for social science, generally speaking, and whether it be a problem of the political system or a problem of a personality system, there are common difficulties which are encountered in delimiting clear lines between the system under study and its environment. At the extremes, of course, there is no problem. One can always point to some elements which are quite clearly within the system and to some elements which are equally outside the system. Thus, in the model of the individual and his self-images, the Mohave desert is not part of the model in any regular or standard sense. (An individual perception of the Mohave Desert could, of course, be included in the model if it were applied to a specific instance.) On the other hand, there are elements, such as previously mentioned attitudes, and norms controlling behavior which are quite clearly included within the boundaries of the model. The difficulty is to determine what is the environment from the point of view of a given person at a given time. Given that the crucial feature of the model is the organization of norm sets, the difficulty can be restated thusly: Which norm sets are external to the individual, which are between the individual and his environment, and which are internal to the individual? This raises the identity problem and various related areas such as identification, internalization, socialization and enculturation. It would take us too far afield to explore these in systematic detail. Our purpose here is only to raise certain strategic questions concerning the nature of the boundary between the Norm Sets and their environment.

Internalization of Norms

One way of simplifying the problem is to determine the structure and content of the individual's perception. If an individual perceived a norm to be external to him rather than feeling it concomitantly with perception of the environment, then that norm is external to him. That is, the individual generates the norm in response to

3 That is in the abstract the matter is uncomplicated; however, the question of when a specific norm is "internal" to the system is quite complicated, as we shall see later.

situations not denoting the norm. This approach still leaves an ambiguity, for the individual may have norms which supplement a norm which is external to him, so it is neither completely outside his system nor definitely inside his system.

The behavior prescribed by a norm may be accepted by the individual on the basis of another, closely associated, norm. This may be the case either because the prescribed norm behavior is external to the individual, or alternatively, the norm in the perception of alters which prescribes the behavior is a norm which is subordinate to another in the individual's norm set in his activated self-image. Thus, an individual may choose to respond with appropriate behavior prescribed by a norm which is not in his dominant norm set but which is congruent with it.

Such behavior may often be called "pragmatic" or "superficial." But regardless of what it is called, social conformity can be insured to some extent by the structure of rewards and reinforcements as affecting existing individual values more or less independently of the socially prescribed norms which ideally govern the behavior. This is well illustrated, for example, by the tendency of political systems, after stating all the noble purposes and ends for which they are intended, to then devise elaborate means which, in fact, operate upon the worst possible premises rather than the most ideal. The enduring American system of checks and balances is an example of this type. It would be an improbable political system which functioned on the basis that men in positions of power will even usually, to say nothing of always, act on the norm of bringing about the greatest possible social good for the greatest possible number without some consideration of "pragmatic" conditions. Indeed, the very fervor of idealizations of the "general welfare" myth indicate something of the necessity to supplement it.

Returning to the main point, perhaps the greatest problem with the environment boundary is posed by conscious and unconscious norms and by the process of internalization. If norms are, as it were, transferred from an external source to an internal source, there must be a period of time in which they are located totally in neither or are located in both. Under these conditions, supplementary norms will be invoked to produce the behavior at one point. Upon successful reinforcement, a later period will be governed by a norm in a dominant set or in a hierarchically higher set than the set in which the supplementary norm is located. Without the supplementation of what later becomes a "lower ordered" norm the behavior would not have been produced at all.5

In tracing out a problem like the above in empirical research, it must be admitted freely that certain problems would be encountered, and in admitting this we simply add the hope and the belief that these problems are by no means insurmountable. For rigorous scientific explanation, the number of qualifications one can attach to a causal explanation has to be limited, i.e., hypotheses and propositions must be falsifiable. It is difficult to close the argument that if a behavior is not reproduced or replicated, then the norm that was thought to be dominant has not really been firmly established. The null hypothesis that a given norm is not in the dominant set can probably be established without too much difficulty. But to establish the contrary that a given norm is in the dominant set seems to be at this point a Herculean undertaking. This is a fortiori the case given the possibility that other self-images as a source of control may have to be considered as alternatives for the self-image under primary consideration. In any case, there is consolation in the fact that other, similar research faces similar difficulties.6

Sanity and Insanity

We will later discuss the integration of mental processes in relation to the processes of autonomy and legitimacy. But boundary maintenance between self and environment and within the self system also bears importantly upon psychiatric disturbances. Ludwig von Bertalanffy provides a useful summary and illustration of the boundary questions involved in the nature of sanity-insanity:7

6 The analysis proposed is not as difficult as it seems, although there is a certain arbitrariness to fixing points of demarcation or boundaries to "norms." A good example of such a procedure may be found in Jean Piaget's classic The Moral Judgment of the Child (London: Kegan Paul, 1932). In somewhat different terms the establishment of norms of group behavior in sensitivity groups and "T Groups" reflects a similar process. A most interesting presentation replete with case studies is Philip E. Slater's Microcosm: Structural, Psychological and Religious Evolution in Groups (New York: John Wiley & Sons, 1966). See especially his discussion of the separation of the secular from the sacred analogous to our earlier discussion of the difference in implication for thresholds of instrumental and ideological norm sets. See also "Part Two: The Evolution of Boundary Awareness," in Ibid., p. 167-185.

Mental disease is essentially a disturbance of system functions of the psychophysical organism. For this reason, isolated symptoms or syndromes do not define the disease entity.... Look at some classical symptoms of schizophrenia. 'Loosening of associational structure' ... and unbridled chains of associations; quite similar examples are found in 'purple' poetry and rhetoric. Auditory hallucinations; 'voices' told Joan of Arc to liberate France. Piercing sensations; a great mystic like St. Teresa reported identical experience. Fantastic world constructions; those of science surpass any schizophrenic's. This is not to play on the theme 'genius and madness;' but it is apt to show that not single criteria but integration makes for the difference.

Psychiatric disturbances can be neatly defined in terms of system functions. In reference to cognition, the worlds of psychotics, as impressively described by writers of the phenomenological and existentialist schools ... are 'products of their brains.' But our normal world is shaped also by emotional, motivational, social, cultural, linguistic, and the like factors, amalgamated with perception proper. Illusions and delusions, and hallucinations at least in dreams, are present in the healthy individual; the mechanisms of illusion play even an important role in constancy phenomena, without which a consistent world image would be impossible. The contrast of normality to schizophrenia is not that normal perception is a plane mirror of reality 'as is,' but that schizophrenia has subjective elements that run wild and that are disintegrated.

The same applies at the symbolic level. Scientific notions such as the earth running with unimaginable speed through the universe or a solid body consisting mostly of empty space interlaced with tiny energy specks at astronomical distances, contradict all everyday experience and 'common sense' and are more fantastic than the 'world designs' of schizophrenics. Nevertheless the scientific notions happen to be 'true' -- i.e., they fit into an integrated scheme.

Similar considerations apply to motivation. The concept of spontaneity draws the borderline. Normal motivation implies autonomous activity, integration of behavior, plasticity in and adaptability to changing situations, free use of symbolic anticipation,
decision, and so forth. This emphasizes the hierarchy of functions, especially the symbolic level superimposed upon the organismic. Hence beside the organismic principle of 'spontaneous activity' the 'humanistic' principles of 'symbolic functions' must be basic in system-theoretical consideration.

Hence the answer whether an individual is mentally sound or not is ultimately determined by whether he has an integrated universe consistent within the given cultural framework.... So far as we can see, this criterion comprises all phenomena of psychopathology as compared with normality and leaves room for culture-dependence of mental norms. What may be consistent in one culture may be pathological in another, as cultural anthropologists ... have shown.

Porosity

A third set of boundary questions can be raised with respect to the porosity of a boundary between a system and its environment, a boundary between subsystems of the system and a boundary between subsystems of the system and the environment if they are linked to the environment directly. There is no satisfactory a priori approach to these matters; however, it is possible to note what considerations will be essential to a proximate resolution of the problems involved. First of all, what is an analogue to the nature of the boundary? Is it more profitable to view the relationship between the self-image and the environment as a quality akin to porosity, or is it perhaps more efficient to think about it as a stimulus barrier or a process involving stimulus selectivity? Perhaps porosity is somewhat misleading in this respect as a threshold of perception, and sensitivity of perception as influenced by the reinforcement of the behavioral environment ties together more of the data in social change. Much of the research which has been done on the circumstances conditioning selectivity or receptiveness to some kinds of stimuli rather than others, particularly in social processes, is pertinent here. Research on rigidity, open-mindedness, the authoritarian personality also seem to be pertinent. The latter especially bear upon the question: Can different self-images vary in sensitivity, and can different self-images within the individual differ in sensitivity to social stimuli? The differential conditions under which learning is facilitated or hindered also

---

8See Chapter II on role reinforcements and operating culture selection for examples.
should be considered, for example, David Ausubel's work on cognitive advance organizers. Relevant to this question is the one Jean Paul Sartre raised concerning anti-Semitism. Can a man be a good father, a loving husband, and at the same time still be an anti-Semite? Some research seems to indicate that where a given belief system is part of a culturally accepted world view, some of the other aspects which are generally (cross-culturally, statistically) associated in a syndrome with this belief system need not necessarily be present. All of these areas of investigation pose fascinating problems for research to determine under what conditions a self-image is more or less sensitive to given kinds of stimuli under specified kinds of social situations.

As the above discussion suggests, the nature of the boundary between self and environment will be a problem for social science for some time to come. The most that can be done here is to indicate leads such as those already referred to which seem promising. In addition to studies in social psychology and psychiatry, it is suggested that investigations of anthropologists should be taken into consideration here, particularly those on continuity and discontinuity in the life cycle. The research on acculturation also looks promising; for example, see Edward M. Bruner's comments on "The Early Learning Hypothesis." Although there are numerous objections which could be raised to the early learning hypothesis, particularly with respect to its failure to adequately account for the dynamics of the process in the sense that mere temporal priority proves nothing, it is a suggestive lead, particularly in locating dominant norm sets. This is not the place, however, to pursue the topic of which norms become internalized at what point.


13See, for example, Piaget, Moral Learning in Childhood, op. cit.
At the psychological level of explanation, the nature of the boundaries that separate self-images within an individual presents a rather puzzling problem. Most psychological theories refer to the self as an integrated and continuous whole. The implicit notion that the whole individual is acting has persisted in Western science and Western philosophy under one form or another for thousands of years. The possible existence of a person behaving in such an integrated manner is called into question, if by nothing else, then by the stress upon its attainment as an ideal -- the ideal of an integrated man or of a whole man who fulfills the multifaceted purposes of his being in every act. Strangely enough, most of the definitions of self in encountered psychology seem to accept this ideal as at least an approximate description of human behavior. It is an uncomfortable feeling to argue against such a well-established and firmly grounded artifact of Western philosophy, but our previous discussion of the bases of self-differentiation indicates that it is not at all the case that a person acts under one integrated self-image.

If we examine the matter closely we see that the separation of role contexts by space, by time, and by the restriction of some interactions to isolated sets of individuals achieves the separation of reinforcement structures in self-images as well. Such separation and isolation helps insure the development and organization of psychological functions primarily oriented toward these contexts. Another factor, separation of group activities from those of other groups and the phenomenon of identification with selected group members, provides the basis for the genesis of separate self-images. For example, several authors have pointed to the reinforcements of the American middle class nuclear family with its female-dominated home atmosphere in childhood as forming a context for internalization of norms which are peculiar to the culture. Following Freud, it seems reasonable prima facie to account for the establishment of new self-images through the extension of the domain of control of existing norm sets to a greater expanse of the environment. The major support of this development is the phenomenon of differential identification through maintenance of differential social reinforcement systems supporting them.

Thus, it would seem legitimate to regard the organization of the individual's total system as resting upon the boundaries of communication in the larger society by which separate self-images have


\[15\] See Chapter II on roles and operating cultures for examples.

separate contacts with the environment. This allows the individual to act under these self-images by selecting from the supportive social system inputs which reinforce the dominant norm set of that self-image. This process raises numerous interesting questions if we take it as the basis of social change. If a person is acting under a self-image defined as inappropriate by a new social system which he enters, will the inappropriate self-image be isolated, aggregated or obliterated by the social contact? This problem will be addressed in some detail later but here we are concerned with its implication for the nature of the boundaries between the different subsystems: What is the probability that a person will shift from one of his self-images to another, or abandon a self-image, and under what conditions will he do so? Our model suggests that when a social system is low enough in its input of reinforcement so that by performing under a given self-image a person can only satisfy norm sets which are low in the hierarchy for that self-image, then the person will initiate a search for a self-image with a higher degree of reinforcement capability. He will compare and contrast the activated norm set which may be satisfied under the activated self-image with others to determine if he has available other self-images under which a higher preference level may be satisfied. At some degree of discrepancy between levels in the system the individual will shift.

This inspires an interesting conceptualization of the "superego" in which the superego is the function of hierarchically organizing or maintaining a sense of stability among alternative self-subsystems, that is, among alternative self-images, and, within a selected self-image, among alternative norm sets. This is clearly a different function from maintaining a stable relationship between the behaviors governed under one norm set within a self-image as contrasted with another norm set within another self-image. These conceptually distinct activities provide an interesting approach to the problem of guilt. Failure to satisfy a subordinate norm set is not likely to cause discomfiture if higher order norm sets are being satisfied. However, if the social situation in the short run reinforces the selection of a subordinate norm set, and the social situation in the long run reinforces the selection of the superordinate norm set, then

a situation is created under which guilt feelings will be systemati-
cally produced. Alternatively, if some self-images are less satis-
fying than others, prolonged interaction under a less satisfying self-
image could severely strain the entire system. Comments on this will
be made at length in later discussions of acculturation and social
change. But we must first take up our briefly mentioned problem of
isolation and aggregation.

Conscious and Unconscious Elements

Within a given norm set will ordinarily be found both con-
scientious and unconscious elements (p. 34). The unconscious elements
break down further into two main types: 1) influential elements that
may be consciously articulated values, yet are available to the conscious
awareness should behavior or the self-image itself become problematic;
and 2) elements which, although influential in affecting behavior, are
repressed -- actively defended against. Thus, for example, the
neurotic compulsive may constantly portray himself as an over-

---

18 Leo Schneidermann, op. cit., pp. 162-165 calls attention to
the importance of interpersonal relations in defining the interpreta-
tion of the situation in the short and long run. The determination
of guilt feelings stems not from the norm set violation but from the
feelings of conflict with the social environment. He argues that
"both moral and 'immoral' actions occur in response to direct social
pressures, and are productive of anxiety only when they violate the
prescribed definition of the context in which they occur.... Anxiety
may occur as readily in a person who behaves morally in an atmosphere
of general good will." Later Schneidermann drops this somewhat loose
formulation of "atmospheres" and "morality" to focus on the presumed
reality of the actor in terms of his perception of others. From this
we may hypothesize that reaction to the short run situation by
selecting behaviors reinforcing a lower priority in the norm set will
increase the importance of that norm set in defining the self-image.
However, if the perception of "reality" in the long run establishes a
conflict within the actor due to his relationships with significant
others in overlapping social situations, the guilt system or anxiety
system will be established. Refer to our later discussion of self-
awareness and change strategies for some implications of these propo-
sitions for social change (pp. 73-74).

19 At another level Erving Goffman describes varying degrees of
awareness of "performances," op. cit., pp. 16-20. See also Stendahl
(Marie Henri Beyle), The Red and the Black (Tr. C. K. Scott-Moncrieff),
In his self-image as a high achiever he may be able consciously to articulate values of setting high aspiration, hard work, efficiency, future orientation, etc. This makes for a tight norm set dominating a hierarchy of lower-ranking sets; however, the most important norm involved (important, that is, from a clinician's viewpoint in terms of maintaining the neurotic behavior) may not be available to conscious recall. It may be so repressed that the individual in his self-image as a "patient" may be unable to recall or recognize it, even though it is largely responsible for the "compulsive" aspect of his behavior. That is, the individual may not be aware of the negative evaluation of failure, insecurity and under-assertiveness, which all contribute to severe anxiety. The latter may be crucial norms within the dominant norm set, yet be unavailable to self-consciousness under non-therapy conditions and actively defended against in therapy. As a consequence, the individual may rationalize his conscious achievement norms in ignorance of his fear of failure. Thus, he may not only remain unaware of the "causes" of his "objectless" anxiety but remain unable to face his anxiety to the point of denying its existence. In this state his behavior is controlled by a norm which, being inaccessible to consciousness, is beyond control. The individual is motivated to set goals so high that failure to attain them is not reprehensible -- rather than set goals whose attainment might be "realistically" expected.21 (Not surprisingly, the failure to attain the high goals feeds greater fear which tends to amplify ever-increasing deviation rather than to maintain a stable steady state.)

One advantage of the foregoing derivation from the Norm Set Model is that it allows an extension into both the micro and the macro levels. To the extent that self-image and self-consciousness are not equated with the total personality and to the extent that norms cohere in sets which link together conscious and unconscious elements, then the idiosyncratic experience of the individual finds a representation in the model. On the other hand, the model is not tied to the unique individual experience by virtue of the coherence of norms and the hierarchy of sets, thus reflecting social commonalities. Norms are likely to occur in patterned sets reflecting widespread cultural practices in socialization and continuities and discontinuities in cultural conditioning.


21 Contrast achievement as fear of failure and as aspirations to success in John W. Atkinson and George H. Litwin, "Achievement Motive and Test Anxiety Conceived as Motive to Approach Success and Motive to Avoid Failure," Journal of Abnormal and Social Psychology, Vol. 60 (No. 1, 1960), pp. 52-63.
Another aspect of this conceptualization concerns the degree of self-awareness in the individual and the level of self-awareness in the population of the society or various subpopulations thereof. Our discussions of autonomy and of legitimacy in Chapter VII will return to the significance of this variable. Here we note that self-awareness can have both positive and negative implications. Self-awareness seems to be limited by anxiety as well as by homogeneity, ritualization and institutionalization. Thus, if the antecedent conditions have promoted a lack of self-awareness, and if this lack endures for a significant length of time, the outcome might be a threshold condition involving loss of response capability and flexibility vis-à-vis the environment. In this sense, self-awareness represents a regulative capability and a control over environmental variation.

We hypothesize self-awareness to be a response to a problematic situation. It would seem that for the individual in isolation as well as for individuals as members of larger cultural units it is likely that awareness of values occurs only when such values give rise to problems. Within congruent value systems it is possible to remain unaware of ways of thinking and acting.

We might note in passing that a person may even have incongruent, yet unproblematic, value sets as long as these elements remain isolated within the individual. They may remain so isolated by virtue of temporal, situational or interpersonal restrictions on their activation; one important clue to social change is found in the breakdown of such restrictions. As long as norm sets within a particular self-image, and self-images within the individual, are based either on congruent values, or on isolated incongruent values, there is no reason why the values themselves should enter the self-awareness of the individual. This brings us to the negative aspect of self-awareness.

A problematic situation which calls into attention values which have been preconscious may well have the positive effect of increasing self-control, cognitive control in service to the ego. However, when the problematic situation brings into awareness defenses -- that is, symbols which stand in place of repressed, conflict-arousing values -- then the positive function of increased awareness is less assured. An

\[22\text{See Carl G. Jung, Psyche and Symbol (New York, Doubleday, 1958), especially p. 136 on the observation that "identity does not make consciousness possible; it is only separation, detachment, and agonizing confrontation through opposition that produces consciousness and insight."}

\[23\text{This is merely one source of the phenomenon. Repression through frustration is another. Both seem to be functions of anxiety in face of new stimulus-response relationships.}\]
educational strategy for guided social change which called upon increasing respondent introspection and cognitive controls courts this danger.

It is not always the case that increased introspection, or intellectualization, will lead to self-reorientation. A neurotic, for example, can be driven to increased compulsion to avoid the consequences of introspection. Even with non-neurotics, resistance to change can be increased by attempts to increase self-awareness by "objective" presentations. Paradoxically, the greatest harm may occur where the change-agent is right. Carl Rogers points directly to this difficulty:24

It should also be emphasized that only those feelings should be verbally recognized which have been expressed. Often the client has attitudes which are implied in what he says, or which the counselor, through shrewd observation, judges him to have. Recognition of such attitudes which have not yet appeared in the client's conversation may, if the attitudes are not too deeply repressed, hasten the progress of therapy. If, however, they are repressed attitudes, their recognition by the counselor may seem to be very much of a threat to the client, may create resentment and resistance, and in some instances may break off the counseling contacts.

We may conclude this discussion of self-awareness with the hypothesis that where environmental changes have the effect of increasing self-awareness or of increasing cultural consciousness, the probability of self-reorganization or cultural reorganization in the direction of increased cognitive control, greater responsive capability, and greater flexibility of internal rearrangements from perceived alternatives, will be directly related to the availability of the problematic values in the preconscious. Or, alternatively, the probability of positive response will be inversely related to the degree of repression of the problematic values. The corollary is that attempts of change agents to accentuate those aspects of the self-image of their respondents which are repressed or which involve defenses against conflicting values will serve to increase resistance to change. Thus, we can hypothesize that self-reorganization is more likely in areas instrumental to the culture as compared with areas which are ideological to the culture, but this anticipates Chapter VI.25


25See Chapter III, Proposition 6.4 for the introduction of these concepts.
Developmental Aspects of the Self-Image

We must also consider the developmental process of the self-image in the establishment of norm sets. Part of this aspect was discussed in our treatment of internalization and the locus of control within the individual. An insightful portrayal of a developmental approach can be found in Ulric Neisser's summary of Piaget's position.  

The fundamental assumption on which any developmental approach rests is straightforward: thinking and remembering do not occur in the same way throughout life, but change as the child grows into a man. The changes are not only of content but also of method and style. For the most part, they result from the cumulative effect of the cognitive activity itself. That is, the very act of processing information causes change in the system which carries out this process. Piaget calls this change accommodation... Accommodation is the change in him; its effect in reshaping the input is called assimilation.

These two reciprocal processes--assimilation of reality and accommodation to it--are stressed by Piaget as responsible for the growth of intelligence.... The structures which are accommodated and which do the assimilating are called schemata by Piaget.... The accommodative process critically involves the child's own activities and movements. As fast as it is formed, any schema is used to assimilate new experiences, changing them to an extent that makes what comes after quite incommensurable with what went before.

It is noteworthy to find the concept of a steady state implicit in this position insofar as the state of the system is contingent on a flow of "information." Likewise, a self-image is dependent upon a steady flow of reinforcement. 27 This is a modification of Piaget's reinforcement theory to include more than cognitive structures, and is, we believe, a legitimate working hypothesis. That is, it is not only cognitive structures which require a steady flow of supports but affective and


normative structures as well. One qualification is added in that continual reinforcement may often be more effective in establishing a response than continuous reinforcement. This theme will be extended into the conception of norm sets.28 Piaget's concept of "schema" and its importance for memory indicate one major explanation for similarity in groups of norms across individuals. The continuities and discontinuities of socialization produce experiences emphasizing similar perceptions, emotions and cognitions. Thus, in a state in which parents possess a given organization of selection mechanisms and interpretative orientations, they are unlikely to perceive alternatives from a child's viewpoint; thus, they reinforce the child to adopt their organization and to forget his perspectives as their parents themselves did in their childhood. Conformity of categorization, interpretation and communication are enforced. Thus, we perceive as adults with fairly rigid schema which themselves reflect a "social agreement" or "social reality." This steady-state is preserved by a continuing mapping of experience, memory, and interpretation.29 These three processes, besides having implications for isolation and aggregation, have important implications for levels of self-change, legitimacy, and autonomy. These are the central psychological mechanisms for a general theory of micro-macro social change.

