This is to certify that the

thesis entitled

CASTE, STRATIFICATION, AND MODERNIZATION
AMONG PEASANTS IN INDIA

presented by

V. Tellis-Nayak

has been accepted towards fulfillment
of the requirements for

Doctoral degree in Sociology

Robert H. Berg
Major professor

Date June 22, 1973

O-7639

ABSTRACT

CASTE, STRATIFICATION, AND MODERNIZATION
AMONG PEASANTS IN INDIA

By

V. Tellis-Nayak

The present study is designed, in its most general aspect, to investigate the relationship between the hierarchical caste structure of the Indian peasant society and the modernization process. More specifically, it seeks to identify the complex association of caste with factors that mediate beween the caste positions of peasants and their modernizing conduct. These intermediary factors can be preliminarily identified as economic and social in their first and immediate association with caste, and as access to modernizing sources in the second step association with caste.

The questions that constitute the central problem of this study are the following. Is the caste structure associated with the differential modernized patterns of peasant behavior? Assuming that there is such an association, is this relationship direct or routed through mediating factors like economic class,

social status and power, and discriminatory access to modernizing sources? In other words, what is the relative predictive strength of the following relationships: (1) caste ascription and peasant modernization, (2) caste ascription and the three intervening variables: economic class, social power, and access to modernizing sources, (3) the three intervening variables and peasant modernization, (4) the three intervening variables among themselves? The relative strengths of these associations would indicate the path and complexity of the relationship that caste bears to modernization.

The data utilized is from six villages in India constituting 559 respondents who owned at least one hectacre of land and were the decision makers in their households. These peasants were studied in terms of their modernization which, in this study, was a variable composed of modernized attitudes and the acceptance of innovations as regards agriculture, health, and family planning.

The methodological techniques used were the following. Firstly, two zero-order correlations between the five main composite variables were computed. Secondly, another elaborate zero-order correlational matrix was prepared using the fifty three variables constituting the above five composite variables. Thirdly, we used multi-variate regression treating separately modernization, modernized attitudes, and modernized behavior as dependent

and the four other main variables in their composite and component forms as independent variables. The strength of the proof lay in the recurring patterns in the correlational matrices and the multi-variate regression.

The findings provided several surprises among which are the following. The model we tested as regards caste being related to modernization not on its own strength but through economic and social factors, was largely disproved. Caste ranking shows relation to innovation on its own merit. Secondly, the very concept of individual modernization as composed of modernized attitudes and behavior proved to be of dubious validity. This concept was then extensively critiqued in a final chapter. Thirdly, social leadership, both formal and informal, seems to be very little innovative, it shows signs of moving away from caste structure, but it is still strong in its economic base. Fourthly, the concept we utilized under the label of access to modernizing sources seemed to be the best predictor of modernization behavior among Indian peasants, and perhaps stands as the only significant intervening variable between caste and modernization.

This study points to the conclusion that the very concept of individual modernity may need to be radically reexamined in its conceptual structure and in its operational application.

CASTE, STRATIFICATION, AND MODERNIZATION AMONG PEASANTS IN INDIA

By

Vivian Tellis-Nayak

A THESIS

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

DOCTOR OF PHILOSOPHY

DEPARTMENT OF SOCIOLOGY

1973

ACKNOWLEDGEMENTS

For permission to use his data, I am indebted to Dr. Everett M. Rogers, Department of Communications, Michigan State University. It is possible that the conceptual model of this study, its selective use of the data, and the type of analysis herein used, are not necessarily consonant either with the original intent of the vast three-nation study, nor its theoretical base, nor its author's own conceptual and ideological leanings. Hence the nature of the findings and of the critique in this study have to be evaluated on their own merit and in the specific context of this study. They may or may not reflect on the validity of the larger three-nation research of Rogers.

For help that went beyond the call of duty, I am grateful to Dr. Herbert Karp. For sustained interest and stimulation, I am warmly thankful to my friend and colleague Dr. Krishna Kumar.

TABLE OF CONTENTS

LIST OF TABLES

Table | Page

LIST OF FIGURES

INTRODUCTION

The Setting

This study hinges on the two central concepts of caste and modernization in India. By any yardstick modernization as a process and a goal constitutes India's single most crucial problem, for it relates directly to the viability and survial of history's largest functioning democracy. The pace, path, and progress towards modernization in India have to confront the realities of the traditional social structure which is, in great sections of the land, still predominantly characterized by the caste system.

In a less developed country the modernizing trends cannot be adequately understood only by the study of the progress towards industrialization—often and largely initiated and sustained by the elites—and of the rapid and uneven process of urbanization. Any such study has necessarily to consider the major bulk of the populace that resides in the countryside and lives off the land. The modernizing behavior of these villagers towards a successful transition from subsistence to commercialized agriculture affects the quality of the urban process, as well as the significance and success of the country's industrialization effort. In India it is this

peasant society that is primarily distinguished by the persistence of the caste system. The present study aims at relating the caste characterisitics of the Indian peasant to his modernized attitudes and behavior.

The relation of the caste system to modernization is a complex one. The concept of caste as emphasizing its closed, ascriptive system has been generally viewed as being far removed from the concept of modernization with its stress on mobility, achievement orientation, and rationality. This view neglects the importance of the modernizing potential that lies hidden in many traditional structures. When provided with a new political environment and with economic incentives, traditional systems have sometimes shown surprising resourcefulness and adaptability in exploiting the opportunities for economic, political, and social gain and mobility. In the case of the caste strucutre, this new behavior can result in progress towards modernization through routes that are complex in nature and direction. This study focuses on the complex relationship that exists between caste structure and modernization.

The Problem

The present study is designed, in its most general aspect, to investigate the relationship between the hierarchical caste structure of the Indian peasant society and the modernization process. More specifically, it seeks to identify the complex

association of caste with factors that mediate between the caste positions of peasants and their modernizing conduct. These intermediary factors can be preliminarily identified as economic and social in their first and immediate association with caste, and as access to modernizing sources in the second step association with caste.

The questions that constitute the central problem of this study are the following. Is the caste structure associated with the differential modernized patterns of peasant behavior? Assuming that there is such an association, is this association direct or routed through mediating factors like economic class, social status and power, and discriminatory access to modernizing sources and channels? In other words, what is the relative predictive strength of the following relationships: (1) caste ascription and peasant modernization, (2) caste ascription and the three intervening variables: economic class, social status and power, and access to modernizing sources, (3) the three intervening variables and peasant modernization, (4) the three intervening variables among themselves? The realtive strengths of these associations would indicate the path and complexity of the relationship that caste bears to modernization.

An implicit assumtion in this set of questions is the expectation of unidirectionality of the progression of relationships from the caste variable through the intervening factors

to modernization. That is, for this study we have ignored the reverse effects of the variables considered. Is this assumption theoretically and practically valid?

A schematized form of these relationships constituting the theoretical framework of this study is presented on page 5. This study looks for the empirical values of the relationsips which are expected to provide the basis for the theoretical argument concerning the direction and nature of the relationships in the broader structural context of the social forces in India.

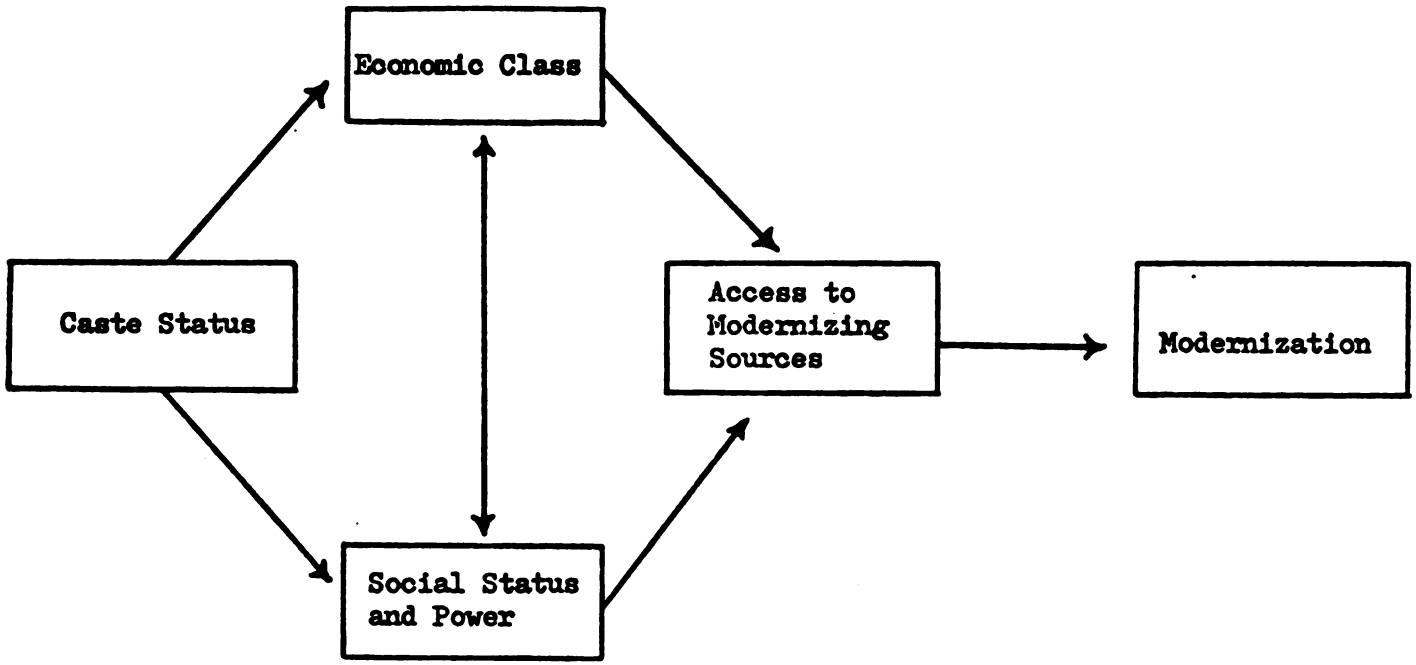

Figure 1. Caste and modernization: the pattern of relationships.

CHAPTER I

REVIEW OF LITERATURE

I. Caste

Caste as a pervasive, well-knit, and legitimized social system has been a unique, almost exclusive, historical characteristic of the Indian sub-continent. The incidence of caste in other societies bears features widely contrasting to the phenomenon of Indian society. Any reference to the caste characteristics of non-Indian socieities, historical or contemporary, would not necessarily contribute to the purpose of the present study.

Despite the basic characterisitics of caste which apply throughout India across its variegated regional differences, the understanding of the structure and operation of the caste system differs considerably according to one's analytic perspective. There have been different and distinct analytic models that have been utilized in the studies of the caste system. These models have differed according to the sources of data utilized, the levels of analysis, and the emphasis placed either on the cultural or socio-structural features of caste. These differences have served different purposes and have yielded

different kinds of results.

Caste Models

The earliest and more well known of these models is the varna model. This is a framework which views society as a system of four ideologically based, hierarchically arranged categories: Brahmin (priest), Kshatriya (warrior), Vaishya (merchant), and Shudra (menial worker). The fifth category of the Harijan, composed of the ex-Untouchables, falls beyond the caste categories but is functionally associated with them. As Srinivas points out, this model assumes that there are only these five recognizable categories throughout India and that they are clearly defined, static, and immutable (1966, p. 3).

The varna model is the societal view of the ideologically dominant Brahminical group, and therefore it constitutes the dominant view in the religious, Sanskritic scriptures which provide a legitimizing, mythological, divine origin in the hierarchized caste differences (Ghurye 1950, p. 57). The early Arabian scholars who had access to Indian Sanskritic literature stressed the varna view of Indian society. So did the orientalists during the British period. Not only was the classical Indian literature the primary object of their scholarly studies, but also their elitist, conservative social background stressed the political and social stability and order of the

caste system (Cohn 1968, p. 10). Srinivas suggests that the varna model became popular during the British period as a result of a variety of forces (1966, p. 6).

A historical transition occurred from the textually based varna model to an operationally described caste model. This view accepts realistically that there are literally hundreds of locally based castes or sub-castes in India. Jati is the local cultural unit, which is generally what is meant when one uses the word caste. Members of a jati roughly have the same traditional occupation, commensality rules, rituals, and myths, and they form a caste hierarchy with other jatis of a region.

