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IMPLICATIONS FOR FURTHER RESEARCH

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Sociology

by
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B.S., Texas Woman's University, 1960
M.A., Louisiana State University, 1962
August, 1967
FOR MY LOVE
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ABSTRACT

This study in theoretical sociology combines the author's long-term interest in adolescence with recognition of the need for synthesis and codification of sociological knowledge. It attempts to explain adolescence as a sociocultural phenomenon by employing axiomatic theory construction as a strategy for synthesizing and codifying the research findings and speculations of others.

The problem selected and the research strategy employed in this study are reflections of the author's epistemological perspective which sets forth explanation of the sociocultural universe as the primary goal of the sociologist. Attainment of this goal necessitates going beyond description, classification, and quantitative measurement to formulate coherent systems of causal propositions about social phenomena which can be verified to various degrees of probability. In order to do this, the author has made modifications and elaborations on the conception of axiomatization which have resulted in the formulation of a "strategy of axiomatic theory construction" comprised of an inductive as well as a deductive phase. Employment of this strategy enables the sociologist simultaneously to synthesize and codify sociological knowledge and to explain the meaning-
ful human interaction which comprises the sociocultural universe.

Examination of the sociological literature on adolescence yields a lengthy inventory of propositions pertaining to (1) adolescence as an aspect of social organization and (2) the nature of the adolescent society and subculture. Applying the assumptions and following the procedural steps of the strategy of axiomatic theory construction, the inventory is reduced to two sets of systematically organized propositions: a theory of adolescence in American society and a theory of adolescent society in America. The former explains adolescence as a culturally defined age period characterized by marginality, stress and strain, socialization and transition, a subculture, and generational conflict. Its postulates are restated in the form of "research propositions" in order to demonstrate its implications for further research and to facilitate its empirical verification. The latter theory explains such internal aspects of the adolescent society as its organization and values and their relationship to the organization and values of the larger society.

It is concluded that the factors primarily responsible for producing and shaping the prolonged period of adolescence in American society are the high degrees of urbanization, industrialization, and complexity and the rapid rate of social change. These factors produce a society
in which most of the responsible roles require a great deal of education or highly specialized training, a society in which few responsible roles are open to those in their second decade of life. The prolonged preparation necessary for adulthood results in the segregation of adolescents in educational institutions where most of their contacts are with their peers. This segregation coupled with the barriers to communication and understanding between generations produced by rapid social change constitute ideal conditions for the development of an adolescent society.

Although the adolescent society in America has undergone much investigation in recent years, most of the data pertaining to it are purely descriptive and lacking in statements of causal relationship. Thus, the author's attempt to develop a separate theory to explain its internal aspects is somewhat premature. The postulates which are stated are not without value, however, for they constitute the beginnings of an axiomatic theory and suggest areas for further research.

Problems encountered in the research, particularly those pertaining to the formulation and explication of the frame of reference for each theory, emphasize the need for axiomatic theory construction in sociology. Its use in this study demonstrates its appropriateness both as a technique for synthesizing and codifying data and as a bridge between "theory building" and "empirical research."
CHAPTER I

INTRODUCTION

Social differentiation and organization based on age are commonly recognized uniformities of culture upon which sociologists have only recently begun to focus their investigative energies. They began their examination of age statuses with the study of adolescence, which constitutes a particularly unusual and interesting age because its recognition and definition vary significantly among societies and from one time to another within societies. It is neither as universally recognized nor as uniformly defined as the statuses of infancy, childhood, and adulthood. As the period of transition between the limited, protected societal

participation of childhood and the productive, responsible societal participation of adulthood, adolescence is frequently characterized by ambiguously defined and often conflicting behavioral expectations. The impact of rapid, far-reaching sociocultural changes in contemporary American society has intensified the ambiguity and conflict of adolescent behavioral expectations and accentuated the necessity for acquiring more up-to-date and reliable knowledge about this age status.

I. SOCIOLOGY AND THE STUDY OF ADOLESCENCE

Cognizance of and speculation about adolescence may be traced back to earliest historical times, but its systematic scientific investigation is of much more recent origin. It has passed through several phases, each of which has been characterized by emphasis on a different aspect or dimension of age. The earliest and somewhat sporadic studies

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3 Age, as the concept is employed in this study, has three dimensions which are more or less correlated with chronological age. These dimensions are (1) biological, which designates one's position along the life-span and his capacity for survival; (2) psychological, which indicates one's adaptive capacities; and (3) sociocultural, which refers to one's acquired social habits and status, to the performance expected of him in various situations. In an expanding inclusiveness, each dimension embraces the previous one but adds new aspects. These dimensions of age are not equally influential or deterministic in all stages
concentrated on the biological, and more specifically the physiological, dimension of age. After the publication of G. Stanley Hall's massive two-volume treatise on adolescence in 1904, however, emphasis shifted to the psychological dimension to such an extent that most subsequent studies of this age category have been done either by psychologists or at least in the name of the "psychology of adolescence."

Early psychological studies devoted almost as much attention to physiological influences as they did to purely psychological factors. More recent psychological studies, however, mirror the over-all trend in the study of adolescence away from concern with biological factors and toward greater emphasis on sociocultural influences. Recognition of the crucial role of culture in determining the nature of adolescence originated in such empirical works of the life cycle. For instance, infancy is dominated largely by the biological element; whereas, adolescence is predominantly a sociocultural phenomenon. That is, the infant is restricted to a role of dependence and helplessness by his biological and psychological immaturity; whereas, the adolescent is biologically and psychologically capable of fully and productively participating in the adult world, but he is prevented from doing so by the prescriptions and proscriptions of culture. This designation of dimensions of age is based on types of age described by James E. Birren in "Principles of Research on Aging," Handbook of Aging and the Individual, James E. Birren, editor (Chicago: University of Chicago Press, 1959), pp. 18-20.

as Margaret Mead's *Coming of Age in Samoa*, first published in 1928, and the theoretical writings of Ruth Benedict in the 1930's. As concern with the sociocultural nature of adolescence increased, sociologists became interested and active in its investigation.

One of the earliest explicit references to and discussions of sociological investigation of adolescence is a rather obscure article by Jordan D. and Ruth Shonle Cavan, "The Adolescent in American Psychology and Sociology," published in 1930. It documents the trend in studies of adolescence described previously and indicates that initial sociological interest was largely focused on the problems of adolescence and/or adolescents as problems. An early call for sociological research on adolescence and the problems associated with it was issued by C. R. Hoffer.

The first formal expression of interest in and organization for investigation of adolescence as an aspect of social organization rather than as a problem or source of problems seems to be the outline of "Sociological Research in

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5Margaret Mead, *Coming of Age in Samoa* (New York: Mentor, 1949).


Adolescence" prepared by the Research Planning Committee of the American Sociological Society.\(^9\) This outline was the product of a Yale University conference of sociologists, anthropologists, psychologists, psychiatrists, and educators interested in adolescents and adolescence called by the Research Planning Committee in April, 1934.\(^10\) It was followed shortly by an article by E. B. Reuter, chairman of one of the sections of the 1934 conference, attacking the popular conception of adolescence as a period of social disorder and erratic behavior directly and certainly resultant from physiological development and changes.\(^11\) In his article, Reuter stressed the cultural basis of adolescent behavior, pointed to the lack of and need for research to examine the nature of the adolescent world, and suggested means for its study.

Although the delimitation of a sociological approach to adolescence and a set of guidelines for the study of the adolescent world were carefully worked out by 1940, actual sociological research on adolescent behavior was relatively


meager until the late 1950's and early 1960's. It was not until then that significant studies of the "adolescent world" were made. C. Wayne Gordon's study published in 1957 concentrated on the patterns of interaction, values, norms, and activities which comprise the social system of the high school. A more extensive analysis of adolescent culture and social systems was published by James S. Coleman in 1961.

During the past decade, the amount of sociological data pertaining to adolescence has grown through a proliferation of studies. Within this body of information, however, one seldom finds efforts to summarize what is known and to indicate what needs to be learned. Nowhere in the literature does one encounter the codification of existing

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research from the point of view of theory and/or methodology. Gottlieb and Reeves\textsuperscript{16} examine a substantial portion of the pertinent literature in their discussion of empirical studies of adolescent behavior in urban areas. Although they do present suggestions for further research, the general organization of their research is topical and does not go beyond the level of description and summarization of description. Matza states as the aim of his article "... to summarize and organize some of the accumulated sociological knowledge regarding youth by means of a description of a variety of types of youth behavior."\textsuperscript{17} True to this aim, his well-organized article does not go beyond the construction and description of ideal-types of youth behavior.

In summary, three distinct trends have been evident in the study of adolescence. First, the mode of dealing with adolescence has changed from that of pure speculation to scientific investigation. Second, the conception of adolescence has changed as investigation has centered first on its biological, then its psychological, and finally on its sociocultural dimension. Finally, investigation of the sociocultural aspect of adolescence has shifted from concern with the problems of adolescence and adolescents as unadjusted or problem individuals to concern with adolescence as an aspect

\textsuperscript{16}Ibid.

\textsuperscript{17}Op. cit., p. 191.
of social organization and with adolescents and their world in general.18

II. PROBLEM OF THE RESEARCH AND ITS SIGNIFICANCE

Although sociologists were relatively slow in becoming interested in the investigation of adolescence, they have now accumulated a large body of knowledge pertaining to it. There exists, however, no systematic summary of this body of knowledge nor of the kinds of research which presently need to be done. The desirability and necessity for synthesis of sociological knowledge through the codification of existing research and the formulation of theories—be they empirical generalizations, theories of the middle range, or grand theories—has been amply demonstrated in various critiques and commentaries on present-day sociological theory and methodology.19 Recognizing the need for codification and theory formulation in sociology, the objective of this study is two fold: it proposes (1) to examine and codify the current body of sociological data pertaining to the


sociocultural dimension of adolescence and to attempt theoretical formulations which might be significant for further research, and (2) to describe and demonstrate the utility of axiomatic theory construction as a strategy for the codification of sociological knowledge.

The scope of the study is delimited to contemporary sociological studies of adolescence in American society. No specific dates are established to define "contemporary"; rather, only those studies emphasizing the sociocultural, or "contemporary," conception of adolescence are examined. The study is further delimited to discussions and studies of (1) adolescence as an aspect of social organization and (2) the nature of the adolescent world and subculture. Thus, studies of specific problems of adolescence or certain adolescents as problems generally will not be included on the basis of the beliefs that (1) it is necessary to have a broad and general understanding of "normal" adolescence and adolescents before adolescent "problems" can even be defined, much less understood; and that (2) such problems as juvenile delinquency, youth movements, and dating and courtship are more appropriately treated in the substantive areas or contexts of deviant behavior, social movements, and marriage and the family respectively. Other studies which are not included in the research are those involving adolescents which are not actually concerned with adolescence, for example, attitude and opinion surveys in which the respondents are conveniently reached student "guinea pigs."
Perhaps the most serious limitation of this study results from the fact that the literature is examined explicitly to find propositions, i.e., statements of relationships among variables. Thus, much good work which stresses description, classification, and/or measurement, rather than explanation, is not incorporated directly into the theoretical statements which constitute the body of the present study. Since these aspects of scientific investigation are necessary steps to explanation, however, they have been examined and constitute the background or basis for the numerous decisions and interpretations which are made. Thus, they are indirectly incorporated into the present study.