Summary

In concluding this chapter we note that the Norm Set Model presents a rather complex portrayal of the human being. He is seen as developing in experience different controls over his behavior. The controls are themselves modified by experience and are dependent upon a flow of support from experience.

The human being is not pictured as a simple passive reactor to the swirl of events beyond his comprehension; he is not pictured as an unreasoning machine powered by unconscious drives, forming associations and habits beyond his understanding and control. Neither is the Norm Set Model similar to the "rational" man who through reason manipulates and controls his reactions and his destiny.

We have attempted to define a locus of control for both psychological and social systems. Development from infant to adult,

28 Refer to the discussion of superego and guilt earlier in this chapter (p. 70).

and adult adaptation to environment, have been described as progress in the elaboration of hierarchies of norm sets. These mental structures are integrated with each other with varying degrees of coherence and with varying frequencies of reinforcement from the environment. Both factors have significant effects upon the control of behavior from individual to individual and from environment to environment. Whether the behavior of the individual will extract or guarantee an environmental stream of inputs -- an environmental structure -- sufficient to the maintenance of his norm set, or whether the environmental conditions will necessitate an alteration of the internal structure, lies in this balance.

There are different degrees of freedom for an individual with respect to his environment and later chapters will explore these in greater detail. In some respects the individual is analogous to a yet-to-be-devised, self-organizing computer which is sensitive not only to the content of a problem presented to it, but also to the method and structure of presentation. Such a machine would sort both variables to select a program by which to operate on the presented problem.

This chapter has established some links between the Norm Set Model and the general context of social science theory. There are many more enumerations which one might add and it is difficult to determine an appropriate cutoff point. However, a number of related areas in social psychology and anthropology will be discussed in Chapter VII in conjunction with the application of the model to autonomy, adaptation, social change and to a general theory of legitimacy. It seems best to take up these linkages as they occur under their later relevance rather than to devote separate treatment to them in this chapter. The next chapter will take up some alternatives for a general research strategy.

Social theorists often overlook the implications of their models of behavior for action. The evaluative consequences which flow from social theory are sometimes disowned by the originator. I cannot quite account for this curious irresponsibility except in the instance of that school of psychology which followed John B. Watson, Clark L. Hull and B. F. Skinner. In the instance of the latter a theory which denied "mentalistic" concepts and values was merely being consistent in ignoring the value consequences of its own propagation. 30

30 The deplorable authoritarian implications of the attempts to reduce human behavior to a level of physical and mechanistic explanation are delineated in Floyd W. Matson, The Broken Image: Man, Science and Society (New York: Anchor Books, 1964).
In our final chapter some of the implications of the Norm Set Model for social change and the rural-urban transformation will be discussed. Here it will suffice to note that one's method of education, therapy and, indeed, of adjustment to life itself are profoundly affected if these processes are conceived as a delicate balance among ordered decision principles relying on the reinforcement of others and the cohesion of internal -- fantasized and remembered -- reinforcements. The role of a given individual in shaping the influence of external factors upon him has a much greater weight in this conception as contrasted with one which postulates an individual passively reacting to either external or to unconscious "forces."
CHAPTER V

SOME RESEARCH ALTERNATIVES: A PRELIMINARY STATEMENT
TO AN OPTIMUM RESEARCH STRATEGY

One advantage to generating a series of propositions from a systematic model is that one can devise different research approaches either from the viewpoint of the system as a whole or from a viewpoint adapted specifically to problems in relating subcomponents to one another. This chapter will raise questions about research priorities and questions about the degree of integration which can be brought about between various research activities; that is: How can social change research supplement past and future work in some cumulative manner?

We are especially interested in the transition between self-images as the key to social change. Self-images in transition refers to a broad range of phenomena, e.g., going from the lower class to the middle class, from teenage daughter to well-settled wife, from graduate student to professor, or from traditional farmer to modern farmer. It seems advisable to stick to algebraic representations of self-images with the understanding that the reader will supply such illustrations as seem appropriate under his own conditions. Our procedure will be to start from the bottom, that is, with the components of norm sets and norm sets themselves and work to the top, that is, to the self-image and the organization of the total self-system.

The initial questions, then, will focus on the need for research into the expansion of the domain of behavior perceived as congruent with a given norm set within a given self-image; that is: What behaviors are organized within a given norm set and what other behaviors might be incorporated without strain? What sets of behaviors are congruent with a self-image as a hierarchical preference system? A person who sees himself as a \( W \) under given circumstances may prefer to behave as \( W_A \). At a given time we may state that, on the basis of observation, \( W_A \) includes \( W_{A1} + W_{A2} \ldots + W_{A_n} \). All these are elements (attitudes, cognitions, values, or preferences) governed under Norm Set \( W_A \), and are preferable to all of a similar set in that self-image under different circumstances governed under Norm Set \( W_B \). If \( W_A \) and \( W_B \) tend to reinforce each other, the individual will not perceive himself as choosing between them in conflict but rather will perceive himself activating \( W_A \) for the situations over which he has more control and \( W_B \) for situations over which he has less control.
He may view both outcomes as positive, although one may be evaluated more positively than the other. Other norm sets, subordinated to A and B, may be included in self-image W, but constitute less preferred, perhaps almost indifferent, behaviors.

An important question is, how many elements or norms can be added to a norm set before producing a qualitative change in that set or in the entire self-image of which it is a part? A prior question is, how many separate organizations can a given self-image include? Then the next question would be, how are elements or norms added or subtracted or transposed within a particular norm set or self-image? What is the relationship between an array or set of reinforcements in the environment and corresponding norms in a norm set? Some of the theoretical groundwork pertaining to this question will be covered under our discussions of relative autonomy in the next chapter. However, there is still much work to be done in this area.1

Another major set of questions might be developed around boundaries and the general topic of acquisition of distinct self-images, W, X, Y, Z. A set of questions should be directed to determining the control of distinctness among self-images, that is, what keeps the sets of norms which are hierarchically arranged into one self-image separate or nonintermingled with another norm set under another self-image? Can the hypothesis be sustained that subsets of norms are shared among different self-images? Self-Image W, let us say, includes Norm Sets A, B, and C; then is it possible for Self-Image X to include Norm Sets C, D, and E? Some of these questions have been raised in the last chapter with respect to boundaries. Another way of asking this question is: What changes when an individual moves from W to X? These represent questions involving transpositions or shifts according to, or with, changes in situations as they affect a given self-image. Another set of questions might be directed to the conditions of acquisition of a distinctly new self-image. Is acquisition facilitated by similarities of subsections of the sets? In Chapter VI we hypothesize with respect to cultural learning that to the extent that a norm being acquired is in the instrumental area of self-definition, rather than in the ideological area, the capability to acquire or learn it is increased. The association between the "instrumental area" and "creative behavior" is also hypothesized to be high. The question of facilitation perhaps would be better phrased from a situational focus: What controls the environmental area

1D. Rapaport, op. cit. (1960), p. 137 calls attention to the need for data on analogous structures at different levels of hierarchy in psychological organization.
to which a given norm set or self-image applies, and how is this area extended or redefined?²

The notion of the possibility of related norm subsets across self-images within an individual raises the question: What degree of variation is possible within a single individual, or, alternatively, how compartmentalized can self-images become? Part of the answer to this question will probably depend on the degree to which subsets of norms can be shared among different self-images and the degree to which subsets of norms can be shared among different self-images and the degree to which norm sets lower in the hierarchy of one self-image can be shared at a higher or lower point in another self-image. Can an individual have self-images W and Z if W contains a hierarchy of A, B, and C, and Z contains a hierarchy of D, E, and F, when A, B, and C share no characteristics with D, E, and F? If self-images W, X, Y, and Z have no consistencies or shared subcomponents, can they all be accommodated within the self-organization?³ Under what conditions does the strain of this kind of compartmentalization become more acute?⁴ Such questions as these might turn out to have interesting implications for mental health. But these questions about individual variations only touch on the degree of systemization in self-organization. There needs also to be considered the external reinforcements to self-organization. We need to consider group variations and the relationship of group membership to the degree of variability among individual members.

The relationship of these group characteristics and the uniformity or variability of individual self-images among members of that group pose a number of problems which are not easily operationalized. First of all, with respect to membership of a group, what norm sets and what self-images encourage or maintain membership?⁵ This is more of a question of group appeal than anything else. However, after the initial decision to join, do the norm sets of an individual become more like the common denominator of the group? The kind of group is a variable that must be considered, such as type of leadership, the degree of participation, the importance of its goal to the member. What is the


³For some leads here see Proposition 2.4, 3, on cognitive differentiation.

⁴Refer to the discussion of step level functions, Proposition 6., 6.5.

⁵But this is a smaller version of the problem of differential appeal to participants producing similar effects.
effect of strong participant memberships? An individual can join a social movement or a group for any number of reasons and probably be just as effective as other members of the group. But what external forces are necessary to sustain effectiveness? Where the individual perceives himself as a W, how do others perceive him? How does he perceive their perceptions of himself? What broad commonality is found across major groups within a society? An individual possessing a disorganized self-image, that is, a self-image whose hierarchy is not firm or whose norm sets are low in coherence and affective intensity may join a group with coherent norms and high intragroup coherence. Does this increase the power of the group over the member? This brings us back to individual variation again.

Some interesting research could be conducted into the locus of control and the range of elements controlled in terms of the external and internal requisites of control maintenance under a given self-image. This is especially the case in considering additions to or subtractions from a self-image. If, under Self-Image W, Norm Set A includes Elements A1 + A2 ... + AN, what is the consequence for W of the addition of one more element? Has W, thereby, gained in importance relative to the other self-images?

This problem can be generalized. For example, the analyst might observe an individual acquiring a new behavior by adding an element to a norm already incorporated in an existing norm set. Or, the new behavior might involve the addition of a whole new norm set to an already-existing self-image. Finally, the new behavior might involve the addition of a whole new self-image. In this last case, the new behavior would be embodied or reflected in the dominant norm set of the new self-image.

Finally, more work is needed on one of the most elusive subjects of all, that of the overall organization of the system, and the locus of overall control of choice and decision processes -- which self-image and norm set to activate in a given situation, how to maintain or shift boundaries, etc. We confess to some doubt as to how to label this structure or process -- superego, identity, or what?

---

6 Many suggestive leads on self-organization and groups can be gained from the T group or "sensitivity" group. See Philip Slater, op. cit., pp. 167-185.

CHAPTER VI

AUTONOMY AND LEGITIMACY: SYSTEM CONTROLS

For more than two years we have been intrigued with the basic importance to Norm Set Theory -- and indeed to any similar theory attempting to embrace both micro and macro levels of analysis -- of the twin notions of autonomy and legitimacy. This chapter represents our best capability, at the moment, to come to grips with these fundamental notions.

Stated very briefly, the crucial importance of autonomy lies in its relevance to the kind and extent of deviance from existing standards or expectations of behavior that is open to subunits of a system -- e.g., an individual in a group, a group in a society, etc. This freedom to deviate is the key to the initiation of social change. The crucial importance of legitimacy lies in its relevance both to the restriction of freedom to deviate, and to the "freezing" of a new norm once it has begun to emerge through processes of deviance. Stated at its most general (and crudest) level, then, autonomy has to do with the initiation of change, while legitimacy has to do both with the prevention of change, and with the retention of the social products of change. Autonomy and legitimacy, we will argue, are fundamental tools with which to analyze the balance between two component streams of influence upon processes of social change: 1) the behavior of individuals shaping the outcomes of events and organizational goals; and 2) the influence of events and organizations acting to socialize and resocialize individuals.1

1A good review of dual tendencies and paired concepts of interactions and institutions may be found in Reinhard Bendix and Bennett Berger, "Images of Society and Problems of Concept Formation in Sociology," in Llewellyn Gross (ed.), Symposium on Sociological Theory (New York: Row, Peterson, 1959), pp. 92-118.
Definition of Autonomy

Autonomy is defined as the capacity of a system to maintain its structure by shifting resources within a range of inputs from its environment. Power is defined as the ability of a system to impose its structure upon its environment.²

The use of systems terms for definitional purposes is deliberate. "Autonomy" and "power" pose very similar problems in their conceptualization and utility in theoretical formulations. So long as theorists defined power in terms of superiority of will of one party over another³ they succeeded only in increasing the feeling that the problem had been faced and a solution found. Unfortunately, substitution of "will" for "power" does not increase our chances of finding appropriate manifestations of the phenomenon under study. Likewise Webster defines "autonomy"⁴ as the state of self-government. This definition provides us with a concept for which we can find illustrations at least at the extremes; however, Webster's definition poses the problem of what constitutes a difference of degree in self-government? When autonomy is applied to the behavior of individuals, conceptual difficulties with self-government multiply.

Our definition has been chosen because it focuses upon the structure -- the stable⁵ configuration of relationships over an observed period. Stability here refers to structural persistence through an

²See Karl Deutsch, Nerves of Government (New York: Glencoe, Free Press), 1965. Deutsch's definition has been split in half with the maintenance of structure taken as an index of autonomy and the imposition of structure as an index of power. The reasons for this will become clear at a later point. Also see Robert Dahl, "The Concept of Power," Behavioral Science (Vol. 2, 1957), pp. 201-215.


⁵Stability is relative. What is structure and what is process or function often depends on the period of time over which observations are collected. Over a longer time span the boundaries of the system under study may alter in inclusiveness or porosity; the regulators' access to resources may be increased or decreased, the ability of the system to maintain the internal relationships of its components, i.e., the autonomy will change.
average, expectable environment. (The matter of expectation is, of course, inherently a somewhat subjective element which cannot be entirely eliminated by statistical comparisons as the choice of significant indices entails a judgment that the selected factors will continue to be and are presently the most significant or most representative factors for the system under study.) The focus upon structure has some disadvantages, but it does indicate a need for a further refinement of the definition elaborating the implicit notion of an internal locus of control. If a system has the capacity to maintain its structure in a changing environment; ergo, the stipulation of a range of inputs, then it must have resources which are independent of the range of environmental inputs within the place and time under observation. The degree of internal control is relative to the ratio of environmental inputs to the "free floating resources" just discussed. This is a rather interesting parallel to a statistical maxim that the more you attempt to control for some variables in selection of a sample the more you must leave others free to vary. A corresponding postulate with respect to a theory of autonomy would be: The more a system seeks to stabilize in some domains of behavior, and the greater the range of variation in the environment in these domains of behavior, then the less the stability which can be maintained in other areas of behavior.

A structural conception of autonomy is inadequate to the task of encompassing the shift of resources from one part of the system to another. A steady state model based on information theory is superior for this purpose. Fortunately, such a model has been elaborated elsewhere and is easily adapted to our ends.

6 See Webster's definition of _supra_.

7 An instructive application of this concept will be found in S. N. Eisenstadt's work _The Political Systems of Empires_ (New York: Free Press of Glencoe, 1963). In particular see Chapter 12 on the emergence of new systems.

8 We may also postulate that there will be some structured relationship between the areas of greater autonomy and of lesser autonomy. In psychosis and autism one might have an example of what happens at the psychological level when all levels of the system are insulated from the environment. This will be discussed later. Here it is instructive to review Jules Henry's dictum: "It is a simple question of balance in any culture: What is exigent in one dimension imposes what is exiguous in another." See his _Culture Against Man_ (New York: Random House, 1963), p. 280.
Karl W. Deutsch provides a most useful model of an autonomous system based on the structure of authoritative information processing:

Indeed, we might define autonomy above the simple feedback level as the feeding back of data from some form of memory, and thus from the past, into the making of present decisions.

Autonomy, in this view, depends on the balancing of two feedback flows of data; one from the system's performance in the present and in its environment; the other from the system's past, in the form of symbols recalled from its memory.

One of the advantages of Deutsch's approach to autonomy is that it calls attention to the holistic dimension of a system. One of the disadvantages is that it becomes more difficult to utilize, because the state of the whole is much more difficult to determine -- except ex post -- than the structural relationships of the parts. Fortunately, Deutsch surmounts this problem quite well:

Autonomy in an organization is thus a function of the whole system. It is not located at any one point in the system, but there may be one or more points of particular importance for it. These crucial points for the autonomy of an organization are the points at which a flow of data recalled from the past enters the flow of data used for the making of current decisions. The location within an organization of its major memory facilities, and the points or channel patterns by which these memories are used for steering and decision-making, may tell us much about possible structural weakness and vulnerabilities of the organization.

---


10The problems with having multiple levels of conceptualizations is illustrated by the example of physicists in the early twentieth century who were said to favor a practical theory of light on Mondays, Wednesdays, and Fridays but a wave theory of light on Tuesdays, Thursdays and Saturdays; thus leaving Sunday free of the problem.

11Ibid., p. 207.
The advantage of having more than one approach to the nature of autonomy is that one then has a certain amount of flexibility in problem-solving. The structural approach will allow us to better locate differences in stable types of hierarchies. The information theory approach will allow us to analyze the boundary maintenance processes and the steady state flows which preserve the relatively stable structures.

Biological Base and Psychological Structure

The biological basis of human autonomy is the capability to delay reaction to the stimulus object. The "stimulus barrier" of Freud is discussed by Hartmann as the basis of a psychological "inner world":

In the course of evolution, described here as a process of progressive "internalization," there arises a central regulating factor, usually called the "inner world," which is interpolated between the receptors and the effectors. We are familiar with it in human adults as one of the ego's regulating factors. The breadth of the subjective world, the degree of sensitivity to experiences, etc., reflect individual differences in this factor. Here, however, we are not concerned with the inner world as such, but rather with its role in objective functional relationships.

We earlier referred to the work of Ludwig von Bertalanffy who goes beyond Hartmann to postulate a hierarchal organization of responses which mediates this "inner world." We would go so far as to suggest that this latter conception of a hierarchal organization of responses is a superior substitute to the more ambiguous model of superego, ego, id, ego ideal, etc. Our intention here, however, is not to delve into the possible therapeutic and psychoanalytic implications of a model of a hierarchal organization of the self-image but to proceed with its significance as a basis of autonomy and a theory of autonomy.

---


13See Chapter III, footnote 20 (p. 38).
Free-Floating Resources

Our position is that the stimulus barrier and the hierarchical organization of response systems are the essential requirements for creation of "free-floating" psychological resources -- the essential element in autonomy. Thus it becomes important to discuss what kinds of structures produce different quantities of these resources and different qualitative organization of these resources. In this respect, we note that hierarchies have general properties which are qualitatively distinct from other formations or linearities. Herbert A. Simon has distinguished the chief advantage of hierarchies as lying in the stability of the components. This intermediate stability becomes a crucial advantage over time in dealing with inputs from a slowly changing environment. "Slowly changing" refers, of course, to the relative rate of change with respect to the subassembly's capacity. Thus, the crucial factor in hierarchies becomes the stability of the components. As Simon notes, "The time required for the evolution of a complex form from simple elements depends critically on the numbers and distribution of potential intermediate stable forms." We will subsequently stress the ratio of input capability to environmental variability in the relevant input area as the determinant of the "number and distribution of intermediate stable forms."

All cultures will erect hierarchical structures processing information in a perceived reality. Our model of the self-image points to some general properties of these structures. A point of great significance which emerges from this consideration is that not all cultures are equal with respect to autonomy developed via these interpositions between stimulus and response. Cultural symbols evoke

---
14 Robert Dahl in Who Governs (New Haven: Yale University Press, 1961), p. 305. Refers to a quite similar function which he terms "slack resources." He notes the importance of these resources in maintaining a state of pluralism in New Haven, and provides a more concrete illustration of the general theory at the macro level. See also S. N. Eisenstadt, op. cit.

15 Discussion of the nature of these resources at the psychological level is deferred to the discussion of self-society relations, see below p. 92.


17 Ibid., p. 66.
responses of their own -- often even responses opposed to the stimuli of external or internal events. The cultural structuring of meaning in human behavior serves to channel the energies of individuals who accept the culture into specified goals. The domain of these norms then becomes a factor of great importance in the relationship of individual and society to the environment. In our discussion of legitimacy below, we will also need to discuss these variations, but first we must note the different implications for autonomy posed by variations in cultural configuration.

That there are basic distinctions among cultures has been recognized for quite some time. It is one thing to note diversity among cultural configurations, but quite another thing to link this diversity to significant theoretical generalities. Out of all the ways in which societies differ, we ask: Which are significant to the hierarchical construction of norm sets so as to affect the degree of free-floating resources; hence, the autonomy, of the individual under those sets? Part of this question will be deferred to our discussion of legitimacy -- the differences among kinds of norms stressed by a society especially with respect to the intensity and inclusiveness of the domain of behavior under them. Here we will discuss the nature of free-floating resources at the micro level. Then we will turn to the manner in which these resources are altered by the individual's perceived and accepted self relation to his society.

Conflict-Free Elements

We now turn to the discussion which we deferred earlier. What is the nature of free-floating resources at the micro level? In his discussion of the development of the ego through conflicts with id, superego, and the external world, Hartmann employs a rather different conceptual framework but provides us with an insight into the nature of the individual's free-floating resources. In a striking parallel to the propositions we have deduced from our Norm Set Model toward a

---

18 It should be noted that we are not speaking of total autonomy of the individual for he may have greater constraints in some areas and greater autonomy in others, but instead we are asking what kinds of resources are constrained under what norms and how are they so constrained?

19 Our later discussion will particularly focus on perceived ideological and instrumental domains of behavior.
general theory of autonomy, Hartmann concludes that the development of ego strength depends upon the "conflict-free" aspects of the ego: 20

Our task is to investigate how mental conflict and 'peaceful' internal development mutually facilitate and hamper each other. We must likewise study the interplay between conflict and that aspect of development with which we are familiar mostly from its relations to the external world.

Hartmann notes that defense mechanisms have an important role to play in this process as they preserve an area of freedom for adaptation. 21 He relies heavily on Anna Freud's explication of the defense mechanisms, 22 but in addition calls attention to "an autonomous intelligence factor which as an independent variable, codetermines the choice and success of the defensive process." 23 The importance of this "intelligence factor" lies in its reality-oriented aspects.

The denoting of a defense mechanism guided and related to reality by an "intelligence factor" as constituting an example of free-floating resources would in itself be a significant insight for the purpose of a general theory of autonomy, but Hartmann goes even farther: 24

More generally, we are interested in what manner and to what extent is defense indirectly regulated to


21 Ibid., p. 14.

22 Anna Freud, The Ego and the Mechanisms of Defense (New York: International University Press, 1946), pp. 178-9. Another significant set of elements providing free floating resources are those unique products of intermediate stable states of the past -- the preconscious automatisms (See Ibid., passim). It would take us too far afield to discuss these in any detail, but for future reference it should be borne in mind that a major advantage of processes of assimilation and aggregation in contrast to displacement and isolation is the incorporation of readily available stable components. We have discussed the advantages of this phenomenon in a general theory on p. 88.