This empirical, kin-based view of Indian society was an outgrowth of the effort of the British administrators to collect, collate, and publish accurate information about the structure and functioning of Indian society for the purposes of assessment and regular collection of revenue, the maintaining of law and order, and the running of a centralized administrative system. The official census-based view of the caste system, therefore, saw it as one of separate castes and their customs. The empirical data and their organization was influenced by the anthropological interests and theories of the Victorian period and stressed the cultural attributes of self contained caste units. All this however does not deny that some scattered, valuable anthropological research by Indian scientists has always existed (Karve 1961).

But the overwhelming thrust of the caste view during this period seems to fall within the framework here described.

A third theoretical approach to caste stress its structural rather than its cultural components. It seeks to study caste in some of its following features: authority patterns, role of the headman or caste panchayaths, property relations, mechanisms of behavior control, inter-caste relations, caste rankings, regional caste composition and distribution, cross-caste alliances, patterns of political cleavages, changes, adaptations, and mobility in time, space, and according to ecological incentives, etc.

These kinds of social anthropological analyses of caste developed through intensive field work by social scientists in the post World War II era. This view of caste was greatly aided by the extensive changes in the methods, theories, and subject matter of social anthropology, the independence of India, and greater availability of funds for extensive research (Cohn 1968, pp. 11ff).

General Caste Characteristics

Common to all these theoretical approaches to caste are certain general characterisitics. Scholars have noted these general features despite the numerical, hierarchical, and functional complexity of the system as it operates in different parts of India, such as for example, when "some Brahmin groups are regarded

as so low that even Harijans will not accept cooked food from them" (Srinivas 1966, p. 4). The following might be considered the ideal typical characteristics of the traditional caste system: (1) the horizontal stratification, (2) the vertical, hierarchical order, (3) the systemic structuring.

In the first place the caste system in its horizontal dimension is a segmentized division of self-contained, almost self-sufficient, local groups. Karve describes caste as a more or less cell-like structure which for many purposes is separated from other similar cells and lives a life partly independent of them (1961, pp. 31-32). Residential and social segregation according to caste; caste-exclusive participation in important family functions, social festivals, and religious celebrations; the existence of caste panchayaths (councils) with legislative and punitary authority over violators of caste rules—all these institutional forms have given rise to the proverbial solidarity and loyalty of caste members to the extent that they "render the development of any common social feeling impossible. In fact, it is the negation of the idea of society" (Pannikar 1955).

Just as important as the horizontal stratification is the vertical relationship among horizontal ranks. The castes are ranked in hierarchical order of ritual purity with Brahmin castes generally ranked the highest and the unclean castes the lowest. There are ritually prescribed relationships among all castes, and functions within each caste, with the Brahmin caste

traditionally being the final decision maker on ritual castes. Secondly, the ranking of castes is also traditionally associated with specific occupations, based in large part on the character of the materials handled and the functions performed in religious ceremonies—this has the effect of reinforcing the ritual hierarchy. "With the exception of a few open occupations, such as agriculture, which may be pursued by anyone irrespective of caste, a large number of crafts and occupations are caste monopolies and can ideally be practised only by specific castes" (Dube 1958, p. 27). The occupational caste monopoly approximates the concept of property rights in the West; it contributes to social security and stability.

Thirdly, in terms of economic functions, the traditional vertical relationships approximate those of the patron to client. This arrangement known as the "jajmani" system also determines the distribution of the crops among the occupational castes for services rendered to the agriculturalist in their respective fields of sepcialization. The "jajmani" system has been described as pertaining primarily to the North Indian context. However, numerous South Indian equivalents or near-equivalents of this phenomenon have always existed. Finally, in terms of dominance, the vertical relationships between castes presents a very complex situation. Not only are there complex forces involved, such as numerical preponderance, economic power, political strength, high caste rank, Western education and occupations (Srinivas 1955, p. 18; 1959, p. 15), but the changing pattern of combinations

of these components make for shifts in decisive dominance of some castes over the others.

On the systemic level the caste can be described as highly structured arrangements of social roles, in as much as they imply a clear definition and regulation of behavior affecting great areas of social life, low tolerance level of deviance, and severity of sanctions applied. To begin with, caste is an ascriptive system with membership being confined to those who are born of members and including all persons so born (Taylor 1966, p. 45). Starting from ascription by birth, caste governs most aspects of one's social personality. "Caste is a comprehensive system of life, a religion rather than a changing social order, and the rigidity with which its rules are enforced would put to shame the Great Inquisition" (Pannikar 1933, p. 9). Religious legitimation for the immutability of the system is provided in terms of Hindu theological concepts such as samsara, karma, and dharma, which are intricately bound with it. Thus the interpersonal and inter-caste relations are invariably expressed in terms of religious and ritual pollution and purity.

The notion of pollution expresses strict prescribed social distance and behavioral restrictions in the caste system. These normative limitations affect primarialy contacts involving sex, food, and ritual. Endogamy is among the most sacred of the caste rules, and the most enduring. Elaborate commensality codes prescribe what caste members can eat and what types of foods can

be given to or received from other higher or lower castes. Ritually, rules prescribe definite functions each caste can perform in religious and social ceremonies. Even residential and physical distance —as for example in untouchability—form a part of the elaborate caste code governing the lives of individuals. Generally, the higher the caste, the more susceptible it is to pollution. The severity of the system of sanctions and rewards is not only related to religious ideology, but also involves social sanctions, such as excommunication and outcasteism which are partly responsible for the origin of the outcaste untouchable category.

In trying to attain an ideal typical view of the caste system we have presented a brief and almost frozen image. But it needs to be emphasized that in practice the caste system offers quite a fluid, complex and changing picture. Thus, for example, in the case of marriage there exist cases where there are institutional arrangements for intercaste marriages as among the Nayars and Nambudiris of Malabar, the Kulin Brahmins of Bengal, and the Patidars of Gujarat. The principle of descent may differ in these marriages: matrilineal caste ranking of the child in Malabar, and patrilineal in Gujarat. Hypergamy in these instances may not affect the social rank of the married couple as in Malabar, or it may have an equalizing effect as in Gujarat where the marriage slightly increases the wife's caste rank and diminishes that of the husband. This might create a fluid situation in which different

families, lineages or localized village segments may strive to be included in a higher caste or may be expelled into a lower one (Harper 1968). This varied and fluid picture of caste can also be documented in terms of sharply or fuzzily demarcated jatis, due, sometimes, to their size (Mandelbaum 1968); isolated or extensively and multipally interrelated castes (Srinivas and Shah 1960, pp. 1376ff); recruitment into the caste by birth or marriage (Fuchs 1950, p. 18, Mandelbaum 1968); formation of new castes or assignment of marginality and non-caste affiliation to offspring of concubinage (Karve 1961, p. 16); different forms of political organizations and cleavages (Nicholas 1968).

II. Modernization

Terminological Problem

In its conceptual content and scope the term "modernization," as it is frequently used, smacks of considerable imprecision, ambiguity, and elasticity. In this it shares the nature of some other sociological concepts like "secular," "alienation," etc. In part the confusion derives from three factors: the historical change in the meaning of the term—the term "modernism" has had distinct philosphical and religious connotations in recent Western tradition; its cultural and political implications when it has been made synonymous with "Westernization;" the fact of its multidimensionality especially when these dimensions are

not exhaustively identified, correlated among themselves or shown to be always present in a definite profile in a given case. Further, the confusion also arises when modernization is contrasted with the equally ambiguous notion of traditionality, especially when this is done with an unexpressed value-implication. At times the concept has been defined in a circular manner, as for example, when Rogers defines modernization as a process of becoming nontraditional (1969, p. 14). Sometimes the definition has been of questionable utility, as when Inkeles admits that his "measures of modernity [do] not differentiate between traditional and nontraditional people as they would be ordinarily defined" (1966, p. 143). These qualities of modern man, he asserts, can be found even in the ancient Greeks, the Maya Indians or the Elizabethan Englishman. Some authors have defined the term for their purposes arbitrarily, with its boundaries not fully congruent with nor departing from those of other definitions conceptually or in scope.

Modernization: Societal and Individual

Before discussing a general framework in which to view the modernization process, we may here identify some features that have been generally associated with modernity. Modernity has been viewed as operating either on the societal or the individual level. Generally, modernization on the societal level has been

the normal concern predominantly of economists, political scientists, and sociologists with a bent towards the "structural approach." The conceptual interests of such an approach are the different institutional frameworks which serve as bloackages or provide the opportunities or incentives to development (Weiner 1966, p. 10). This approach is also associated with macroprocesses that constitute the different dimensions of modernization: industrialization, urbanization, bureaucratization, and secularization. Some of the other commonly identified features of modernity on the societal level are the following: rationalized and expanded institutions pertaining to education, mass media, political participation, market mechanisms, commercialized agriculture, rapid economic growth, science and technology, abundance of entrepreneurship, and opportunities for social mobility.

Modernization on the individual level has been the object of study of many social psychologists and anthropologists. The general assumption in this approach is that modernization of individuals is the ultimate key to the modernization of society. The specific objects of study in this approach are the motivations, attitudes, values, and beliefs of modern man as contrasted with those of non-modern man. Among the more famous concepts described as a key motive in economic development is the one McClelland (1961) suggests to be the "need to achieve," which is a desire for excellence in order to attain a sense of personal accomplishment. Lerner (1958) put forward the other well-known concept of

empathy, "the capacity to see oneself in the other fellow's situation," as a crucial variable, which, along with literacy and mass media, is chiefly instrumental in altering a traditional individual's life style. Some of the other individual characteristics generally associated with the modernization process are the following: functional literacy, cosmopoliteness, mass media exposure, innovativeness, political activism, secular orientation, self-reliance, a disposition to accept new ideas and try new methods, a readiness to express opinions, an interest in the present and future than in the past, a sense of punctuality, concern for planning, organization and efficiency, a tendency to see the world as calculable, a faith in science, and a belief in distributive justice (Weiner 1966, p. 4).

The Process of Rationalization-Individuation

If one were to search for a more general underlying framework in which theoretically to link the processes of societal and individual modernization, one would have to have a recourse to the theory of the dialectics of social structure and personality based on the polar principles of rationalization and individuation. We are arguing here that the historical trend of modernization can be fruitfully viewed as one of the central themes in this larger pattern of change in social and personality structures.

The Objective Process of Rationalization

The concept of rationalization is here understood as proposed by Max Weber (1946) who utilized it as a methodological tool to plot the dominant themes of modern social history, patterns of thought, culture, and art in the West. For Weber rationalization implied a progressive "disenchantment with the world," and an increasing utilization of rational bases for social action. The undercurrent of rationalization in Western history has tended to convert social values and relationships from the primary, communal, and traditional shapes to the larger, rational, impersonal utilitarian shapes of modern life. It has progressively tried to eliminate the nonrational, the informal, and the sacredist element from man's attitude, his organizations, and his thought processes.

In one place the process of modernization is defined by Weber as "the methodical attainment of a definitely given and practical end by means of an increasingly precise calculation of adequate means" (1946, p. 293). Thus, we may conclude, the conscious selection of means that are inappropriate for the ends one seeks is irrationality; while the unreflective and habitual selection of means that may or may not be appropriate to given ends is traditionalism (Faunce 1968, p. 32). In these terms the process of modernization appears as a progressive widening of the areas of conscious, rational behavior.

The Weberian use of the term develops the concept of functional rationality rather than that of substantial rationality. Functional rationality refers to the operation of the utilitarian principle in the adoption of the best possible means for the attainment of specified goals. This is often characterized by the elimination of traditional norms in favor of strictly scientific criteria, by the division of functions and roles, and by their specialized development. Substantial rationality, on the other hand, suggests the rational development of the total human person and the total human society in terms of the totality of their needs, rational and nonrational. It is in this framework that Bellah's (1965) analysis seems important. He suggests that the pathologies that have been associated with modernization have been the result of "an increased effectiveness in goal-attainment with no increase in the rationalization of the goal-setting process" (p. 195).

In the modernization process, a concern for substantial rationality and for rationalization of social goals inevitably invloves an expression of value-preferences. Not the least important issue in this regard is the anticipation and decision as regards the inevitable consequences of industrialization, the preservation of some features of one's tradition, culture and religion. The dilemma herein involved is well illustrated by the Gandhian ideal of self-sufficient, independent Indian village

communities that would be spared the ravages of industrialization.