Other limitations of the study result from the fact that few authors state their findings explicitly and consistently in propositional form. This means that (1) some significant propositions have undoubtedly been overlooked and some of the propositions which have been included may have been misinterpreted as they were restated for inclusion in the axiomatic theories. Future empirical tests of these theories should eliminate such gaps and misinterpretations, however.

Despite its limitations, a study of this nature is significant from several sociological perspectives. First

20"Proposition," as the term is used in this study, refers to a statement which relates at least two variates to each other. This restricted conception of proposition is adapted from Zetterberg, op. cit., pp. 64-68.
of all, it answers on a small scale the need for codification and theory formulation in sociology today. In this respect it helps to (1) draw together and clarify existing knowledge; (2) eliminate further unnecessary duplication of research; and (3) indicate the direction and constitute the basis for future research on adolescence. Second, it contributes to the systematic delineation of a "sociology of adolescence" as a special sociology. Third, since adolescence is the age or period of transition between childhood and adulthood, greater understanding of it at least implicitly adds to the knowledge and understanding of its adjacent statuses and the social structure in general. Finally, the utilization of axiomatic theory construction as a strategy for the codification of sociological knowledge of adolescence demonstrates the feasibility and profitability of its use as a technique for the codification of sociological knowledge in general. The organization of propositions according to the axiomatic format is significant because it not only provides for an orderly, logical presentation of material but also because it necessitates the (1) spelling out of basic assumptions; (2) careful definition and consistent use of concepts; and (3) explicit statement of deductions. It further enables the researcher to recognize and fill in gaps in existing knowledge by elucidating formerly obscure implications of propositions and deducing novel propositions to be stated as hypotheses and confirmed through further investigation. The confirmation of such propositions is actually easier when
they are incorporated into theories than when they must be tested singly.\textsuperscript{21}

In the following chapter, the author's conception of sociology and her epistemological perspective are spelled out, and the research strategy and tactics for the study are described and discussed. In succeeding chapters, theories of adolescence in American society are presented and their implications for further research are examined.

\textsuperscript{21}Zetterberg, \textit{op. cit.}, p. 156.
CHAPTER II

RESEARCH STRATEGY AND TACTICS

The entire "sociological community" has not yet been able to agree on a paradigm for the study of human social behavior; rather, there are currently several competing "schools of sociological thought," each with its own paradigm and its own band of devotees and practitioners.¹ The advocates of these schools of thought are differentiated by their epistemological perspectives which are comprised of three sets of factors: (1) a value-situation, the primary motivating preferences of the adherents; (2) a meaning-situation, the kind of knowledge taken to be acquirable; and (3) a knowledge-situation, the method by which knowledge is

constructed and the criterion which is used to verify it.\(^2\)

Since the kinds of problems a sociologist recognizes, the types of social behavior he examines, the kind of research strategy he formulates, and the research tactics he employs are dictated by his epistemological perspective, a fair and adequate evaluation of specific segments of his work can be made only if this perspective is known.

Many problems and misunderstandings in sociology today result from the failure of sociologists to clearly and concisely articulate all aspects of their epistemological position—for themselves or others. Although they present their knowledge-situation carefully and systematically in the elaborate, detailed research designs developed for their studies, they do not make explicit the value- and meaning-situations upon which it is based.\(^3\) Consequently, their readers and colleagues are left with the tasks of ferreting out implicitly stated basic assumptions and piecing them together to obtain a complete representation of their epistemological perspective.


\(^3\)See ibid., pp. 239-41, for a discussion of the need for epistemological postulates by representatives of the various social sciences. George A. Lundberg, Foundations of Sociology (New York: The Macmillan Co., 1953), pp. 8-9 and 100-101, concurs with the conclusion of this author that the weakness of sociological research in general lies in the lack of adequate conception of the meaning-situation; i.e., "There is no workable set of postulates to guide and organize research." He urges fuller recognition of "the basic postulates regarding the nature of 'reality' and 'knowledge' upon which all science proceeds."
In order to facilitate the reading, interpretation, and evaluation of the present study of adolescence in American society, the author offers the following statement of her conception of sociology and her epistemological perspective.

I. STATEMENT OF EPISTEMOLOGICAL PERSPECTIVE:

SOME PROLEGOMENA

What Is Sociology?

Sociology is the social science which studies meaningful human interaction, its forms, patterns, products, and change. It may be divided into general and special sociologies. General sociology studies the characteristics and uniformities common to all sociocultural phenomena, the inter-connections among them, and the interrelatedness between them and cosmic and biological phenomena. Each special sociology does the same for a segment of sociocultural phenomena selected for intensive study.5

For purposes of analysis and teaching, the meaningful

4The position stated here was developed through a process of trial-and-error and represents a synthesis of ideas from a variety of sources. It is presented in the form of answers to a series of questions suggested by and adapted from William P. McEwen's treatise on The Problem of Social-Scientific Knowledge, op. cit. The works of "recognized" social scientists who have essentially the same ideas are cited whenever possible to lend support to the author's position.

5Sorokin, Society, Culture, and Personality, op. cit., p. 16.
human interaction which constitutes the sociocultural universe may be viewed as if it consists of three separable and independent entities: (1) personality, the total organization of the minds and behavior of individuals; (2) society, the totality of interacting personalities with their sociocultural relationships and processes; and (3) culture, the totality of the meanings, values, and norms possessed by interacting persons and the vehicles which objectify, socialize, and convey them. Empirically, however, and this point cannot be stressed too strongly, these aspects of the sociocultural universe are interdependent and inseparable.

The method of sociology is the method of science, a way of knowing and dealing with experience comprised of empirical observation, the logic of human reason, and intuition which may be characterized as "reflective inquiry" or "integralism." It is implemented through procedures and techniques specifically adapted to the unique nature of its subject-matter. As Sorokin cogently and succinctly states:

6Ibid., pp. 63 and 342.

7McEwen, op. cit., pp. 4, 58, and 213-33.


... sociology has its own modifications of the principles and procedures demanded by the peculiar nature of the sociocultural phenomena, especially by their components of meaning-value-norm. ... It operates with such categories as causality, time, space, and others ..., but in a manner notably different from that of the natural sciences. In its study it uses logical-mathematical and syllogistic deductive methods, moderately exploits intuitive insight (always checked by other methods), widely applies empirical observation in all its forms: induction, statistical analysis, case or clinical observation, even experiment; but again with considerable modification of each of these methods and techniques, so as to adjust to the specific character of superorganic phenomena. 

What Is the Epistemological Perspective of the Reflective Inquirer Studying the Sociocultural Universe?

The explication of and justification for the preceding conception of the subject-matter and method of sociology constitutes the epistemological perspective—the value-, meaning-, and knowledge-situations—of the author.

Value-Situation: What is the dominant-motivation of the author as a sociologist engaged in reflective inquiry? It is the goal of this author to learn as much as possible about the sociocultural universe and to develop theories which explain it. This is not to say that accurate description, classification, and quantitative measurement of

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10 Sorokin, Society, Culture, and Personality, op. cit., p. 18.

11 The dominant motivation of the author is basically the same as that described by McEwen, op. cit., pp. 214-15, for all who are engaged in reflective inquiry: the "desire to know."
meaningful human interaction are not also desired. However, they are viewed and valued merely as means to an end--tasks which must be accomplished in order to achieve the ultimate goal of explanation.\textsuperscript{12} Although it is recognized that explanation is feasible only in more advanced sectors of research, it is believed that sociology has now developed to the point where theory formulation is both possible and inevitable.\textsuperscript{13}

**Meaning-Situation:** What kind of knowledge is acquired through reflective inquiry about the sociocultural universe? In an attempt to find a consensus among scientists with regard to the kind of knowledge they consider acquirable, McEwen suggests that:

The reflective inquirer can operationally construct reliable hypotheses about that dimension of reality with which he is concerned in terms of a coherent system of generalizations which have causal implications that can be verified to various degrees of probability.\textsuperscript{14}

As a sociologist who is fundamentally in agreement with this statement, the author believes both in the possibility of

\textsuperscript{12}See Maurice Duverger, *An Introduction to the Social Sciences with Special Reference to their Methods*, trans. Malcolm Anderson (New York: Frederick A. Praeger, Publisher, 1964), pp. 226-27, for a discussion of description, classification, and explanation as "levels of research" in all sciences.

\textsuperscript{13}The inevitability of increased emphasis on synthesis and generalization in sociology is indicated by Pitirim A. Sorokin, "Sociology of Yesterday, Today and Tomorrow," *American Sociological Review*, 30 (December, 1965), 833-43.

\textsuperscript{14}McEwen, *op. cit.*, pp. 215-16.
and the active engagement in the formulation of sociological theories, i.e., systematically organized, lawlike propositions about meaningful human interaction that can be supported by evidence. This conception of the kind of knowledge which may and should be acquired about the subject-matter of sociology is based upon the author's value-situation and the following Postulates of the Meaning-Situation:

I. The Reality Postulate: There is an objective reality to a specific dimension of which the subjective constructs of the given discipline refer.

The sociocultural universe, the aspect of reality with which this author is concerned, is comprised of the components of:

(1) thinking, acting, and reacting human beings as subjects of interaction; (2) meanings, values and norms for the sake of which the individuals interact, realizing and exchanging them in the course of the interaction; [and] (3) overt actions and material phenomena as vehicles or conductors through which immaterial meanings, values, and norms are objectified and socialized.

It is distinguished from the subject-matter of the physical and biological sciences by the presence and influence of the human mind, which, as Leslie A. White so capably demonstrates, is fundamentally different from the minds of non-humans: man

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15 This definition of sociological theories was adapted from Zetterberg, op. cit., p. 22.


17 Ibid., pp. 41-42. See also, Chapters 1 and 4.
has the ability to use symbols, an ability possessed by no other creature. In summary, the sociologist studies a reality consisting of man as a symboling organism, the meanings he arbitrarily bestows on things, and the things upon which he bestows meanings. In so doing, he develops a set of symbols representing the forms, patterns, products, and changes of meaningful human interaction which become part of the sociocultural universe and, thus, part of the reality he is studying. (No wonder his tasks are never-ending!)

II. The Probability Postulate: A high degree of probability (reasonable acceptability), rather than absolute certainty, is the most that can be expected in the operational verification of generalizations which will never exhaust all that is yet to be known.

The dynamic nature of the sociocultural universe alluded to in the discussion of the reality studied by sociologists precludes the acquisition of complete, absolutely certain knowledge of it. It is assumed, however, that there is sufficient permanence, uniformity, regularity, and recurrence in the sociocultural universe to make its study worthwhile. Persisting inquiry makes possible the formulation and verification of generalizations about it which open new

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18Leslie A. White, "The Symbol: The Origin and Basis of Human Behavior," The Science of Culture (New York: Grove Press, Inc., 1949), pp. 22-39. Symbols are "things"--material objects, colors, sounds, odors, motions of objects, or tastes--the meanings or values of which are not derived from or determined by their physical form but are bestowed upon them by those who use them.

19McEwen, op. cit., p. 269.
problems to view and bring about the development of novel concepts and research techniques. Through the utilization of these concepts and techniques, it is possible to formulate and verify still further generalizations. Thus, "truth" in science is ever-changing and relative to time, data, methods, instruments, frame of reference, and interpretation.