23 Hartmann, op. cit.

24 Ibid., p. 15.
those ego functions not currently involved in the conflict. After all, mental development is not simply the outcome of the struggle with instinctual drives, with love-objects, with the super ego, and so on. For instance we have reason to assume that this development is served by apparatuses which function from the beginning of life ... For now we will mention only that memory, associations, and so on, are functions which cannot possibly be derived from ego's relationships to instinctual drives or love-objects, but are rather prerequisites of our conception of these and of their development. In judging the success of a defense we will inquire not only into the fate of the instinctual drive and the protection afforded to the ego, but also -- more than before -- into its effects on the ego functions not directly involved in the conflict. The concepts of ego strength, ego weakness, ego restrictions, etc., are all related to this realm, but they remain nebulous as long as the specific ego functions involved are not studied in detail. Ego strength -- though it manifests itself strikingly in the struggles of the conflict-sphere -- cannot be defined solely in terms of that borderland of the ego which is involved in the conflict.

If we elaborate upon the implications of Hartmann's comments for the entire population of a society, we arrive at the hypothesis that free-floating resources at the individual level will be distributed in a patterned manner throughout the society and will vary from society to society, and culture to culture. This hypothesis is a predecessor to our set of propositions characterizing dimensions of culture according to properties of norm sets pertaining thereto (p. However, Hartmann's discussion of "conflict-free" elements is a convenient stepping stone to another proposition as well. Hartmann's analysis focuses upon the psychological present. But conflict-free elements in the present are products, outcomes of past stabilizations, the structuring of ephemeral processes. The significance of these products will be reviewed in this chapter in connection with a general theory of autonomy, and with our discussion of legitimacy.

The nature of these past stabilizations in the individual should not come as any surprise at this point. They are steady states,

---

25 Refer to our earlier discussion on p. 88 presenting Herbert Simon's position on the intermediate stages of stability afforded by hierarchical organization.
learned outcomes in response, which occurred in congruence with an existing norm set. Upon performance the response was reinforced either by perceived internal congruence with existing stabilizations or by external reinforcement through significant others. At this point the response became attached to a norm set and, thus associated, was potentially available for future reference.

Self-Society Relationship

We return now to the self-society relationship. The individual's degree of attention to cultural choices, the extent of self-awareness, the perceived degrees of freedom available to him, and other psychological resources, are hypothesized to be functions of the perception of the relationship between self and society.

After our long discussion of micro phenomena, some readers may have difficulty in relating differences among individual perceptions of self-society relations with macro characteristics of society. A very useful link between these two levels was provided by Emile Durkheim, who distinguishes the "mechanical," i.e., the simple, pre-industrial society, and the "solidary," i.e., the complex industrialized society as two opposite types.

26 "Learned" is used in the general sense of the word to refer to the entire range of behavior acquisition from conscious creation to imitation to accidental discovery, etc.

27 An excellent treatment of this process is G. H. Mead's discussion of social objectification which will be found in Mind, Self and Society (Chicago: University Press, 1934). Also Peter Berger and Thomas Luckman. The Social Construction of Reality: A Treatise in the Sociology of Knowledge (New York: Doubleday, 1960).


29 Unfortunately, the evolution of language has been such as to thoroughly destroy the relationships between the labels he attached to his societies in terms of their organization. Perhaps current equivalents to Durkheim's "solidary" and "mechanical" societies might be the "unitary" and the "participatory" societies.
1. The first [the mechanical] binds the individual directly to society without any intermediary. In the second [the solidary], he depends upon society, because he depends upon the parts of which it is composed.

2. ... In the first, what we call society is a more or less organized totality of beliefs and sentiments common to all the members of the group: this is the collective type. On the other hand, the society in which we are solidary in the second instance is a system of different, special functions which definite relations unite. These two societies really make up only one. They are two aspects of one and the same reality, but none the less they must be distinguished.

3. ... The first [the mechanical] can be strong only if the ideas and tendencies common to all the members of the society are greater in number and intensity than those which pertain personally to each member. It is as much stronger as the excess is more considerable. But what makes our personality is how much of our own individual qualities we have, what distinguishes us from others. This solidarity can grow only in inverse ratio to personality. ... Solidarity which comes from likenesses is at its maximum when the collective conscience completely envelops our whole conscience and coincides in all points with it ...

The social molecules which can be coherent in this way can act together only in the measure that they have no actions of their own ... That is why we propose to call this type of solidarity mechanical. The term does not signify that it is produced by mechanical and artificial means ... in these social types, personal rights are not yet distinguished from real rights.

It is quite otherwise with the solidarity which the division of labor produces ... this type presumes their (individual) difference. ... It is necessary, then, that the collective conscience leave open a part of the individual conscience in order that special functions may be established there, functions which it cannot regulate. The more this region is extended, the stronger is the cohesion
which results from this solidarity ... the unity of the organism is as great as the individuation of the parts is more marked. Because of this analogy, we propose to call the solidarity which is due to the division of labor, organic.

... in order to recognize their respective importance in a given social type, it is enough to compare the respective extent of the two types of law which express them, since law always varies as the social relations which it governs.

These extracts from Durkheim provide two models of individual-society relationships which radically differ in the degree of individual autonomy. The "solidary" society as applied to our present concerns would posit an external locus of social control and fewer free-floating resources at the individual level.30 Even within one society different institutions may vary in this regard.

Erving Goffman has described a major characteristic of "total institutions" as being the requirement that the individual produce not only conforming behavior but also conforming attitudes about behavior. In this respect the choice of alternative normative structures for behavior is severely constrained. In the "mechanical" society described by Durkheim the delimited range of variation in response seems to be more the consequence of an absence of alternative norms and the steady states which would support them, rather than a direct inhibition of desires for alternative responses. In the case of Goffman's total institutions, delimitation of response is more the result of prohibition and negative sanction attached to alternative approaches, than to a traditional paucity within a stable environment. The latter feature of mechanical society entails a lack of internal resources sufficient to maintain structures in the face of continuous environmental inputs. This lack hinders integration of environmental variation with traditional patterns and content. The inability to integrate environmental variation will be one of the elements involved in our forthcoming discussion of legitimacy.

---

30. The type of social control posed an interesting question itself. Would we be more accurate if we spoke more of fewer norms allowing a choice at an individual level?

Some Remaining Problems

Before turning to legitimacy there remain several problems in the progress toward a general theory of autonomy which we have bypassed in our discussion. In particular, the nature of the stability of the internal structures poses a series of problems. One is almost tempted to state that a general theory of adaptation processes is a prerequisite to understanding autonomy. It is most important in this regard to note that our definition focused on structural maintenance within a range of environmental inputs. One way of viewing the difference between adaptation, neurosis and psychosis is the difference in structural rigidity. Autonomy and adaptation are two-way flows. The unit under consideration not only receives inputs -- as in a throughput system -- but also is responsive to changes in the environment. We will point out that differences in types of hierarchical organization should be correlated with different tolerances in range, and differences in flexibility of response to environmental changes. Hartmann called attention to this aspect of adaptation in noting that adaptation achievements may turn into adaptation disturbances as an individual's synthetic function failed to keep pace with external demands:32

Processes of adaptation are, first of all, purposive only for a certain range of environmental situations; moreover, they involve internal self-limiting factors, which may or may not be adaptive.... Conversely, adaptation disturbances may turn into adaptation achievements which are appropriately elaborated. Normal development involves typical conflicts, and with them the possibility of adaptation disturbances. ... One of its premises is preparedness for average expectable internal conflicts.

At this point we lack sufficient information to be able to determine with much precision what kinds of structures increase or decrease autonomy relative to what kinds of environments. A voluminous

---


33 Ego Psychology and Adaptation, op. cit., pp. 54-55.
literature has been developed about authoritarian and nonauthoritarian environments but the structural relationship between individual and environment remains unclear.

We can, however, note the general parameters of the problem and some hypotheses. On the individual's level we have hypothesized norm sets of varying priorities to exist for a defined range of situations. Much more work needs to be done on the kinds of variation in normative structures and the cultural dimensions delimiting the range of situations to which specific norms are perceived to apply. In the next chapter we will be concerned with some of the differences in environment which are thought to be significant, but how autonomy is increased by a change in structure relative to a specific environment and what type of structure will increase autonomy (especially under steady-state assumptions) pose very difficult questions. Hartmann, although employing psychoanalytic terminology, was also concerned with the difference for adaptation made by variations in the hierarchy of an individual's psychological organization. He also assigned a high significance to the synthetic function (here interpreted as similar to our meaning of "autonomy") in reorganizing the hierarchy.

I believe that we will find it easy to accept the idea that ego functions have, in addition to their coordination, a rank order as well... but this rank order need not coincide with the rank order of ego functions in terms of their biological purposiveness. We have seen, for instance, that fitting together, the synthetic function, must be supra-ordinate to the regulation by the external world. We will see later on that there are also rational regulations on higher and lower levels (concepts like intelligence, objectivation, causal thinking, and means-end relationships are some of these). Even the various aspects of the synthetic function have different degrees of biological significance. A big step in human development separates the primitive synthetic regulations which are at work in the formation of the superego from those synthetic achievements which are our goals in psychoanalytic treatment. The same holds for the differentiation function also. Psychoanalytic therapy may change the basis of this rank order by inducing a new division of labor: for instance, the ego may take over tasks which have previously been performed by other institutions. Much is still unclear in these matters, and

34Ego Psychology and Adaptation, op. cit., p. 55.
will remain unclear until the development of the functions of the conflict-free ego sphere has been understood.

Hartmann's focus on the superordinate status of the "synthetic function" to the regulation by the external world necessary for adaptation -- and we would add autonomy as well -- brings us back to the topic of structural rigidity and responsiveness to inputs from the environment. In the case of psychosis and autism we have an extreme example of the limits of internal structural independence. Alternatively we can describe the psychotic state as the breakdown of the system in which the units which were formerly integrated in a hierarchy under various norms are now multiple control centers cut off from the environment and from the remaining components of the former system. In this instance the units which made up the individual's self-concept have been isolated from the environment and depend almost entirely on fantasies which are internally generated. In contrast to the opposite extreme of the stimulus-bound animal the psychotic imposes so many barriers to the external stimulus that the perceptual basis of behavior is an internal creation reflecting little of the environment.

These extremes in structural variation from the stimulus-bound animal to the internal-response-bound or fantasy-bound psychotic fix the parameters of structural significance for degrees of autonomy. These limits will be useful for investigations focusing on the structures of value allocation in society and the relationship between environmental patterns perceived by an observer as contrasted with the environmental patterns perceived by the observed. It would seem that the greater the congruence between the existing normative patterns dispersed throughout the population with the responses demanded for structural maintenance in the environment, then the greater the autonomy of individuals, and of other subsystems, in the society.

As a slight digression anticipating our discussion of legitimacy later in this chapter, it should be observed at this point that

35 An interesting contrast is the creative use of fantasy to withdraw from reality only to better approach it. See Erich Fromm, The Forgotten Language (New York: Rhinehart, 1951), and also Hein: Hartmann Ego Psychology and Adaptation, op. cit., p. 19 and passim.

36 A striking parallel to the concept of entropy is latent in autism. Perhaps an information theorist could devise a model of psychological structure incorporating this change in the system-environment relations toward greater entropy?
when a cultural dimension or standard associated with a given situation by an individual inhibits the "synthetic function," a legitimacy problem is encountered. That is, when a value derived from the situation conflicts with the maintenance of the priority of norm sets within a given self-image, then the standards governing the hierarchy of norm sets will be called into question, and will become dissonant or problematic. We may view this as a problem involving the "synthetic function" insofar as the ability to integrate the environmental input into the activated system will be challenged if the perception is maintained. As we mentioned in Chapter V there are different levels of seriousness, and corresponding levels of adaptation, in these cases. The least serious difficulty is posed by an input which is problematic at the level of decisions subsumed under one dominant norm, i.e., a problem of synthesis and order under a given norm set. More serious is an input problematic for the dominance of a given norm set over another within the same self-image. Still more serious is an input which is problematic for an ordering of one self-image with respect to another self-image. Finally, and most serious, is an input problematic for the existence of a self-image and demanding the production of a new hierarchy of norm sets under a presently nonexisting dominant norm.

Before looking further at the above-outlined area of concern, however, it is best at this point to return to our discussion of autonomy and look next at the reasons for failure of autonomous processes.

Failure of Autonomy

One way to explore further the complex notion of autonomy is to examine the circumstances under which autonomy fails. With respect to the failure of autonomy, a structural approach gains greatly in usefulness when combined with a steady-state approach. Karl W. Deutsch has succeeded in doing this, and has provided an excellent typology of the modes of failure of the processes of autonomy. Deutsch divides the modes of failure of autonomy into five broad groups:  1) the loss of power, i.e., resources and facilities necessary to pattern the environment; 2) the loss of intake or information input effectiveness or reliability; 3) loss of steering capacity, positive or negative feedback lag, poor coordination; 4) loss of depth of memory or judgmental, imaginative failure or failure to search criteria, particularly as affected by facilities for recall and recombination of data; 5) loss of capacity for comprehensive or fundamental rearrangement of inner structure or failure of revitalization movement or personality change.

Deutsch's typology enables us to return to the problem of describing the relationship between system and environment with some fresh insights. If we are to answer the question of what effects differences of structure of the system have upon the probability of occurrence of each kind of autonomy failure, we must assume first of all that we know the significant environmental factors and the system factors relevant to the problem. It should be borne in mind that the most evident feature of the system-environment relationship is not, of course, necessarily the most significant feature for a given problem. For most systems, we could postulate the probability of autonomy failure to be a function of the relationship between the input processing and control structures of the system (including the structures for resource mobilization and allocation). The degree of autonomy varies with changes in: 1) the range of input variance, 2) the intensity of input variance, 3) the frequency of input variance. It is easier to visualize this relationship at the macro level than at the micro level, but the relationship should hold for all systems.

If the problem of determining the degree of autonomy could be stated as only a function of the relationship between the selected structures of the system and input variance, we would have a model -- albeit a complicated one -- which could then be used to determine the probability of autonomy failure in a rather straightforward manner. One would assess a system's structure along dimensions thought to be

38 One reason why the function was not stated to be of an increasing, decreasing, direct, indirect, or inverse nature with respect to the relationship under discussion concerns the dual threshold nature of the variables. For example, one readily responds to the third variable by thinking of overload under increasing input. (This may be an artifact of our high pressure civilization with high rates of change; perhaps in another culture this might not be so.) However, we cannot ignore the lower threshold. A steady state cannot be maintained without some minimum level of input; otherwise, it will become a source of resources for system maintenance and absorbed into another structure; or it will atrophy. Another alternative is that the structure keys itself to a new kind of input and modifies itself accordingly. At the social level the government bureau is a good example. At the psychological level we find in neurosis the formerly successful adaptation persisting in an inappropriate environment. For examples of transformation of resources in organizations see C. Northcote Parkinson, Parkinson's Law and Other Studies in Administration (New York: Houghton Mifflin, 1957). See also J. Laurence Peter and Raymond Hull, The Peter Principle (New York: W. Morrow, 1969).
significant, e.g., centralization-decentralization, and then assess the input variance at various points in past time and space, and in anticipated time and space, and arrive at a judgment.

At the outset we noted that the preceding approach would suffice for most systems. Unfortunately, social-psychological systems involve a rather complex intervening variable. To the above it is necessary to add an assessment of the degree of relevance of received input to the system's maintenance and survival. This requires that one consider the adequacy of the norms of the system. Not only the content of the value system but the priorities in which norms are arranged must be assessed in order to determine a system's probable reaction capability. Whether one is concerned with autonomy at the micro or macro level, a judgment of the relevance of the norms of the system to its maintenance or survival is necessary to determine the degree of freedom available to maintain selected structures of the system, i.e., the degree of autonomy. One must also consider the hierarchy of norm sets in addition to the content. A determination of probable shifts in priorities can be based upon projected changes in input variance in relation to resources available to the system.

There are crucial points within a system at which one can collect data which will enable a determination of relevance or adequacy of the norms of the system. One should attempt to measure the level of sensitivity of the system to the environment. One would do so by examining the range of input factors a given receptor focused on, the amount of time devoted to each factor, and the range and the amount of variability for that receptor. The total number of channels available to handle inputs should be assessed with respect to the total range of input and the division of the burden among them should

39 For an example taken from a value allocation structure of society see David Apter. Here he looks at segmentary and pyramidal structures in Africa and evaluates their success with different cultural types being considered as an intervening variable. His cultural dimensions inspired our work on legitimacy as well. Unfortunately, Apter's model does not do justice to the complexity of the problem he is concerned with.

40 At the macro level the hierarchy prevailing among decision-makers, providing that they can be located within the system, is a useful shortcut in analysis. As the Vietnam issue of the 1960's and 1970's illustrates, which social priorities will be ranked the highest will to a large degree depend upon the judgment of the decision-makers who interpret the meaning of events and to some extent control them.
be examined. A key factor in determining the flexibility of the system to shift input from channel to channel might be the amount of time the system devotes to internal information and to evaluation of internal efficiency. The relationship among input channels themselves is also important. All things being equal -- which, of course, they never are -- a system with overflow provisions among receptors which automatically transfer input from an overloaded channel to surplus processing capability will be a system with greater autonomy than one without such a relationship.42

In addition to input-receiving structures and processes, input-manipulating processes must also be analyzed. The content of norms and values becomes crucial to the sorting of received information. What barriers to association does the system have? What kinds of information are blocked from free circulation? What is the rank order of sorting categories? For example, is new information regarded first in terms of a threat to the system, second as a demand upon the system, third as a signal for a shift in capability, etc.?43 To some extent the degree to which a system can manipulate its information is a function of a low level of volume per channel and a low number of channels to control points. But this straightforward mathematical problem of the number of messages which can be received and processed by the receiver cannot

41 At the micro level some degree of introspection would seem necessary for psychological reorganization. At the macro level if an organization does not know how the burden of information is divided among its input-processors decisions on shifts of input flow are not going to be based on knowledge of surplus capability but more likely on crises reactions.

42 Strictly speaking there is no universally "good" feature or advantage to any aspect of a system in absolute terms. Each component of a system must be evaluated relative to its environment. A good illustration of this principle is provided in W. R. Ashby, "Principles of the Self-Organizing System," op. cit., p. 112.

43 It sometimes seems as if social movements within the United States are sorted in this fashion. At least superficially it appears that the first problem of a social movement is the sort into Communist versus non-Communist, followed by a sort into disruption of legitimate channels versus non-disruption, followed by a sort on the kinds of people who have allied themselves with the movement and so on. Only after a considerable amount of investigation does the question of what conditions inspired this social movement seem to be posed. This procedure, if confirmed, would have some interesting ramifications in terms of perceived legitimacy of a social movement by the government and vice versa.
be considered independently of the priority assigned to different types of manipulations and associations in the system's normative hierarchy.

Related to the previous considerations of sensitivity and manipulative capability is the capability of the system to mobilize available resources. This is a core function for preserving and extending the degree of autonomy and it depends on more than just the system's knowledge or memory of its free-floating resources. Repeated uses of resources for a specific purpose induces a certain amount of rigidity. One consequence of this is that a system may not be able to visualize alternative uses of underemployed resources. The ability to mobilize resources is also determined by the ability of the system to forecast trends and project future needs for resource utilization -- failure to perform adequately this function is known as "feedback lag." However, future projected needs are usually based upon present priorities and whether or not the system will be able to utilize future resources for structural preservation is considerably more than a question of abundance of resources.

So far in this chapter we have focused predominantly upon the micro factors which influence the outcomes of social action in terms of the greater or lesser autonomy possessed by individuals in a society.


45 In case an example is needed, one might think of a technologically advanced society with a complex social system, a large GNP per capita, and a history of mobilizing resources with alacrity -- but one which is nonetheless unable to preserve its system because of a value structure which stressed the wrong priorities. If a value system stressed growth and defense against all possible perceived threats from outsiders, such a country might project a future trend which would commit as much as a quarter of all of its resources to military defense and conspicuous display of growth symbols, for example automobiles. If the real trends of the future required the society to mobilize resources for utilization on the problems of environmental pollution, overpopulation and inter-racial tension, mere abundance of resources would be of little avail. Once resources are committed to a long-term position, it is difficult to alter their use in a complex society. Anti-ballistic missiles in North Dakota in 1972 cannot readily be converted into air purifiers in Long Beach in 1973. This is particularly true if resources were committed to North Dakota in 1969 while allowing carbon monoxide to accumulate in Long Beach until 1973 when the problem was raised to a priority sufficient to rank with the 1969 perception of the need for the anti-ballistic missile.
We have pointed out internal factors which increase or decrease the individual's autonomy within a given domain of behavior. Reference was made to the necessity to consider the significance of various domains of behavior in terms of an individual's different perceptions of the degree of autonomy possible within these domains. In passing we noted that external factors such as the configuration of cultural values, and their intensity and differences among the institutions within or across which the individuals acted, would be significant factors in assessing the probable direction of social change and the strategy which would be necessary within the culture to achieve social change. In the relationship among the individual's norm sets, the value structure and institutions of his culture, and his perception of these values and institutions we confront head-on the key problem of "legitimacy."

Why Legitimacy?

The reasons for including this topic in our discussion will become clearer if we examine states of a system in which legitimacy is not a problem. To imagine such a system (or subsystem) is certainly not particularly difficult. The key variables to such a system would be, first, the range of input variance in content; second, the range of input variance in frequency; third, the range of input variance in intensity. Sufficient change in any of these dimensions would, of course, be exacerbated by combinations. To what factors would one look to attribute stability in the input variance in these dimensions? If such a fortuitous circumstance were to obtain, it would be likely to be a function of at least two factors, 1) a sufficient degree of autonomy in subsystems, and, 2) environmental variations within a range "expected" by the system.

46 We are not saying that these are the only significant dimensions of input variance but that others such as source of variance, the selection of channels which are utilized, the means of processes of input are here viewed as secondary problems which escalate to one of the three discussed only if the system's structures lack the autonomy to process variations along these secondary dimensions.

47 The reason for focusing upon "expectations" rather than, for example, the history, of the system is that occasional large deviations even of near-catastrophic dimensions can be accommodated by a system by a temporary stretching of resources, depletion of capital, etc. This is also why we have ranked frequency over intensity in importance. Persistent small failures over a long period are much more difficult
At different levels of analysis different terms will be used to describe these conditions and the flow of elements which are necessary to maintain these conditions. At the micro level a description of this state would focus on the degree of the individual's self-acceptance (or ego strength) and the degree of positive reinforcement from ego's reference group. These correlates of subsystem autonomy and environmental stability could then be contrasted with ego's expectations of his environment and of himself. If ego is not to question his self-acceptance or "legitimacy" he must continue to perceive himself as possessing norm sets which are acceptable to his reference group. His reference group must, therefore, continue to perceive ego's behavior as falling within expectations measured against the patterned behavior of those individuals perceived to be "like ego." Under these circumstances the hierarchy of ego's norm sets will require only the constant adjustments of assimilation and accommodation which we have treated in our discussion of autonomy. When such conditions of environmental stability and individual development to the point of subsystem autonomy prevail, the individual's perception of his own legitimacy and his perception of others' perception of himself will tend to reinforce each other to the point where occasional large deviations from the expected pattern can still be accommodated without involving the necessity for the development of a new norm set or cultivation of a different reference group. Thus, the existing norm sets will function to elide the eventuality or the necessity for the individual to consider his "legitimacy," his self-acceptance, as crucial. At the macro level an analogous set of correlates can be found for social as contrasted with psychological systems and subsystems.