Getting back to the rationalization principle, we find that its inner logic leads to a progressive segmentation of functions and roles. The rationalization of social structure gives rise to increased differentiation, an elaborate and complex division and specialization of roles, functions, and skills. Specialization or professionalization connotes the emergence of autonomous bodies of knowledge, norms and controls. Functional self-sufficiency and operational intelligibility within their own boundaries come to characterize the roles in this pluralistic situation.

The process of structural differentiation has affected most sectors of life. Thus, religion has been demonopolized as economics, science, art, politics and other professions have been progressively divorced from religion's overarching normative control, as they developed their own self-sufficient, self-governing norms. So too has the family lost its economic and socialization functions to specialized agencies. The state has developed away from theocracy to secularity, the legal educational, service, and other systems have subdivided and given rise to autonomous professions. Labor has been subdivided, skills and professions have multiplied.

In this context rationalization has inevitably led to the need of scientific management of social relationships, which again is dealt with by Weber under his theory of bureaucracy. A bureaucratic system which stresses external controls, functional

work allotments, and a hierarchized authority structure, is itself a functional response of society towards a new rationalized integration of man in the face of loosening traditional controls. A highly differentiated, complex, fluid society calls for istitutionalized, formalized means for accommodating conflicts and opposing interests. Viewed in this light, this is a higher and maturer level of social integration, characteristic of more individuated persons. For, this integration is based on a web of formal rules, not on unreflective traditional controls, on free contractual relationships rather than on sacral, communal ties.

Finally, the ultimate expression of the process of rationalization is found in highly modernized societies where there occurs an institutionalization of change. These societies develop mechanisms that generate and incorporate change in their social systems. Investments are made for researching change itself, for investigating new modes of life, new means, new goals, new theories. It affects the very attitude of man who takes all generalizations and theories as tentative and subject to change in the face of new facts and evidence.

The Subjective Process of Individuation

The growth of an objective pluralistic situation in modernized societies which was spawned by the rigorous application

of rationality, corresponds to the emergence of a subjective personality structure characterized by Eric Fromm as "individuation," which is a gradual emergence of "man's awareness and conception of himself as an independent and separate being" (1967, p. 37). This individuality implies man's new "freedom from" external controls from his primary ties to nature and society. It implies, in addition, a new "freedom to" exercise inner controls, to make individual choices in one's social relationships.

Individuation as a historical process is analogous to the psychological, biographic process of a normal human being in its growth from childhood into adulthood. In the earlier period of social history, man was tied to his world and to his society with primary, organic ties which gave him a certain corporate identity and security. The stronger these ties are that "connect the child with its mother, the member of a primitive community with its clan and nature, or the medieval man with his church and his social caste," the greater is the lack of freedom and individuality (Fromm 1967, p. 40).

The weakening of these ties that hold man integrally linked to his economic, political, social, and religious environment, is a necessary condition for him to grow into an awareness of the possibilities and responsibilities of individual freedom and action. The closed, secure, and highly structured world with its limited, self-contained meanings, well articulated roles, and definite given means to attain fixed aims, now collapses

when its organic bonds are severed. The emerging individual thus faces the possibility of personal choice in a differentiated world full of complex functions, norms, and roles.

Rationality as a force is increasingly evidenced in the objective social processes of life, while individuation as a subjective evolution is a correlative resultant. Human consciousness reflects the character of its social base as well as affects it. Hence the thematic changes in the objective social processes both influence and are conditioned by a correlated thematic change in the subjective consciousness of man.

The history of Western modernization is illuminated when viewed in the perspective of this rationalization-individuation model. The application of rationality to social action set in motion a process of change that has increasingly differentiated and subdivided social processes to the point that change itself has been institutionalized in modern societies. Correspondingly man has experienced a liberation of consciousness. Luther and Calvin symbolized and legitimized the breaking away of the "Reformation Man" from the traditional, religious, economic, and political authority of the Church. Protestantism legitimized man's individualistic relations with God. Capitalism with its new values and institutions of capital, market and competition promoted man's individualistic, instrumental, functional approach to the world and his fellowmen. In the complex, pluralistic world where an overarching normative order has geiven way to an

endless variety of sectors, roles, functions, and values, modern man finds that he is now less subject to traditional, emotional, primary controls exercised by the world and his community, and that he has now to exercise inner controls of responsibility and judgement in the face of a situation which has maximized his options in life. In the absence of traditional and emotional controls which served well the function of social integration, society now develops rational, contractual, bureaucratic norms and procedures with which the modern, individuated man is asked to participate consciously and freely.

In the light of this theoretical model the concerns of the authors emphasizing the societal or individual aspects of modernization can be seen in perspective. The approach of the former stresses the infrastructural preconditions and the institutional blockages or opportunities that affect the modernization process. The latter, on the other hand, concentrates on the values and attitudes of man that promote or hinder modernization. Our emphasis here, however, has been the historical concomitancy and reciprocity of the social and individualistic evolutionary change. At this point we cannot engage in a discussion as regards which of these polar principles, the social structural or the individual psychological, have the primacy either of time and/or of causality over the other.

III. Modernization and Caste

In the relationship of caste to modernization, two aspects can be distinguished, namely, caste viewed as a dependent variable or an independent variable. Though the latter question is the concern of this study, it is useful as a background discussion briefly to suggest how caste, although assumed to be a rigid, ascriptive system, has in fact proved to be flexible and adatative under the varying ecological, modernizing demands in historical and contemporary India.

Caste as a changing phenomenon has to be viewed in the context of social mobility in the Indian system. Caste and social mobility in the contemporary, post-independence situation substantially differ from the reality of the earlier times.

Caste Mobility: Earlier Period

Srinivas (1968) distinguishes a medieval period and the British period which ushered in the modern period. In the earlier periods mobility in the caste system had different characteristics and ecological bases. In the pre-British era the unit of mobility was generally the family and, through the influence of the family, also the caste group. This mobility of the individual families ahead of the caste group is termed by Srinivas as mobility through the process of "fission" (1968, p. 191). "A necessary concomitant, if not precondition, of such graduation was Sanskritization, that

is, the acceptance of the rites, beliefs, ideas, and values of the great tradition of Hinduism as embodied in the sacred books" (p. 190). Srinivas provides references to several studies that document this kind of a familial mobility.

In the medieval period the sources of this mobility lay in the fluid political system and the open agrarian system. In the absence of a strong centralized adminstration, leaders of local dominant castes, ambitious tax collectors and officials could take advantage of periods of confusion to found their own chiefdoms. The king himself sometimes became a source of mobility for individuals or groups, since he had the responsibility to settle all caste disputes and the power to raise or lower the ranks of castes as reward or punishment. The second source of caste mobility was the availability of marginally settled lands suited for cultivation where groups could settle and emerge as new regionally dominant caste groups. In such a situation there was a premium on human labor, initiative, and skill which often involved spatial mobility

Caste Mobility: Later Period

In modern times both the features of caste mobility and its sources were altered. The advent of the British brought in a centralized political power as well as some Western conditions such as the following: land survey, settlement, and tenurial systems; new economic and educational opportunities; concepts

of legal equality, rationalism, and some forms of Western humanitarianism. These factors closed the traditional channels of mobility and opened new sources and systems of prestige and power. With the coming of independence several new avenues were opened: a representative democracy which places premium on vote banks; the constitutional abolition of caste discrimination; the elitist, reformist campaign against casteism; the demands of the growing urban process and the factory system; the effects of land reform, distribution of resources, and availability of credit systems.

Corporate Mobility

In the setting of a new political, social, and economic context, new needs and new opportunities have resulted in changes in the caste system which have been varied. One of the features of this new change is a different mode of caste mobility. This process Srinivas labels as mobility by "fusion" as contrasted with the earlier process of "fission" (1968, p. 199). It is a process which contributes to the weakening of the pollution ideas as well as is resulted by such a weakening. It is no more a familial mobility as of old but a corporate mobility in as much as the corporateness is functional for obtaining political power and using it for the benefit of caste fellows. Accompanying this upward mobility is the attempt to maintain the position

in the caste system and to preserve the system itself through the mechanism of Sanskritization or Westernization—which latter designates a replacement of Sanskritic symbols, rites, etc., by Western ones, and at the same time, a replacement of a religious caste hierarchy by a secular one (Srinivas 1962, p. 51). The conceptual and methodological criticism against the concepts of Sanskritization and Westernization does not directly bear on our present argument, hence it is not reviewed here.

New Caste Consciousness

A second feature of the change in the functioning of the caste in modern times is the emerging new consciousness of the political strength of caste groups which tends to reinforce the caste lines. Assessing the new role of castes the Rudolphs (1960) maintain that by creating conditions in which a caste's significance and power are beginning to depend on its numbers rather than its ritual and social status, and by encouraging egalitarian aspirations among its members, the caste association is exerting a liberating influence. This new trend stresses less the negative restrictions on social behavior of caste members as it did in the past, but rather encourages positively the members to come together and take collective action to preserve their identity and to seek success. Antibrahminism, especially in South India, has been one, and often successful, aspect of such a trend.

This integrative caste activity finds expression in such diverse phenomena as caste journals operated for the benefit of caste members (Harrison 1960, pp. 103ff), trade unions whose membership often follows caste lines (murphy 1955, p. 76), caste cooperatives, youth centers and clubs serving exclusively their own caste (Barnabas 1958). Above all it is manifested in the new functioning of the caste sabhas or associations to which the Rudolphs (1960) refer. Initially these sabhas aimed at reforming caste customs in a socially upward direction and at welfare activities and institutions for caste fellows. With the coming of a new political climate they have tended to become powerful political and economic pressure groups and lobbies (Weiner 1963).

Several forces in addition to those above can be identified which contribute to caste solidarity. In the first place the legal "discriminatory protection" provided for the "backward" castes and classes has encouraged their claim to caste identity to obtain preference as a matter of right as regards seats in educational institutions, scholarships, and jobs in the adminstration (Galanter 1961, 1963; Lynch 1968). Secondly, the political reality at the local levels reflects caste lines and intersts such that caste becomes a potent vote-catching device which is exploited as such by politicians who consequently reinforce caste line behavior (Barnabas 1965, pp. 59ff). Thirdly, caste as a system of locally bound subgroups has received reinforcement from the linguistic, political, and adminstrative divisions which follow the regional

lines corresponding to caste distinctions. In the absence of crosscutting loyalties or overlapping interest groups, the caste groupings emerge as convenient vehicles for members to serve their interests and self expression. Fourthly, the adaptative potential of caste and some of its features do possess latent forces that might be proving helpful in the face of modernization opportunities. Singer's (1968) study of the Indian joint family and modern industry suggests such a modernity potential of tradition. He concludes that "it is not at all true that the joint family system is structurally and functionally incompatible with these features of modern industry, and therefore either is a major obstacle to the development of industry or is inevitably destroyed by the progress of industry." His evidence "suggests that the traditional joint family system and many practices associated with it offer some distinct advantages for organizing an industrial enterprise" (p. 445). Similar conclusions have been suggested above concerning caste associations and modern political behavior. Similar conclusions will be suggested below concerning religious features of caste and modernized behavior.

Adaptative Processes

A third feature of recent change in the caste system may be termed as the adaptative processes. Though Indian religion, associated with caste, has been assumed to be a bulwark of traditionalism and fatalism incompatible with modernity (Weber 1964,

p. 270), modern scholarship has evidenced that India's "basic religious and cultural ways are by no means static, and they are by no means incompatible with or obstacles to modernization" (Singer 1966, p. 63). Some modernization of religious beliefs in India has not been achieved through secularized processes but by adaptation of traditional forms which coexist with secular ideologies of socialism, communism, and rationalism.

One of these adaptations has been the reinterpretation of the ancient religion so well exemplified by the words and deeds of Gandhi and several other social reformers. A second process has been what has been referred to as Sanskritization. One variant of this has been the process of conversion to Christianity or Buddhism on the part of the low castes. A third process is that of compartmentalization of the domestic and social sphere where traditional and religious norms continue to be operative, and of the industrial sphere where modern and secular codes are operative. A variant of this mode is the role inconsistency of some low castes who claim a backward caste status for official aid-receiving purposes, and claim a high caste status in the social sphere. A fourth process is that of vicarious ritualization whereby the conflicts that emerge from the coexistence of traditional and modern life styles are resolved by contraction of ritual time, by symbolic observance, and by delegation of ritual responsibility to women or professional priests.