III. The System Postulate: Knowledge about the objective physical and behavioral universe requires an orderly system of constructs. 20

If it is assumed that there is order in all aspects—inorganic, organic, and superorganic—of the universe and if the sociologist develops and works with constructs which represent the superorganic aspects of the universe, then it necessarily follows that these constructs will constitute an orderly system when they are properly formulated and presented. 21

Such systematic organization is important in the sociologist's taxonomy, or conceptual scheme; but it is essential in his generalizations and theories. It (1) facilitates parsimonious summary of actual or anticipated findings; (2) coordinates research so that many separate findings support each other; (3) indicates the most strategic or manageable propositions for testing; and (4) provides

20 Ibid., p. 283.

21 Zetterberg, op. cit., pp. 44-45, vividly illustrates the strengths and weaknesses in taxonomies which are properly and improperly presented in his comparison of Max Weber's taxonomy and a portion of the taxonomy from an introductory sociology textbook.
limited areas in which to locate false propositions when a hypothesis fails to meet an empirical test.\textsuperscript{22} From a specifically pragmatic point of view, it may be noted that hypotheses integrated into theories are more easily confirmed than those which are detached and must be tested singly.\textsuperscript{23}

IV. The Postulate of Causality: Causality is required as the principle of objective reference for the construction of explanatory and predictive hypotheses about the interaction of physical events and about behavioral transactions.\textsuperscript{24}

The assumption of causality is basic to the author's conception of sociological theory and its goal of explaining sociocultural phenomena. This assumption is also held by scholars such as Sorokin and Blalock. According to Sorokin,

\begin{quote}
It may be safely assumed that the discovery and accurate formulation of causal or functional relationships between two or more variables is the supreme task of any generalizing science and the ambition of such a scientist or scholar. To arrive at some causal formula is the final goal beyond the great amount of arduous 'spade work' which precedes it.\textsuperscript{25}
\end{quote}

Professor Blalock points out that although causality can never be directly demonstrated and validated empirically, it is a very useful theoretical tool. Furthermore, he says,

\begin{quote}
... it will probably be extremely difficult for most persons ... to get along without the aid of a
\end{quote}

\textsuperscript{22}ibid., pp. 161-66.
\textsuperscript{23}ibid., p. 175.
\textsuperscript{24}McEwen, \textit{op. cit.}, p. 328.
metaphysical assumption to the effect that something akin to causal laws operates in the real world and not just in the hypothetical models of the scientist.26

An essential aspect of the conception, of course, as it is used here, is the idea of "producing," i.e., "If X is a cause of Y, we have in mind that a change in X produces a change in Y and not merely that a change in X is followed by or associated with a change in Y."27 Although this introduces the notion of asymmetry into the relationship between X and Y, it does not rule out the possibility for "reciprocal causation."28

V. The Coherence Postulate: Coherence, i.e., consistency and adequacy is the generic logical criterion of verification from which specific criteria and techniques for empirically testing the deduced implications of hypotheses are derived.29

The significance of this postulate is aptly and succinctly demonstrated in the following excerpt from a discussion of the "referential principles of integralist sociology" by Sorokin:

Logical thought . . . is indispensable for cognition


27Ibid., p. 9.

28For further discussion of appropriateness of this postulate for the meaning-situation of the sociologist as well as other social scientists, see McEwen, op. cit., pp. 328-88; Sorokin, Sociocultural Causality, Space, Time, op. cit., especially Chapter 2; Zetterberg, op. cit., especially pp. 62-74 regarding types of causal linkages; and Robert M. MacIver, Social Causation (Boston: Ginn and Company, 1942).

of even the empirical aspects [of sociocultural phenomena], since without human logic and dialectic, no empirical cognition, no collection and analysis of relevant facts, no adequate observation, no valid experiment is possible. Without mathematical and so-called "symbolic" logic, deductive and inductive logic, no sound empirical judgment, theory, concept, or generalization is conceivable.\(^{30}\)

In summary, it is the belief of this author that it is now possible as well as desirable for sociologists to move beyond the description, classification, and quantitative measurement of sociocultural phenomena to the task of formulating coherent systems of causal propositions about it which can be verified to various degrees of probability.

**Knowledge-Situation:** By what method and criterion is reliable knowledge about the sociocultural universe acquired? Following McEwen, the author recognizes the hypothetical-deductive method as the investigative procedure of reflective inquiry and coherence as the criterion which coordinates the specific observational, inferential, and verificative techniques which are necessary to acquire reliable knowledge concerning meaningful human interaction.\(^{31}\) The hypothetical-deductive method may be outlined in terms of four principal stages: (1) Observation and classification of all data relative to the specific topic under investigation; (2) Formulation of a hypothesis or a system of hypotheses which


might explain the phenomena in question; (3) Verification of the hypothesis (or system of hypotheses) according to the criterion of coherence; and (4) Integration of the empirically confirmed hypothesis (or hypotheses) into a coherent and logically consistent theory.\footnote{McEwen, ibid., pp. 425-46, describes these stages in detail as follows:}

1. Observation and classification of all of the factual data which are relevant to the specific problem which instigated the inquiry.

2. Construction through inferred generalizations of a hypothesis or a system of hypotheses which might serve as a causal explanation, as well as a formula for more precise classification and prediction, with respect to the relevant observational data.

3. Verification of the theoretical hypothesis or system of hypotheses in accordance with the criterion of coherence, i.e., consistency and adequacy:
   a. Deductive elaboration of the consistent implications of the hypothesis by logical-mathematical reasoning in the form of the hypothetical syllogism (If . . . , then . . . ).
   b. Empirical testing of consistently-deduced implications of the hypothesis by techniques which are applicable to the specific data to which the proposed hypothesis refers in order to verify its higher degree of adequacy.
      i. Experimental testing for confirming or refuting the hypothesis under controlled laboratory conditions and/or controlled observations in the natural sciences (including experimental psychology).
      ii. Experiential testing for confirming or refuting the hypothesis under relatively controlled observational conditions in the social sciences and psychology (excluding experimental psychology).

4. Conceptual integration of each hypothesis that has empirically confirmed implications into a coherent system of descriptive generalizations (laws) which are logically consistent, i.e., absolutely valid, and, in comparison with alternative theories, more adequate for interpreting the context to which it refers, i.e., relatively true.

Perhaps a word of clarification is appropriate with
The hypothetical-deductive paradigm is relevant to sociological research on two levels. First, it functions as a model for specific sociological studies. This is its most frequently recognized use. Second, and more significant from the point of view of the present work, it furnishes a model for the development of sociology and sociological research in general. In this sense, the stages may be viewed as separable—albeit interdependent—tasks that can be performed by different sociologists at different times. Thus, initial studies of a particular aspect of the sociocultural universe are frequently limited to the observation and classification, i.e., description, of the phenomenon under investigation; they are "stage I" studies. The development of conceptual regard to the order of the first two stages of this paradigm. Most accounts of investigative procedures specify the formulation of a hypothesis as the first stage in social-scientific inquiry. More realistically, however, it is recognized that an investigator's initial questions about a problem are rarely phrased in the hypothetical mode. Rather, they are usually general, straight-forward interrogative statements. It is only after the investigator has examined the existing factual data pertaining to his problem that he is able to formulate specific, testable generalizations, i.e., hypotheses.

One further refinement of the hypothetical-deductive paradigm may be desirable. It is suggested that the "deductive elaboration of the consistent implications of the hypothesis by logical-mathematical reasoning" need not be limited only to the form of the hypothetical syllogism (If ..., then ...). If any proposition lacking empirical support is viewed as a hypothesis, deductions may also be made according to the form of the categorical syllogism. Either form is effective when the rules of deduction are observed. It may be, however, that the categorical form is more useful for synthesizing and generalizing; whereas the hypothetical form is more appropriate for verificational studies.
schemes or taxonomies is representative of the second stage of the investigative process; works devoted exclusively to this task are identified as "stage II" studies. Research designed to test previously deduced or formulated hypotheses, verificational studies, are of the "stage III" type; whereas, synthesizing and generalizing, i.e., codificational, efforts representative of theoretical or propositional sociology may be classified as "stage IV" studies.\(^{33}\)

The remainder of this chapter is devoted to a detailed discussion of selected aspects of the author's knowledge-situation which comprise the strategy and tactics for this study.

II. A STRATEGY FOR RESEARCH CODIFICATION AND THEORY CONSTRUCTION

The present study is concerned primarily with the integration of empirically verified (or verifiable) propositions about adolescence in American society into logically coherent systems and secondarily with the explication of the procedure used for this purpose. Thus, it is basically a study in theoretical sociology in which the author is attempting to develop theories out of the research findings of others by employing axiomatic theory construction as a strategy for

\(^{33}\)See Zetterberg, op. cit., pp. viii, 22, \textit{et passim} regarding the nature of theoretical or propositional sociology. These terms shall be used synonymously in this study, emphasizing the development of propositions into theories.
Although axiomatic theories per se are certainly not new, their use in sociology is both new and limited. The most outspoken proponent of their use among sociologists is Hans L. Zetterberg whose treatise, On Theory and Verification in Sociology, has served as a guide not only for the present study but also for most other sociological studies in which axiomatic theories have been formulated.

In so doing she will be working on the fourth stage of sociological inquiry outlined in the hypothetical-deductive paradigm. Any novel propositions derived in the axiomatic theories constructed in the present study, however, will be tested in future empirical investigations; hence, this may be viewed also as a contribution to the second and third stages of these future studies.

The Format of Axiomatic Theories

The format of the theories which follow Zetterberg's guidelines is somewhat more uniform and specialized than that of axiomatic theories in general.

An axiomatic theory, generally speaking, is a deductive system of propositions—true or false statements—which explains. It is comprised of basic propositions, "axioms" or "postulates," the truth of which is assumed and from which the remaining propositions in the system, "theorems," are derived according to the established rules of deduction. An axiomatic theory must satisfy the following conditions: (1) its propositions must be stated in precisely defined terms; (2) its propositions must be consistent, i.e., contradictory statements cannot exist within the same system; and (3) it must be complete, i.e., all the theorems which can be derived from the axioms must be included in the system.36

Whereas axiomatic theories in general are not restricted to propositions of any particular form, those constructed according to Zetterberg's guidelines are. Zetterberg delegates one-variant statements to descriptive sociology and


specifies that only those propositions which relate two or more precisely defined variates to one another are acceptable for incorporation into sociological theories. Although he is very specific about the minimum number of variates to be included in propositions, he is less explicit about the relationships between the variates.

From the nature of his examples, his consistent reference to variates as "determinants" and "results," and the amount of space he devotes to the discussion of varieties of causal linkage, it must be assumed that Zetterberg intends for the propositions in sociological axiomatic theories to assert causal relationships between the variates rather than mere correlations. He lists the following varieties of causal linkage encountered in sociology in terms of five attributes of a causal relation:

I. "Direction": (a) Reversible: if X, then Y; and if Y, then X; and (b) Irreversible: if X, then Y, but if Y, then no conclusion about X.

II. "Certainty": (a) Deterministic: if X, then always Y; and (b) Stochastic: if X, then probably Y.

III. "Time": (a) Sequential: if X, then later Y; and (b) Coextensive: if X, then also Y.

IV. "Contingency": (a) Sufficient: if X, then Y, regardless of anything else; and (b) Contingent: if X, then Y, but only if Z.