Legitimacy will not be called into question as long as an organization or a society can resolve expected problems, that is, process inputs, through the expected functions of its subsystems. The autonomous utilization of an organization's resources by components can be accomplished in accordance with accepted procedures.48 Under these conditions of environmental stability and individual development to the point of subsystem autonomy prevail, the individual's perception of his own legitimacy and his perception of others' perception of himself will tend to reinforce each other to the point where occasional large deviations from the expected pattern can still be accommodated without involving the necessity for the development of a new norm set or cultivation of a different reference group. Thus, the existing norm sets will function to elide the eventuality or the necessity for the individual to consider his "legitimacy," his self-acceptance, as crucial. At the macro level an analogous set of correlates can be found for social as contrasted with psychological systems and subsystems.

Legitimacy will not be called into question as long as an organization or a society can resolve expected problems, that is, process inputs, through the expected functions of its subsystems. The autonomous utilization of an organization's resources by components can be accomplished in accordance with accepted procedures.48 Under these conditions of environmental stability and individual development to the point of subsystem autonomy prevail, the individual's perception of his own legitimacy and his perception of others' perception of himself will tend to reinforce each other to the point where occasional large deviations from the expected pattern can still be accommodated without involving the necessity for the development of a new norm set or cultivation of a different reference group. Thus, the existing norm sets will function to elide the eventuality or the necessity for the individual to consider his "legitimacy," his self-acceptance, as crucial. At the macro level an analogous set of correlates can be found for social as contrasted with psychological systems and subsystems.

Legitimacy will not be called into question as long as an organization or a society can resolve expected problems, that is, process inputs, through the expected functions of its subsystems. The autonomous utilization of an organization's resources by components can be accomplished in accordance with accepted procedures.48 Under these conditions of environmental stability and individual development to the point of subsystem autonomy prevail, the individual's perception of his own legitimacy and his perception of others' perception of himself will tend to reinforce each other to the point where occasional large deviations from the expected pattern can still be accommodated without involving the necessity for the development of a new norm set or cultivation of a different reference group. Thus, the existing norm sets will function to elide the eventuality or the necessity for the individual to consider his "legitimacy," his self-acceptance, as crucial. At the macro level an analogous set of correlates can be found for social as contrasted with psychological systems and subsystems.

48 There is a dual hierarchy here of "norms," i.e., organizational procedures and of formal and informal structures which form...
circumstances there will be no need for a restructuring of the organization or a society and the processes of resource aggregation and allocation will proceed according to variations in input. The steady state will be maintained so long as input variance remains within the expected range. The reader will, we are sure, agree that such pronounced stability, such an absence of legitimacy problems, has been the rare exception in human history.

The reader will, we are sure, agree that such pronounced stability, such an absence of legitimacy problems, has been the rare exception in human history. Around these resource allocations. One might even think of a three-stage hierarchy since occupants of positions are not identical and variations in the norm sets of individual occupants affect the application and interpretation of the norms enshrined in the organization's procedures. The significance of norms used for internal evaluation will be the subject of a later discussion.

This brings us to a significant digression. If the range of input variance exceeds expectations at the micro level the individual may distort his expectations of himself, producing self-delusion. At the macro level this process may be a significant clue to the difficulties of totalitarian regimes. It would seem that a regime which severely constricted control of free-floating resources, i.e., autonomy, of its subsystems would require a very "stable," i.e., expectable, environment. If the environment does not behave as expected, a series of increasing divergence, or deviation amplification, can occur. The regime when confronted with environmental contradictions may be motivated to manipulate information so that discrepant information is depreciated and the environment will present the expected appearance to recipients of the selected information. But this produces a still further discrepancy or deviation. Upon receipt of this barrage of information, the information-gathering subsystems will apprehend the desires of the regime and be motivated to reinforce the expectations of their reference group -- their superiors. Should some discrepant information still leak through, the regime may be motivated to shift the resources of the system to alter the environmental source of discordant information. Lest this process seem unnatural and foreign to the reader, an example is close at hand. In the early 1960's the United States government entered into what it expected to be a small and temporary commitment of forces to South Vietnam. In 1963 representatives of the United States Government were returning from an expanded commitment in South Vietnam with predictions that the war would be successfully concluded by 1966. In 1966 the commitment had increased again but military and political figures confessed to "seeing the light at the end of the tunnel." When discrepant information continued, policy makers then began bombing North Vietnam including its capital Hanoi. At the start of the bombing, press releases were made promising an efficient conclusion of the fighting and the enemy's
What is Legitimacy?

We will follow the same procedure here that we followed earlier. We will avoid a long list of definitions and comparisons, preferring instead to contrast selected approaches to the concept. The emphasis will be upon aspects of the definition most significant to our immediate problems. Subsequently, we will expand our definition and draw on other contributions as required by the needs of the discussion.

capitulation. When a full year of bombing produced evidence of increased infiltration and a massive Tet counter-offensive, the political system entered a severe crisis bringing about a refusal of an incumbent President to run for re-election, and, in 1969 a cessation of the bombing. We note that in this process the system diverted $30 billion dollars a year to altering the source of discordant information.


Weber's definitions focus on the important distinction between subjective and external acceptance of commands or authority. Other theorists in law and political science focused on the rule of force and the locus of enforcement. An excellent discussion of these alternatives can be found in Morton H. Fried, The Evolution of Political Society: An Essay in Political Anthropology (New York: Random House, 1967), pp. 21-26. A rather comprehensive treatment of variations in characteristics can be found in Leonard Binder, Iran: Political Development in a Changing Society (Berkeley and Los Angeles: University of California Press, 1962), see especially pp. 43-47. Some criticism of Binder's approach and an extension to a different perspective may be found in an interesting attempt to integrate political science approaches to the political system with sociological discoveries in H. V. Wiseman, Political Systems: Some Sociological Approaches (New
Talcott Parsons has referred to legitimacy and the process of legitimation as the primary link between values as "an internalized component of the personality of the individual and the institutionalized patterns which define the structure of social relationships." Elsewhere Parsons has called attention to legitimation as the "appraisal of action in terms of shared or common values in the context of the involvement of the action in the social system." One's definition of legitimacy of necessity will be derived from the functions which one postulates to be performed by the concept. The meaning of legitimacy will depend upon the context of the theory in which it is used. Although Parsons ascribed the significance of legitimacy to the nature of the linkage between the individual's values and "institutions," he did not elaborate the specific nature of this "linkage" beyond his useful suggestions on the analytical components of the problem.


51 Essays in Sociological Theory (rev. ed.), (Glencoe, Illinois: Free Press, 1954), pp. 171-176. Parsons, we believe, accurately distinguishes four analytic components of the linkage between individual and institutionalized patterns: the nature and "solidity of the cognitive justification involved, the mode and order of internalization of the values in personalities; and the nature of the situation in which the actor is placed to implement the values." As we noted in Chapter II, Parsons is concerned with social order and particularly with social statics. Perhaps because of this he is content to link legitimacy to generalized patterns of norms which he calls "institutions." Unfortunately, this orientation leaves somewhat ambiguous the locus of the "institutions." A more detailed presentation of Parsons' position can be found in his "The Link between Character and Society," in S. M. Lipset and L. Lowenthal, Culture and Social Character: The Work of David Riesman Reviewed (New York: The Free Press of Glencoe, 1961), p. 89-135.

In addition to these considerations of linkage, we also emphasize the two-way flow between subsystems and supra-systems in determining the state of the whole system. These factors will take on special importance in the following chapter when we treat the significance of ideological as compared with instrumental norms. Some good examples of this process are provided by Richard Flacks, who considers some social psychological and structural factors determining legitimacy, particularly with respect to opposition to the Vietnam War and resistance to the draft.53

David Easton in a discussion of the definition of ideology amplifies the functions which are performed for the political system by ideology and in the process enlightens our understanding of the nature of the linkage between the individual's values and the cultural norms:54

Expressively, the emotional roots of the appeal in a vision of life, society and politics lie in the capacity of the belief system to establish a firm link with the motivational structure of members in the system: to their conception and feelings about their own needs, interests and place in the political and social system or to their conviction that the ideology correctly or truthfully explains the real world. It may arouse in them a sense of purpose in the face of material and psychological conditions that might otherwise lead to feelings of futility and utter frustration. It may provide a simple and plausible interpretation for a world that is otherwise complex, recalcitrant and unintelligible, thereby appealing to a desire to know the truth about the world or to a need for a feeling of mastery over nature. It may allay anxieties and concerns roused by the apparently unpredictable turns of a rapidly changing culture and society.

Easton blends both macro and micro functions of legitimacy together in his excellent treatment of ideology. He relates social change to psychological needs in a concrete description. His primary


54 A Systems Analysis of Political Life (New York: Wiley, 1966), p. 295. Another useful by-product of Easton’s discussion is the implied variation of the function of legitimacy with differences in identity -- or norm sets. But there will be more to add on this topic shortly.
concern, however, is with ideology and, thus, he does not explore the processes whereby these needs -- which we have included as elements within the norm sets (p. 38) -- are related to perceptions of social "reality."

We take the position that legitimacy is primarily a process, and that what is needed is a definition which will allow us to build a model of this process. It is in this respect that a structural approach to legitimacy has its greatest deficiencies. A view of legitimacy as a product or a function of a set of structures obscures the nature of the processes which are involved. An alternative steady state approach to legitimacy would demand an array of factors which interact with each other over fluid situations to maintain a set of relationships between the micro level of individual normative hierarchies and the macro level of social processes perceived as largely independent of the individual in the situation.

A useful steady state approach to legitimacy is to consider it as an information processing system. Again we are indebted to Deutsch for his definition of a "legitimacy myth" which will serve as the basis for our model:55

An effective set of interrelated memories that identify more or less clearly those classes of commands, and sources of commands that are to be given preferential attention, compliance, and support, and that are to be so treated on grounds connecting them with some of the general value patterns prevailing in the culture of the society, and with important aspects of the personality structures of its members.

This is an excellent definition linking together the basis of perception at the micro level with the perceived sources at the macro level. The definition allows us to discriminate among the processes which occur at the micro level with respect to sources of commands and preferences. One shortcoming, however, is the stress on the cognitive aspects of legitimacy to the neglect of affective aspects. We are, nonetheless, better equipped because of this cognitive emphasis to construct a cybernetic model of the process. In the next chapter we will discuss the issue of differential sources of commands as connected with general value patterns prevailing in a culture.

The Legitimating Process: Self-Image and Social Mapping

If we consider legitimacy as a process of information comparison and reduction, we then have all of the elements necessary for a cybernetic model: internal standards (norm sets) against which to compare inputs; input processing mechanisms (preferences, aspirations, etc.) ordered under those sets; and feedback evaluating structures ("memory and social comparison processes"). The essence of this model lies in the mapping of individual norm sets on perceived social reality.

The nature of this mapping process depends on a number of characteristics of the order, coherence and content of the norm set vis-a-vis the environment as we have previously discussed. Richard Flack discusses some structural elements in the perception of the social situation which increase or weaken attribution of legitimacy. Most of Flack's comments center on degrees of relative coherence in environment -- e.g., degree of trust, perceived consensus, perceived benefit to self or members of one's group, etc. This raises the interesting question of how one would go about measuring such mapping processes. If one took a large group of individuals as a unit of analysis, the normal procedures of psychoanalysis would allow only a small sample of the population to be surveyed and even that task would take an unrealistic number of manhours.

Another possibility is the method adopted by P. R. Gould and R. R. White from a discipline long concerned with mapping problems -- geography. These authors devised an ingenious means of assessing the mental maps of British school leavers of geographic space in terms of its residential desirability. A similar approach to the legitimacy of a social space might be more difficult to achieve insofar as the

---

56 Mapping phenomena as a class of general system behavior or process are as neglected almost as much as they are ubiquitous. The system concomitants of such processes would make a subject of an interesting monograph. We are unaware of any literature on this subject although the properties of these phenomena may be assumed to be treated in the domain of mathematics, and hence beyond our competence.


58 Richard Flack, op. cit.

perceptual nature of the "object" is more ambiguous. But Flack's hypotheses on the increasing legitimacy of various forms of resistance to "middle class values" might be assessed in this fashion. Whether one can determine the cybernetic nature of the process at the micro level will depend on the development of converging measurements parallel to those suited to larger units as we have just discussed.

The objective in formulating a cybernetic model is to describe the operations of social change at the psychological level -- what distinguishes acceptable and legitimate social change from the illegitimate? Let us take a command input for an example. Briefly, an input of perceived command is scanned for relevant cues. These stimulate memories associating cognitive and affective symbols with a) the source, b) object, and c) process through which the perceived command was issued. This decoding process becomes the basis for encoding output -- based on free-floating resources controlled by the individual's hierarchy of norm sets under a given, relevant self-image. The norm set in control is analogous to a program which incorporates and distinguishes among cultural preferences. The linkage between remembered associations among object, source of command and cultural norms is a "condition" governing activation of one of the individual's alternative norm sets.

The activated norm set is in this view a controlling hierarchy. Expectable satisfactions of various responses to the input are mapped against the controlling hierarchy on the perceived most salient dimensions until an optimum selection is found. This is less a "brute force" solution of complex problems, but more a heuristic process in which norms, linked in tight cohesion and reinforcement, guide decision on the basis of the situational Gestalt. The difference can be contrasted further as the difference between games of total information and games of partial information. In games of total information, e.g., tic tac toe, there is an advantage to the brute force approach (enhanced by the determinate nature of the solution). In chess, however, the alternatives after each move are so numerous and complex that the best players are guided by the distribution of pieces, the configuration of position and the style of the opponent's play as mapped upon outcomes of recalled moves in similar positions against similar opponents selected according to emotional preference of the player. These encoding and decoding processes are repeated until conflicts among preferences can be solved and a decision on the required response moderating the objects of command and personal preference can be reached.61

61 Note that the decision here is only that of some response, any response. This is not necessarily a decision reconciling the
This abstract description derived from a cognitive-processual definition links the individual's self-perception with the legitimacy and the effectiveness of attempted social change at two points. The first link is at the point of decoding where congruence or complementarity between self-perception and source object or process activates an existing norm set, including elements of attitude, cognition, value, and preference. This ordering determines content and direction, salience and intensity of response which will be attached to the input. The second point at which the individual's identity interacts with the input is in the encoding stage where the nature of the value hierarchy with which the command source and object has been associated becomes a limit, a parameter, of the range of alternatives from which an output is selected. It is argued that social differentiation -- the establishment of new roles, the dislocation of strata, etc. -- tends to interfere with the legitimizing process at precisely these points, producing a determinant of action in terms of positive or negative feedback to the self-image.

We have explored the reasons for our interest in legitimacy. We have defined legitimacy and constructed a steady state description of the process. We have also pointed out the crucial function of norm sets in this process. This brings us to our next chapter, which will be a discussion of those cultural variables which will affect the nature of the individual's autonomy and the processes of legitimacy in social change.

conflicting elements which might be involved; for example, the threshold of frustration-tolerance may be raised in a decision resolving the response-selection problem, but calling this response-selection a resolution of the conflicting values stretches the definition. However, see Kenneth Boulding, Conflict and Defense (New York: Harper, 1962), where stability and unacceptability are employed as the operating parameters of a conflict situation. The model of the processes involved is this author's derivation from Karl Deutsch's definition and is not to be blamed upon the latter.
CHAPTER VII
SOCIAL CHANGE: CULTURE, THE SELF-IMAGE, AUTONOMY AND LEGITIMACY

One of the assumptions to which we have constantly returned in this monograph is that a rigid distinction between the levels of the psychological and the sociological obscures the nature of social change. The self-image as we have modeled it is not a purely psychological phenomenon: It is pre-eminently a sociological product. Society is not the least common denominator of groups as petrified into organizations through historical processes. Values and norms are not structured into calcified institutions reaching like a deus ex machina through the mysteries of the "socialization process" to shape and mold the next generation. We have stressed the interactive experience of individuals and the on-going state of the product. The norm set structure of one individual shapes his response in a patterned but not entirely predictable manner. Large scale developments reflect the distribution of these individual patterns and form what are perceived as "trends" or "stresses" as a further stimulus at the individual level. The process of social change is complex and reflective. This chapter will essay a fresh approach to the subject of social change utilizing the concepts developed throughout this monograph.

Strategies of Approach

From the methodological standpoint we are attempting to combine two complementary approaches to the problem of social change. The difference in these theoretical approaches in terms of general systems theory was quite clearly described by Kenneth E. Boulding:

Two possible approaches to the organization of general systems theory suggest themselves, which are

---

to be thought of as complementary rather than competitive, or at least as two roads each of which is worth exploring. The first approach is to look over the empirical universe and to pick out certain general phenomena which are found in many different disciplines and to seek to build up general theoretical models relevant to these phenomena. The second approach is to arrange the empirical fields in a hierarchy of complexity of organization of their basic "individual" or unit of behavior and to try to develop a level of abstraction appropriate to each.

In accord with the first approach in earlier chapters we selected and developed general models for the phenomenon of autonomy, which seems to be characteristic of all systems, and the phenomenon of legitimacy, which seems to be characteristic of all human systems.

The second approach which Boulding mentions is the one that has been emphasized in this monograph: The specification of a new unit -- the self-image -- and the analysis of the system-environment relationship in terms of this unit, and in terms of its subunit, the norm set. We have further related norm sets to the understanding of variance in the general phenomena of autonomy and legitimacy. In order to discuss the interrelationship of all three models to social change, it is necessary to theorize at yet another level of complexity. The crucial variables that must be considered in order to determine the matrix of outcomes of interrelationships among these models of social change are the dimensions of normative variation among cultures. Unfortunately, it is not yet possible to devise a model which will handle the latter set of variations with sufficient precision. The boundaries of cultural systems and their environments do not seem to be well enough understood at this time to propose limits of general changes in input and processing which will effect outcomes along similar dimensions for cultural systems. We know a good deal about the reaction of specific cultures to specific inputs along selected dimensions, but we do not know enough yet about the general system properties of cultural systems in terms of their normative limits of action.

However, in the absence of a general model of a cultural system and its changes, we are not completely at a loss. We can still

---

2There are, however, some excellent models of the parameters of cultural variation in values. See, for example Florence Rockwood Kluckhohn and Fred L. Strodtbeck, Variations in Value Orientation (Evanston, Illinois: Row Peterson, 1961).
examine the implications of variation in selected cultural dimensions for the interactive product of our models. The problem here is to choose significant dimensions of variation. There are as many analytical possibilities as there are analysts.

Culture and Legitimacy

A promising attack on selecting dimensions of significance can be initiated by picking up again the threads of the discussion in the previous chapter of the conditions under which legitimacy is not a problem, and to consider the cultural dimensions which would be involved in those variations in the parameters of the system which would increase the probability of legitimacy problems. We noted that under conditions of stability of input content, intensity and frequency legitimacy would not be a problem. The significant dimensions of culture which bear upon legitimacy must, therefore, affect these variables.

Culture, Stress, and Legitimacy

It is difficult to link cultural dimensions directly with legitimacy. Rather, there seems to be an indirect link between categories of cultural perception and selection, and the feedback from the consequences of action to these systems in terms of positive or negative reinforcement. From the sociologist's perspective variations of content, intensity and frequency of input can be stated as variations in degrees of deviant behavior. At the macro level the sociologist conceives of control mechanisms (organizations and processes) which have the primary function of handling these strains. A significant cultural dimension for our purposes would be one which affected these control mechanisms and thus the capability of the system to respond.

What are the means that a society has at its disposal, to control strain and its consequences? Neil J. Smelser and William T. Smelser have provided us with a useful summary of these social mechanisms:

Given some strain and some threat of deviant behavior, two lines of attack are available at the social system level to reduce the possibly disruptive consequences.
(a) Structuring the social situation so as to minimize

Examples are the institutionalization of priorities (so that conflicting expectations are ranked in a hierarchy of importance for the actor), the scheduling of activities (so that demands that would conflict if made simultaneously may be worked out serially); the shielding of evasive activity (so that illegitimate behavior is permitted so long as it does not openly disrupt the legitimately structured role-expectations); the growth ideologies that justify certain types of deviance as "exceptions" while reaffirming, perhaps by paying lip service, the dominant norms of the situation. (b) Attempting to control reactions to strain once they have arisen. This involves the activities of various agencies of social control, such as the police, the courts, social welfare agencies, mental hospitals, the press, and so on. These lines of attack are analogous to the operation of defense mechanisms at the personality level.

It is interesting to note the emphasis which the authors place upon a hierarchical ordering of priorities to minimize stress. They do not explore the implications of this emphasis at the micro level, but if the social situation is to come to be perceived as one offering attractive deviant possibilities (a change in content, intensity, or frequency of input to the social system as well), then, in our terms, a norm set must be established allowing this deviant alternative to satisfy higher priorities than the postulated social hierarchy. The crucial cultural dimension for deviance patterns and stress control at the macro level, and for self-reorganization and psychological stress at the micro level, will be the cultural dimension which establishes that culture's priorities among norms. This somewhat obvious statement (obvious at least in retrospect) highlights a key point for analysis of social change. One should be no more concerned with the specific content of a proposed social change, than with whether or not the proposed change affects a prevailing method or base

---

4 This is not the place to go into the matter but it would seem that deviance in the society is hierarchic in nature as well. A case can even be made that a society will structure deviance from its norms in rather predictable patterns. A further point could also be made that in a coherent, well-organized society, deviance will take a form which will reinforce the accepted norms among the accepting population. A very readable presentation of forms of deviance and their implications is Howard S. Becker's, Outsiders: Studies in the Sociology of Deviance (New York: Free Press, 1963).
for establishing priorities among cultural norms. We distinguish the content from the function of a norm in a set.

If a change is proposed in the standard by which priorities are measured, then the proposed change is more likely to be revolutionary at the macro level and traumatic at the micro level. It will involve the reorganization of the purposes of organization at the social level and a reorganization of the boundaries of self-image at the micro level. That is, at the micro level, the actor will do one of three things: 1) have to rearrange the hierarchical priority order of a given norm set vis-a-vis other norm sets within a given self-image; or 2) abolish elements of an existing norm set and establish substitute elements in their place; or 3) isolate an existing norm set together with its associations while building a new set to deal with the situational range implied by the proposed social change.

Dimensions of Culture and the General Theory of the Machine

Of crucial importance in the analysis of social change is the internal, evaluative dimension of a culture, which we will refer to as the "ideological" dimension. It is here regarded as separated from another crucially important dimension, which we call the "instrumental" dimension. We contend that social changes involving ideological alterations, involving processes that set the standards of priorities among other cultural values, involving processes which, therefore, are usually presumed to be self-justifying, are problems in legitimacy. Social changes which involve instrumental alterations -- changes in method, content or order under an accepted dominant norm -- are problems of autonomy. We will later contend that these differences require significantly different strategies for their introduction and imply diffusion in significantly different patterns throughout the society.