Caste Dissolution

A fourth and final feature of recent change in the caste system is the genuine dissolution of the caste structure in some segments of the population and country. The fading lines of caste behavior are principally seen in urban rather than in rural sectors, among the elitist, better educated sections of the people. The dissolution of the caste among these groups is observable in the slackening of the rules of ritual purity, endogamy, and in the incidence of economic and political alliances that cross caste boundaries. The disappearance of the traditional caste forms in some sections, however, does not imply the disappearance of loyalties—religious, communal, regional, linguistic, and even caste. Such loyalties have shown their persistence even in the most modern of settings and societies. These particularist loyalties can be expressed towards one's own caste group, even when the traditional structure, forms, and functions of the caste system itself are dissolving or changing beyond the traditional definitions.

IV. Caste and Modernization

The primary objective of this study is the investigation of caste as an independent variable as it affects the modernization process. It is one of the major assumptions of this study that caste affiliation affects modernization not directly but indirectly

by way of economic class, social status and power, and preferential access to modernizing sources. The following discussion therefore will review the pertinent literature concerning caste, economic class, and modernization; caste, social status, and modernization; and caste, modernizing sources, and modernization.

A. Caste, Economic Class, and Modernization

In rural India three economic groups can be distinguished: peasants with large or small land holdings, agricultural laborers who derive most of their income from work for others although they may have small nonfunctional land holdings, and nonagricultural groups such as artisans and those employed in industry or services. The present study is concerned exclusively with the first of these categories.

Land and Caste Dominance

In rural areas where caste persistence is the strongest, land remains the chief resource in terms of economic power and social dominance. Thus the castes that have a greater proportion of the land emerge as the dominant castes. The concept of dominance suggests that the dominant caste has not only an easier access to political, economic, and social benefits, but it is also affected beneficially in its relations with all other castes, including those ritually higher (Srinivas 1966, p. 13).

Generally, in the early independence days the pattern of land ownership in rural India was such that the bulk of the arable land was concentrated in the hands of a relatively small number of big owners (Rosen 1966, p. 32). Despite wide-spread land reform and the curtailment of the power of the zamindars, individuals and groups still "hold amounts of land sufficient to guarantee their continued hegemony over individual villages" (Nicholas 1968, p. 269). This disparity common to many countries has a unique feature in India in as much as the owners, tenants, landless laborers, artisans, and those who provide services form permanent and hereditary caste groups. Land owners generally come from the higher castes while landless laborers belong largely to lower caste groups (Srinivas 1966, p. 12). Landholdings being concentrated among the higher castes has been a fact that has been diversely documented by, for example, Healey (1958, p. 32), Nicholas (1968, p. 258), and Marriot (1968, p. 135).

Economic Mobility and Congruent Caste Upgrading

Concentration of economic power along caste lines is not a surprising historical process. In the earlier discussion it was pointed out that historically there have been avenues open to most caste groups to move upwards towards dominance within a region. Rosen points out that "within the traditional system there was a possibility for all except the unclean castes to

achieve either dominance or some of the major attributes of dominance with respect to economic, social, or political power" (1966, p. 196). It is important to note that the traditional ascent towards dominance by a caste group has been accompanied by the process of Sanskritization and the claim to higher ritual purity. Thus whatever group emerged as an economically dominant caste in a locality, ended up by upgrading its caste ranking. The case of a low caste group, the Goatherds, who acquired land and successfully bettered their rank on the caste hierarchy has been documented by Marriot (1968, p. 164ff). The general relation of economic mobility to the Sanskritization process has been argued for by Srinivas (1966, 1968).

Another issue as regards the congruence of the economic power and caste superiority is the resultant conflict between the upstart caste groups and the traditionally superior castes like the Brahmins. Such economic, political, and social conflicts have been documented (Lynch 1968). The lower caste successfully emerging as a higher one often possesses alternatives successfully to parry the attacks of the threatened higher castes. The high castes have sometimes to fall back upon other devices to preserve their social status. Westernization as discussed by Srinivas has been one of these defence mechanisms of the higher castes (Gould 1961, p. 947). Urban migration and entering into modern professions, to which they are educationally and culturally better suited, have similarly been functional adjustments by Brahmins and other higher

castes. Legislation against absentee landlordism has also encouraged these traditional high castes in the direction of these modernized avenues and symbols of prestige. All this in turn has helped the economically emergent castes to claim the local higher caste status and has reinforced the congruence of the economic strength with caste superiority.

Economic Class and Modernization

The relation between economic class and modernization among peasants is evident both in terms of concrete studies and in theoretical terms. Rogers's (1969) data for peasants in Columbia clearly suggest the relation between economic class and innovative behavior and attitudes (pp. 304ff). In India Dube's survey of community development in two villages in Uttar Pradesh revealed 70% of the modernizing benefits going to elite groups and to more affluent and influential agriculturalists (1958, p. 82). A U.N. report of several villages in Uttar Pradesh found that the amount of net capital investment was directly related to differences in income and size of holdings (1961, pp. 29-44). Beals found in Godalpur, South India, that "those who make adequate profits and have acquired surplus capital are the large landholders...." (1962, p. 80). The Government of India Study Team on Community Projects and the National Extension Service reported that there is a direct relationship between the size of landholding for a group and the

benefit derived from the innovative programs (Rosen 1966, p. 168). Thus, concerning the various agricultural programs for development for a decade, Rosen concludes that "it is likely that the larger peasants were better able to take advantage of the new facilities to increase their output and generally gained more than the smaller ones" (1966, p. 169).

The explanations of the positive relationship between size of land holdholdings and innovativeness can be several. In the first place a farmer with a small amount of land may seek off-farm employment or work as agricultural laborer to supplement his family income. This may force him to neglect his own land (Danda 1968, p. 165). Secondly, Galbraith (1965) suggests the vicious circularity of the poverty of the subsistence farmer. He wisely does not attempt to risk adopting new inputs in place of the time-proven, though low-yielding, techiniques. Thirdly, not only are the larger farmers more credit-worthy, but they use a larger proportion of borrowings for capital investment, whereas the smaller farmer uses much of his debt for his greater consumption needs (Reserve Bank of India 1961).

B. Caste, Social Status and Power, and Modernization

The study of social status and power in India is becoming increasingly important as Indian democracy is outgrowing its phase of elite political culture, which grew out of the nationalist

struggle and was associated with cities and towns, and as the country is entering into a phase of mass political culture which is increasingly associated with local leadership in villages which constitute close to 75% of the country's population (Rosen 1966, p. 72). The continued exercise of universal sufferage, proportional backward class representation in local governments, the transition in villages from subsistence to cash economy, local factionalism resulting in political coalitions, and the general increase in political consciousness have all affected the traditional rural politics and power patterns in the direction of representative democracy. Yet caste ranking still seems to be closely associated with the concentration of village level social status and social power.

Formal and Informal Social Power

Social power positions in villages may be either formal or informal. The formal institutions of power are either traditional or elective. The traditional panchayaths have varying degrees of formality and overlapping functions which involve inter- or intra-caste relations, economic matters, and village level disputes. For each of these there might even be a separate formal or informal panchayath (Rosen 1966, p. 19). The elective institution is the government village panchayath with wide legislative and adminstrative rights and duties. In addition, the formal power positions

would also include the headships of any governmental, caste or business agencies.

Orenstein suggests a classification for informal leadership for a Bombay village which may hold good for many others (1959, p. 422ff). Informal leadership can be either sanctioned—which in turn may be passive or active—or unsanctioned. Sanctioned passive leadership, made up of "men of strict morality and discretion," is drawn upon for advice, mediation or imitation (p. 422). Sanctioned active leadership is made up of men, often involved in fight for status, who command services of others, have power over the fortunes of others, can organize village activities. Unsanctioned leadership, not generally legitimized, is made up of men who base their power on force and use it to manipulate culture and people for personal ends.

Caste and Social Status and Power

There is wide documentation that both formal and informal social power positions tend to be occupied by high caste members. Oscar Lewis (1958), Majumdar (1958), Dhillon (1955), Hutton (1961), and Epstein (1962) have observed that socially influential actors usually stem from higher caste and better economic class. The informal positions of influence which are often socially more significant are even more closely high caste related as documented by Harper (1959) in a Karnataka village, by Bachenheimer (1959)

in an Andhra village, by McCormack (1959) and Beals (1959) in two different Mysore villages, and by Orenstein (1959) in a Bombay village.

Regarding the socially non-dominant castes, Bachenheimer suggests for his case study that "lower caste leaders are clearly allowed to exist only at the pleasure of the upper castes" (1959, p. 452). Lower caste leaders are essential to provide a channel of communication between village leaders and lower castes. But they are careful to remain in this limited role.

Social Status and Power and Modernization

Most of the literature suggests the closeness of the relation not only between caste and social influence but also the relation of these two factors with high economic rank. These three factors serve to reinforce one another and to provide easier opportunities for the acquisition of modernized attitutdes and innovative behavior. The relation between economic class and modernization was referred to earlier. The relation between social power and modernization among Indian peasants has been documented by Sen (1969). The explanation seems obvious. Since most formal positions of influence carry with them wide ranging rights and duties both for village welfare and the implementation of modernizing projects, their incumbents are in a favored position to have a better knowledge of innovations and an opportunity to exploit them.

Most of the informal leadership too is not only better informed about village matters but has the capacity to manipulate people and things for their benefit.

C. Caste, Modernizing Sources, and Modernization

Planned Modernization

A traditional village society is a relatively closed system. Modernization on the other hand calls for some extra-systemic linkages conducive to flexibility, adapatability, and acceptance of new ideas. Hence not even that section of the peasantry which is economically and socially dominant, can by itself hope to achieve great modernization success. The historic role of the urban sector in inducing modernization of agriculture has been widely acknowledged (Keyfitz 1965).

In contemporary India the role of inducing peasant modernization develoves greatly on the process of planned modernization in which the peasantry is brought into close touch with factors potentially productive in innovative behavior. These factors are here referred to as modernizing channels or sources. These forces may be identified as the peasantry's contact with the government's planned change agency, its exposure to mass media, its urban contact, its political knowledgeability and knowledge of innovations, and its level of literacy.

Modernizing Agencies

The chief change agency in the Indian villages is the Community Development Organization under the jurisdiction of the central government. It has a concentric organizational framework with a project area of 300 villages each, several development blocks of about 100 villages within it, and about twenty groups of villages within a block. Its immediate responsibility, with overlapping functions, devoloves on the District Collector heading a cadre of technical officers, the Block Development Officer, and the Village Level Worker who is in direct contact with the villagers. The organization's interlocking formal relations with the village panchayath differ from state to state.

Despite the problem of the sheer variety of tasks the Village Level Worker is assigned, his lack of expertise in immediate technical agricultural competence, the marginality of roles, his cultural distance from his clients, and the possibility of conflicts in social and political matters generated by the pursuance of the program, he still possesses great potency as a change-agent in inducing modernization. His importance may be attributed to the relatively general lack of other alternative channels carrying new ideas into the villages (Rogers 1970, p. 6-2). He is the carrier of information of new techniques, motivator, and technical helper who aims at opening the village system, which is at a stable equilibrium, to a process of change.

For the data of Stone (1952) and Petrini (1966, 1967) Rogers points to the non-linear three-stage relationship of the change-agent activity to the rate of adoption of innovations (1970, p. 6-5). At stage I, the very early stage of an innovation's adoption, change-agent activity has little effect on the rate of adoption; innovators at this stage are poor in diffusing the innovation. At stage II increased inputs of change-agent activity result in direct gains in the adoption rates (5-20%): innovators here possess a high degree of opinion leadership and influence others' adoption. At stage III, with about 15-20% adoption, further change-agent activity does not have direct effects on the rate of adoptions; the further impetus from the opinion leaders becomes more important. Thus the difference rests on the influence-potential of the particular clients at each stage.