38 Herbert L. Costner and Robert K. Leik, "Deductions from 'Axiomatic Theory,'" American Sociological Review, 29 (December, 1964), 820, make the same observation.
V. "Necessity": (a) Necessary: if X, and only if X, then Y; and (b) Substitutable: if X, then Y; but if Z, then also Y.

To these varieties of causal linkage he adds an additional one which is actually a combination of the reversible, sequential, and contingent types:

VI. Interdependent: a small increment in X produces a small increment in Y; the small increment in Y produces a further small increment in X, which in turn produces another small increment in Y, and so forth.39

In addition to specifying that propositions must include at least two causally related variates, Zetterberg asserts that the informative value and confirmation level of propositions must be taken into consideration in the formulation of sociological theories. Propositions which refer to specific times, places, persons, and events are said to have low informative value and are designated as "ordinary" propositions. Those which are presumed to be valid for all persons, in all times and places are said to have high informative value and are referred to as "theoretical" propositions.40 The confirmation level of a proposition indicates the amount of empirical support it has. Propositions supported by evidence are called "invariances"; those for which more evidence is needed are known as "hypotheses."41

39Op. cit., pp. 69-74. The labels for the attributes have been provided by the author, but the causal linkages are described as they are listed by Zetterberg.

40Ibid., pp. 79-86.

41Ibid., p. 101.
The informative value and confirmation level of propositions may be combined to produce the following fourfold classification of propositions:

<table>
<thead>
<tr>
<th>Empirical support</th>
<th>Low informative value</th>
<th>High informative value</th>
</tr>
</thead>
<tbody>
<tr>
<td>wanting</td>
<td>Ordinary hypothesis</td>
<td>Theoretical hypothesis</td>
</tr>
<tr>
<td>sufficient</td>
<td>Finding</td>
<td>Law</td>
</tr>
</tbody>
</table>

In summary, Professor Zetterberg at least implicitly indicates that axiomatic theories in sociology should be comprised of propositions, each of which consists of two or more precisely defined and causally-related variates, which have the same causal linkage, informative value, and level of confirmation.

Axiomatic Theories in Sociology: Criticisms and Modifications

Reference has already been made to several axiomatic theories formulated according to the format suggested by Zetterberg which have appeared in the sociological literature. These theories have evoked a number of commentaries.

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42 Ibid.

43 Supra, pp. 29-30.
and criticisms enumerating and explicating the strengths and weaknesses not only of the specific theories under consideration but also of the general format of axiomatic theories in sociology.\textsuperscript{44}

\textbf{Criticisms.} When axiomatic theories are compared to the usual informal and relatively unsystematic presentations of information in sociology, several advantages or strengths of their format become readily apparent. First, the axiomatization of a theory facilitates communication by effecting the parsimonious summary of anticipated or actual research findings and providing a systematic means for


The unusually large amount of criticism which has been inspired by the axiomatization of sociological theories may be accounted for in a number of ways: (1) This may be a poor mode of ordering sociological propositions; (2) This format may have been used incorrectly by sociologists; (3) Empirically and analytically oriented sociologists may be unduly harsh in their appraisal of anything they perceive to be deductive in nature; and (4) It may be that axiomatization clears away some of the "verbal underbrush" which often obscures sociological theories and thus permits and encourages others to read and criticize them. Although each of the foregoing explanations is plausible, the latter seems to be most plausible.
revealing hidden implications within the theory. Second, it points to gaps in the existing body of knowledge and helps the investigator to bridge gaps in his own data. Third, the drawing together and coordinating of separate research findings in the theory so that they support each other not only gives the highest plausibility to the theory per finding but also facilitates its verification. In so doing, it aids in the location of the most strategic and/or manageable propositions for testing and the limitation of the area in which to locate false propositions when a hypothesis fails to meet an empirical test. Finally, the axiomatization of a theory requires the identification and specification of the conditions under which the theory is expected to hold. In summary, it may be said that axiomatization is "an aid to the clearer statement and more thorough exploration of theoretical alternatives"; and axiomatic theories constitute a most promising means for bridging the present gap between "theory building" and "empirical research."

Among the disadvantages or weaknesses of these theories is the tendency to treat them as sets of logically and conceptually tight statements which are complete within themselves. Although it may be assumed that the significant variables are incorporated into a theory and that they operate on one

45 These strengths of the axiomatic format are based on discussions in Zetterberg, op. cit., pp. 161-67 et passim and Kinch, op. cit., pp. 484-85.

46 Turk, op. cit., p. 338.
another only in the manner specified, it can never be assumed that all factors and influences are included or accounted for. Thus, as Kinch emphasizes, care must be taken to specify the conditions under which a theory may be expected to hold.47

Most of the other weaknesses of axiomatic theories in sociology which have been enumerated are not directly relevant to the present attempt at theory construction. They pertain to specific theories and, particularly, to such aspects of the verification of these theories as the selection of meaningful indicators and the development of adequate techniques and devices for measuring the relationship between them. The criticisms of these theories which do refer to Zetterberg's guidelines for axiomatic theory construction can be reduced to two basic and inseparable issues: the form of the propositions and the "reasoning" or "deductive" process involved in the derivation of valid theorems from the postulates.48 These criticisms result, indirectly at least, from the failure of Zetterberg to explicitly state a rule for deduction. Rather, he indicates that "the deduction rules of ordinary language are [to be] used."49 Costner and Leik suggest that his rule of deduction

47Kinch, op. cit., p. 485.
48See Duncan, op. cit., Costner and Leik, op. cit., and Chambliss and Steele, op. cit.
49Zetterberg, op. cit., p. 163.
may be summarized as the "sign rule": "The sign of the deduced relationship is the algebraic product of the signs of the postulated relationships." This mode of deduction is illustrated by the following:

- The greater the A, the greater the B.
- The greater the B, the greater the C.
- Therefore, The greater the A, the greater the C.

Costner and Leik demonstrate that this mode of deduction applied to postulates stated in simple correlational form yields logically valid theorems only when the postulated relationships are perfect—or nearly perfect. Since the magnitude of the relationship between the variates in the postulates is not always known and can rarely be assumed to be high, much less perfect, this is a serious limitation. It is not insurmountable, however, if certain simplifying assumptions are made.

**Modifications.** This limitation may be overcome by making the following simplifying assumptions suggested by Costner and Leik as sufficient conditions for the validity of the sign rule: They state that if

- i. postulates are stated in asymmetric causal form;
- ii. the common variable in the two postulates is prior to one but not to both of the other two variables; and
- iii. a 'closed system' is assumed, i.e., it is assumed that there is no connection between the variables in the postulates except those

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51 Ibid., pp. 819-35.
connections stated or implied in the postulates. . .52

the sign rule is valid regardless of the magnitude of the relationships between the variates in the postulates. The sign rule is also applicable when the common variate in two asymmetric causal postulates is the determinant in each, but the deduced relationship between the variates in the theorem is "spurious" rather than "causal"; it must be stated in simple covariation form rather than asymmetric causal form.53 No valid theorem can be deduced by the sign rule when the common variate in two postulates is the result in each.54

These simplifying assumptions impose even more stringent restrictions on the axiomatization of sociological theories than the guidelines developed by Zetterberg. The assumption of asymmetry is particularly restrictive, for it rules out the inclusion of correlation propositions and at least two types of causal propositions: reversible and interdependent. This assumption must be made, however, because

52 Ibid., p. 827.

53 According to these criteria and to their explication by Catton, op. cit., pp. 208-209, Zetterberg, op. cit., pp. 98-99, makes an invalid deduction in one of his illustrations. Although he deduces all the theorems logically possible from his original postulates, he is able to do it only by combining a proposition with a symmetric relationship with one which has an asymmetric relationship and designating the relationship in the theorem thus deduced as asymmetric—a practice which is questionable at best. It may be noted that selection of a set of postulates with a common form of causal linkage would have eliminated this error.

adequate techniques are not presently available for handling these types of relationships successfully. Further work by propositional sociologists in collaboration with statisticians and mathematical sociologists is needed in order to develop such techniques.

**Axiomatic Theory Construction: A Strategy of Induction, Codification and Deduction**

Although the procedure for deducing valid propositions is a central concern of the axiomatic theorist, it is not the only procedure that merits his attention. Procedures for the selection and formulation of the postulates of his theories must also be considered.

The postulates for axiomatic theories in sociology may have their origin either in a non-empirical source or in a body of empirical findings. "Non-empirical postulates" may be derived from various descriptive or speculative works or they may be developed from a general frame of reference. The latter are formulated by the theorist on the basis of his intuition or "hunches" about the relationship between components of his conceptual schema. Theories built around the non-empirical postulates tend to involve only the deductive procedure. Those based on postulates selected from empirical findings, however, may involve not only deduction but also induction and/or codification.

"Codification," as the term is used here, is the procedure through which several propositions of the same informative value and level of confirmation are combined into
fewer propositions of the same type from which the postulates
of the theory are selected. "Induction" is the procedure by
means of which several ordinary invariances, i.e., findings,
are combined to form theoretical propositions (either laws
or theoretical hypotheses) from which the postulates of the
theory are selected. Both of these procedures are essential
to such synthesizing and generalizing studies as the present
one; however, no explicit guidelines have as yet been
established for them. One of the tasks of the present
study, then, is to develop and make explicit a procedure for
selecting and formulating postulates by means of induction
and codification. This procedure may be viewed as consisting
of a number of more or less simultaneous stages or phases.

The initial phase of this procedure involves making
an inventory of all the propositions relevant to the care­
fully delimited subject of investigation. In so doing, the
investigator must review and examine entire studies—rather
than merely their summaries and conclusions, because there
are sometimes serious discrepancies between stated findings

55 Zetterberg, op. cit., pp. 79-86, 94-99, 101-104 et passim, describes some phases or aspects of these procedures
when he discusses the informative value and level of con­
firmation of propositions and demonstrates the ordering of
propositions according to the axiomatic format. George C.
Homans, "Contemporary Theory in Sociology," Handbook of
Modern Sociology, Robert E. L. Faris, editor (Chicago: Rand
McNally Co., 1964), pp. 974-76, suggests induction as a
strategy for arriving at a deductive system and suggests
that it "could be made more effective if it were made more
explicit." (It will be noted that he uses "induction" and
"codification" as synonyms rather than in the more restricted
sense in which they are used by this author.)
and the data upon which they are based. The inventory
process is further complicated by the fact that clearly and
concisely stated propositions are seldom found in sociological
literature. Thus, it may be necessary to formulate proposi-
tions by condensing lengthy, descriptive paragraphs, by
combining two or more one-variate descriptive statements, by
rephrasing ambiguous statements, and by stating propositions
from previously uninterpreted or misinterpreted data.

As the propositions are collected, their informative
value and level of confirmation must be determined and
specified. They are designated as ordinary hypotheses,
ordinary invariances, theoretical hypotheses, or theoretical
invariances after examining the type and scope of study from
which they come in relation to the inclusiveness of the theory
under construction. Another task which may be accomplished
as the inventory of propositions is made is the explication
of the type of causal linkage between the variates in each
proposition.

After the propositions have been collected and their
confirmation-information level and causal linkage have been
determined, they must be reduced to the smallest number
possible. This is accomplished by eliminating duplicates,
subsuming ordinary propositions under theoretical ones, and
formulating more complex multivariate propositions whenever
possible.