This is what confusing terminology can be avoided by a more abstract notation which would also reduce the noise from the connotations of the language. Instead of beginning with a norm set we could begin with a set of elements of a system having the property that they are rules coding information for outputs of the system. These rules, or the system's "program," consist of at least two types of components: rules for internal relations and rules for external relations of the system. These components then have the property of being organized,

---

5 Unfortunately, there is no common agreement across the social sciences on the terminology to be employed in referring to these dimensions. In place of ideology some writers will use consummatory or sacred; in place of instrumental -- pragmatic or secular.
i.e., relations between entities A and B (e.g., input and output or system resources) are conditional upon the state or value of the rules. They have the further property of being hierarchically organized, such that the rules for internal relations among rules have first claim to the utilization of system resources. A component for the rules of internal organization is the rule for the generation of other rules for internal organization. This latter rule contains an "empty" norm set, which upon reaching a specified stress threshold will be filled in by information selected from the environment and combined with selected elements from the memory of the system according to conditions specified in the rule. This set then becomes an independent unit, a new self-image. For example such a "Threshold Rule" might read: When the results of previous decisions have exponentially increased the flow of significant information according to the information selection rules required for all norm sets in Self-Image Y, then:

1) Adopt the dominant norm of the most "significant other" person, defined as the greatest contributor of input variance.

2) Combine as many elements from Y as are consonant with the new dominant norm to form Self-Image Z.

3) Establish a new null set to be filled in according to the level of strain as specified supra, i.e., to accommodate the next activation of the "Threshold Rule."

What is of greatest concern to us in this discussion is the number of states of the environment and especially the similar properties of those states affected by a condition of the system. The greater number of states of the environment affected by the internal rules of the system and vice versa, the more the system can be holistically characterized as "ideological." The greater the number of states of the environment affected by the condition of the subordinated rules of the system, and vice versa, the more the system can be holistically classified as "instrumental." Even more accurate would be a record of the frequencies with which the various combinations occur, thus making

the social change process susceptible to uncertainty analysis. Unfortunately, it would be much too tedious to repeat this each time the distinction is employed and there is little to be gained by adding yet another neologism to describe the different states so this study will simply employ the terms "ideological" and "instrumental."

An Example from Current American Life

The differences between these two dimensions may be illustrated by the differences in two hypothesized proposals for change in current social behavior in the United States. Both hypothetical proposals will involve alterations in a prevailing conception of the "work-ethic" and symbols of achievement. The difference between the two will be that one change will require alteration in the order of priorities while accepting present goals; the other will require a significant modification in goals, substitution of symbols and a different basis for judging success. Both will appeal to the same rationale -- "the common welfare" as justification for the proposed change.

The first change is a proposal that business should be more concerned with the ecological and social side-effects of its operations. Corporations should involve themselves in the goals of their community and attempts to solve community problems -- particularly those concerning environmental pollution and unemployment among the poor. This change would broaden corporate goals beyond narrow profit orientation to a conception of more profitable operation in the long run and better public relations through efforts to improve the corporate environment. Insofar as this improves the labor supply projections, it inhibits direct regulation of operations by environmental control agencies and avoids embarrassing and costly minority attacks and boycotts. This change could occur, in the Smelsers' words, through "shielding of evasive activity."


8 Op. cit., although a large dose of skepticism is in order for the probability of such an approach succeeding on a broad scale, such reformulations would not be surprising on the part of large semi-public corporations which are under intensive pressure from consumer groups. Henry Ford, II, had similar rationalizations for Ford's involvement in the National Alliance for Business. See Henry Ford, II,
A somewhat different emphasis would be proposed by advocating that the corporation devote a larger share of its earnings to the welfare of its workers and its community and not really seek profits as such at all. Advocacy of mental health among the workers and community as a major goal of the corporation would challenge the standard by which priorities are now established. Perhaps it would be argued that there are other organizations in society which are interested in mental health. Thus, to require a specialized segment of the society to take over other functions in addition to production is not only a reordering of priorities for the organization, but also it is an inefficient means of attaining the end. That is, opposition to the proposal might be based upon the efficiency of the means rather than the acceptability of the goal. The latter basis of opposition is unlikely, but a counter-argument might be that Japanese corporations, which are not inefficient in production, do take considerably more interest in the physical and mental health of their workers and provide a sense of security in exchange for a working lifetime of loyalty. Whether or not the mental health of the worker is better served is an open question. The point is that in the United States a definite reordering of the standards of "successful" business would be required to bring about an emphasis upon orientations of workers other than those directly relevant to production. A proposal that a company should stress improved emotional relations among its employees as a primary goal or standard of success is

"Business Wrestles with Its Corporate Conscience," Fortune (August, 1968), p. 90 as cited in Richard F. Ericson, "The Impact of Cybernetic Information Technology," General Systems, Vol. 14 (1969), p. 101. Although this might constitute a similar rationalization, the National Alliance for Business hardly constitutes a startling departure in practice except that some firms have made personnel innovations, some even out of ideological motives. Our own experience with these programs indicates that it is extremely difficult to motivate even non-profit organizations to become actively involved even when there is no direct financial cost to be borne. NAB offices are involved in a massive "put-on" which counts thousands of pledges to the program -- only a miniscule proportion of which are activated. The activated pledges, in turn, constitute largely unskilled positions with high turnover that would have been filled by the so-called "hard-core" unemployed in any event. In recognition of the widespread abuse of the program the Department of Labor in the spring of 1970 reallocated its funding away from the Job Opportunities in the Business Sector (JOBS) program and into Public Services Careers and Manpower Development Training Administration (MDTA) programs. The latter are largely allocated to public school districts whose inability to train the population during their "normal" exposure plays a significant part in the creation and maintenance of the large pool of unemployable labor which the new program is supposed to alleviate.
not likely to be met by arguments in American companies that this is an inefficient approach to better emotional relations!

To repeat, a stress in the ideological dimension raises the problems of legitimacy. The basic stakes involved in the stress are the preservation of a standard of priorities for social behavior. The importance of this ideological-instrumental distinction extends further in that it provides a clue to the nature of other significant dimensions of culture which can be expected to affect our models and the process of social change.

Obstacles to Change in the Ideological Domain

What is the fundamental reason for the difficulties encountered by proposed social changes in the ideological bases of behavior? As we have noted, such changes come to be viewed primarily as problems of legitimacy rather than problems of autonomy. But what is the reason for this boundary? The difference is in the manner in which information is processed.

Because in legitimacy problems the standards for setting priorities and the standards of evaluation are in question, information relevant to legitimacy problems cannot be easily screened into existing channels of information processing. In problems of autonomy the capacity of existing channels may be stretched but the input does not have to be repeatedly screened in terms of the appropriateness of the channels to process it. If a social change requires a new identity, i.e., if the legitimacy of the system or subsystem is challenged, then by virtue of the dual nature in information processing required, those cultural dimensions affecting information processing are especially significant to legitimacy problems.

Social and Cultural Dimensions Affecting Information Processing

The distribution of information within society, and within subgroups will be found to correspond with social structure to some

---

9. The problem is analogous to a distinction made by an unrecall author between a primary code and a secondary code. The primary code classifies objects according to their content and the secondary code is attached to the primary code to identify items of greater significance. Problems of autonomy can be likened to problems of primary classification; problems of legitimacy to problems of secondary classification.
extent. The prestige of the communicator will affect the reception of the message.\textsuperscript{10} In considering the distribution of information we should also consider different intensities with which the information is held, the means through which information on standards of evaluation or legitimizing values has been learned, and the point in socialization at which such information was acquired. Such differences in distribution and intensity will affect the rate of acceptance or rejection of proposed social changes and will determine to some extent the effectiveness of different techniques or strategies in introducing social change. Listed below are seven dimensions determining the rate and flow of information through a society. A profitable way to ponder them is to take the stance of a communicator or educator who wishes to be a change agent and promote change in the social system:

1) The locus of control accepted by the population. Do individuals guide themselves according to prevailing external signs, e.g., auguries or magical-religious interpretations of current reality or "other-directedness" in terms of responsiveness to perceived public opinion or reference group opinion? Or, for a given area of behavior, do most individuals adhere to a fixed, traditional set of standards inculcated as a standardized interpretation of perception -- "inner-directedness"? Or, do individuals choose, and perceive themselves as choosing, among a known range of guides to behavior in order to select one interpreted to best suit the individual's situational needs -- "autonomy"? Furthermore, what weight is attached to an individual's opinion versus a group opinion; a minority versus a majority opinion; a new versus an old interpretation of a rule or precedent?

2) The degree of openness or secrecy in interpersonal communications.\textsuperscript{11} This dimension could be called for some purposes the "trust-distrust" dimension. What matters do individuals feel free to discuss without conscious reservation? What restrictions pertain in what degree to expressions of feelings in ideas across what groups in society -- close primary groups, extended family, friends, business or occupational associates, members of the smallest or next largest culturally relevant geographic area, members of the same religious, political, or educational affiliation? What degree of confidence is placed in statements from various sources, quite apart from the content of information?

\textsuperscript{10}Carl I. Hovland, "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change," American Psychologist, Vol. 14, pp. 8-17.

3) Boundaries of public and private expression. Are certain topics discussed only among close associates? Where discussion of some topic is severely restricted, does a condition result, a "conspiracy of ignorance" inhibiting consideration of variables which an observer might perceive to be crucial?

4) Sensitivity to information about change itself. What is the culture's evaluation of change relative to stability? Here, a crucial distinction is in many cases that between change in the instrumental domain, versus change in the ideological domain. What has been the record of change in the area of interest? Given past performance of the subsystems most likely to receive the change initially, what is their tolerance for rates of change as evaluated by utilization of present capacities and capacity which can be generated in the short run? What is the "weight of tradition?" In other words, how bound to precedent are the subsystems most likely to encounter the change; how is the preferred coping mechanism affected by past performance and outcomes? In the face of the complex changes demanded in the present, a preference for adaptation by means of isolating the old structure while transferring its functions to a new structure is more likely to overtax a subsystem encountering rapid demands for change than one which utilizes assimilation or aggregation as its preferred means of adaptation.

5) Degree of introspection or self-consciousness of a system. The extent of group-consciousness or social consciousness is difficult to determine. The impact of this variable is not as clear-cut as one might think, for greater introspection does not necessarily increase autonomy if no further resources are uncovered to cope with the perceived stress. Likewise, if self-searching raises only greater and graver doubts about one's standards of belief, one may come to question what has been unquestioned and, in the lack of precedent, be driven to abandon rather than to affirm these standards.

6) The number and quality of alternatives that have been previously proposed. What alternatives are perceived other than the current method and the alternative proposed by the change agent?

7) Methods of information transmission. What is the differential access to information of the various groups and subgroups who are the major communicators? What are the main sources of information?

relied upon by the subsystems which will receive the initial information on the proposed change? Beyond these salient aspects of the means of information transmission we should consider the nature of the medium through which the information is transmitted.\textsuperscript{13} Is the proposed change advocated through a medium novel to the subsystem? Is there a cultural advantage on the side of the medium employed by proponents or opponents of the proposed change? Will the interpretation of the proposed change be made through the same or a different medium? How will the medium of introduction affect interpretation through face-to-face groups? In a country of low literacy there may be an equal opportunity for a large portion to receive the same message simultaneously through the mass media. In this instance an individual can consult local leaders who have received the message simultaneously. A written message may not be as widely diffused, but is capable of being examined and re-examined in its original form at will.

In describing each of the above major sociocultural variables we supplied illustrations of their significance for our models. It would take us too far afield to examine each of these dimensions and their implications, but several require further elaboration.

In terms of locus of control, it would seem that the autonomy of subsystems is greater in other-directed areas of behavior than in inner-directed, and greater still where individuals are presumed to be "autonomous" rather than other-directed. We have discussed part of this proposition in our previous chapter, particularly in respect to the weakness of totalitarian systems (p. 105). But there is more to be considered in the weakness of inner-directed systems than just the restriction of input capacity. One must further consider the restrictions on output capability within the boundaries of acceptable input variance. This matter brings us to the discussion of the implications for processes of legitimacy for individuals in an inner-directed system in comparison to individuals in an other-directed system.

To understand these implications we must refer to the concepts of "public culture" and of "operating culture" developed by Ward H. Goodenough (p. 23). In our discussion of legitimacy we focused upon the essence of the process of decoding inputs and mapping them upon the activated norm set to determine a response. The nature of the response can involve a legitimacy problem rather than an autonomy problem when the input calls into question the standards of belief, i.e., falls into the ideologically rather than the instrumentally defined areas of behavior perceived by individuals. If this be the case, then the

\textsuperscript{13} Marshall McLuhan, \textit{The Medium is the Massage} (New York: Random House, 1967).
intervening nature of the "public culture" as being other-directed rather than inner directed stems from the greater or lesser range of outputs available to be perceived as alternatives.14

How might an "other-directed" culture have greater flexibility of output than an "inner-directed" culture?15 We have suggested that the nature of this "flexibility" consists of a greater choice of alternatives which satisfy the individual's preferences, needs, etc. organized under his activated self-image and norm set. But if this is the micro viewpoint, then the macro statement must be the reverse. There must be in the perceived public culture a tolerance of a wide range of situational behaviors in response to a given cue. But these two concomitants of the phenomenon imply a good deal more about the prospects of social change as an autonomy problem rather than as a legitimacy problem.

At the micro level a greater choice of satisfactory alternatives implies a correlate of equi-valued objectives, i.e., norms in the set are in some manner equated by reference to a common standard which allows a wide range of free substitution for approximately equal satisfaction. Such a situation can arise in the extreme instance if any given member of a society is willing to structure his responses to any other member in terms of achieving the other's preferences. Obviously, this would be an impossible condition, but we can approximate the extreme by postulating an increasing number of areas of a society as being those normatively viewed as "sensitive" to the preferences of others; i.e., the norm set of the individual choosing an alternative contains a norm which dictates: "Choose the behavior under associated norms that will satisfy the expectations

14 The problem is rather complex, but it might be helpful to think of it as essentially a part-whole problem. That is the society of other-directed individuals will display properties as a whole which will significantly differ in implications for legitimacy than the same norm distribution among individuals in another society differing only in that it was inner-directed. For psychological reasons related to dissonance resolution such a clear-cut case is probably impossible but the distinction could be an interesting ideal type. A useful guide to this area of discussion is Edward Purcell's, "Parts and Wholes in Physics," in Daniel S. Lerner (ed.), Parts and Wholes (New York: Free Press of Glencoe), pp. 11-22. Reprinted in Walter Bukley, Op. cit., pp. 39-44.

15 This is not the most precise statement of the problem. A society may have areas which are relatively "other-directed" and areas which are relatively "inner-directed," for example contrast the advertising and the military subcultures in the United States.
of the greatest number of, or most important, individuals to be affected by the choice." Under this condition we would describe the macro level as constituting a mutuality of perception of the members such that a wide range of behaviors are interchangeable to achieve approximate satisfaction of what is perceived as "required" under culturally specified conditions.

Implied in this discussion of areas of "other-directedness" in a culture is that there is a high probability for these areas to be viewed instrumentally as well. Since an instrumental orientation would facilitate flexibility of choice among alternatives satisfying perceived needs, and an other-directed orientation would increase sensitivity to information from others over an area of interchangeable norms -- the introduction of social change is likely to meet its widest acceptance in an area toward which a society possesses both instrumental and other-directed orientations.16

Other than the locus of control there are two other intervening cultural variables which require extended comment on their impact on our models of norm set, autonomy and legitimacy. The degree of system consciousness and the history of the system's employment of alternatives to the change being advocated for the system may constitute factors with a significantly different impact under an ideologically rather than under an instrumentally perceived area of behavior.

16 Thus, individuals who possess a relatively high degree of coherence within their norm sets will have greater latitude to vary within an other-directed system. Unfortunately, the emphasis upon "sensitivity" in other-directed systems and the emphasis upon instrumental behavior, tend to lower the degree of coherence within norm sets by weakening ideological norms. Consequently, individuals who possess a relatively low degree of coherence in an other-directed system will vary their behavior over a wide latitude as they shift from one setting to another, e.g., the used car salesman, but they will not perceive themselves as being in control of this variation. Paradoxically, then, the other-directed system will tend to be composed of 1) individuals with high autonomy who are themselves relatively less other-directed, and 2) individuals of low autonomy who are themselves relatively more other-directed. A similar paradox will tend to occur with respect to ideological and instrumental orientations. High autonomy and high coherence would imply a relatively larger domain of behavior controlled by an ideological norm set, rather than an instrumental norm set. The converse is true for low coherence, low autonomy. In the absence of other theoretical considerations, the stability of an other-directed system seems inherently problematic.
In Chapter IV we discussed briefly the problems and the benefits which can stem from increased awareness induced by change agents (p. 74). From what has been said to this point about the nature of ideologically interpreted areas of behavior as contrasted with the instrumentally interpreted areas, we can understand the defensive impact of increased consciousness under the former. If a change agent challenges the standards of belief, the standards by which the norm sets cohere, he raises problems. These problems are not merely about the intensity or application of the behaviors performed according to the norm -- that is, problems of autonomy -- but problems concerning the association of currently interrelated norms and the validity of the set itself. This type of change calls into question the self-image of the individual. That this should be more a defensive reaction than a pragmatic one is especially clear if the individual has no perceived relevant alternatives to which he can shift.17

An example of the difficulties posed by an increase in self-consciousness by change introduced into ideologically interpreted behavior can be found in the Middle East. Daniel Lerner has studied the impact of the introduction of mass media on the Muslim cultures and he takes a comprehensive view of the difficulties which result:18

Even a little such fantasy in the Middle East, goes a long way. For the mechanism of empathy is thereby engaged. Operating at the level of a person's identity, empathy alters the basic self-imagery by which a person defines what he is and what he may become. To alter this self-imagery requires comprehensive rearrangements of the self-system, that system which locates all elements of a person's environment in their proper place. The young ex-villager, when he has learned to read and earn his living in the city, sees his family, community, religion, class, nation in different relationship to himself than he used to do.... A whole new style of life is involved.

17 We will take up the question of what processes are involved at the micro level and the need for reinforcement of these processes when we come to our discussion of alternative strategies based upon the different nature of the social change being advocated.

Similarity between the Existing and the Desired Alternatives

The variable of degree of consciousness also relates to the history of alternatives which are perceived to be available as responses to the promptings of the change agent. It is sometimes maintained that the more a system is like the state desired by the change agent the more it is likely to change in the desired direction from the change agent's point of view. Unfortunately, what constitutes significant "likeness" is often viewed as analogous behavior in a narrow analytic perspective. The relationship to the system as a whole must also be evaluated.

From our remarks on consciousness we can hypothesize that alternatives are most likely to be sought among available models when a proposed change is in the instrumentally perceived area rather than in the ideologically perceived. Thus a behavior perceived to be ideologically important will be resistant to change based upon instrumental grounds (or, at least, presented as being so based) if this change also presumes change in the standards for evaluating the behavior. The resemblance of the change to the current state may even impede the ability of individuals to make the proposed change by depriving them of the opportunity to establish a clear-cut boundary for their new identity.\(^{19}\)

Ideology and the Selection Process

The emphasis in this discussion has been that it is not enough that an individual have been exposed to alternatives which might provide a model by which he may cope with a proposed change, but that the utilization of the alternatives, even the very capability of perceiving them, will be strongly influenced by intervening variables.

\(^{19}\) Here the inclusiveness of the requirements of alters become significant. Along the ideological dimension of behavior one would expect that the attitude toward the required behavior would be an important component of action and one which would be open to frequent questioning. If the performance looks similar to the required performance but is based upon dissimilar norms (as the early Christians' participation in some civic functions acknowledging legitimacy, e.g., "Giving to Caesar ... " while refusing to participate in state religion) then the boundaries for the new performance within the old become confusing to adherents and opponents alike. The historical relationship between Church and State is some indication that the Romans had good grounds for their confusion about the Christians' relationship to the State.
which hinge upon the fundamental distinction between ideological and instrumental criteria of evaluation that are found in a culture (and, presumably, in all cultures). In order to understand the basis of this hypothesis, we must return once again to our old starting point of the imaginary system where legitimacy was not a problem (p. 103) and proceed to examine the change in the nature of the selection process as legitimacy becomes a problem.

As long as the individual's belief system and his self-perception successfully identify the priorities and the meaning of commands, or as long as his interactions generate positive feedback to his "conception and feeling about... his needs, interests and place in the political system" then the individual will tend to feel that the legitimacy myth or ideology is a suitable interpretation of the phenomenal world. But if this is not the case, if indeed the world does not seem to possess its former predictability, then the negative feedback to the individual's self-perception will disrupt the decision process involving command inputs.

When, however, this internal feedback becomes negative, the selection process shifts to a broader range. Under these circumstances the newly perceived situation is scanned for secondary familiar cues in an attempt to perceive continuity. In other words, the individual can be described as shifting to hierarchically lower norms within a given, already-activated norm set, or to an alternative, as-yet-unactivated norm set. The first attempt of the individual will be to deal with the challenge to his standards by means of reinterpreting the stimuli to fit. Experience inconsistent with a self-image will not disrupt the norm set but will produce anxiety. This anxiety will be quelled if the individual can obtain satisfaction of action interpreted to be congruent with the dominating norms in the activated set. Should satisfactory outcomes be produced under these circumstances, then the norms will be reinforced further. In a situation perceived as being thoroughly ambiguous, the individual will attempt to postpone decision.

Hierarchical of Adaptive Responses -- Some Propositions for a General Theory

Our distinction between ideological and instrumental orientations as affecting autonomy and legitimacy leads us to suspect a general principle governing adaptation. We have already discussed (p. 121) the significance for adaptation of ideological versus instrumental change.

requirements for an individual. This section will develop additional features of a response hierarchy based upon the Norm Set Model.

Proposition 5 states that once an individual has selected a response from within a given self-image, the probability is higher of selection of the next response from the same self-image, rather than a different self-image. The dominant norm within the set will act as a parameter of the problem-solving approach, i.e., will fix the limit to the nature and number of alternatives which will be considered in applying the norm to the mapping of input. To some extent then, the dominant norm acts as a barrier to creative problem-solving. Proposition 6.41 states that if the behavior following the dominant norm sets (or norm within a norm set) does not pass test routines, behavior will be selected following subordinate norm sets (or norms).

A general theory of adaptation would link together a series of propositions defining the threshold states for switching from one norm set (or norm) to another. We do not have sufficient information to venture the hypothesis that all adaptations for all systems can be predicated on a gradient of more rigid to less rigid responses but the following model seems to hold for human adaptations and possibly for all cybernetic responses. First, the activated set is mapped upon the input. If an input is initially perceived as instrumental but subsequently becomes problematic, then the individual will refer to the dominant norm in the set to confirm the initial decision. If the dominant norm is an ideological norm the decision may be made to persist in the behavior and initiate test routines. After some period of trial -- test routines -- a threshold is reached which switches control to another norm set or a new norm set. This "learning" process can be described as possessing certain general properties. Following our general theory of autonomy we hypothesize that all adaptive responses which reach the point of switching to another or a new norm set (a control) will proceed through these stages: 1) The newly regnant norm set will be first applied rigidly, i.e., a uniformity of pattern will persist; 2) After reinforcement in the new pattern, the individual will develop free-floating resources and will acquire greater autonomy in applying the newly regnant norm set -- provided patterns of input variance stabilize; 3) Stability of input variance will increase autonomy through the shift of attention to particular processes, subcomponents, of the pattern. Increased autonomy will be reflected in greater freedom of control, variance in interpretation and application. 5) If input variance does not stabilize, a search for other controls, new dominant norms, will ensue.