Literacy

On a comparative perspective, India as a nation state is among the most favorably placed of the less developed countries in terms of its educational and itellectual traditions (Shils 1961). Galbraith (1965) points to the fact that in terms of the availability of a base of professional skills, India is in a position of self-sustaining modernizing growth if capital resources are made available to her. But this optimistic picture draws its evidence from the elite urban culture rather than the overwhelming rural

masses. In 1950-51 the primary school enrollment for the age group of 6-11 was 42.6%, while in 1965-66 the figure was 80%. This indicates that education is a high priority item in the planned development in India.

The relation education bears to modernization is summarized by Rogers (1969, pp. 70ff). Literacy provides reading skill and a consequent exposure to print mass media and the new ideas that the meida carries. Lacking the initial mental skills for rapid comprehension the literate peasant is able to control the rate of message-communication in the print media, thus aiding a slower but thorough absorption. Literacy further aids the storing and retrieving of technical and innovative information for delayed use. Literacy also promotes growth of mental abilities helpful for modernization: manipulation of symbols, abstraction, empathizing with strange roles, and restructuring reality.

There are studies which associate the literacy rate of a nation and its economic development (Lipset 1960, Simpson 1964, Caplow and Finisterbusch 1964) as well as those which relate individual literacy to innovativeness (Lerner 1958, 1964, Deutschmann 1963, Wright 1967, Herzog 1967, Schuman 1967). Both in Columbia and India Rogers found the link between literacy and various modernization variables (1969, pp. 80-92).

Mass Media

Information from the larger society conveyed through different communication channels have an influence on agricultural innovation. The change-agent is a direct communicator. Another channel is the informal, interpersonal communication between friends, relatives, and other cultivators. This is in contrast to the mass media. Roy points to this contrast in terms of the effect on the knowledge about innovation in Indian villages (1968, p. 56). There is stronger association between higher knowledge and use of the mass media as sources of information, as contrasted with interpersonal channels. It should be pointed out that in India the mass media, i.e, the newspapers, radio, and movies, do carry information about agricultural innovations.

The mass media seem to be able to create a climate for modernization among peasants which may indirectly lead to innovativeness (McNelly 1966). Though Rogers and Meynen (1965) and Deutschmann and Fals Borda (1962) in Columbia, and Rahim (1961) in Pakistan indicate that a mass medium is seldom named as a specific source in the diffusion of an innovation, data in Columbia (Rogers 1969) and India (Rogers 1970) show that earlier adopters have greater exposure to mass media communication channels than later adopters. But earlier adopters are no different from later adopters in mass media credibility. The potential of the mass media in planned development seems to be logically significant.

Knowledge of Innovations

An obvious source of modernization is the knowledge about the available new ideas and innovations. Such knowledgeability is a function of the peasants' contact with the foregoing modernizing sources. Not all knowledge leads to trial and adoption. But these latter presume a prior knowledge of the improved methods.

Both logically and empirically these modernizing sources and channels—change agent contact, literacy, mass media exposure, urban contact, and knowledge of innovations—are therefore shown to be both interlinked and reltaed to modernization behavior.

That these modernizing sources are directly related to other variables—caste, economic class, social status and power—is also obvious. This association is, in the first place, theoretical; as has been pointed out, the socio-economic factors are interrelated and causally connected with modernization. This connection is unintelligible without its relation to the modernizing sources on the basis of which modernization occurs. Secondly, the relation of caste and the socio-economic variables is more than implied in most of the references to empirical research that are adduced in the review of literature above.

CHAPTER II

DATA

Sources

This study draws on data collected for a project which was sponsored by the U.S. Agency for International Development, was conducted from 1966 through 1968 in Brazil, Nigeria, and India, and was directed by Everrett M. Rogers of the Department of Communication, Michigan State University. The project was phased into three parts. In India, in the first phase, 108 villages in three States were selected for a village level study. In the second phase, the focus was on the individual farmer; eight villages from the original 108 were selected from which a sample of 680 peasants were studied. In the third phase, six villages of the second phase were selected to study the effects of controlled communication experiments.

The present study utilizes the data of the second phase pertaining to six villages out of eight where the caste system was operative; the other two were predominantly Muslim villages.

Sample

The selection of the sample of villages in three States, Andhra, Maharashtra, and West Bengal, was more purposive than statistical. The criteria of selection were the following: the provision of variability in geography, in types of developmental administration (Roy 1968, p. 8), in the success or failure of the agricultural development as encountered in the first phase (Rogers 1970, p. 2-40).

The criteria for selecting the peasants within the six villages were two. In the first place only and all farmers operating one hectacre (2.5 acres) and more of land were interviewed, thus excluding the landless laborers who do not make agricultural decisions, and those who cultivated less than a hectacre of land. These latter find many of the innovations not practical for them. Besides, the sample interviewed affects about 95% of the cultivated land in each village and utilizes 95-98% of the available innovations (Roy 1968, pp. 9-10).

The second criterion was of age. Only those heads of farm households who were 50 years of age or younger were studied. This excluded older members of farm households who sometimes claimed to make farming decisions while their sons were often the real farm operators. Interviews were conducted with all farm operators meeting the farm size and age criteria for a total of 559 interviews.

The limitation of this data is that it pertains not to a

statistically random sampled group, but to a judgmental one meeting the range of variation of meaningful dimensions of modernization. This was necessary given the enormous difficulties and expenses of the alternate approach. Several analyses have shown consistent prediction by various factors within community variance. The measures were devised to encompass the entire range of farmers.

Questionnaire and Data Gathering

The interview schedule construction occurred in four stages: (1) unstructured observation of the social system, (2) discussion and interviews with key informants, (3) pilot study of a small representative sample with open-ended questions to determine the usefulness and pertinence of questions and the range of responses, (4) closed-ended interview schedule containing pertinent questions with answer categories. The questionnaire content was kept within the general outline of the three nation project and was theoretically based on past studies.

The content, operationalization, wording, and format were revised for India and they relied heavily on pertinent previous studies (Sen 1966, Roy 1967). The questionnaires were translated into the three State languages, Telugu, Marathi, and Bengali, and pretested for format and questions in two stages, and revised.

The data was gathered through personal interviews obtained by the "invasion" rather than the "immersion" method by teams of

four experienced, trained interviewers led by a supervisor. The data gatherers were all hired in India and in all cases had regional familiarity as well as bachelor's or master's degrees in social science. These features of the interviewers may have themselves affected the nature of the data collected. Firstly, the data gatherers did not possess an anthropological familiarity with the social context of their respondents. Secondly, their educational and urban culture might have set them apart in terms of intellectual bias and empathetic relationships. Thirdly, they may not have been able to detect or ascertain the truthfulness of the responses received when the situational demands would make it desirable for the respondents to conceal or distort the truth sort for in the questions.

The team also coded the data, the code categories having been established on the basis of the sub-sample. The coding was checked for random and systematic error.

CHAPTER III

HYPOTHESES AND OPERATIONALIZATION

The central problem of this study has been delineated in the Introduction. In essence, it bears on the indirect and complex relationship that caste has to modernization. The following hypotheses have to be understood in this general setting of the problem.

I. Hypotheses

Three sets of hypotheses are here formulated, first in their general assertions, and then in the form of specific chain hypotheses.

General Statements

A. The relationship that the caste system in Indian peasant society has to modernization is in itself an insignificant one. What significance it has derives from the close association that caste bears to other factors such as the following: (1) economic class (EC), (2) social status and power (SSP), and access to modernizing sources (MS).

B. These socio-economic factors in Indian society are not uniformly related among themselves or with modernization. Rather, a higher rank on EC and SSP tends to provide better access to MS and thus preferentially to promote modernization.

C. Caste is related to modernization through an indirect, three-step progression, namely, through EC and SSP in the first step, both of which lead to MS in the second step, which, in the third step, leads to actual modernization.

Specific Chain Hypotheses

A. 1. Caste is associated with modernization.

I.e., higher the caste ranking of the peasant, the greater is his modernization.

2. But Caste is associated with threee socio-economic factors, EC, SSP, and MS, more closely than it is with modernization. I.e., Caste ranking predicts EC, SSP, and MS better than it predicts modernization.

3. And the three socio-economic factors are associated with modernization more closely than caste is associated with modernization.

I.e., EC, SSP, and MS individually predict modernization better than caste predicts modernization.

4. Thus caste is insignificantly associated with modernization without its intervening relationship with the three socio-economic factors.

   I.e., when controlled for EC, SSP, and MS, caste is not or very little associated with modernization.

B. 1. As regards the three socio-economic factors and modernization, EC and SSP are individually associated with modernization, but not as closely as MS is associated with modernization.

   I.e., MS predicts modernization better than either EC or SSP predicts modernization.

C. 1. Caste is associated with EC and SSP more closely than it is with MS.

   I.e., Caste predicts EC and SSP individually better than it predicts MS.

The relationships suggested in these hypotheses are referred to in general in the literature reviewed in Chapter I. A more specific and analytic explicitation will be attempted while presenting the results of the computer manipulation of the data.

II. Operationalization

A. Caste

In the light of the earlier discussion we can define caste as

> ...a hereditary endogamous, usually localized group, having traditional association with an occupation, and a particular position in the local hierarchy of castes. Relations between castes are governed, among other things, by the concept of pollution-purity. Generally, maximum commensality occurs within the caste (Srinivas 1962, p. 3).

In the determination of caste ranking the notion of ritual purity associated with the giving and acceptance of food plays a central role (Epstein 1962, p. 156). Marriot set out to construct "an index which could accurately predict the caste ranks of a locality while revealing the values by which highness and lowness of caste are locally judged" (1968, p. 137). Inter-caste transaction, he discovered, was the master conception related to village thinking about caste rank. His many-layered matrix constituting the transactional model posits that food transaction is essential to rank distinctions. In food three honorific distinctions are made: the raw uncooked food is highest, then comes the superior category of cooked food, next to which is the inferior cooked food, and lastly food garbage and feces which come at the end of this series of food categories. The cardinal assumption in food transaction is: givers are higher,

receivers are lower.

For the data of the present study and the pretesting of the questionnaire, a village by village complete caste list was made and represented in a series of pictures containing some clue to the ritual caste status of the persons in the picture. The clues included food transactions. Key informants arranged the pictures in a hierarchical order on the criterion as to who accepted what cooked food or drinking water from whom. These rankings yielded four broad categories of ritual caste status for each of the six villages: low caste, lower middle caste, upper middle caste, and high caste.

B. Modernization

The focus here is on modernization not on the societal level but on the individual level. Individual modernization is the process of substitution of an unexamined and habitual basis for a conscious and rational basis for one's attitudes and conduct as regards specified categories. By the modernization variable in this study we understand the modernized peasant in the context of agricultural, health and family planning development.

Several attitudes and modes of behavior associated with the modernized individual have been enumerated in Chapter I. For our study the following modernized attittudes and behavior of the peasant are taken into consideration: modernized attitudes

—empathy, achievement motivation, and educational aspiration; modernized behavior—innovative decisions in terms of accepting available agricultural, health, and family planning innovations.

Modernized Attitudes—Three Aspects

The three aspects of modernized attitudes here chosen touch upon the important psychological aspects of the modernized peasant. Empathy and achievement motivation are widely considered to be crucial to individual modernization. Educational aspiration for children is specifically essential in the village context of the Indian peasant. Other modernization attitudes like self-reliance, credit-orientation, deferred gratification, secular-orientation, are not taken into consideration here. Their relative insignificance for our population will be discussed later. Another important issue to be considered elsewhere is why these attitudes or psychological aspects of modernization are considered to be the end results of an already modernized peasant, rather than the prerequisite characteristics leading one to modernization as is generally argued for by Lerner and McClelland.

Empathy

Rogers (1969) discusses the origin, characteristics, and the relation to modernization of the concept of empathy.

"Empathy is defined as the ability of an individual to project oneself into the role of another person" (p. 197). It leads towards role-taking skills in the prediction of the behavior of those with whom one interacts. From Lerner (1958) on, it has been held important for peasant modernization because modernization implies a trend towards complex social environments. The more empathic individual has an open, flexible, adaptative approach to new situations.

Empathy was found to be an important variable in modernization by Lerner (1966) in the Middle East, Eister (1962) in Pakistan, Frey (1964) in Turkey, Rao (1963) in India, Whiting (1967) in Brazil, and Rogers (1969) in Columbia.