In order to facilitate the reduction of the number of
propositions to be dealt with and to increase the precision
of the completed theory, a taxonomy must be developed which will incorporate and precisely define every extra-logical term in the theory. A previously-developed taxonomy may be selected and explicated for this purpose or the investigator may develop a taxonomy specifically for the theory. This may be done by making an inventory of all the extra-logical terms in the propositions and utilizing the most general ones appropriate to the theory.

After the taxonomy for the theory is developed, it should not be difficult to see that many of the ordinary propositions collected can be inferred from the theoretical ones in the inventory. If all the ordinary propositions in the inventory cannot be subsumed under the existing theoretical propositions, novel propositions which will subsume them may be formulated.

In order to make valid deductions in an axiomatic system, all of its postulates must have the same type of asymmetric causal linkage. Thus, the investigator must select and specify the linkage to be used. After this is done, the next step in the selection and formulation of the postulates for the theory is the uniform restatement of the propositions in the reduced inventory in terms of the taxonomy and specified causal linkage. Propositions other than those with the specified relationship may be incorporated into the theory by altering the causal relationship between variates, e.g., by restating a deterministic relationship as a stochastic one. Although this is a "weaker" relationship, it may be
more beneficial to state it in this less powerful form than not to state it at all. It must be noted that a stochastic relationship cannot be restated as a deterministic one without grossly misrepresenting the nature of the relationship.

After the inventory of propositions has been reduced to the smallest possible number of theoretical propositions, the investigator may designate the propositions having the most empirical and theoretical support as the postulates of the theory. These postulates are chosen so that no postulate can be derived from the others. The actual designation of the postulates for the theory constitutes the last phase in the procedure of induction and codification and the initial phase of the deductive procedure of axiomatic theory construction. Thus, the two phases are united into a single strategy of axiomatic theory construction based on a broader conception of axiomatization than is generally held. The theory is completed by deducing all the theorems and hypotheses logically possible.

In summary, the following tasks may be viewed as an outline of the procedures which comprise the strategy of axiomatic theory construction:

1. Inventory relevant propositions.
2. Determine the confirmation-information level of the propositions.
3. Specify the relationships between the variates in the propositions.
4. Reduce the number of propositions as far as possible.
5. Develop a taxonomy for the theory.
6. Develop theoretical propositions from ordinary ones through induction.
7. Specify the type of causal linkage the postulates in the theory will have.
8. State the propositions in the reduced inventory uniformly according to the taxonomy developed for the theory and the type of causal linkage specified.
9. Designate the postulates for the theory.
10. Deduce all the theorems logically possible.
11. Deduce all the hypotheses logically possible.

III. TACTICS FOR THE CONSTRUCTION OF THEORIES OF ADOLESCENCE IN AMERICAN SOCIETY

In accordance with the author's conception of sociology and epistemological perspective, the strategy of theory construction described above is implemented in the present study to synthesize current knowledge of adolescence in American society. In succeeding chapters, two theories are stated: the first explains the relationship of adolescence to the total social structure of American society and the second explains the nature of the adolescent society in America.
CHAPTER III

ADOLESCENCE IN AMERICAN SOCIETY

Adolescents and the phenomenon of adolescence currently and consistently receive a great deal of attention in American society. The duration and intensity of the conflict and stress and strain associated with this period of socialization and transition elicit concern from adolescents themselves, their parents, teachers, and clergymen—from every aspect of society.

Numerous descriptions of and commentaries on adolescence in American society are available, but the questions of utmost importance are no longer "What?", "How?", "When?", and "Where?"; rather, the question to be answered is "Why?" Why is adolescence such a prolonged period in American society? Why is it a period of marginality? Why is it characterized by stress and strain? Why do adolescents develop a distinctive society and subculture? Why does this subculture tend to conflict with adult society? The task at hand, then, is to explain the phenomenon of adolescence and the behavior of adolescents.

A theory is presented in this chapter which attempts to answer the foregoing questions and, thus, to explain the position and condition of adolescence in contemporary
American society. It is a synthesis and codification of a significant portion of the current sociological and social psychological literature pertaining to this topic by means of the strategy of axiomatic theory construction. Following a brief description of the frame of reference of the theory, the postulates are presented, commented upon briefly, and then restated in the form of research propositions appropriate for the empirical verification of the theory. The propositions are grouped according to five subtopics: (1) adolescence as marginality; (2) adolescence and stress and strain; (3) adolescence as socialization and transition; (4) adolescence as a subculture; and (5) adolescence and generational conflict.

I. FRAME OF REFERENCE

The frame of reference of a theory consists of a taxonomy comprised of basic and derived concepts and a set

1According to Schwirian and Prehn, op. cit., p. 814, the order of presentation of the frame of reference in a theory depends upon the origin of the postulates of the theory. The frame of reference should precede the presentation of the postulates if they are primarily a result of conceptual manipulation of the contents of the frame of reference. It may follow the presentation of the postulates when they are taken primarily from earlier empirical findings. In this way the frame of reference serves as an agent for integrating the postulates.

Although the postulates in the theory presented here are from earlier empirical findings, the author prefers to present the frame of reference first rather than last in order to facilitate as uniform and unambiguous a statement of the propositions which comprise the theory as possible.
of assumptions pertaining to them. Formulation of the present theory involves twenty-eight basic concepts (terms which are undefined in the frame of reference since there is assumed to be a general consensus of understanding about their meaning) and twelve derived concepts (terms which are defined through the combination of basic concepts and assumptions). The derived concepts are designated as first order, second order, third order, or fourth order depending upon the number of logical steps required for their derivation.\(^2\)

**Basic Concepts**

The basic concepts in the taxonomy of the present theory are: (1) age; (2) behavior; (3) biological; (4) complexity; (5) conflict; (6) culture; (7) discontinuity; (8) function; (9) human individuals; (10) idealism; (11) identity; (12) industrialization; (13) integration; (14) interaction; (15) mass media; (16) maturity; (17) milieus; (18) model; (19) needs; (20) overindulgence; (21) overprotection; (22) pattern; (23) segregation; (24) society (social); (25) stress and strain; (26) structure; (27) urbanization; and (28) values.

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\(^2\)See *ibid.*, pp. 814, 818-19, for further discussion of this aspect of the frame of reference.

The excessively large number of concepts incorporated into this theory results from the use of inductive procedures to codify empirical research representing numerous points of view. Had the theory been constructed utilizing deductive procedures only, this proliferation of concepts could have been avoided; however, the purpose of the study would not have been served.
Assumptions

The following statements concerning these basic concepts, their nature, and inter-relationships are explanations of some of the assumptions implied in the studies synthesized by the theory: (a) Age is a basic biological-psychological-sociocultural characteristic of human individuals. (b) The behavior defined as appropriate for human individuals differs with age. (c) The needs and values of human individuals differ with age. (d) The behavior and interaction of human individuals and groups are patterned and their structure may be examined. (e) The patterning of the behavior of human individuals is not always the result of consensus; it may be based on conflict. (f) The behavior of human individuals is influenced by the prescriptions, proscriptions, and limitations of their social, cultural, and natural milieux. (g) The milieux of human individuals is dynamic, but the rate and degree of its change varies with time, place, personnel, and natural conditions. (h) The sociocultural milieux of human individuals differs significantly in terms of degree of urbanization, industrialization, and complexity. (i) There may be a lag between the biological and social maturity of human individuals. (j) The behavior younger individuals are taught as appropriate tends to be more idealistic than the behavior they observe in older individuals they must use as models in their search for identity.
Derived Concepts

The derived concepts of the taxonomy are presented in the order of their derivation. The first order concepts are: (29) adulthood; (30) age grading; (31) childhood; (32) socialization; and (33) status. Adulthood is the age period in the life of an individual which is characterized by full maturity --social as well as biological. (1, 3, 9, 16, 24, i)^3 Age grading refers to differentiation and organization of individuals based on age. (1, 24, a, b, c, d) Childhood is the age period in the life of an individual which terminates with the achievement of biological maturity. (1, 3, 9, 16, i) By socialization is meant the interactional process through which the human individual acquires the sociocultural qualities that make him a member of society. (6, 9, 14, 24, d, f, j) A status is a position in the social structure which is either assigned (ascribed status) or earned (achieved status). (24, 26, d)

The second order concept is role, the behavior expected of a human individual who occupies a given status in the social structure. (2, 9, 24, 26, 33, b, d, f, j) The third order concepts are: (35) adolescence and (36) group. Adolescence refers to the age period in the life of an individual when his society ceases to regard him as a child but does not accord to him full adult status, roles,

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^3 The numbers in parentheses refer to the concepts and assumptions from which the concept being defined has been derived.
and functions. (1, 8, 9, 24, 29, 31, 33, 34, i) A group consists of two or more human individuals who interact with one another in terms of specific statuses and roles. (9, 14, 33, 34, d, f)

The fourth order concepts in the frame of reference are: (37) deviant activities; (38) marginal men; (39) peer group; and (40) subculture. Deviant behavior departs from or runs counter to the expected and accepted behavior of a group or society. (2, 24, 36, d, f, j) Marginal men are human individuals who are neither completely in nor out of a group; they are between groups. (9, 36) A peer group is a group composed of one's equals, particularly one's age mates. (30, 36, a) A subculture consists of the culture common and peculiar to a specific group or category within a society. (6, 24, 36, d)

II. A THEORY OF ADOLESCENCE IN AMERICAN SOCIETY

The propositions which comprise the present theory have been formulated according to the previously discussed guidelines and simplifying assumptions for the strategy of axiomatic theory construction. For purposes of parsimony, most of them are presented as multivariate statements. Although the multivariate determinants and results usually occur together as set forth, it should be understood that unless otherwise explicitly stated any single determinant may produce any single result or combination of results. (For reference purposes, determinants are designated by
numbers and results are identified by letters.) The propositions all have the same causal linkages: irreversible, stochastic, coextensive, contingent, and substitutable.\textsuperscript{4}

\textbf{Postulates of Marginality}

\textbf{Postulate I}

(1) The greater the urbanization, industrialization, and complexity of the society and/or
(2) the greater the rate of social change in the society,
(a) the greater the discontinuities in age grading probably are,
(b) the fewer responsible roles that tend to be open to adolescents, and/or
(c) the less formalized and more diffuse the boundaries between adolescence and adulthood tend to be.

\textbf{Postulate II}

(1) The greater the discontinuities in age grading in a society,
(2) the fewer responsible roles open to adolescents, and/or
(3) the less formalized and more diffuse the boundaries between adolescence and adulthood,
(a) the longer the period of adolescence tends to be.

\footnote{See \textit{supra}, pp. 30-31, and Zetterberg, \textit{op. cit.}, pp. 69-74, for a discussion of all the varieties of causal linkages. The contingencies are not made explicit in all the propositions; they are assumed. It is assumed, for instance, that adolescence is a sociocultural phenomenon and that adolescents have interpersonal contact among themselves.}
Postulate III

(1) The longer the period of adolescence,

(2) the fewer the responsible roles open to adolescents, and/or

(3) the greater the tendency of the mass media to report only the deviant activities of adolescents,

(a) the greater the likelihood that adolescents will be marginal men who are viewed as being uninvolved in and unconcerned with the serious functions of the society.