Initial rigidity in application is posited because contrary to lay views on this topic, a completely flexible mind is not only a myth
but also is a contradiction. Hartmann in particular has called attention to the significance of "preconscious automatisms" as essential to "well-established achievement".\(^{21}\)

Not only motor behavior, but perception and thinking, too show automatization. Exercise automatizes methods of problem-solving just as much as it does walking, speaking, or writing. Observations of automatized functions, and of some other phenomena as well, warn us that the conception of a thoroughly flexible ego is an illusion; yet normally even well-established actions and methods of thinking are not completely rigid. Besides the adaptedness implicit in their use, automatized activities have a certain leeway (of varying latitude) for adaptation to the momentary situation.

From our point of view the degree of latitude determines the extent of system autonomy and this will be contingent upon the ideological or instrumental area of behavior defined in the actor's culture as affected by the extent of consciousness and exposure to alternatives.

In terms of the nature of the problem-solving set there is some evidence that it is easier for a person to learn new responses to a familiar stimulus rather than either: 1) to learn to recognize a new stimulus appropriate to an already-familiar response; or 2) to learn a new stimulus and a new response -- in a situation possessing cues similar to the original stimulus and response. We might also expect interference effects as cues are overgeneralized or undergeneralized in forming conceptions of the environment under the new norms. The influence of culture here is quite obvious.\(^{22}\)

A general theory of adaptation processes would link together a hierarchy of these responses with a specification of intermediate steps and establish thresholds of transformation among them.

---

\(^{21}\) Ego Psychology and Adaptation, op. cit., p. 88.

Social Change and Legitimacy: The Ideological Area

The general processes of adaptation can be claimed to be followed at all levels of human learning. The holistic description of these adaptation processes is quite different in terminology at different levels of view. The consequences are almost sufficiently different to appear as different phenomena, e.g., the alleged distinction between revolution and evolution in social forms and processes. Although we will endeavor to describe the differences which pertain to change in the area of legitimacy cum ideology, as contrasted with the area of instrumentality cum autonomy, we will also stress the commonalities of these processes in terms of the reinforcement of norm sets at the micro level.

If a legitimacy problem is to arise, it will do so as a consequence of failure of a norm set to control input variance in terms of the standards of evaluating the consequences of behavior stemming from dominant norms in the norm set. Under these circumstances the predictability of the environment declines and the system enters a cyclical series of feedback lag -- which may be negative or positive but in either case culminates in the disruption of the self-image.

A brief example would be the case in which an individual from a "traditional" subculture in a modernizing society ventures beyond the boundaries of tradition and encounters demands for behaviors and performances in terms of modern roles. If these demands fall within an ideological area in his subculture he will tend to persist in the subculturally acceptable behavior. If the demands of the new role cannot be avoided, persistent encounter will create a crisis of choice between legitimacy myths. But the choice is much more than a mere option between legitimacy beliefs; it is the activation of one particular self-image rather than another.23

23. We have made some simplifying assumptions to the effect that isolation of behaviors and other mechanisms is not possible. These other defenses will be discussed below under our treatment of instrumental-autonomous responses, on account of the lower probability of isolating the challenge in the emotionally charged ideological area. This is not to say that isolation of "traditional" and "modern" behavior is infrequent. The outcomes seem to depend upon the priority of the standard being challenged in terms of other standards in the norm set, e.g., other-directedness and the coherence and intensity of reference groups advocating the opposed behaviors.

Onofre D. Corpuz, The Philippines (Englewood Cliffs, New Jersey: Prentice-Hall, 1965) provides a most useful example in the Philippines where corruption (or informal, extra-legal channels of
Social change involving the ideological domain of behavior is likely to take distinctive forms as the proponents seek to legitimate their new standards. These forms have acquired distinctive names but our treatment of legitimating social change as revolution, or revitalization movements, or conversion processes, should not obscure the commonality of the basic process as it occurs in both the ideological and instrumental areas.

In treating the convergence of micro and macro processes we must constantly be on guard against unwarranted generalizations across different types of units. Of particular significance is the tendency to generalize from broad sociological correlates of mass movements to decision-making and information) is an outcome of the dilemma of "two different value systems competing for the governance of social behavior." Ibid., p. 87. His excellent description of the value superstructure of modernized societies imposed on the traditional infrastructure of traditions and ethics ("ethos, social custom") delineates the problem quite clearly. Ibid.

There is not a permanent state of dissonance as a consequence; for "the norms and values brought by the modern culture take their place in the individual's mind alongside of the norms and values of the traditional culture. Neither culture has displaced the other in the governance of his behavior and social outlook." Ibid., p. 89.

Eventually, the individual must choose between dichotomized norms of social behavior where a kin claim and a public claim oppose each other. But on a systemic level "So long as the constitutional order was not in danger, it seemed, the contradiction between citizen condemnation and tolerance of graft, and the contradiction between the party, posture and performance, were acceptable. It was only necessary for the contradictions to be reconciled," p. 91. This was accomplished by what American culture would define as "mass hypocrisy." Corpuz quite nicely puts it, "The solution, in effect, was to comply with the law in form, and to appease the social conscience through an excorcism of the public's guilt feelings through ritual and ceremony," Ibid., p. 92.

In Corpuz' example one can observe a by-product of an other-directed culture coming into play in the alteration between different sets of norms according to context. A way of stating this at the micro level is that over time ego acquires an objective or detached view of his own norms and differentiates his interaction patterns according to cues to the nature of alters' expectations. See Erving Goffman, The Presentation of Self in Everyday Life (New York: Doubleday, 1959) for an illustration of the latter process.
psychological motivations of individual actors. The model which we are employing was devised with the intention of countering this propensity by means of incorporating a steady state flow between the individual system and the various environing supra-individual systems.

Although there are some built-in safeguards against the above fallacy, there is no protection against another type of potential error likely to occur in applied studies employing Norm Set Theory. Complex systems such as self-organizing systems have multiple channels of inputs and with respect to an average state of the environment such systems will have relatively high reserves of free-floating resources. (Otherwise they would be reduced to more simple systems according to the second law of thermodynamics.) This condition makes errors of the "residue" more probable when one seeks to apply the model. In social science we are accustomed to moving rather directly from stimulus to response, from proximate cause to probable effect. In applied studies of social change, however, the complexity of the system may rest upon dynamically opposed streams of inputs. A consequence of this condition is that the attempt to marshal energies in a single input stream or at a single control point will result in the mobilization of free-floating resources from other points in the system -- with paralysis as a consequence. Thus, although the form of the process of social change may be similar, as an adaptation process of complex systems, in both ideological and instrumental areas, the consequences may be dramatically different.

For example, the attempts of groups opposed to the Vietnam War to mobilize a broad range of unique resources and symbols -- youth, long hair, different sexual mores, new definitions of patriotism, etc., -- around dominant norms which judged war, imperialism and the exponential growth practices of the consumer economy as immoral have provoked in other groups fears of the future, resentment of ingratitude, hatred of communism and desire for stability and security -- even at the cost of tolerating "some" injustices. In early 1970, it was not very clear whether or not paralysis would result, but there was general agreement upon the fact that polarization was accelerating.


25 Some evidence for this polarization was provided by a Louis Harris Survey between May 20 and 28, 1970 of 820 undergraduates in 50 colleges. The students were asked if they agreed with a statement and then asked if they thought their parents would agree or disagree with the same statement. By approximately 70 to 30 per cent the students agreed that 1) America was lacking in values, 2) American imperialist policies are a cause of its problems, 3) economic competition was a
In contrast to the adaptation process in the ideological area, the results of an undue limitation of focus of input application in the instrumental area may be illustrated by the enormous number of research results on educational innovation. By and large changes in one factor or another seem to produce no significant difference. Whether the change be in curriculum, teacher style, class composition, etc., as long as only a single element is changed the other elements are used more intensively. If the curriculum change is not preferred to the previous system, teachers and students work harder to overcome it. If the teaching method bores students to exasperation, they turn to the text more intensively for relief. In the instrumental area of social change it is not uncommon to find a parallel to the law of diminishing returns in economics: The marginal value of an increase in a single input decreases with each increment. It is only when a single input produces complex ramifications and recombinations with other streams of environmental inputs that one obtains "deviation amplifying mutual causal processes."26

Bearing these warnings in mind we will now turn to our discussion of the convergence of micro and macro processes in the ideological legitimating and the instrumental-autonomous domains of social change. We will be particularly concerned to discover what flows of information and reinforcement are necessary to aggregate which kinds of alterations in norm sets in such a manner that successive micro adaptations can stabilize and extract or evoke from the environment a stream of resources sufficient to maintain the new dominant norms at the micro level.

cause of our troubles. By the same margin the students disagreed that America should maintain its present policies because of the threat of communism. Approximately half the students thought their parents would be on the opposite side of each of these statements. It is also interesting that by 81-17 per cent the students felt that "until the older generation comes to understand the new priorities and life-style of the young, serious conflict is going to continue." On this issue 50-44 per cent thought their parents would agree with them. Louis Harris, "Why Students Feel 'Turned Off,'" San Jose News (July 13, 1970), p. 8.

Revitalization and Cognitive Dissonance

Anthony F. C. Wallace has described the structure of the revitalization process as consisting of "five somewhat overlapping stages":
1) Steady State; 2) Period of Individual Stress; 3) Period of Cultural Distortion; 4) Period of Revitalization (in which occur the functions of mazeway reformulation, communication, organization, adaptation, cultural transformation, and routinization), and finally, 5) New Steady State. 27

How these processes are supported at the micro level might still remain in question had it not been for the insightful work of Leon Festinger and his colleagues. Their research substantiates the factor of reference group support, and the mobilization of energies toward persuasion on behalf of contrary viewpoints, that is described in Wallace's description of the macro processes. Five conditions are specified if proselytizing is to follow disconfirmation of a belief -- and it is possible that quite similar conditions hold as requisites for an, successful advance of social change in the ideological area. The conditions specified by Festinger and his colleagues are: 28

1. A belief must be held with deep conviction and it must have some relevance to action, that is, to what the believer does or how he behaves.

2. The person holding the belief must have committed himself to it; that is, for the sake of his belief, he must have taken some important action that is difficult to undo. In general, the more important such actions are, and the more difficult they are to undo, the greater is the individual's commitment to the belief.

3. The belief must be sufficiently specific and sufficiently concerned with the real world so that events may unequivocally refute the belief.

4. Such undeniable disconfirmatory evidence must occur and must be recognized by the individual holding the belief.


The first two of these conditions specify the circumstances that will make the belief resistant to change. The third and fourth conditions together, on the other hand, point to factors that would exert powerful pressure on a believer to discard his belief. It is, of course, possible that an individual, even though deeply convinced of a belief, may discard it in the face of unequivocal disconfirmation. We must, therefore, state a fifth condition specifying the circumstances under which the belief will be discarded and those under which it will be maintained with new fervor.

5. The individual believer must have social support. It is unlikely that one isolated believer could withstand the kind of disconfirming evidence we have specified. If, however, the believer is a member of a group of convinced persons who can support one another, we would expect the belief to be maintained and the believers to attempt to proselyte or to persuade nonmembers that the belief is correct.

We assume that in a population of actors, the ability to tolerate frustration will vary, with the consequence that the same stimuli will exceed the limits of tolerance of the norm sets of people in one segment of the population, but not of another. At some point those with a lower gradient of satisfaction from behaviors guided by a controlling norm set will seek experiences and information altering such a set. Wallace describes the process of search, and confirmation of the leader's appeal. Having found confirming evidence for dissatisfaction, a member of the dissatisfied segment of the population will seek group support for his position. Festinger, et al. clarify these

micro processes in terms of the theory of cognitive dissonance. The most surprising result of this study of a deviant religious group that was preparing for the end of the world on a fixed date in the near future, was that the reorganization of the self-image (by the generation of new norms and the organization of these into new norm sets) was not, in itself, sufficient to maintain belief. Even the supporting affirmations of the small group were not sufficient. The group seems to have had a collective need for support in terms of a predictable input from the environment. The failure of the predicted disaster to occur was reinterpreted in terms of the salvation of the group and the rest of humanity provided by their belief and prayers. But there still remained the need to convert non-group members. In terms of our description of the general properties of adaptation processes we can understand this initial rigidity in application, but the timing of the occurrence of the need to convert others cannot be explained in these terms. The need to convert others to the new norm might reflect the decisive establishment of the new norm set within the disaffected group. It might also reflect the fact that the adaptation process was largely a process of displacement of norms rather than isolation or aggregation or assimilation (p. 70). That is, there may be differences in the need for extra-group appeals for reinforcement, depending on the process by which the new norms are established. Thus, if a group relied primarily upon isolation processes, the group might then attempt to reshape its social contacts to allow the enactment of old norms in a "safe" restricted time and place with a selected population (perhaps in a very "formal" manner), while expanding the time and places in which the new norms are enacted. Similarly for aggregation, a defensive screen might be developed allowing interpretation of the new norms in light of the old. Isolation and aggregation risk a breakdown in controls or development of schizophrenia insofar as sudden shifts in environmental patterns can disrupt the internal structure. The initial rigidity of the adaptation is a handicap in these instances, as isolation and aggregation are hypothesized to have lower thresholds, or, in other words, are more sensitive steady states than displacement. Adaptation through assimilation is neither as sensitive as isolation and aggregation, nor as insensitive as displacement.

---

The need to convert others as a feature of social change in the ideological realm may stem from yet another characteristic which distinguishes the ideological from the instrumental -- the belief in the infallibility of one position. In an instrumental rather than ideological area of behavior, an opinion is less likely to be associated with a conviction of infallibility. Furthermore, the intensity of conviction is likely to be higher for attitudes and opinions linked primarily to the ideological domain than in the instrumental.

The consequence of such a conviction has been noted by anthropologist Margaret Mead who claims:31

As soon as there is an attitude that one set of cultural beliefs is definitely superior to another, the framework is present for active proselytizing, unless the idea of cultural superiority is joined with some idea of hereditary membership, as it is among the Hindus.

Granted that this intensity of conviction sets the "framework for proselytizing," one must still ask, What is the catalyst? Mead indicates that the greater value attached to one's own beliefs as contrasted with the beliefs of others might induce a fear that others might try to convert one to their inferior position. "It might be found that active proselytizing was the necessary condition for the preservation of the essential belief in one's own revelation."32 This brings us to one further element which would logically bear on the importance of obtaining converts.

A final reason for the need to convert others shown in the group Festinger and his associates studied might lie in the other-


32 Ibid., The broader implications of this position for system stability are quite fascinating. What happens if, as in the instance of the cold war balance of terror, opposing "superior" ideologies are unable to proselytize and unable to inhibit the persistence of the opposition? Is a feedback generated to the norm hierarchy moving the opposed elements into the instrumentally perceived area? What are the relevant conditions and thresholds? Some such new state of the system was probably involved in the Treaty of Westphalia ending the Protestant-Catholic religious wars. But the evidence indicates that three centuries later this ideological division retains its former destabilizing properties in Ireland. Why?
directed nature of the larger culture. Since there was not total displacement of the larger culture, one of the retained elements coloring norms within a new norm set might have been "other-directed-ness." If this is the correct hypothesis, then individuals within the group would have sought conversion of people from outside the group in order to preserve their own internal ties to nondisplaced elements.

In the latter event the method of adaptation, viz., displacement, still retains analytical significance. We might logically assume that if the old norm set were merely added to or restricted in its area of application, i.e., isolated, the pressure to confirm internal relationships among sets would have been lower. Thus, the need to convert others would have been lower as well.

We note in passing that the adaptive process of assimilation is unlikely to be employed in the area of ideology-legitimacy. This restriction of adaptive mechanisms in social change probably accounts for the distinction often made between evolutionary and revolutionary change and brings us to our discussion of the processes of social change in the instrumental-autonomous areas of culture.

Social Change and Autonomy: The Instrumental Area

The basic process of adaptation in the area of subsystem autonomy encompasses several distinctive features of holistic significance. The most significant factor is that since the standards of normative evaluation and the internal testing or internal feedback process, are not being challenged, the subsystem is free to organize its response around a stable core. Furthermore, the retention of existing dominant norms enables the proponents of an instrumental change to find group support with considerably less difficulty than the proponents of an ideological change.

One obvious holistic property of this process is that it opens the possibility of adaptation through assimilation. Components (elements or norms) of old norm sets can be combined with components of the proposed innovation in a synthesized settlement. The synthesis may prove to be only temporary, but the achievement of temporary stable states by a system increases the probability of long range stability. In conscious systems there is the additional potential influence of precedent affecting the parameters of the next settlement. A series of such intermediately stable settlements could be considered as factors which would seem to increase the flexibility of the subsystem in applying the latest settlement, or rearrangement of on-going experience, to a new problem occasioned by new input variance.
Flexibility and Cognitive Discrimination

One of the propositions in our Norm Set Theory which applies to this discussion of the flexibility of norm sets is Proposition 4.8 (p. 52).

The closer the environmental input is to the individual's values, the more differentiated the individual's organization of cognitions and responses (the higher the transformation state, higher discrimination).

This factor of increased cognitive discrimination in areas close to the individual's values pertains to both ideological and instrumental areas, but can be viewed as having opposite effects.

Cognitive Discrimination and the Ideological Domain

We hypothesize that in the ideological domain greater discrimination will inhibit rearrangement of norm sets by being employed as a screen of input. The challenge to the standards of evaluation will increase the employment of system resources in a "defensive" manner. This is not necessarily either "good" or "bad"; it depends upon the nature of the environment. If the internal tests of the system are adequate to maintaining states of the system in terms of environmental variation -- particularly over the long run -- a resistance to change in the short run could be interpreted as a higher level of frustration tolerance. One by-product of this would be the increase in the legitimacy of successfully defended norms. Moreover, successful defense of norms would be likely to increase also the autonomy of subsystems related to the internal norms in question, in terms of dealing with problems of a pragmatic nature. In other words, successful defense of the ideological standards would free greater resources for use at other system levels.

Cognitive Discrimination and the Instrumental Domain

We hypothesize that in the instrumental domain greater discrimination will increase the capability of the system to rearrange secondary aspects of its structure. If such a proposed change is in an area directly relevant to the dominant norm of the dominant norm set of a particular activated self-image, it will be examined with respect to a greater number of variables and compared with a wider range of alternatives than a proposal in a more normatively remote area. We also hypothesize that the system will utilize a legitimating screen
(p. 115) which will further facilitate a strategy of appeal to instrumental but relatively important values in the culture -- generally values determining economic status and social prestige.\textsuperscript{33}

**Flexibility and "Areas of Privilege"**

Up to this point in our discussion of social change and the instrumental area of culture we have been largely concerned with the implications of various states of the system or conditions of the norm sets being affected by domains of culture and processes of adaptation selected in response to input variance. We must now expand the number of variables to include an important secondary factor which was extensively treated in our discussion of legitimacy (p. 124) -- the other-directed nature of the culture.

We have previously discussed micro and macro aspects to "other-directedness." At the micro level we are likely to find a positive correlation between degree of "other-directedness" and a range of nearly equivalently valued objectives. Thus, at the micro level in an other-directed, instrumental area of culture we should find a larger range of alternative responses to a proposed social change than would be found in either ideological areas or in inner-directed, instrumental areas of culture. From another viewpoint on this subject the individual will have alternatives within his norm set upon which to map an input and choose an operating culture (p. 23).

The macro aspect of the phenomenon is that subsystems and individuals in an other-directed society will possess a considerable diversity in operating cultures: Thus more autonomy. A by-product of this situation would be expected in terms of sensitivity to innovation. The threshold of acceptance of social innovation in an instrumental area should be expected to be lower in an other-directed as contrasted with an "inner-directed" area. This latter aspect deserves more detailed treatment.

In order to have a wide range of choice at the micro level, there must be a wide range of permissiveness at the macro level -- if

\textsuperscript{33} The whole question of the appeal to a class of values eliciting a response from a similar class of norms is a rather interesting one. For purposes of the discussion the similarity is assumed. The intervening variables between the basis of appeal and the basis of response would involve an extended discussion of the mapping function in the society and a weighing of the historical balance between ideal and actual values therein. These matters have been discussed previously.
outputs from one individual which results from the mapping of environmental input to that individual are to be satisfactorily reintegrated as inputs to other individuals. However, the grounds for public acceptance need not be identical to the norms of action employed by the individual. Ward Goodenough notes that "within a community the private orientations of its members may differ considerably and still allow them to profess the same public values." The interplay between public values and personal sentiments reflects to some degree the different positions (statuses) in the social order and, as we have noted, the legitimizing myth or ideology defines the individual's position and expectations within that order (p. 108). Goodenough calls the area of choice from a given position the "area of privilege."

But the existence of a broad area of privilege can be expected to reinforce the prevailing standards -- or what are believed to be the prevailing standards of norm evaluation, i.e., increasing system legitimacy. The legitimating function of a broad area of privilege is implied in views such as this one: "Public values prescribe and proscribe certain kinds of behavior in certain situations thereby establishing people's duties and rights. But within the limits thus set, the public values grant considerable freedom of choice." It is within these boundaries that we can expect innovation to proceed most rapidly.

Consensus: Necessity or Illusion?

The mapping of inputs upon divergent norms to produce a congruence, a similarity, of output -- or output capable of being interpreted as congruent by other systems (which receive such output as their own input) -- would lead to suspicion that "consensus" is not an important factor in social change, and that perhaps ideological areas of culture can be isolated by this process of stretching definitions and interpretations of output, except in the most extreme cases. Acceptance of the rules of the social order requires, as Goodenough put it, that "the public values which these rules express be reasonably compatible with personal values especially those high on the priority scale."36

At first thought it would seem that if there is to be considerable flexibility in the operating cultures, the more important personal

35 Ward H. Goodenough, op. cit.
36 Ibid., pp. 100-101.
values must be widely shared and the nature of the problems people face must be agreed upon in relation to these shared values. Under these conditions the legitimacy of behavior would not become an issue, i.e., the acceptability of the order of things and one's position in that order would not be questioned. This state of the system should be expected to display great resistance to proposed changes in the ideological domain of behavior. Goodenough takes a position implying such a structuring of response in the ideological domain when he notes that under conditions of diffuse legitimacy, "there is little difficulty in arriving at a consensus regarding the allocation of rights and duties."37

The difficulty with this presumed state of affairs, even if one restricts one's attention to the instrumental area, is genetic. How is it that such a consensus could come about? There seems to be an inherent contradiction between the final state of the system and the intermediate stages required to arrive at that state: How could widespread variety of interpretation and motivation produce widespread consensus throughout the population even on an allocation of rights and duties?38

Prior to the problem of what degree of consensus is necessary if a stable instrumental orientation is to be maintained toward a domain of behavior, we must raise the question of the extent to which consensus exists at all. One eminent political scientist, David Easton, maintains that "there is little reason to believe that members of the system perceive the ideals, procedures and norms of the regime even in broadly similar terms.39

We seem to arrive at a position that the boundaries of legitimate, autonomous action do not really depend on a substantial consensus of belief among the actors of the system. There must be some limit to

37 Ibid.

38 A distinction should be made between agreement on a particular issue or a set of procedures for settling issues, versus widespread agreement on the norms evaluating these procedures and issues. It is possible to get agreement on the least worst outcome rather than the most preferred outcome for a given issue or a set of procedures if other system conditions are stabilized. For an illustration of this "pluralist" system see Robert Dahl, Who Governs? (New Haven: Yale University Press, 1961). See also James Buchanan and Gordon Tullock, Calculus of Consent (Ann Arbor: University of Michigan Press, 1962).

this "constrained variety" but that limit can be quite broad indeed. Easton's discussion is so much to the point that we cite it here at length:

It is a moot question as to whether the political objects about which we customarily presume consensus in the United States are even perceived let alone interpreted, in similar terms. Proof of ideological consensus is still an expectation, hardly a fact.