Empathy was operationalized in terms of questions bearing on four role-taking situations, namely, those involving the Block Development Officer responsible for developmental programs, the panchayath president, the District Collector, and a day laborer. The index was constructed by giving one point to every positive answer.

Achievement Motivation

Achievement motivation is "the desire to do well, not so much for the sake of social recognition or prestige, but to attain an inner feeling of accomplishment" (McClelland 1966, p. 76). Its theoretical link to economic development has been

variously suggested by Weber (1930), Rostow (1961), Hagen (1962), and McClelland (1961). It has been measured for whole cultures by the content analysis of children's stories (McClelland 1961) and for individuals by the projective technique (McClelland 1961), sentence completion (Morrison 1964), and story telling (Pareek and Chatoopadhyay 1965).

Rogers (1969) found for Columbian peasants that achievement motivation is related to mass media exposure, political knowledge-ability, cosmopoliteness, education, empathy, and educational and vocational aspirations (pp. 256-266).

The operationalization of achievement motivation was the response—agree or disagree—to the following statements: (1) work should come first, even if one cannot get proper rest, (2) one should succeed in his occupation, even if one has been neglectful of his family, (3) one should have determination and driving ambition, even if these qualities make him unpopular.

Educational Aspiration

Educational aspirations are the levels of formal education desired by parents for their children (Rogers 1969, p. 54). Traditional societies are presumed to have low educational aspirations.

In the Indian peasant context educational aspirations have great modernization implications. They imply acceptance of

education as a significant method of improving one's condition even when it demands sacrifices. Education is a long term investment with deferred rewards, considerable current expenditure, and loss of ready family labor.

For the operationalization of this variable the respondents indicated how much schooling they would like to have for their youngest sons.

Modernized Behavior

Innovativeness is the degree to which an individual adopts new ideas relatively earlier than others in his social system (Rogers 1969, p. 294). An innovator plays an important modernization role in developing societies by adopting alternative methods, techniques, and values in the place of traditional ones for achieving social goals. Innovators are characterized by higher literacy, mass media expsoure, empathy, achievement orientation, high aspirations, change-agent contact, and other modernizing and modernization variables (Rogers 1969, p. 315).

The operationalization considered innovations in agriculture, health and family planning. In agriculture the adoption of ten unit-weighted innovative items constituting high-yielding seed, fertilizers, tools, and insecticides were considered. The list was arrived at after analyzing the data of Phase I of the project the results of two pretests, and the submission of the list to

Guttman scaling and factor analysis in order to determine their unidimensionality. The question was asked, "Have you ever used..." instead of "Are you using...." This was because of the non-availability, seasonal utility, or lack of rational utility of some of the innovative items in some instances.

The same procedure was followed as regards innovations in the spheres of health and family planning. As regards health the innovations considered were the following: small pox vaccination, cholera innoculation, bed bug insecticide, making drinking water safe, malaria prevention, and modern child-birth practice. As regards family planning the innovations considered were vasectomy for males and the IUD insertion for women.

C. Economic Class

The theoretical import of this variable in its interrelation with caste and modernization has been discussed in detail in Chapter I. This variable is generally understood in the sense of the Weberian concept of economic class (Weber 1946, pssim). Our indicators of economic class to which the respondents belong are farm size and panchayath tax paid. These indicators pertain to two basic economic resources, namely, land and income. For the data of the present study the two indicators show a correlation of r=0.51 (Roy 1968, p. 32). Though related they do not measure the same reality but two aspects of the economic power

of the respondent. This is so because the farm size of the cultivated land need not be owned by the respondent, nor need size indicate a uniform volume and value of agricultural product. Ownership of land and agricultural output are the basis of the land tax paid. In addition, the panchayath tax also includes house tax. Thus in its totality the panchayath tax reflects the respondent's net income—an aspect of his economic standing.

For operationalization, farm size records the number of hectacres the respondent cultivates, while panchayath tax records the number of rupees paid to the panchayath by way of tax.

D. Social Status and Power

This variable has been adequately discussed in Chapter I. The terms social status and power are taken in the Weberian tradition. Status situation, for Weber (1946), connotes the condition of life determined by a specific social estimation of honor which is normally expressed by a specific style of life from those belonging to the specific circle (p. 187), while power is the chance of a man or group to realize their will in social action even against the resistance of others participating in the action (p. 10).

Two indicators were chosen to measure this variable. The first indicator is the formal leadership in the village which is measured by the holding of office in the formal organizations

in the village. Office holders score one point for each office held while non-office holders do not receive any points.

The second indicator is the opinion or informal leadership in the village which is measured by the unit-weighted nominations received by each respondent from other respondents on the following questions. The first question identifies organizing leadership involving ability to contact officials and handle financial matters affecting the village. The second question identifies overseeing leadership involving supervisory work demanding trust and respect. The next set of questions identifies leaders of specific ability who would be sought by the respondent first for personal advice and information on agriculture, credit, health, and marketing. The raw score is standardized for the differences in village sample size.

E. Modernizing Sources

As was explained in Chapter I, this variable was broken down into the following components: cahnge-agency contact, literacy, mass media exposure, urban contact, and knowledgeability of innovations.

Change-Agency Contact

The theoretical content of this variable was discussed earlier. Operationally this is an index developed by summing

the number of times a respondent talked with various extension agents and the number of times he had observed agency-organized demonstrations and educational movies on agricultural, health, and family planning innovations during the past year.

Literacy

The theoretical aspect has been discussed earlier. Literacy is the degree to which an individual possesses mastery over symbols in their written form. The measure was functional literacy, i.e., the ability to read a selection from the newspaper. The score was the number of words read correctly.

Mass Media Exposure

Again, the theoretical argument has been given earlier. This variable had four measures. Firstly, there were two measures of unit-weighted direct and indirect radio-listening. The direct listening was by the peasant himself, the indirect is through his family members who might have more time for radio-listening. The two measures are only moderately related (Roy 1968, p. 66); they are dichotomized for a "yes-no" answer. The third measure is the number of commercial films seen in the past year. These films are popular in the villages and almost always accompany some information on agricultural, health and family planning innovations. The fourth measure is the dichotomized "yes-no"

answer to whether the respondent had read newspapers or had them read to him in the past week. The summation constitutes the total score on the mass media index.

Urban Contact and Mobility

This variable looks at the peasant's extra-systemic linkages. There is reciprocal reinforcement over time of this variable with other modernization variables (Rogers 1969, p. 149). Urban contact and physical mobility of the peasant may be either for obtaining credit or seeds at the headquarters, or for other non-agricultural purposes. It is related to better information about innovations. The measure here used asks whether the respondents had lived outside the village and how frequently visited any town or city in the past year.

Knowledge of Innovations

We have discussed earlier the pertinent theory. Operationally, the respondent was asked whether he knew about the ten improved agricultural innovations and health and family planning improvements which we have listed earlier. Knowledge of each item carried a score of one point.

CHAPTER IV

METHODOLOGY

There are two analytic tools which will be used to test our model: the correaltional matrix and the multiple linear regression with partial correlations.

The Correlational Matrix

There will be two matrices, the second one more elaborate than the first. In the actual presentation these two will be given in a mixed form.

In the first matrix the dependent variable and the four main independent variables will be considered without subdividing each variable into its component parts. This is accomplished by constructing a composite index of each of the variables.

Each of the independent variables will then be correalted (a) with the dependent variable, i.e. modernization (M), and (b) with each other.

The confirmation of the theoretical model consists in the pattern that emerges from this correaltional matrix. This pattern, if it has to confirm the model, will have the following

features. (Refer to the diagrammatized model on page 5. C stands for caste, M for modernization, EC for economic class, SSP for social status and power, and MS for modernizing sources; r stands for correlational association.)

The r between C and M is <u>smaller than</u> the r between
- C and EC
- C and SSP
- C and MS.

- The r between EC and M is <u>greater than</u> the r between C and M but <u>smaller than</u> the r between MS and M.
- The r between SSP and M is <u>greater than</u> the r between C and M but <u>smaller than</u> the r between MS and M

The r between Ms and M is <u>greater than</u> the r between
- C and M
- EC and M
- SSP and M.

- The r between C and Ec is <u>greater than</u> the r between C and M.
- The r between C and SSP is <u>greater than</u> the r between C and M.

- The r between EC and MS is <u>greater than</u> the r between EC and M.
- The r between SSP and MS is <u>greater than</u> the r between SSP and M.

<u>In the second matrix</u> the dependent and independent variables are not considered as individual wholes, but in terms of their component items. Here, instead of correlating the integral variables, (a) each component of the independent variable is correlated with each component of the dependent variable, and

(b) each component of one indepedent variable is correlated with each component of every other idependent variable.

The resulting matrix is similar to the one preceding except that it will be more complex in that under each variable the constituent components will be shown in their correlation with those of others.

As confirmation of the theoretical model, the emerging pattern of correlations will have to show the same overall direction of correlational strengths as suggested above. The strength of the confirmatory proof based on the correlational matrices depends on the consistent directionality of the relational pattern involving many variables and their subcomponents.

The limitation of this approach is that it does not afford any statistical test of significance. But the largeness of the matrices and of the number of correlations would suggest high non-statistical but meaningful confidence.

The actual correlational matrix presented in the next chapter gives both the first and the second matrices, as described above, in a mixed form. Further, because of the cumbersomeness involved in presenting all the fifty three variables which we have used in this study, only fifteen of these fifty three will be presented. These fifteen contain both the composite variables as well as the more important component variables which make up the composite ones. Together they are capable of showing the central direction

in which the total results point.

Multiple Linear Regression and Partial Correlations

Because of the size of the sample we are working with, the randomness of its nature, the normality in its population as well as other features of our data, we are entitled to use this statistical tool. Its suitability rests on the fact that it provides us with (a) the amount of variance explained by the whole group of independent variables we choose to work with at a time, (b) the amount of variance explained by each of the variables in the group, (c) the significance level of the variance explained by each independent variable. When we compare different tables having different sets of independent and dependent variables, we are able to detect not only the contribution of each independent variable, but, most importantly, the direction in which the whole pattern of relationships points. This issue of directionality is crucial for our analysis and argument as we have mentioned above.

CHAPTER V

FINDINGS AND ANALYSIS

The expected results did not entirely match the actual findings. Generally, they failed to confirm the theoretical model which was tested in this study, and in parts where it did, it was only with substantial modification. It was found that some factors which are considered crucial to the theoretical model do indeed play a vital role in the world of the Indian peasantry. At the same time, the findings severely discounted other factors that were logically anticipated to play an important role. Most importantly, the results suggest a serious lapse in the very substantive content of the concept of modernization.

In order to discuss the validity of the hypothesized model in the light of the findings, it would be necessary in the first place to analyze the major surprises that emerged from the findings.