Few sociological statements concerning adolescence have been written which do not include at least some mention of the relationship between adolescence and urbanization, industrialization, societal complexity, and social change. Although there seems to be a general consensus concerning the nature of the relationship, it would be difficult to cite an instance of its empirical verification. This may be due in part to the difficulty in selecting and measuring meaningful indicators for the variates. A longitudinal study—either retrospective or prospective—of demographic data and public records should provide the information required for testing Postulate I. A cross-sectional research design comparing the extremes of urban and rural subcultures within society might also be used for its verification.

Postulate II explains the variation in the length of the period of adolescence between societies and from one time to another within societies. The indicators for length of adolescence suggested in Research Proposition II may be used together or separately. Although both would be equally
usable in cross-sectional and prospective longitudinal research designs, the age range of persons popularly referred to as adolescents would be of questionable value in a retrospective study.

In Postulate III the treatment adolescents receive as a group in the mass media is identified as one of the causes of adolescent marginality. The activities of the deviant minority are reported in such a manner that they tend to be attributed to adolescents in general. Although the reporting of deviant behavior is not unusual—deviance is news, it is not often that the entire adult age group is categorized as criminal simply because a few of its members attain notoriety. It may well be that adolescents as a group are marginal men who are uninvolved in and unconcerned with the serious functions of society. If they are, it is very likely that this is an instance of "negative socialization" and the "self-fulfilling prophecy."  

The relationships posited in the foregoing propositions are contingent upon prosperity which is sufficient and widespread enough in society to permit the existence of a "leisure class" of adolescents. It requires some stretch of the imagination to believe that prosperity produces adolescence and adolescent marginality, as some have suggested; however, it cannot be denied that it is a necessary condition

5By "negative socialization" the author means the interactional process by which one acquires sociocultural qualities which impede the attainment of membership in society.
The following research propositions are suggested for verification of the postulates of marginality:

Research Proposition I

(1) The greater the per cent of population urban, the per cent of the labor force in non-agricultural occupations, and the occupational specialization of the society, and/or

(2) the greater the rate of application for patents, passage of new legislation, and change in the occupational structure of the society,

(a) the greater the differences in the legal rights and restrictions of children and adults and the more child labor legislation and compulsory education,

(b) the fewer occupational, political, marital, and leadership roles that tend to be open to adolescents, and/or

(c) the greater the lack of, or proliferation of, rites of passage and the more varied the ages at which adulthood is recognized in such areas of experience as voting, marriage, military service, and negotiating binding legal contracts tend to be.

Research Proposition II

(1) The greater the differences in the legal rights and restrictions of children and adults and the more child labor legislation and compulsory education,

(2) the fewer occupational, political, marital, and leadership roles that are open to adolescents, and/or

(3) the greater the lack of, or proliferation of, rites of passage and the more varied the ages at which adulthood is recognized in such areas of experience as voting, marriage, military service, and negotiating binding legal contracts,

(a) the greater the age range of persons popularly referred to as adolescents, teen-agers, and youth and/or the greater the number of years between physical maturity and full economic self-support.
Research Proposition III

(1) The greater the age range of persons popularly referred to as adolescents, teen-agers, and youth and/or the greater the number of years between physical maturity and full economic self-support,

(2) the fewer occupational, political, marital, and leadership roles that are open to adolescents, and/or

(3) the more time and space devoted to stories of adolescent crime, crazes, fads, and demonstrations by the mass media,

(a) the greater the likelihood that society will view adolescent behavior in terms of "having fun," meaningless protest and rebellion, or "sowing wild oats."

Postulates of Stress and Strain

Postulate IV

(1) The more dynamic and heterogeneous the society in which adolescents live, and

(2) the greater the number of groups to which adolescents belong or aspire to belong,

(a) the greater the likelihood adolescents will be subjected to contradictory group expectations and role prescriptions.

Postulate V

(1) The more rigidly structured the socialization of adolescents and/or

(2) the more overprotection and overindulgence adolescents experience,

(a) the less opportunity adolescents tend to have to choose their own values and roles.

Postulate VI

(1) The greater the discontinuities in age grading in a society,
(2) the greater the lag between biological and social maturity,
(3) the less formalized and more diffuse the boundaries between adolescence and adulthood,
(4) the greater the emphasis on achieved rather than ascribed status,
(5) the greater the ambiguity of adult expectations of appropriate adolescent behavior,
(6) the more contradictory group expectations and role prescriptions to which adolescents are subjected, and/or
(7) the less adolescents are able to choose their own values and roles,\(^6\)
(a) the greater the stress and strain adolescents tend to experience.

Among the oldest and most widespread conceptions of adolescence is the notion that it is inherently a period of "storm and stress" or "stress and strain." Although numerous cross-cultural and subcultural studies have been made which discredit the idea that it is inherently and inevitably a period of stress and strain, it cannot be denied that in many instances sociocultural influences and emphases produce contradictions and ambiguities resulting in a general atmosphere of stress and strain which manifests itself in indecision, hostility, and restlessness.

The postulates of adolescent stress and strain may be verified by testing the following research propositions in a cross-sectional study of adolescents from different ethnic

\(^6\)Lack of opportunity to choose values and roles may be expected to produce stress and strain only in societies where such freedom of choice is not only permitted but also expected and valued.
Research Proposition IV

(1) The greater the number of groups or organizations and/or the number of competing value and belief systems within the society and

(2) the greater the number of groups, both formal and informal, to which adolescents belong or aspire to belong,

(a) the greater the likelihood of contradiction in the behavioral expectations of adolescents by parents, teachers, and peers in terms of such specific situations as hour for being home at night, studying, participation in extracurricular activities at school, and using the family car.

Research Proposition V

(1) The greater the length of the formal education of adolescents and the less range and choice of curriculum permitted and/or

(2) the more restrictions against the employment of adolescents and the longer adolescents receive an allowance from their parents,

(a) the greater the similarity of political, religious, and occupational preferences of adolescents and their parents and the greater the similarity of beliefs and values among adolescents.

Research Proposition VI

(1) The greater the differences in the legal rights and restrictions of children and adults and the more child labor legislation and compulsory education,

(2) the greater the number of years between development of the capability to bear children and full economic independence,

(3) the greater the lack of, or proliferation of, rites of passage and the more varied the ages at which adulthood is recognized in such areas of experience as voting, marriage, military service, and negotiating binding legal contracts,
(4) the greater the emphasis on achieved factors such as education and occupation rather than ascribed qualities such as age, race, sex, and family background,

(5) the less clarity and consistency concerning behavior defined as appropriate for adolescents by parents, teachers, and clergy,

(6) the greater the likelihood of contradiction in the behavioral expectations of adolescents by parents, teachers, and peers in terms of such specific situations as hour for being home at night, studying, participation in extracurricular activities at school, and using the family car, and/or

(7) the greater the length of the formal education of adolescents and the less range and choice of curriculum permitted,

(a) the greater the restlessness and indecision adolescents tend to experience, the greater their hostility toward parents and other authority figures tends to be.

Postulates of Socialization and Transition

Postulate VII

(1) The greater the urbanization, industrialization, and complexity of the society,

(2) the greater the rate of social change in the society, and/or

(3) the greater the heterogeneity of the society,

(a) the more opportunity adolescents tend to have to choose and interpret their roles.

Postulate VIII

(1) The more opportunity adolescents have to choose and interpret their own roles,

(a) the less likely are parents to constitute adequate models for adolescents as they pursue the task of finding a meaningful identity.
Postulate IX

(1) The less adequate parents are as models for adolescents,

(a) the longer and greater the significance of formal schooling tends to be in the socialization of adolescents into acceptable adult roles.

Although socialization is a life-long process, it is more intensive during certain periods in the life cycle than others. Adolescence is a particularly important period in this sense, for it is the time during which the individual selects and prepares for his occupation, selects his marriage partner, and prepares for responsible participation in religious and political activities.

The explanation of the predominant features of socialization in adolescence presented in postulates VII, VIII, and IX may be verified using the following research propositions:

Research Proposition VII

(1) The greater the per cent of population urban, the per cent of the labor force in non-agricultural occupations, and the occupational specialization of the society, and/or

(2) the greater the rate of application for patents, passage of new legislation, and change in the occupational structure in the society, and/or

(3) the greater the number of groups or organizations and/or the number of competing value and belief systems within the society,

(a) the more opportunity adolescents tend to have to choose their own political, religious, and occupational affiliations.
Research Proposition VIII

(1) The more opportunity adolescents have to choose their own political, religious, and occupational affiliations,

(a) the greater the differences tend to be in adolescents' educational, religious, political, and occupational aspirations and the position and preferences of their parents.

Research Proposition IX

(1) The greater the differences in adolescents' educational, religious, political, and occupational aspirations and the position and preferences of their parents,

(a) the greater the length of compulsory education and/or the amount of education—high school diploma, Bachelor's degree, and so forth—required for various occupations tends to be.

Postulates of Subculture

Postulate X

(1) The longer and more completely adolescents are segregated in educational institutions,

(a) the greater the likelihood that the main values of the society are selectively transmitted to them with a strong idealistic emphasis,

(b) the longer and more difficult the transition to economic and social maturity tends to be, and/or

(c) the greater the number and intensity of peer group contacts among adolescents tend to be.

Postulate XI

(1) The greater the age differential between adults and adolescents,

(2) the greater the amount and rate of social change in the society,
(3) the greater the increase in the complexity in the social structure,
(4) the greater the lack of integration in the culture, and/or
(5) the greater the velocity of movement within the social structure,
(a) the more difference there tends to be in the milieux in which adolescents and adults are reared.

Postulate XII
(1) The greater the number and intensity of peer group contacts among adolescents,
(2) the more the satisfaction of the needs of adolescents is thwarted by the formal social structure,
(3) the greater the difference between the milieux in which adolescents and adults are reared, and/or
(4) the greater the deceleration in the rate of socialization with advancing age,
(a) the greater the likelihood of the development of an adolescent society which has most of its important interactions within itself and which has a distinctive subculture.

The "Great Debate" among students of adolescence during recent years has centered around the existence of a distinctive adolescent society and subculture. After much investigation and discussion, the question has been resolved in favor of the affirmative. Postulates X, XI, and XII explain this phenomenon in terms of prolonged segregation of adolescents in educational institutions where they interact largely among themselves and acquire a distinctive set of beliefs and values. The relationships set forth in these postulates, like several of those discussed previously, can be expected only in relatively prosperous societies which
can support a large group of economically non-productive, high-consuming individuals.

A verificational study for the postulates of subculture might utilize the research propositions presented below in either a cross-sectional or a retrospective longitudinal research design.7

Research Proposition X

(1) The greater the number of years adolescents attend school,

(a) the greater the likelihood of differences between the beliefs and values regarding sex, equality, work, and so forth which are taught to adolescents and those observed in literature, movies, and the everyday behavior of adults,

(b) the longer the period of economic dependence on parents and the greater the amount of specialized training required for various occupations tends to be, and/or

(c) the greater the number of contexts of association with age-mates, the greater the amount of time spent with age-mates, and the greater the conformity to the expectations of peers rather than adults tend to be.