If this is so, when we view legitimating ideologies as a source of diffuse support for a regime, we do not need to imply that a system must rely only on one belief structure for the same membership, to perform this function at a given moment. It is not a matter of exploring the belief structure of the members, but the varied sets of beliefs. This is entirely aside from any substantial conflicts in ideologies about the general nature of the regime and authorities. Here it is solely a question of support through typical ideological means. Even under such conditions, I am suggesting, there is probably a greater range and variety of ideological positions, that can serve as responses than we might have expected from the emphasis usually given to the need for consensus as a condition of survival for a system.

If we adopt the theoretical orientation that variety in ideological perspectives, probably within some determinate but unspecified range of variation, is not inimical to the persistence of regime, and, indeed, that different perceptions of the nature of the same regime need not be destructive of its support, it does pose some important questions. From the point of view of the persistence of a regime, we would need to know what degree of inconsistency or dissensus is permissible among alternative legitimating ideologies. We might also wish to inquire into the range of variation in the interpretation of an ideology by a membership of a system that sees itself

40 This idea from general systems theory is most useful for "legitimacy" in particular as it calls attention to the role of the observer in the perception of variety. See W. Ross Ashby, An Introduction to Cybernetics (London: Chapman and Hall, 1956). Also "Variety, Constraint and the Law of Requisite Variety," in Walter Buckley, op. cit., pp. 129-33.

41 David Easton, op. cit., p. 298.
as subscribing to one and the same set of legitimating beliefs. It is said that individuals differ about the degree to which they can tolerate ambiguity; it is entirely likely that under the varying conditions of stability, crisis, or change the members in a political system will manage to tolerate different measures of ambiguity about their perceptions of the nature of their regime and the ideological positions they adopt in support of it.

If social change can occur in the instrumental area of behavior without a broad consensus among the population or without an identity or similarity of activated norm sets among the individual actors with respect to the area of behavior in question, then we can propose means of accelerating social change through the shaping of appeals to instrumentally perceived areas among subpopulations. That is, we can accelerate social change by a diversity of appeal selected according to the norm sets most instrumental in the target population.

If the norm sets of the population are sufficiently various, the same domain of behavior could be included under an ideological norm or an instrumental norm for different individuals in the same culture, and indeed, for the same individual. The limits of variation, as discussed in our treatment of autonomy (p. 98) are crucial for the total system's performance. The major obstacle to success in such appeals would be the degree of leakage across audiences.

Boundaries of Variation and Stability

It would be desirable to have more research into the conditions necessary to stability in face of perceived variance in ideology: Why do not divergent perceptions and interpretations of a legitimating ideology produce turmoil? The Hindu caste system would testify that social structures have not always been devised to maximize variation in interpretation and application of ideology. The one-party politics of Mississippi and of the Soviet Union have not been supported with the intent to foster alternative choices of political control. Can we argue that the stability sought through these devices which constrain variety could also be obtained through a system which permits greater variations?

42 Whether such variation is itself good or bad, functional or dysfunctional is a question which depends on the nature of the environment more than any absolute. The problem is that the environment is perceived differently by adherents of the systems. The problem is
Limits of Instrumental Social Change and Side Effects

The isolation of side effects from social change is a significant feature which can inhibit or promote the progress of a planned program of instrumental social change. If the side effects can be divorced or screened from association with the proposals and their implementation, then the main effects may proceed unchallenged. One of the difficulties of social change in large complex societies is that the interrelationships and interdependencies of the units are so vast that changes may cumulate in terms of their side effects and push the threshold of acceptable change much lower. This paradox would bring about the opposite of the predicted consequence for any individual proposal by virtue of its overburdening the capacity of the entire system. Unfortunately, it would be unlikely that the disproportionate reaction induced by the last members of the series of proponents will be perceived as such. The consequences for the source of input near the threshold will be such as to redouble the effect and push the system further over the threshold.

quite difficult, as part of the environment -- the social environment -- is a product of men's minds. If a paranoid perceives threat, it is quite impossible to demonstrate contradictory evidence, for ultimately paranoia is self-fulfilling. If deviation is perceived as destabilizing then it may be destabilizing.

43 Just this outcome is predicted by urban development experts who claim that many government policies intended to assist and develop the cities have only served to hasten their ruin. See Jay W. Forrester, "Overlooked Reasons for our Social Troubles," Fortune (December, 1969), pp. 191-192.

44 The triggering of a suicide may be analogous to this process. It would seem that the behavior of the system is not contingent upon the magnitude of the input which provokes suicidal decision, but upon the cumulative nature of the input. The catalysts become a step-level function critically altering the basis of decision processes.
CHAPTER VIII

NORM SET THEORY APPLIED TO PROBLEMS OF EDUCATION
FOR THE RURAL-URBAN TRANSFORMATION

In creating and designing a theory, there are two difficult stages through which the designer must pass: interrogation and application. In the interrogatory stage one reworks and rethinks the initial problem situation in terms of its relationship to conceptual frameworks which one brings to bear upon the problem. In this stage one is faced with the necessity to synthesize divergent mental associations into a coherent framework while forestalling premature closure. In this stage one must find a structure which will allow both surprise, by the encountering of unsuspected relationships, and refinement, through subsequent associations which explain the parameters of the originating problem.

Our central problem of social change seemed suitable to analysis within general systems theory. A general systems theoretical framework was selected because it allowed the stipulation of common properties underlying both macro and micro phenomena, and because it also facilitated the specification of a hierarchy of complexity in the model, permitting the linkage of simple elements in more complex steady-state configurations.

The second major phase in theory-building is the area of application. The synthesis of a range of associations around a conceptual framework allows one to move into a new area of associations not originally linked to the theory, exploring the heuristic and explanatory power of the conceptual framework and assessing its relevance and adequacy for empirical research. This is certainly one of the best methods of validating a theory: To assess its capability to organize new data in some meaningful form.

The purpose of this chapter is to apply the Norm Set Model to a specific area of social change known as the "rural-urban" transformation. We are not seeking to analyze exhaustively the data and literature of this major social transformation -- that would constitute a separate monograph in its own right -- but rather to distill from a general understanding of this worldwide social phenomenon some guidelines for social policy gained from the application of our theory to the complexity of practice and to the observations of scholars who have worked in this area. This application is motivated by the belief that social scientists share in a common feature of human experience
that we learn by doing. However, a simple faith that one will learn from a mere quantity of experience cannot be justified. More justifi-

fiable is the belief that the critical examination of experience --

including introspection concerning personal development -- will in-

crease the richness of our theoretical understanding and the effec-

tiveness of our practice. If the model does elucidate non-obvious

aspects of a range of data which were not utilized in the generation

of the model, then we may be encouraged to apply the model to empiri-
cal tests in the field. Although such a procedure cannot establish

the validity of the model, it can at least determine its potential

as a heuristic.

The Rural-Urban Transformation

Basically, the rural-urban transformation is a transformation

in the attitudes, knowledge, and skills (self-images and norm sets)
of individuals who grew up in a rural setting, so that these individ-

uals may cope with, and profit from, certain new factors in their

lives that have been generated in urban sources. This transforma-

tion is a worldwide phenomenon, and it is at the very heart of the moderni-

zation process. As such, it is a social science problem of high

priority.

It is also a problem of high priority in professional educa-
tion, which is concerned with ways and means to render more effective

and efficient the often haphazard and ineffective nature of the learn-
ing of new self-images and norm sets as it occurs among rural people

around the world. Accordingly, in this chapter we will attempt to

take the stance both of the social scientist and the professional

educator.

Very crudely, the transformation of self-images and norm sets

that take place in rural people (or that could and should take place)
assumes two major forms. The first form, which we shall not deal with
here, is that in which the rural learner has remained in the rural
setting and plans to live out his life there. His need for "trans-
formation" is essentially a need for that kind of psychological and
social change which will permit him to defend himself against exploita-
tion by urban-centered middlemen or exploiters of one sort or another,
and which will permit him to practice modern agriculture or otherwise
occupationally take advantage of new opportunities introduced from
urban sources. The second form is that in which the rural
learner has migrated, has been pushed or pulled away from his rural
setting to an urban setting. This is the type of learner who will
concern us in this chapter.
In the most general sense the rural-urban transformation shares with all processes of social change certain common problems and features. A norm set of a given individual reinforced by and reinforcing a particular group's organization of responses is exposed to inputs whose range, intensity and/or frequency make some of the individual's norms problematic. His response to this problematic situation and indeed his very awareness of it should display variations in quality according to variations in the interface between individual system and environmental system which we have discussed in the previous chapters. The number of input channels, the degree of exposure to previous, similar situations, to quantity of system resources which can be mobilized in response to environmental variation, the degree of coherence in internal controls as contrasted with external variations: All of these factors will be significant.

The "Entry Situation"

In a more specific sense the rural-urban transformation shares the characteristics of a class of phenomena which we believe to be crucial to the process of social change. The nexus of this process is contained in what might best be described as "entry situations." Every social change involves a change of state for each participant to some degree, but the most significant change occurs in those instances in which reformulations or reconstructions of norm sets are required if an individual is to adapt to the new conditions. As we noted in the previous chapter, if such reformations are to succeed at the individual level they must further involve reconstitution of the goals, orientations and perhaps structure of social groups to support the new dominant norms. Such support may take the form of establishing new communication channels or flows, changes in significant symbols of identity such as language, vocabulary, titles of address, apparel, residence patterns, recreational patterns and vocational interests.

By an "entry situation," then, we mean all those situations which involve a transition for an individual requiring the adoption of new norm sets. In Norm Set Theory, entry situations are important situations, for they are critical instances of micro change which are associated with necessary changes in the macro level components of the social system. Entry situations are significant from yet another theoretical perspective, for they are frequently associ-

---

An excellent discussion of the historical evolution of European forms of address and their social psychological implications will be found in Roger Brown, Social Psychology (New York: Free Press, 1965), pp. 51-100.
ated with what Ruth Benedict long ago termed periods of "cultural discontinuities." These periods of increased stress will frequently display a patterned nature in relation to the characterological requisites of the society's major institutions and collectivities.

We can point out several areas of social interaction which constitute "entry situations." Before doing so it should be noted that although these situations are probably representative of those requiring the generation of new norm sets, their impact upon any given individual will vary. Indeed, for some individuals these entry situations will constitute environments for which previous socialization and training will have provided adequate free-floating resources (pp. 70, 140) and norm set organization to allow adaptation via isolation, aggregation or assimilation rather than displacement involving adoption of new norm sets (p. 146). Events which are perceived by some individuals to be at sufficient variance with the average expectable environment so as to constitute demands for adoption of new norm sets or dominant norms will not necessarily be perceived by other individuals and (or members of other subcultures) as demands for such changes upon themselves or upon their supportive social relationships. For example, transition from civilian to military status can be considered an entry situation for most members of society, but this might not be true for the male offspring of a military family, who has been raised "on-base."

Some examples of entry situations for most residents of the United States would include:

1) Transition from a less than total collectivity to a total collectivity, e.g., to a prison, hospital, military unit, convent or monastery, or vice versa. These might also be characterized as transitions between inner-directed and other-directed social situations.

2) Perceived permanent alteration of employment status, e.g., prolonged unemployment or underemployment, an unfamiliar job situation, self-employment, or retirement.

3) Other major changes in status frequently implying new institutional arrangements, e.g.,

---


marriage, entry into a profession or educational accreditation implying significant changes in life style.

4) Entry into another geographic-sociocultural system on a need-to-survive basis rather than on a "visiting" basis, e.g., migration from a rural subculture to an urban subculture within the same overall cultural system. In this transition, previous experience is particularly significant, as the degree of variation among the entrants' perceptions of the adaptation required by significant others is particularly wide.

Responses to the "Entry Situation"

When rurally enculturated individuals -- for example, California Chicanos -- migrate to the city, their responses to the conditions of urban life are likely to vary quite widely. The key explanation for this wide variation lies in the mapping process. Critical to the outcome of the mapping process will be the ideological-instrumental distinction. If the entrant perceives himself as undergoing a challenge to his ideological norms, we expect to find high resistance to change in conjunction with defensive reactions, and limited incorporation of new elements or norms into the individual's existing norm sets.

If, however, urban life is perceived to require instrumental adaptation then the rate of adaptation and the conditions for secure practice have a higher probability of occurrence. An educational strategy should maximize such instrumental perceptions, for in instrumental adaptation the number and quality of previous associations which can be related to the new input are hypothesized to accelerate the learning of new elements and norms. In defensive, ideological adaptation the number and quality of previous associations are hypothesized to retard learning new elements and norms.

In passing, we should reiterate here our observation that norms initially acquired for instrumental reasons may subsequently become the ideological basis of a new norm set. Thus, even for entrants with high instrumental rather than ideological perceptions of the urban environment, substantial reorganization of the self-image is not precluded.

In most cases, we would expect rural-to-urban migration to constitute an entry situation in the sense in which we use the term.
However, it is an empirical question whether or not there is a sufficient variance in environmental demands in the urban as opposed to the rural environment to constitute a demand for reorganization of norm sets. Fortunately, a recent conference on "Migration and Behavioral Deviance" provides a wealth of material on this subject and we will be able to illumine the relationships among a number of our theoretical propositions by drawing upon the data provided therein.5

With respect to the question of whether or not substantive reorganization of norm sets is necessary for adaptation by migrants to urban environments, Eugene B. Brody places emphasis on what we would term, after Hartmann, a change in the "average expectable environment." A significant change in the average expectable environment would be one which substantially shifts the quality of feedback flows from behavior. As an example, in the rural environment the individual might express acute interpersonal sensitivity and receive feedback of a positive nature, while in the urban environment he might express the same kind of sensitivity and receive feedback telling him that he is paranoid.6 Brody notes that the "culturally supported tendency to attribute sources of danger to external factors ... may interfere seriously with the inward-looking ... sometimes necessary for survival in the city."7 Furthermore, such external scapegoats may seriously inhibit the problem-finding function which we have postulated as the source of dissonance energy for reorganization of the self-image. This failure is hypothesized to underlie Brody's observation of the migrant's "incompatibility between his self-image on one hand and the status, of which he is unaware, given him by the social system on the other."8

In Chapter VI (p. 94) we expressed doubt, on theoretical grounds, as to the significance which has been attributed to the similarity or discrepancy of one environment to another in the perception

---

5Articles drawn from the working papers of this conference may be found in Eugene B. Brody (ed.), Migration and Adaptation, American Behavioral Scientist, Vol. 13, No. 1 (September/October, 1969).

6"Migration and Adaptation: The Nature of the Problem," in Ibid., pp. 6-7.

7Ibid., p. 7.

8Ibid. Interestingly enough this particular phenomenon may be only a subtype of a more general variable in modernization on the world scene. See Daniel Lerner, The Passing of Traditional Society: Modernizing the Middle East (New York: Free Press, 1963).
of an observer, in contrast to a participant. Studies of mental illness rates of migrants cast further doubt upon the significance of this variable. They also seem to indicate that participant-perceived discrepancy or similarity might not be a very significant variable, either. Robert Kleiner and Seymour Parker discredit the effects of discrepancy by noting that urban migrants to an urban area had higher mental illness rates than rural migrants. Furthermore, one would expect that the impact of the discrepancy would be greater in the period following initial entry. However, Kleiner and Parker found higher rates among those in the second of two five-year periods of residence rather than in the first five-year period.9

The Kleiner-Parker study has a further significance in terms of our hypotheses regarding the greater coherence of norm sets vis-a-vis the environment.10 These investigators found higher rates of mental disorder among Negro migrants from the North with weaker ethnic identity than among Negro migrants from the South with stronger ethnic identity.11

Further substantiation of this individual system-environment relationship seems to be supplied by a series of studies which indicate lower rates of mental disorders among migrants to communities with a high proportion of earlier migrants from similar backgrounds. Lower rates are also found in more pluralist rather than assimilatory societies, i.e., those which encourage ties to the donor culture rather than those stressing rapid increase in similarity to the host culture.12

9 "Social Psychological Aspects of Migration and Mental Disorder in a Negro Population," in Ibid., pp. 105-106. It is not clear, however, whether the higher rates for the second five-year population might not have been obtained by virtue of sampling characteristics, i.e., a number of "potentially disordered" individuals may have decided that the stress was more than they could bear and left to escape or recuperate; thus the residue of the later years would be biased to contain an ever decreasing proportion of ego syntonic but maladapted urban migrants and increasing proportions of non-ego syntonic maladapted and adapted urban migrants.

10 See Chapter IV herein, Propositions 4.6, 4.7.


12 These studies are usefully summarized by Elmer L. Struening, Judith G. Rabkin and Harris B. Peck, "Migration and Ethnic Membership in Relation to Social Problems," Ibid., pp. 63-65. These authors have also stressed a general systems approach to the study of migrant behavior.
The latter findings are in accord with our hypothesized significance of small group support and environmental variance as affecting the degree of coherence among norm sets and their consequent stability. As far as we can tell from the migration studies, the only aspects of the environment in which similarity becomes significant are those related to small group support. The individual who migrates to an urban environment where he finds others similar to him in ethnicity, language, and cultural standards, and these others provide strong group support will be an individual with a much greater chance of successful adaptation. But even in this case adaptation seems to rest upon entrant control of the conditions of adaptation and such control seems facilitated in the instrumental as compared to the ideological areas of adaptation. Perhaps it does not matter so much whether one migrates from an urban or rural, literate or illiterate environment but instead whether one migrates with "modern" norms and, most importantly, migrates to an environment allowing control to be exercised by instrumental norms over the rate and degree of adaptation while the entrant is reinforced by a small group of peers. This assumption will bear significantly upon our forthcoming discussion of the role of education in migrant adjustments.

Important Background Factors

Before proceeding further with our analysis in terms of Norm Set Theory, per se, it would be well to examine some additional background factors of importance. One factor that is often of significance is the balance between push and pull factors in migration. At one extreme is the case of the voluntary migrant who leaves with little conscious attachment and considerable negative emotion toward the rural area, and considerable excitement at his prospects in the city. At the other extreme might be the tenant farmer or migrant worker forced out of employment by what government reports might casually term a "realignment of factors of production." After exhausting opportunities for survival by underemployment and handouts, in competition with hundreds of others in his rural area for these same marginal resources, this individual finally decides to take his whole family on what he perceives to be a threatening and fearful journey to the urban area.13

13See the descriptions of the migrant workers around Stockton, California, the hill people of Appalachia and the Mississippi Delta farmer in Michael Harrington, The Other America: Poverty in the United States (Baltimore, Maryland: Penguin Books, 1962).
It would be inaccurate to regard any migration as a pure case of push or pull factors. The stress and supports of a given environment which have maintained the norm sets is a complex ecological relationship between individual and environment. Migration taxes an individual's capability, especially his ability to extract greater resources from his environment. Migration brings an unknown environment; and the greater the ambiguity the more the individual may be able to project his wishes and fears, his hope and despair.

From our hypothesis concerning autonomy based upon the coherence of the norm as compared with the perceived coherence of external norms (p. 54), we would suspect that the more voluntary migrant has a self-perception of adequacy vis-a-vis the environment. His perception will be based upon a greater coherence in his expectations of urban life as related to the dominant norms in his relevant norm set or sets. We would suspect that the obverse would be the case with the involuntary migrant who would perceive himself as less adequate and base his perception upon a less coherent set of expectations of the urban environment. Also, the involuntary migrant's "urban expectations" would be related to subordinate rather than dominant norms in his relevant norm set or sets.

14 At this time we have no information which would provide an a priori guide to which norm sets are likely to be invoked by the migrant in application to the problem of entry to the urban environment. The difficulty is that the migrant may come from many diverse subcultures ranging from poor White to American Indian. Even a subculture mistakenly viewed, in Anglo thinking, as homogeneous may contain significant variations for dominant norm sets; e.g., the "Hispanic" orientation of the New Mexico migrant as compared to the "Mexican" orientation of the South Texas migrant. (I am grateful to Jose Lopez of the Santa Clara Valley Skills Center for alerting me to the full significance of this distinction.) It may be that there is a common orientation developed in a "culture of poverty" which supports similar elements in a dominant position among all the diverse subcultures among migrants; see the following note for some suggestions.

15 One procedure which might test groups of voluntary as compared with involuntary migrants to determine the degree of coherence in "urban-oriented" and other associations related to successful adaptation might be based upon the OM Scale. See David Horton Smith and Alex Inkeles, "The OM Scale: A Comparative Socio-Psychological Measure of Individual Modernity," Sociometry, Vol. 29 (Number 4, December, 1966), pp. 353-377. Anyone attempting this task should beware of a tempting pitfall to make comparisons among groups residing in an urban area. Such groups represent a self-selected sample. In contrast to an all-urban sample the greatest extremes are likely to be found from a comparison of a group of voluntary migrants still residing in an urban area and a group of involuntary migrants who have returned to a rural area.
A further advantage of the voluntary migrant is likely to be his greater capability for self-reorganization. As Brody notes, "Voluntary migrants anticipate their moves, and as decisions are made and preparations begun they are caught up in a process of change."16

Graduated Transformation

In our discussion of the adaptation process in the previous chapter we noted that increased control of adaptation is probably achieved by initially rigid acquisitions which are later generalized to a greater area of behavior. The anticipation of stress may give voluntary migrants an increased probability of adjusting their projections and aspirations to the demands of the new environment at less psychological cost and with greater control over the nature of the new acquisitions. A similar difference may be observed to have been involved in those sociocultural systems which controlled their areas and rates of modernization, e.g., Japan, from those which did not, e.g., the colonial systems.

The Oaxaca Case

Theories of acculturation lead us to expect that intensity and frequency of exposure will be other important variables. For example, as part of the population boom a number of urban areas are rapidly expanding throughout the world. In Oaxaca, Mexico, there exists a rather indefinite and shifting urban boundary which expands down the main highway a little farther each year. Villagers coming to market pass through a longer and more intense exemplification of urban life style every year. Villages which were formerly quasi-autonomous are now annexed territories of the city. Migration for individuals from these surroundings may involve considerably less degree of shock than for individuals from more isolated areas. But even the most isolated villages receive some feedback from urbanization in the return of successful and unsuccessful migrants from urban areas. These returners and returnees, as they lean against the fiesta stalls in their home village, absorbing the attention of

their peers, become a major socializing force. By their example, they set expectations and serve as role models for the next wave.