Modernized Attitudes

In the present study, in operationalizing the concept of modernization an important distinction was drawn between a set

TABLE 1. Zero order correlations: fifteen out of fifty three variables

1. **Caste**	1.00														
2. **Economic Class**	0.29	1.00													
3. Social Status and Power	0.16	0.29	1.00												
4. Modernizing Sources	0.36	0.37	0.14	1.00											
5. Modernization	0.38	0.32	0.20	0.51	1.00										
6. Modernized Attitudes	0.18	0.06	0.01	0.20	0.61	1.00									
7. Modernized Behavior	0.36	0.36	0.24	0.51	0.86	0.12	1.00								
8. Empathy	0.20	0.15	0.10	0.27	0.40	0.40	0.25	1.00							
9. Achievement Motivation	-0.04	-0.13	-0.04	0.09	0.18	0.35	0.00	0.12	1.00						
10. Educational Aspiration	0.15	0.07	-0.01	0.09	0.49	0.88	0.05	0.05	-0.01	1.00					
11. Change-Agent Contact	0.34	0.40	0.27	0.54	0.46	0.11	0.51	0.23	-0.05	0.06	1.00				
12. Literacy	0.46	0.25	0.17	0.41	0.43	0.21	0.40	0.32	0.01	0.13	0.35	1.00			
13. Media Exposure	0.17	0.19	0.00	0.72	0.29	0.08	0.32	0.07	0.02	0.06	0.25	0.22	1.00		
14. Knowledge of Innovations	0.45	0.26	0.14	0.50	0.63	0.22	0.64	0.30	0.15	0.08	0.41	0.41	0.24	1.00	
15. Mobility	0.30	0.33	0.15	0.89	0.40	0.19	0.38	0.28	0.12	0.07	0.45	0.34	0.36	0.22	1.00
	Caste	EcCl	SSP	ModS	Mdzn	MdAt	MdB	Emp	AchM	EAsp	C-AC	Lit	MExp	KnIn	Mob
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

TABLE 2. Regressions and partial correlations with Modernization as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	1.0615	0.2177	0.2012	<0.0005
Econ. Class	0.3222	0.1028	0.0961	0.015
Social Status and Power	0.0256	0.0939	0.0816	0.026
Mod. Sources	0.0503	0.3853	0.3868	<0.0005
				R2=0.3196
Caste	1.6307	0.3134	0.3091	<0.0005
Econ. Class	0.6881	0.2075	0.2052	<0.0005
Social Status and Power	0.0276	0.0931	0.0876	0.027
				R2=0.2010
Caste	1.6663	0.3192	0.3159	<0.0005
Econ. Class	0.7671	0.2370	0.2288	<0.0005
				R2=0.1940
Caste	1.9014	0.3631	0.3605	<0.0005
Social Status and Power	0.0439	0.1491	0.1395	0.001
				R2=0.1650
Caste	1.2042	0.2467	0.2283	<0.0005
Mod. Sources	0.0552	0.4273	0.4238	<0.0005
				R2=0.3020

TABLE 3. Regressions and partial correlations with Modernized Attitudes as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	0.3465	0.1210	0.1298	0.004
Econ. Class	-0.0428	-0.0230	-0.0252	0.596
Social Status and Power	-0.0046	-0.0286	-0.0292	0.510
Mod. Sources	0.0108	0.1480	0.1635	0.001
				R2=o.0534
Caste	0.4683	0.1677	0.1753	< 0.0005
Econ. Class	0.0354	0.0196	0.0209	0.649
Social Status and Power	-0.0042	-0.0258	-0.0266	0.552
				R2=0.0322
Caste	0.4628	0.1662	0.1733	< 0.0005
Econ. Class	0.0232	0.0134	0.0137	0.749
				R2=0.0316
Caste	0.4822	0.1784	0.1806	< 0.0005
Social Status and Power	-0.0034	-0.0214	-0.0213	0.621
				R2=0.0319
Caste	0.3251	0.1157	0.1217	0.006
Mod. Sources	0.0101	0.1449	0.1530	0.001
				R2=0.0517

TABLE 4. Regressions and partial correlations with Modernized Behavior as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	0.7150	0.1858	0.1690	<0.0005
Econ. Class	0.3651	0.1457	0.1358	0.001
Social Status and Power	0.0303	0.1387	0.1201	0.001
Mod. Sources	0.0396	0.3817	0.3792	<0.0005
				R2=0.3315
Caste	1.1624	0.2842	0.2748	<0.0005
Econ. Class	0.6526	0.2458	0.2427	<0.0005
Social Status and Power	0.0318	0.1347	0.1260	0.002
				R2=0.2175
Caste	1.2036	0.2918	0.2845	<0.0005
Econ. Class	0.7439	0.2844	0.2767	<0.0005
				R2=0.2031
Caste	1.4193	0.3414	0.3356	<0.0005
Social Status and Power	0.0473	0.1988	0.1874	<0.0005
				R2=0.1672
Caste	0.8791	0.2247	0.2078	<0.0005
Mod. Sources	0.0451	0.4322	0.4319	<0.0005
				R2=0.2949

TABLE 5. Regressions and partial correlations with Modernization as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	1.0849	0.2213	0.2057	<0.0005
Econ. Class	0.3823	0.1228	0.1140	0.004
Memberships & Offices Held	0.1519	0.0212	0.0183	0.625
Mod. Sources	0.0504	0.3826	0.3866	<0.0005
			R2= 0.3139	
Caste	1.6388	0.3132	0.3107	<0.0005
Econ. Class	0.7299	0.2212	0.2177	<0.0005
Memberships & Offices Held	0.4083	0.0527	0.0492	0.213
			R2=0.1962	
Caste	1.9293	0.3649	0.3657	<0.0005
Memberships & Offices Held	0.7930	0.1019	0.0956	0.016
			R2=0.1549	

TABLE 6. Regressions and partial correlations with Modernization as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	1.0623	0.2179	0.2014	< 0.0005
Econ. Class	0.3229	0.1031	0.0963	0.015
Social Status	0.0262	0.0944	0.0818	0.025
Mod. Sources	0.0504	0.3856	0.3871	< 0.0005
				R2=0.3197
Caste	1.6323	0.3137	0.3094	< 0.0005
Econ. Class	0.6901	0.2083	0.2058	< 0.0005
Social Status	0.0277	0.0923	0.0868	0.028
				R2=0.2008
Caste	1.9058	0.3639	0.3613	< 0.0005
Social Status	0.0441	0.1475	0.1379	0.001
				R2=0.1646

TABLE 7. Regressions and partial correlations with Modernized Attitudes as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	0.3531	0.1234	0.1322	0.004
Econ. Class	-0.0366	-0.0199	-0.0215	0.645
Memberships & Offices Held	-0.2406	-0.0563	-0.0572	0.182
Mod. Sources	0.0111	0.1519	0.1683	<0.0005
				R2=o.0557
Caste	0.4752	0.1698	0.1779	<0.0005
Econ. Class	0.0401	0.0224	0.0236	0.605
Memberships & Offices Held	-0.1841	-0.0428	-0.0438	0.315
				R2=0.0334
Caste	0.4911	0.1812	0.1839	<0.0005
Memberships & Offices Held	-0.1630	-0.0388	-0.0388	0.364
				R2=0.0329

TABLE 8. Regressions and partial correlations with Modernized Attitudes as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	0.3460	0.1209	0.1296	0.004
Econ. Class	-0.0438	-0.0235	-0.0258	0.587
Social Status	-0.0044	-0.0268	-0.0273	0.537
Mod. Sources	0.0108	0.1479	0.1633	0.001
				R2= 0.0533
Caste	0.4678	0.1676	0.1752	<0.0005
Econ. Class	0.0346	0.0192	0.0204	0.656
Social Status	-0.0041	-0.0245	-0.0252	0.572
				R2=0.0322
Caste	0.4815	0.1782	0.1803	<0.0005
Social Status	-0.0033	-0.0202	-0.0202	0.639
				R2=0.0318

TABLE 9. Regressions and partial correlations with Modernized Behavior as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	0.7318	0.1885	0.1730	< 0.0005
Econ. Class	0.4188	0.1676	0.1558	< 0.0005
Memberships & Offices Held	0.3925	0.0684	0.0590	0.103
Mod. Sources	0.0393	0.3753	0.3758	< 0.0005
				R2=0.3216
Caste	1.1636	0.2827	0.2751	< 0.0005
Econ. Class	0.6899	0.2604	0.2566	< 0.0005
Memberships & Offices Held	0.5924	0.0959	0.0890	0.023
				R2=0.2104
Caste	1.4382	0.3420	0.3400	< 0.0005
Memberships & Offices Held	0.9559	0.1520	0.1437	< 0.0005
				R2=0.1530

TABLE 10. Regressions and partial correlations with Modernized Behavior as dependent variable and select independent variables.

	Regression Coeffs.	Partial Corr. Coeffs.	Beta Weights	Level of Significance
Caste	0.7162	0.1861	0.1693	< 0.0005
Econ. Class	0.3667	0.1465	0.1364	0.0005
Social Status	0.0306	0.1380	0.1193	0.001
Mod. Sources	0.0397	0.3820	0.3796	0.0005
				R2=0.3314
Caste	1.1645	0.2847	0.2753	< 0.0005
Econ. Class	0.6554	0.2470	0.2438	< 0.0005
Social Status	0.0318	0.1329	0.1241	0.002
				R2=0.2171
Caste	1.2036	0.2918	0.2845	< 0.0005
Econ. Class	0.7439	0.2844	0.2767	< 0.0005
				R2=0.2031

of modernized attitudes and a set of modernized behavior. This distinction proved to be crucially important. It brought to light varied patterns of relationships between important variables which remained hidden when analyzed under larger categories.

One component of the modernization variable, namely a set of modernized attitudes, was defined as the psychological characteristics of empathy, achievement motivation and educational aspiration for one's children. The other component of the modernization variable, namely a set of modernized behavior, was defined as the behavioral characteristics of innovativeness.

Modernized attittudes, as it turns out, bears almost no relation to any of the significant variables in our theoretical model. Neither caste, nor economic class, nor social status and power, nor modernizing sources are related significantly to modernized attitutdes. Even more importantly, modernized behavior, which is its twin component in the modernization concept, is also not significantly related to modernized attitudes. These results contain important implications both in terms of the theoretical framework which we have utilized in this study and previous research literature on which this model was based.

One serious aspect of this finding is that it is in apparent contradiction with a whole trend of writing and research in the modernization field. McClelland (1961), Lerner (1958), Inkeles (1959), and others have emphasized that among the most important

elements in the definition of modern man are his psychological traits: readiness for new experience, achievement motivation, future orientation, empathy etc. There is evidence in the present research that this approach is not universally valid. Achievement motivation and educational aspiration show no significant correlation to caste ranking nor any correlation to economic class both of which (i.e. caste and economic class) are good predictors of modernized behavior; they show no significant relation to social status and power which is not a good predictor of modernized behavior; above all they show no correlation with modernizing sources, i.e., change-agent contact, literacy, mass-media exposure, physical mobility and knowledge of innovations, which are individually and jointly the best predictors of modernized behavior in our study. In point of fact achievement motivation and educational aspiration show a tendency of negative correlation in some of the cases enumerated above. As regards the variable of empathy we find that it is, if not negatively, still very insignificantly, correlated to the variables enumerated above. Most significant of all is the finding that achievement motivation, empathy, and educational aspiration neither individually nor as a set of modernized attitudes show any relation to modernized behavior.

These results raise several issues. Firstly, it is possible that there is a methodological problem involved in this instance. The operationalization of the concepts of achievement motivation,

empathy, and educational aspiration may have given rise to biased results. Thus, the questions on achievement motivation stressed personal success over commitments to family and community. In the village context in India family and community play vital structural roles not only in terms of psychological satisfaction but also as regards factors that affect social status, community labor and cooperation, borrowing, lending and exchange of goods, as well as other economic, social, physical and even survival needs. In this context it would be irrational for a farmer to respond affirmatively to these questions even if he agreed with them. The questions on empathy stressed assuming the roles, among others, of the Block Development Officer and the District Collector. The nature and requirements of these official positions are such that they are normally filled by highly trained personnel from outside the villages. These positions are not only beyond the realistic aspirations of the villagers but their high status, inaccessibility, and lack of contact with the average villager put them beyond the villagers' easy understanding of their role and responsibilities. It would be unnatural to expect a high score on these questions. Finally, as regards educational aspirations, though it requested information both about one's wish for one's youngest son's education and its realistic possibility, it is not at all clear whether, in the concrete constrained situation of the villager, his realistic hope, or lack of it, does not actually temper enough his realistic

wish so that it results in a low score on the questions.

Secondly, as is implied in the above criticism, modernization attitudes cannot be viewed apart from the social structures in which the actors function. Howsoever desirable these modernization attitudes may be defined and perceived to be by the peasants, in order that the peasants score high on them, it has to be assumed that there are no blockages to their legitimate aspirations or realization. Structural constraints in the form of lack of freedom, opportunity, resources or rewards may necessitate individuals to lower their aspirational levels. This realistic attitudinal adjustment may even slip into fatalism which is one of the psychological features often associated with the traditional, non-modern man. It may be argued, however, that fatalism and low-level aspirations are merely rational, functional adjustments of the peasants for the purpose of avoiding the frustrations, tensions, and alienations so characteristic of modern man.