Research Proposition XI

(1) The greater the number of years between the ages of parents and adolescents,

(2) the greater the rate of application for patents, passage of new legislation, and change in the occupational structure in the society,

7Although the prospective longitudinal design would not be appropriate in a situation where an adolescent society is already in existence, it would be invaluable for research in developing societies.
(3) the greater the increase in the number of groups organizations in the social structure,

(4) the greater the discrepancies among norms, values, and behavior,

(5) the greater the rates of social, geographical, and occupational mobility,

(a) the greater the differences tend to be in the literature, music, political organization, economics, science, technology, and so forth by which adolescents are surrounded and that by which their parents were surrounded as adolescents.

Research Proposition XII

(1) The greater the number of contexts of association with age-mates, the greater the amount of time spent with age-mates, and the greater the conformity to the expectations of peers rather than adults,

(2) the fewer appropriate models for adolescents, the greater lack of responsible roles, the greater the categorization rather than individuation of adolescents and the greater the postponement of sexual gratification,

(3) the greater the differences in the literature, music, political organization, economics, science, technology, and so forth by which adolescents are surrounded and that by which their parents were surrounded as adolescents, and/or

(4) the more slowly persons are to adopt novel items and ideas with advancing age,

(a) the greater the likelihood that adolescents as a group will have language, dress, values, leisure activities, symbols, rituals, and so forth which are distinctively different from those of adults.

Postulate of Generational Conflict

Postulate XIII

(1) The greater the likelihood of the development of an adolescent society which has most of its important interactions within itself and which has a distinctive subculture,
(2) the more adults view adolescents as struggling to render them obsolete so they can recreate the world in their own right, and/or

(3) the greater the emphasis on achieved status rather than age as the basis for positions in society,

(a) the greater the potentiality and intensity of conflict between adults and adolescents.

One aspect of adolescence and a topic of much discussion is the seemingly inevitable conflict between adults and adolescents. Such conflict is not inevitable; it is a product of specific sociocultural conditions and it occurs in varying degrees of frequency and intensity. Postulate XIII explains the occurrence of this conflict in American society in terms of the adolescent subculture, societal emphasis on achievement, and adults' perception of adolescents' striving for achievement. The research proposition suggested for this postulate is:

Research Proposition XIII

(1) The greater the likelihood that adolescents as a group have language, dress, values, leisure activities, symbols, rituals, and so forth which are distinctively different from those of adults,

(2) the more adults disapprove of adolescents' protests and demonstrations and their pursuance of higher education, and/or

(3) the greater the emphasis on achieved factors such as education and occupation rather than ascribed qualities such as age, race, sex, and family background,

(a) the greater the number and emotionality of disagreements between adults and adolescents tend to be.
Theorems

In accordance with the "sign rule" mode of deduction and the simplifying assumptions related to its validity, seven theorems are derived from the postulates of the theory. They are not discussed or restated as research propositions since all the variates and their indicators were included in the presentation of the postulates.

Theorem 1

(1) The greater the urbanization, industrialization, and complexity of the society,
(2) the greater the rate of social change in the society,
(3) the more dynamic and heterogeneous the society in which adolescents live,
(4) the greater the number of groups to which adolescents belong or aspire to belong,
(5) the more rigidly structured the socialization of adolescents, and/or
(6) the more overprotection and overindulgence adolescents experience,
(a) the greater the stress and strain adolescents tend to experience.

Theorem 2

(1) The greater the urbanization, industrialization, and complexity of the society,
(2) the greater the rate of social change in the society, and/or

8The postulates were broken down into bivariate propositions to make the deductions. The derived bivariate propositions were then combined into the multivariate ones presented here.
(3) the more dynamic and heterogeneous the society in which adolescents live,

(a) the less likely are parents to constitute adequate models for adolescents as they pursue the task of finding a meaningful identity.

Theorem 3

(1) The greater the urbanization, industrialization, and complexity of the society,

(2) the greater the rate of social change in the society,

(3) the greater the discontinuities in age grading in a society, and/or

(4) the less formalized and more diffuse the boundaries between adolescence and adulthood,

(a) the greater the likelihood that adolescents will be marginal men who are viewed as being uninvolved in and unconcerned with the serious functions of the society.

Theorem 4

(1) The greater the number and intensity of peer group contacts among adolescents,

(2) the more the satisfaction of the needs of adolescents is thwarted by the formal social structure,

(3) the greater the difference between the milieux in which adolescents and adults are reared, and/or

(4) the greater the deceleration in the rate of socialization with advancing age,

(a) the longer the period of adolescence tends to be.

Theorem 5

(1) The greater the urbanization, industrialization, and complexity of the society,

(2) the greater the rate of social change in the society,
(3) the longer and more completely adolescents are segregated in educational institutions,
(4) the greater the age differential between adults and adolescents,
(5) the greater the lack of integration in the culture, and/or
(6) the greater the velocity of movement within the social structure,
(a) the greater the likelihood of the development of an adolescent society which has most of its important interactions within itself and which has a distinctive subculture.

Theorem 6

(1) The greater the urbanization, industrialization, and complexity of the society, and/or
(2) the greater the rate of social change in the society,
(a) the longer the period of adolescence tends to be.

Theorem 7

(1) The more opportunity adolescents have to choose and interpret their own roles,
(a) the longer and greater the significance of formal schooling tend to be in the socialization of adolescents into acceptable adult roles.

Hypotheses

By combining the foregoing postulates and theorems, the following hypotheses are derived:

Hypothesis 1

(1) The greater the urbanization, industrialization, and complexity of the society,
(2) the greater the rate of social change in the society, and/or
(3) the more dynamic and heterogeneous the society in which adolescents live,

(a) the longer and greater the significance of formal schooling tend to be in the socialization of adolescents into acceptable adult roles.

Hypothesis 2

(1) The greater the urbanization, industrialization, and complexity of the society,

(2) the greater the rate of social change in the society,

(3) the longer and more completely adolescents are segregated in educational institutions,

(4) the greater the age differential between adults and adolescents,

(5) the greater the lack of integration in the culture, and/or

(6) the greater the velocity of movement within the social structure,

(a) the greater the potentiality and intensity of conflict between adults and adolescents.

Numerous other "weaker"—covariance—propositions can be deduced, but they are not presented here. The author has chosen to omit them because (1) such statements already constitute a large segment of the literature and (2) the present study is primarily concerned with explanation and, thus, statements of causal relationship.

In summary, an inventory of propositions pertaining to adolescence in American society in contemporary sociological literature has been synthesized and codified into an axiomatic theory consisting of thirteen postulates, seven theorems, and two hypotheses. The frame of reference
for the theory has been described and its postulates have been restated as research propositions in order (1) to make clear its implications for further research and (2) to facilitate its empirical verification.
CHAPTER IV

ADOLESCENT SOCIETY IN AMERICA

Among the more outstanding characteristics of adoles­cence in American society is the existence of an adolescent society and subculture. The theory presented in Chapter III explains the development of this society and its relation to the larger society. The theory set forth in the present chapter accepts the existence of an adolescent society as an assumption and focuses on explanation of its internal aspects, its qualities and processes.

Presentation of this theory of adolescent society follows essentially the same format as the one used in the foregoing chapter: the frame of reference of the theory is described; its postulates are set forth and commented upon; and its theorems are stated. Research propositions are not formulated, however, because of limitations of time and space.

I. FRAME OF REFERENCE

Formulation of the present theory involves twenty-six basic concepts, seven basic assumptions, and sixteen derived concepts.

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Basic Concepts

The basic concepts in the taxonomy of the present theory are: (1) achievement; (2) age; (3) athletic; (4) behavior; (5) biological; (6) control; (7) culture; (8) educational institution; (9) expectation; (10) formal; (11) human individual; (12) informal; (13) interests; (14) mass media; (15) maturity; (16) organization; (17) popular; (18) sanctions; (19) segregation; (20) self; (21) society (social); (22) solidarity; (23) success; (24) unity; (25) value; and (26) visible.

Assumptions

The following assumptions are implied in the studies synthesized by the theory: (a) Age is a basic biological-psychological-sociocultural characteristic of human individuals. (b) The needs, values, and behavior defined as appropriate for human individuals by their culture differ with age. (c) The behavior and interaction of human individuals and groups are patterned and their structure may be examined. (d) Adolescence is a time when peer relations become of major importance. (e) Adolescence is a time of development and evaluation of values. (f) Adolescence is a time of seeking status as an individual. (g) An adolescent society exists and is a widespread and dominant pattern among adolescents in American society.
Derived Concepts

The derived concepts are presented in the order of their derivation. The first order concepts are: (27) activity; (28) adulthood; (29) childhood; (30) norm; and (31) status. An activity is a specific, visible behavior or interest of human individuals. (4, 11, 13, 26) Adulthood is the age period in the life of an individual which is characterized by full biological and social maturity. (2, 5, 11, 15, 21, a, b) Childhood is the age period in the life of an individual which terminates with the achievement of biological maturity. (2, 5, 11, 15, a, b) A norm is a culturally defined expectation of behavior. (4, 7, 9, b) A status is a position in the social structure which is either assigned (ascribed status) or earned (achieved status). (24, c)

There are eight second order derived concepts in the taxonomy: (32) class; (33) code; (34) convention; (35) fad; (36) fashion; (37) role; (38) rule; and (39) status system. A class is a category of human individuals who occupy the same status in society. (11, 21, 31, c) By code is meant a norm formally agreed upon by the human individuals to which it applies. (10, 11, 30, b) A convention is a norm which is accepted as appropriate but not insisted upon. (30, b) Fad refers to a short-lived, extreme range of normative behavior. (4, 30) By fashion is meant a range of permitted normative behavior. (4, 30) Role refers to the behavior expected of a human individual who occupies a given status
in the social structure. (4, 9, 11, 21, c) A rule is a formally enacted norm. (10, 30) By status system is meant the totality of statuses in a social structure. (21, 31, c)

The third order concepts in the taxonomy are (40) adolescence, the age period in the life of an individual when his society ceases to regard him as a child but does not accord to him full adult status, roles, and functions. (2, 11, 21, 28, 29, 31, 37, a, b, d, e, f) and (41) differentiation, the assignment of statuses and roles on the basis of biological and/or social characteristics. (5, 21, 31, 37, b, c) The fourth order concept is (42) leading crowd, the individuals in the highest category of statuses in the adolescent social structure. (11, 21, 31, 40, c, f, g)

II. A THEORY OF ADOLESCENT SOCIETY IN AMERICA

The following propositions, which constitute the postulates and theorem of the theory of adolescent society in America, are products of the synthesis and codification of a recent but rapidly growing segment of the sociological literature on adolescence. They are fairly indicative of the variety of topics covered in the literature pertaining to adolescent society, although they do not give an adequate picture of its volume. This is due to the fact that the majority of the studies inventoried are descriptive in nature and do not answer questions of causality. Only statements of causal relationship are incorporated into the present theory; thus, numerous univariate and covariate
statements from the descriptive studies are not included.¹

Postulates

Postulate I

(1) The less ease and uniformity with which adolescents are able to participate fully in the activities and interests of the adult group, and

(2) the longer and more completely adolescents are segregated in educational institutions,

(a) the greater the unity, organization, and solidarity the adolescent society tends to have,

(b) the greater the likelihood adolescents will be subject to two sets of standards for success: standards for success as adults and standards for success as adolescents, and/or

(c) the greater the likelihood adolescents will value and concentrate on "having fun" or "having a good time" among themselves.