The Santa Clara County Case

A similar process to that of Oaxaca is occurring in the Santa Clara Valley in California. The rapid expansion of the City of San Jose is absorbing former rural areas at a gallop. This process is further complicated by the forced relocation of approximately 22,000 Chicanos as the result of a freeway construction program which looped two major freeways through the former center of the Chicano district.

The disruption of the sense of community and of the many face-to-face social networks was an unassessed consequence of this project.

The latter effect stemmed from the massive migration. The displaced families could not move north toward the high rent areas of Palo Alto or Los Altos, and were also repelled from the industrialized high rent areas around Lockheed and United Technology in Sunnyvale and Mountain View. Hemmed in on the west by the mountains and on the east by San Francisco Bay, those urbanized Chicanos migrated south to South San Jose and Morgan Hill, which were formerly rural areas. No data have been gathered on the effects of this displacement upon entering migrants from the farm labor routes, but it is probable that this accelerated urbanization has reached deep into the migrant worker system centered around Gilroy just south of Morgan Hill. Research upon the nature of the feedback to farm laborers about urban conditions from displaced urbanites would be extremely useful for developing and understanding of the formation of the norm sets of the future migrants to the urban area.

Such research should be directed toward deriving the major elements of the mapping scheme of the entrants and their perceptions of an average expectable environment. This information should be collected with respect to the design of an educational-training program which would prepare entrants for urban life and urban occupations.

A good account of this process as it occurs in an isolated village far outside the urbanizing area of Oaxaca is provided by Douglas Butterworth, "From Royalty to Poverty: The Decline of a Rural Mexican Community," Human Organization, Vol. 29, No. 1 (Spring, 1970), pp. 5-11.

I am grateful to Mr. Jose Lopez, Director of the Santa Clara Valley Skills Center for contributing this information and pointing out some of the effects.
The general strategy should focus on perception of instrumental alternatives -- practical opportunities visualized in the mind of the entrant as "suitable for people like himself." From this base a simulation program should be developed which would provide controlled exposure to increasing variance in feedback. The feedback would consist of information on the consequences of behavior selected in response to simulated situations. Such a program can be based upon the Norm Set Model. One of the program's objectives should be that of working with the entrant in devising his own curriculum and choosing training for occupations which he might not otherwise have thought himself suited for.

The Relevance of the Model for Education and Training

Norm Set Theory postulates that there is a hierarchy of norm sets subject to the laws of dissonance (Proposition 3.1); that social support is essential (Propositions 4.4, 6.4); and that some adaptive processes are more effective for instrumental rather than ideological problems (Chapter VII). These propositions have an immediate relevance for educational theory and practice. In this section, we will highlight theoretical areas which we believe should be stressed in the practice of education, and in the following section a specific application of these principles will be developed.

The problem to be confronted is: Given that education seeks the reorganization of self-images, what does the Norm Set Model contribute to the understanding of this process of self-reorganization? To answer this question we might best focus on two different aspects of the self-image, the boundary maintenance aspect and the self-organizing aspect. We believe that a successful educational approach must focus on both of these aspects simultaneously.

Education and Boundary Maintenance

Selective perception and retention constitute a major boundary control at the individual level. This process is supplemented by the isolation of potentially dissonant or problematic behaviors or roles in space and time according to the sociocultural system's patterns. The norm set as a steady state reflects these cultural patternings, especially since the defenses of most individuals are constructed in congruence with their interactions with significant others, with the object of selecting a stream of reinforcements for the self-image from
the environment. A given hierarchy of norms in a sane individual pre-
sumes at least a rough match to an average environment.19

The fact that most individuals take considerable comfort in
their expectations concerning average environmental conditions, which
expectations comfortably support their norm sets, is a definite problem
for the educator. Resistance to learning, avoidance of the educational
situation, and isolation of information acquired in the educational
context are familiar problems rooted in this basic comfort. Thus, the
boundary maintenance function of norm sets dictates an educational
strategy directed toward creating dissonance, generating problematic
situations and breaking down the boundaries between norms to facili-
tate the flow of information. The objective is to expose the individ-
ual to a greater degree of environmental variation and increase the
perceived cost of maintaining unchanged the present self-image.

Focus on the average expectable environment should proceed
via the increase in range and intensity of information directed speci-
fically at the categories which the individual utilizes to decode in-
put and encode output. If the boundaries of these categories can be
made problematic, then the restructuring of a norm set is potentially
achievable. A sound educational approach should thus begin with a
thorough understanding of the mapping categories of the student in
the initial state.

This approach requires a carefully controlled environment in
which the individual is exposed to increasing variation in informa-
tion and increasing reflection into the self. Constant confrontation
between preferred and perceived outcomes, with dissonance as a conse-
quence will weaken the categories of selective perception and retention
and will lessen the domain to which a norm set is applied. It may be
hypothesized that with a free rein and complete resource control all
human boundary maintaining mechanisms can be altered. However, lest
we be led into B. F. Skinner's Walden II, we must note that exclusive
concentration upon this approach is not education, as it supplies no
replacement for the elements, norms, norm sets and self-images which
are altered. "Behavior conditioning" perhaps might better describe
this treatment. Unfortunately, an exclusive and incautious reliance
upon this approach is more likely to result in the destruction (self-
inflicted or otherwise) of a subject, rather than the education of a
student.

19 The difference between individuals whose perception of the
environment is autocentric, as contrasted with those open to allo-
centric perception is the main theme of Ernest G. Schachtel,
Education and Self-Reorganization

An educational approach seeks the enlargement of the individual's capabilities for controlling the impact of the environment upon him. It aims at the greater autonomy of the individual in both present and future environments. In pursuit of this objective the educational process should seek the creation within the individual of greater free-floating resources. If the individual is to generate these resources he must be an active agent in his own education. He should thus attain control not only of vocational and social aspects of his environment but educational aspects of his environment as well. At a minimum the educational process should transmit greater cognitive and emotional resources, and control over their utilization and practice for transfer to other future environments. Ideally, the educational environment should not be sharply distinguished from the other environments of the student. If the educational environment is sharply delineated so as to be perceived as a special case, a Ding an Sich, this will inhibit transfer of learning and restrict freedom of association. Ideally, the student's growth should be reinforced in a multitude of environments in differential intensities of practice.  

In our discussions of autonomy and legitimacy in Chapters VI and VII we have indicated that control over free-floating resources is more likely to be maximized under conditions of instrumentality, rather than ideology. Our general model also indicates that change directed at elements under instrumental norms is achievable through mechanisms such as assimilation or isolation, rather than displacement. To the extent that education seeks to alter instrumental aspects of norm sets and units of lower generality, e.g., a single norm in a complex, education will minimize the cost of change to the student. By contrast, to the extent that education seeks to alter ideological aspects of high generality, e.g., an entire norm set or a complete self-image, education will maximize the cost of change to the student.

In this context, perhaps the ideal educational environment would consist of a simulation process in which the student would

---

20Not that I presume that our so-called "educational" institutions depart radically from this first approach. See for example, Jules Henry, Culture Versus Man (New York: Random House, 1963), particularly pp. 183-321. See also Edgar Z. Friedenberg, Coming of Age in America (New York: Random House, 1965). How far the current educational procedures deviate from this ideal might be gleaned from our language which separates the academic world from the "real" world -- in much the same manner as it separates the convent, the prison and the asylum.
choose among alternatives, within the range of alternatives as perceived by the student in terms of his mapping categories. These choices would then lead to "treatments" or "practice sessions" modeling the consequence of his choice. Where the choice-simulation procedure results in mastery of a new environmental problem previously unknown to the student, practice for transfer and reinforcement in applying the new achievement to different environments should be encouraged.21

An Educational Program for Chicano Adaptation to Urban Organizations

We have outlined several considerations relevant to educational practice and several important theoretical aspects of the rural-urban transformation. This final discussion will develop an educational program for a specific entry situation assuming a hypothesized self-image modeled along the general characteristics of an adolescent Chicano male. The objectives of the educational program will be to develop a generalized sense of competence in encounters with (public or private) bureaucratic organizations, to provide a knowledge of the rules governing these interactions, and to enable the program entrant to utilize a range of strategies in dealing with obstacles posed by representative officials, especially in government bureaus or private firms concerned with the granting of credit. The pre-established criteria for determining relative success of the program is that at the conclusion of the program the entrant will be able: 1) to obtain market values at or near the open market price; 2) to complete and justify credit applications; 3) to handle routine bureaucratic subterfuges.

Delineation of Relevant Self-Images, Norm Sets, Norms, and Elements

The first step in planning the program is to delineate the relevant self-images, norm sets, norms, and elements. Based on our operating experience with such training programs in Santa Clara County, California, we present in this subsection the kind of delineation called for, which has been considerably simplified for purposes of clarity in presentation. Two relevant self-images are delineated, each of which subsumes a hierarchy of norm sets, and in each case we specify the dominant norm set and one or two subordinate norm sets.

Self-Image W: The "Drop-Out"

Norm Set W_A: Avoid Anglo-Dominated Environments.

This label indicates the dominant norm in the norm set. In addition, there are subordinate norms, such as: Withdraw from Ambiguous Situations.

Norm Set W_B: Protect Against Attack.

This label indicates the dominant norm. In addition, there are subordinate norms, such as: Disguise Weaknesses. Keep Up an Appearance of Well-Being. Maintain Respect of Peers.

In general, while operating under this self-image, the individual will expect to be at a disadvantage in dealing with Anglo environments and will expect to "get screwed" by the system. He may be assumed to have ambiguous preferences -- preferring to shift into taking advantage of the system and increasing his in-group status while also preferring to avoid humiliation and loss of in-group status. (This subordinate norm of maintaining in-group status will, as we shall see, become the focus of the strategy to educate for greater adaptation to the urban environment.) A more formal way of stating all this is in terms of the following "elements" (p. 38) which suffuse the self-image regardless of which norm set is activated:

Attitudes: Outsiders and unfamiliar situations are not to be trusted.

22Robert L. Derbyshire, op. cit., provides a useful background discussion relevant to the delineation of such self-images, especially as his comments apply to recent migrant adolescents versus non-migrants.
Cognitions: The economic system is run by Anglos for Anglos. It takes a Chicano months to find work, and then only at wages like $1.65 an hour.

Evaluations: The status system is so unfair that there is no way for a Chicano to "make it" if he is straight.

Preferences: Where a Chicano can do so, he should stay with his own.

Self-Image X: The "Young Cat"

Norm Set $X_A$: Assert Manliness.
This label indicates the dominant norm in the norm set.

Norm Set $X_B$: Maintain the Respect of Others.
This label indicates the dominant norm. In addition, there are subordinate norms: Meet Obligations to In-Group. Make Sure You Get Treated Right.

Norm Set $X_C$: Take Advantage of Out-Groups.
This label indicates the dominant norm. In addition, there are subordinate norms: Illustrate Cleverness -- particularly in getting "bread" (money), services, a good gig (that is, a "groovy" job, a psychological coup of whatever type, etc.).

In general, while operating under this self-image, the individual will think of himself as strong, clever, socially adroit, amorously appealing to the opposite sex, and capable of manipulating social relationships to his own advantage. Elements suffusing this self-image include the following:

Attitudes: Social slights should be aggressively dealt with.

Cognitions: I know my way around the streets.

Evaluations: I am a cat who can take care of myself.

Preferences: I like group activities which allow me to demonstrate my skill, my "cool."
Determination of a Strategy

Once the relevant self-images have been delineated, the next step toward resolution of our problem is to determine an overall strategy upon which to base a set of specific, concrete treatments. The initial strategic question is: In what general direction of self-managed change should the educator encourage the Chicano entrant to move? Since the "Drop-Out" Self-Image is essentially passive, it can hardly be defined by an educational program as a self-image to be encouraged actively in most entry situations over the long run. The "Young Cat" Self-Image, by contrast, is an active one. If the educator is forced to choose between the two it seems clear that this active self-image is a more appropriate one to emphasize.23

Fortunately, it would appear, prima facie, that movement from a tendency to activate the Drop-Out Self-Image to a tendency to activate the Young Cat Self-Image would be easier to encourage through education than would be movement in the opposite direction. The reason for this stems from our lengthy discussions in Chapters VI and VII, in which we stressed the relative rigidity of norm sets in which the dominant norm is of an ideological rather than an instrumental character. Note that the Drop-Out Self-Image is dominated by the essentially ideological norm set, "Avoid Anglo-Dominated Environments." By contrast, the Young Cat Self-Image is dominated by the essentially instrumental norm set, "Assert Manliness."

The next strategic step is to examine the two self-images for structural overlap. The key to solution would appear to lie in the overlap between a subordinate norm in $W_B$ and the dominant norms in $X_B$ and $X_C$. That is, the proper strategy would appear to be an appeal to the Drop-Out Self-Image (W) through Norm Set $W_B$, "Maintain Respect of Peers," by emphasizing the dominant norms in $X_B$ and $X_C$, namely, "Maintain Respect of Others," "Take Advantage of Out-Groups."

Another point of some importance in this hypothetical example is that the movement is from a more ambivalent self-image to a less

---

23 Note that we are not here simply recommending that the educator encourage or reward all behavior that might be acted out by an entrant under any norm set within an activated Young Cat Self-Image, regardless of moral considerations for the entrant or for society. The value systems and activated self-images and norm sets of most educators who would be likely to become involved in this sort of work would make this impossible, in any case. It is more useful, we think, to regard the Young Cat Self-Image as itself being quite amenable to change in response to environmental changes or to self-reorganization processes.
ambivalent one. Ambivalence can be extremely useful in liberating dissonance energy. This potential must be utilized carefully if it is to be channelled into areas which emphasize the control of the in-group in order to attain goals viewed as instrumental in this self-system. But with adroit handling, a situation can develop in which the isolation of the educational environment can be overcome by transferring control to a small group seeking skills for instrumental achievement on their own terms.

**Determination of a Set of Treatments**

In determining a set of ordered, concrete treatments for the educational program, one must bear in mind the average expectable environment within which an entrant interacts with the Anglo-dominated bureaucracy. The young Chicano often reacts to these encounters solely on the basis of his perceptions of condescension on the part of the Anglo bureaucrats. This perception will then invoke a decision to withdraw from further contact under Norm Set WA, "Avoid Anglo-Dominated Environments." The entrant will perhaps rationalize that this withholding of interaction will punish the offending organization or individual. Unfortunately, such a course of action also deprives the Chicano of the needed service. The service may then not be sought in a wider market but in a more closed, ethnic market -- and at a higher cost.

The educational process can build "treatments" around instrumental problems which are likely to arise in the average environment of the students. Other structural attempts to minimize ideological perception and maximize instrumental perception would be to organize small groups as the basic educational working unit, and incorporate Chicanos as group leaders and principal actors in the program. Furthermore, the small groups should be constructed of peers from some in-group, perhaps in already existing social units, e.g., clubs, gangs, etc. The pre-existing units have the further advantage of decreasing the degree of isolation of the educational environment and of enhancing in-group appeals to status maintenance. One benefit of a mixture of pears is a lower probability of inter-generational conflict. However, the benefit of lower inter-generational conflict is partially offset by the homogeneity of experience contained in the group. To overcome the restricted range of experience, group leaders should be selected partially on the basis of their capability to illustrate desirable, alternative role models.

The treatments will be simulations of "encounter" situations, such as with bankers, credit agents, government service agencies, used car salesmen, etc. The simulated sessions would not be brought forward until their instrumentality and desirability had been established. The latter procedure might evolve from discussion of some of the problems...
in "making it" in the local community. During the discussion a number of instances of frustration resulting from encounters with Anglo institutions will arise. These "natural" occurrences can be examined in detail, with stress upon how one might have avoided the worst. Reflection within the group on cases where others in a similar situation "really got screwed" can be used to shift into the activation of the norm concerning "Maintaining Respect" which is found in subordinate position in \( W_B \), but in dominant position in \( X_B \), and which will hence serve to strengthen movement toward the assertive Young Cat Self-Image.

We have postulated that shared group support will increase the efficiency of norm alterations. When the group members have established rapport, their shared experience can be used to increase salience of norms appropriate to the Young Cat Self-Image. Such consciousness must be encouraged in discussion situations where opinions such as "We always lose," and "That's just the way life is," become ascendant. The dissonance generated between the need to stress strength and capability under the Young Cat Self-Image and the avoidance or withdrawal dictated by the Drop-Out Self-Image can become the motivation for productive simulation through role-playing.

In the role-playing situation greater dissonance can be generated, according to our theoretical propositions, by increasing the intensity, duration and frequency of feedback at a rate or degree equal to, or just short of, the maximum level that can be accommodated under the existing norm-sets. In this manner the effectiveness of learning can be combined with the increasing motivation stemming from dissonance, plus the opportunity to increase esteem within the group.

Greater feedback flows can generate dissonance by focusing upon the motivations of the Anglo-alters in detail and by having group members play both sides of the encounter sequence. These openings in the boundaries of information selection and retention, as well as processes of ex post facto rationalization, can be further shortcircuited by the use of videotape feedback. A particularly effective approach would be the demonstration by a group member of successful techniques for surmounting the (simulated) obstacles in the role of "young cat on the make." Comparison of one's own performance with cultural ideals under conditions of group support can effect dramatic improvement in performance as instrumental behaviors are associated with the necessity of "taking care of one's self."

The effectiveness of videotaped feedback can be even further increased by the use of the tape to mirror the reactions to perceiving
one's previous videotaped performance, that is, mirroring one's reactions to one's actions in a simulated situation. This procedure should be particularly effective in breaking down ideological mappings.  

By gradually increasing the degree of environmental variation and feedback, the Young Cat Self-Image can incorporate greater alternative resources, new strategies, and new elements of cognition and evaluation with respect to performance in a wider domain of behavior. In this manner the ideological overtones of racist discrimination involved in these encounters with Anglos can be diminished. To further solidify the new behaviors, practice of the roles must be transferred to the Anglo environment. This might be done in several stages. A group leader might gather a sample of bank credit application forms and conduct a practice session on "Kinds of Hang-ups Bankers Have." In the practice session the emphasis should be on explaining the reasons for requiring so much information. The relative importance attached to each of the required items on the forms should also be examined. This practice session can then be followed by the invitational appearance of a real, live banker. His appearance might be formally devoted to explaining the bank's credit policy and the procedure for opening an account. This appearance will allow the group to question the bank's performance with respect to members of the group in the past or with respect to individuals they know. Similar exercises can be held with government agencies. These sessions will allow controlled variance to continue as the new domain of behavior under this norm set is expanded.

Transfer training should continue with less and less control over variance leading to field trips by members of the group, perhaps in pairs, to see what kind of a deal they can obtain on a used car.

---

24 The use of videotaped reactions to one's previous performances is being investigated by William G. Peters who has hypothesized that ideological definitions of a situation will be restricted to the reaction to one's performance and that one's reactions to one's reactions to the performance will evoke instrumental definitions of the situation. Such a procedure should be very effective in mapping the hierarchy of responses in a norm set with dominant norms occurring prior to subordinate norms. If the hypothesis is demonstrated that ideological definitions of the situation are exhausted by the second replay of one's reactions to one's self, i.e., one's simulated behaviors, then perhaps an important boundary for self-organization can be located in reference to a limit to human capabilities. Perhaps it will be found that humans cannot exceed more than a third order of organization of responses within a self-image, i.e., an ideological reaction, an instrumental reaction, a disrupted set of unorganized elements. The implications of such a discovery would be quite far-reaching.
Such a technique can emphasize the merits of alternative approaches by comparison among differing prices quoted by various dealers for the same model automobile (or differing turn-in prices offered for the same vehicle). Different credit terms can also be examined with subsequent follow-through into areas of basic education.

This follow-through aspect of the simulation has been neglected in order to follow the process through from initial problem discussion to successful transfer. However, one of the major advantages of this type of approach is the capability of the group to generate its own curriculum demands in response to perceived advantages of selected skills in the environment, e.g., interest rate calculations. Education can, in this instance, become the tool of a man "who can take care of himself" and not an obstacle put forth by still another "official institution."

Summary

In this chapter we have applied our Norm Set Theory to an area of social change which was quite unrelated to the original problem situation in which the theory was devised. The purpose of this exercise was to discover whether the theory increased our capability to understand processes of social change in unanticipated circumstances. We also wished to test the theory's utility as a guide for the design of an educational program facilitating social change.

Norm Set Theory does indeed seem to us to have illumined important, non-obvious aspects of "entry situations," or in applying our theory to the Chicano adolescent's problems stemming from migration to urban environments we discovered reinforcing data in the work of other social scientists. Particularly significant is the apparent confirmation of our predicted lack of influence attributable to sheer similarity or dissimilarity between premigration and post-migration environments. Although selected confirmations of a postdictive nature are encouraging, they are of relatively low value in validating a theory. We, therefore, sought to extend the theory to a concrete application.

The self-images of a hypothetical individual were modeled after components which might reasonably be expected in an adolescent

---

25 Robert Dubin, Theory Building (New York: Free Press, 1969), pp. 9-14, distinguishes the function of understanding from the function of prediction in science. He defines understanding as "knowledge about the interaction of units in a system," (p. 10).
Chicano population. From the nature of the norm sets within these self-images we devised a strategy for an educational program having as its objective the acceleration of adaptation to an urban, bureaucratic environment. The strategy incorporated into simulated practice, provisions for group control, skill acquisition, feedback into norm sets and transfer to uncontrolled environments. We believe this concluding chapter has demonstrated, or at least adumbrated, the theory's power to relate new knowledge within the framework of its propositions. We also believe, finally, that Norm Set Theory possesses utility for designing applications to social change beyond the educational context.
EPILOGUE

This monograph has developed Norm Set Theory with the objective of integrating both micro and macro approaches to the problems posed by social change. Norm Set Theory posits the contents of self-images to be integrated sets, hierarchies of balanced norms.

A deductive system has been derived by the application of the concept of the norm set to selected literature from the social sciences. This array of propositions described the properties of the norm set with particular reference to control of behavior. Through this theory we were able to investigate several important processes occurring in social change, particularly those of autonomy and legitimacy.

The investigation of autonomy and legitimacy in terms of Norm Set Theory led to the postulation of further theoretically important distinctions. The distinction between ideological and instrumental norms proved to be particularly useful in clarifying the limits of autonomy and legitimacy according to variations in the sociocultural environment. Ideological norms were shown to be theoretically related to problems of legitimating change and to resistance in learning new adaptations. Instrumental norms were shown to be theoretically related to autonomous change and to acceleration of learning new adaptations.

The theoretical relationships between ideological norms and legitimacy as compared with instrumental norms and autonomy were used to develop a strategy for education in the rural-urban transformation. A program for training young adult Chicanos in California was developed on the basis of this strategy.
BIBLIOGRAPHY

Books:


Articles:


"Growth and Crises of the Healthy Personality," in Ibid., 1959, pp. 50-100.


191

- 185 -