Postulate II

(1) The greater the unity, organization, and solidarity of the adolescent world,

(a) the greater the degree of control the adolescent society tends to exercise over its members by rules, codes, conventions, and expectations.

Postulate III

(1) The longer and more completely adolescents are segregated in educational institutions,

(a) the more the informal organization of adolescent society tends to follow the formal organization of the educational institution.

¹All the propositions have the same causal linkages: irreversible, stochastic, coextensive, contingent, and substitutable.
Postulate IV

(1) The greater the degree of differentiation of a society,
(a) the greater the likelihood that the adolescent society will be highly differentiated.

Postulate V

(1) The more adolescents are judged by their visible presentation of self,
(2) the longer and more completely adolescents are segregated in educational institutions, and
(3) the more license adolescents have to experiment with the possibilities in adult roles,
(a) the more adolescents tend to be committed to fashion and fad.

Postulate VI

(1) The more adolescents' achievements occur as part of a collective effort,
(2) the higher the social class background of adolescents, and/or
(3) the more adolescents exemplify the values current in the adolescent culture,
(a) the higher their positions in the adolescent status system tend to be.

Postulate VII

(1) The greater the "visibility" of an activity in the adolescent society,
(a) the greater the likelihood it will constitute the starting point for the leading crowd in the society.

Postulate VIII

(1) The more glamorous and socially skilled the adolescent girl and the more athletic the adolescent boy,
(a) the more popular with other adolescents they tend to be.

Postulate IX

(1) The greater the lack of opportunities to gain status among adolescents,

(a) the greater the adolescents' orientation to interests and activities outside the adolescent society tends to be, and

(b) the greater their use of the mass media tends to be.

Postulate X

(1) The more the activities of adolescents are chosen according to the generalized value orientation of "having fun,"

(a) the more likely they are to receive negative sanctions from adults.

Theorems

Theorem 1

(1) The less ease and uniformity with which adolescents are able to participate fully in the activities and interests of the adult group,

(a) the greater the degree of control the adolescent society tends to exercise over its members by rules, codes, conventions, and expectations.

According to the foregoing theory, many of the internal aspects of the adolescent society result from the influence of the larger society. Thus, the adolescent society is what it is because the larger society shapes its qualities or at least permits them. To characterize the relationship between adolescent society and the larger society as primarily one of conflict, then, is to present
a false picture of the nature and origin of the former.

The present theory leaves many unanswered questions in the mind of the author. This is no doubt because the conception and investigation of adolescent society is relatively new and most of the studies which have been made are descriptive or stage I research. Until the body of empirical data on this phenomenon is increased and efforts are made to conduct more stage III research to test hypotheses suggested by the descriptive studies, attempts to formulate theories may not be very fruitful. Such attempts should not be abandoned, however, for they furnish well formulated hypotheses to guide further investigations.
CHAPTER V

SUMMARY AND CONCLUSIONS

I. SUMMARY

The present study in theoretical sociology combines the author's long-term interest in adolescence with recognition of the need for synthesis and codification of sociological knowledge. It attempts to explain adolescence as a sociocultural phenomenon by employing axiomatic theory construction as a strategy for synthesizing and codifying the research findings and speculations of others.

The author's epistemological perspective which dictated the problem selected and the research strategy employed sets forth explanation of the sociocultural universe as the primary goal of the sociologist. In order to attain this goal, the sociologist must go beyond description, classification, and quantitative measurement to formulate coherent systems of causal propositions about social phenomena which can be verified to various degrees of probability.

The author has made modifications and elaborations on the conception of axiomatization which have resulted in the formulation of a "strategy of axiomatic theory construction"
comprised of an **inductive** as well as a deductive phase. Thus, it permits the sociologist simultaneously to synthesize and codify sociological knowledge and to explain meaningful human interaction. The procedural steps comprising the "strategy of axiomatic theory construction" may be summarized as follows:

1. Inventory relevant propositions.

2. Determine the confirmation-information level of the propositions.

3. Specify the relationships between the variates in the propositions.

4. Reduce the number of propositions as far as possible.

5. Develop a taxonomy for the theory.

6. Develop theoretical propositions from ordinary ones through induction.

7. Specify the type of causal linkage the postulates in the theory will have.

8. State the propositions in the reduced inventory uniformly according to the taxonomy developed for the theory and the type of causal linkage specified.

9. Designate the postulates for the theory.

10. Deduce all the theorems logically possible.

11. Deduce all the hypotheses logically possible.

Examination of the sociological literature on adolescence yielded a lengthy inventory of propositions pertaining to (1) adolescence as an aspect of social organization and (2) the nature of the adolescent society and subculture. Following the steps of the strategy of axiomatic theory construction outlined above, the inventory was reduced to
two sets of systematically organized propositions: a theory of adolescence in American society and a theory of adolescent society in America. The former explains adolescence as a culturally defined age period characterized by marginality, stress and strain, socialization and transition, a subculture, and generational conflict. Its postulates are restated in the form of "research propositions" in order to demonstrate its implications for further research and to facilitate its empirical verification. The latter theory explains such internal aspects of the adolescent society as its organization and values and their relationship to the organization and values of the larger society.

II. CONCLUSIONS

Although the theories formulated in this study are no doubt lacking in completeness and precision, they do represent an attempt to synthesize and codify current sociological knowledge of adolescence and to demonstrate the utility of the strategy of axiomatic theory construction developed for this purpose. They constitute sets of propositions which may be further verified and/or modified to contribute to the explanation of adolescence as a sociocultural phenomenon.

From the theory of adolescence presented in Chapter III, it may be concluded that the factors primarily responsible for producing and shaping the prolonged period of adolescence in American society are its high degrees of urbanization, industrialization, and complexity and its
rapid rate of social change. These factors produce a society in which most of the responsible roles require a great deal of education or highly specialized training, a society in which few responsible roles are open to those in the second decade of life. The lack of responsible roles and the longer period of education required as preparation for adulthood result in the segregation of adolescents in educational institutions where most of their contacts are with their peers.

In the rapidly changing society, parents and youth are often reared in vastly different milieux. This, coupled with the tendency for the rate of socialization to decelerate with advancing age, reduces the likelihood that adults will constitute adequate models for the roles adolescents will play as adults and creates a barrier to communication and understanding between generations. The inability of adults and adolescents to share common roles and to communicate effectively contributes to the ambiguities and/or contradictions in the expectations of behavior for adolescents and results in their turning more and more to their age-mates for norms, values, and companionship.

The ambiguity which frequently characterizes adult perception and expectations of adolescent behavior in a complex, rapidly changing society also carries over into the delineation of boundaries between adolescence and adulthood and creates a condition of marginality. This marginality, along with the prolongation of the lag between biological
and social maturity and the lack of appropriate role models, results in considerable stress and strain for adolescents as they strive for their identity as individuals.

The segregation of adolescents in educational institutions where most of their contacts are with age-mates who share common interests and problems constitutes the ideal situation for the development of an adolescent society. The adolescent society in America has received so much attention in recent years that the author has attempted to develop a separate theory to explain its internal aspects. (See Chapter IV.) It must be concluded, however, that such an attempt seems to be somewhat premature at this time. There is a rapidly growing body of literature pertaining to the adolescent society, but most of it is purely descriptive in nature and few statements of causal relationship can be drawn from it.

Although the data are not available to explain all the qualities and processes of the adolescent society, there are enough propositions to constitute the beginnings of an axiomatic theory which explains some of them. In spite of all the discussion to the contrary, it must be concluded that the organization and values of the adolescent society are not so diverse that they are inevitably in conflict with the larger society.

The problems which had to be coped with as the research was executed have taught the author far more than can ever be measured in terms of facts about and
understanding of adolescence in American society. Aside from the tremendous volume of material to be analyzed in the study, perhaps the most vexing problem encountered was the formulation and explication of the taxonomy and basic assumptions, i.e., the frame of reference, for each theory. In most instances, the author literally had to assume the assumptions basic to each of the studies analyzed in order to make explicit the assumptions for the theories under construction. The development of a concise, logically integrated taxonomy incorporating all the necessary concepts from the wide range of studies examined proved to be an impossible task. The author's efforts to use the concepts as found in the studies produced what at best can be called a glossary of terms. Perhaps the problem of developing a taxonomy could be alleviated somewhat if the researcher translated the propositions into his own previously developed (or adopted) taxonomy as he inventoried them.

The derivation of theorems and hypotheses from the postulates involved two problems for the author. First, it was cumbersome and unproductive to attempt to make derivations using multivariate propositions as such. By breaking these propositions down into the appropriate bivariate ones, the author was able to derive numerous other bivariate propositions which could then be combined into multivariate theorems and hypotheses. Since most of the propositions in the initial inventory were bivariate ones, this technique seemed to be a reasonable and justifiable one. Second, the
author was confronted with a large number of time- and space-consuming "weak," i.e., covariance, statements derived from the postulates. The decision to omit them from the theories presented was based on (1) the knowledge that such statements constitute the bulk of the information on adolescence now available and (2) the fact that the present study is concerned with explanation and thus statements of causal relationship.

Such problems as the aforementioned ones have not discouraged the author's use of axiomatic theory construction for purposes of synthesis and codification; rather, they have encouraged it. These problems as well as the condition of the literature on adolescence which was examined in the study emphasized and re-emphasized the need for axiomatic theory construction. They have made clear the need for the orderly, logical presentation of material provided by the organization of propositions according to the axiomatic format and for the spelling out of basic assumptions, the careful definition and consistent use of concepts, and the specification of modifying conditions it necessitates.

Utilization of the strategy of axiomatic theory construction in this study has not only demonstrated its appropriateness as a technique for synthesizing and codifying data but it has also reinforced the author's conviction that it promises to provide a much-needed bridge for the gap between "theory building" and "empirical research."
III. IMPLICATIONS FOR FURTHER RESEARCH

The implications for further research of the theories formulated in this study are several. First, the theories themselves must be verified. Although they are based on previously existing research, they have never been stated or tested in their present forms and should not be accepted without further empirical verification. The author has suggested research designs and propositions to facilitate their testing. Second, even though the theories were constructed specifically to explain adolescence in American society, they may be helpful in making either subcultural or cross-cultural comparative studies. Indeed, the sociologist should strive through verification and modification to formulate theories applicable in all times and places, i.e., to formulate sociological laws.

A third implication for further research which arises out of the present study pertains not to the theories of adolescence but to the strategy of axiomatic theory construction itself. It suggests the need for extensive inventories of propositions from the sociological literature. The compilation of such inventories would not only expedite synthesis and codification of sociological knowledge, but it would also constitute a good pedagogical technique.

There are doubtlessly many other questions which can be raised both by the procedures and the outcome of this research. However, the objective of the study has been
accomplished; and it is believed that the theories presented and the strategy utilized for their construction constitute significant contributions to theoretical sociology.
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D. ESSAYS AND ARTICLES IN COLLECTIONS


E. ENCYCLOPEDIA ARTICLES


F. UNPUBLISHED MATERIALS


VITA

The author, Barbara A. Goodnight, was born September 8, 1937, in Pampa, Texas, where she received her elementary and secondary school training. She graduated from Pampa High School in May, 1956, as Valedictorian of her class. In June, 1960, she was graduated with honors from Texas Woman's University, receiving the Bachelor of Science degree with a major in sociology and minors in recreation and government-history.

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