Thirdly, a serious question need be asked whether it is fair to assume that what has been defined as modernization attitudes should be at all concomitantly present with modernized behavior. This is implicitly assumed in most of the current theory, but it is specifically contradicted by the present research. Is it possible that the attitudinal syndrome is a reflection of and response to the structure of values, ideas, norms, and

statuses in a culture, whereas the behavioral syndrome stems predominantly from an innate pragmatic sense that does not conflict and can coexist with traditional attitudes? There is evidence (Roy 1968, Rogers 1969, Ford Foundation 1970) which suggests that Indian farmers have accepted innovations in family planning and agriculture only to give them up for sound, pragmatic, self-serving reasons totally unrelated to their traditional attitudes. Traditional attitudes as responses to social environmental reality need not prevent the acceptance of innovations. On the other hand, one cannot ignore the real behavioral impact of subjective attitudes. In the light of the present research as well as other findings, we might conceptualize a process wherein subjective attitudes are in constant dialectical interaction with the behavioral needs based on structural demands. At any given point in this process we might expect an incongruence between attitudes and behavior. We might also expect within this inconsistency a tendency towards resolution of this inconsistency. Thus over a period of time different adaptative processes would make for a congruent fit between subjective attitudes and behavioral and environmental structures. The new attitudes and behavior, however, do not have to take the so called modernistic patterns that have evolved in the West. There is ample evidence that adaptative attitudes, behavior, and social structures have emerged in a wide combination of patterns in the new states. Thus, we are suggesting that the

assumptions as regards personality structure in the modernization literature, and perhaps in social psychology generally, may have to be radically reexamined.

Fourthly, it is particularly instructive to note that modernization attitudes are only slightly or not at all related to caste, economic class, and social status and power. It has been shown by Kumar (1969, p. 29) that the need to achieve is actually negatively related to caste, i.e., lower caste groups score higher on the scale than the upper caste groups. In the present data the economically affluent, the socially well placed and highly regarded individuals do not perform much better on the achievement motivation scale than their lower placed counterparts. On the other hand, it is these very persons holding economically higher positions in Indian society who show themselves to be the most innovative in their behavior. Thus these findings are consistent with our argument above that the concept of modernization attitudes may have only slight theoretical utility, and that its importance is seriously relativized in the cultural and social structural context of the Indian peasant.

Finally, despite the operational difficulties mentioned above, the concept of empathy shows itself to be a more relevant factor in modernization than the concept of achievement motivation. This is suggested by the consistently higher scores on the correlational matrix, though admittedly the advantage is

only marginal. Perhaps empathy is a concept more relevant in the theory of modernization and personality structure than the concept of achievement motivation which smacks of being more culture-bound as we have suggested in our discussion in the earlier sections.

Social Status and Power

The second major surprise in our data concerns the concept of social status and power. This concept was a composite of social status as measured by opinion leadership and formal social power as measured by memberships and offices held.

It was discovered that social status and power, either in its composite form or in its components, bears none or negligible relation generally to modernization and particularly to modernization attitudes and modernization behavior. The same holds true for their relationships with caste and modernizing sources. These relations suggest the following considerations.

Firstly, there is one significant relationship that stands out in this context, namely, the positive relationship between social status and power and the economic class of our respondents. This was anticipated in as much as formal positions of power would naturally be more accessible to persons of better means, and that these very persons, as research literature indicates, tend to wield informal power, which is here measured in

terms of opinion leadership.

Secondly, against expectations, social status and power as a variable turns out to be only slightly related to caste status ($r = 0.15522$). This is particularly noteworthy in the light of the fact that caste is related to economic class as highly, or as moderately, as social status and power is to economic class. This suggests that though the caste system has not relinquished its economic strength in Indian villages, social power is increasingly growing away from it. This may be a reflection of the changing bases of power in the Indian subcontinent. The advent of democracy which has enfranchised all sections and castes in the population, as well as the practical implications of the "socialistic pattern of society" as advocated by the political party in power since 1947, may have ushered in the end of one type of monopolistic power structure where caste, economic class, and social position appeared to be reinforcing one another. In other words, high caste ranking does not any more serve as a predictor of formal or informal social power in Indian villages.

Thirdly, the social leadership among Indian peasants appears to be particularly lacking in innovativeness. And this despite the fact that their social position greatly exposes them to contacts with change-agents, which fact in itself normally leads to a high degree of innovative behavior. It is possible that the contact of the social leadership with the change-agencies

is on the bureaucratic level and in terms of power politics rather than on the level functionally conducive to innovative behavior. Further, it is not surprising that this leadership scores very low on modernization attitudes, which latter variable in any case is not found to be correlated with modernized behavior as we have shown earlier. Neither does the leadership utilize its access to other modernizing sources which do highly correlate with modernized behavior; thus, they score poorly on knowledge of innovations ($r = 0.14024$), on media exposure ($r = 0.00245$), literacy ($r = 0.16754$), and mobility ($r = 0.15200$).

Fourthly, in the matrix of correlations one or two noteworthy points emerge. In the first place, whether on the high, medium or low correlational level, social status (i.e. opinion leadership) seems to have an edge over formal social power (i.e. memberships and offices held). This seems less surprising. Formal leadership may depend more on traditional power bases such as status and influence, whereas informal, opinion leadership would depend more on pragmatic considerations. In the second place, several subtle patterns emerge when we break down the larger categories into their components. To give one example, the social leadership performs differently both as regards the knowledge and actual acceptance of different innovations. This suggests that considerations other than achievement motivation might enter into the motives of the acceptors of innovations on a selective basis.

Theoretical Model

These preliminary discussions bring us to the consideration of the hypothesized theoretical model which is being tested in this study. We have hypothesized that caste status affects the modernization process not directly but through the intervening variables of economic class and social status and power in the first stage, and through preferential access to modernizing sources in the second stage.

In the light of of our findings this model does not hold up in its entirety. Several profound modifications have to be introduced if the model has to have any empirical applicability.

To begin with, as we have indicated, there were two substantial surprises in our results. Firstly, the concept of modernization, we discover, cannot be simply viewed as a component of innovative attitudes and behavior. This distinction, though it does not alter, does considerably accentuate, the direction in which caste, economic class, social status and power, and modernizing sources are related to innovative behavior. Secondly, the results show that we had vastly exaggerated the contribution of social status and power in the modernization process. Its relation is substantial as regards economic class, only moderate as regards change-agent contact and the accepting of agricultural innovations, but poor as regards most other factors which we have considered.

Caste status appears independently to have better predictive

value than was anticipated. It emerges as relating to modernized behavior more closely than is economic class whose anticipated intervening influence, therefore, appears to be severely discounted. This conclusion emerges both from the simple correlation matrix and the partial correlation tables. This conclusion suggests two lines of thinking. In the first place, the caste system does not seem to be losing its structural advantage as regards modernization despite the profound counter forces introduced by the democratic process in India. It seems to affect innovative behavior on its own merit independently of its economic or other bases. Secondly, our finding might suggest some emerging modifications in the process of sanskritization. This process hypothesizes that economic and political upward mobility gradually integrates itself with the caste structure: upwardly mobile groups tend to assume the status symbols of the upper castes and ultimately pass for upper castes. This would imply a high correlation between caste ranking and economic class, and a caste relation to innovative behavior as great as the relation of economic class to innovative behavior. This implication is not verified substantially enough in our results. Possibly modern social change has a tendency of affecting these processes in ways as yet unidentified.

Economic class as a factor in modernizing behavior of individuals emerges as somewhat of less importance than was anticipated. It does have a substantial predictive value,

although lower than that of caste. Interestingly, it is almost twice as closely related to social status and power, than is caste to social status and power. The importance of this fact has been discussed earlier in terms of the shifting bases of social power in Indian villages. In one instance, economic class seems to have a very slight advantage over caste ($r = 0.36736$ vs $r = 0.36295$), and this is in their individual relationship to modernizing sources. This advantage is too slight for economic class to be considered as an intervening variable between caste as an independent variable and modernizing sources as a dependent variable. Thus, even this fact cannot be taken as a strong enough endorsement of the validity of this section of the theoretical model.

One section of the model, however, seems strongly validated by the results. The isolation of the factor which we have termed as the access to modernizing sources seems clearly to be of strategic importance in the understanding of the modernization process in relation to caste and other factors which we deal with here. Modernizing sources were operationalized in terms of change-agency contact, literacy, mass-media exposure, physical mobility, and knowledge of innovations. Modernizing sources singly and as a collective factor relate to modernized behavior ($r = 0.50737$) more closely than any other factor in our model. The correlational matrix and the partial correlation tables would warrant the conclusion that modernizing sources do serve as an intervening

between any and all of the independent variables under consideration here and modernized behavior. The theoretical meaning and validity of these relationships have been amply discussed in our earlier sections.

In conclusion we might say that the theoretical framework which we developed, basing our logic on preceding research, has to a great extent been proven to be inapplicable to the peasant world of India. Our hypotheses about the intervening effect of social status and power and economic class proved invalid in so far as social status and power bears hardly any relation to modernized behavior; and in so far as economic class bears a lower level relation to modernized behavior than does caste status; if anything, it is caste which would function as an intervening variable. There emerged, however, indisputable evidence that modernizing sources do clearly intervene in the effect that caste and economic class have on modernized behavior.

In this light the caste system stands validated as a potent factor in the modernization process among Indian peasants. Higher caste ranking, quite apart from its economic and social power bases, provides preferential access to modernizing sources which in turn open the greatest opportunities to modernized behavior.

Contribution of this Study

The contribution of this study can be summarized as follows. Firstly, this study has distinguished caste, the components of stratification, and the separate factor of access to modernizing sources. Modernization has not generally been studied in terms of these factors either in India or anywhere else. This study has pointed to the crucial importance of the factor of modernizing sources as distinguished from other factors; it has, in addition, pointed to the primacy of caste effect on modernization behavior, and discounted the contribution of social status and power.

Secondly, noteworthy relationships between several factors were brought to light. This is especially the case with the unanticipated effects, or lack of them, of social leadership among Indian peasants. Its association with caste and innovative behavior, we discovered, seems to contradict much of what is being said in research literature.

Thirdly, and above all, our study tested and found wanting a model that was logically constructed on the basis of existing theories and research findings. This points to the fact that not only may the social reality among Indian peasantry be changing in directions unforseen by social scientists, but also that there may lurk conceptual flaws and practical dangers in some of the modernization theories fashionable among these scientists. This is particularly true of the theoretical stance

of social psychologists. Some of their basic assumptions and concepts proved to be the weakest, if not completely erroneous, factors in the model we have tested. The implications of these findings are further pursued in the following chapter.

The limitations of this study largely derive from the nature of the data. Six out of approximately 500,000 villages are not a representative sample either numerically or in their non-random selection. But the purposive selection of the villages based on both scholarly instinct and close and wide acquaintance with the Indian villages point to the applicability of the conclusions of this study beyond the specific data here utilized. The significance of the conclusions somewhat suffers by the exclusion in the data of the landless laborers and the smallest peasant who both together form the bulk of the low castes. Though not so serious, yet in itself important, is also the exclusion of the women in the sample studied.

CHAPTER VI

THE SOCIAL PSYCHOLOGICAL SYNDROME IN MODERNIZATION STUDIES: A CRITIQUE

This chapter emerges as a consequence of the kind of results we were confronted with in the present research. In the categories of the variables used, and in the assumptions and substance of the theoretical model here treated, we have utilized a frame of reference which is derived from the social psychological school in the study of modernization. The nature of the results, and especially the direction in which they point, seem to suggest basic ambiguities and flaws in our theoretical framework as well as in its underpinning assumptions. We have pointed to a few of these in the analysis of our results. Here we would like to mount a fuller investigation into the substance of the theories that were our guide in this research, and which are here labelled under the general name of the social psychological school in the study of modernization.

In modernization research, perhaps more than in most other areas, the conceptual axioms have been so culture-bound as to result in studies of great magnitude and repute, but, at the same time, of dubious validity and therefore of little usefulness.

This is generally true of the social psychological school. From the viewpoint of the sociology of knowledge, an inquiry into the social and political bases of the dominant theoretical categories in this approach would not only promise to clarify sources of contradiction and confusion, but also point up the cultural and social biases of the research methodology and conclusions.

The purpose of the present chapter however are not those of the sociology of knowledge. Neither is the intention here to analyze the individual positions of some reputed authors, nor is it dissect the more prominent and generally prevalent concepts. Rather the aim here is to identify the distinctive features of one school of thought in the study of modernization. We will attempt to describe the set of theoretical assumptions, premises, conceptual categories, and policy implications which are commonly shared by the authors who belong to this school.

Despite the divergences on individual issues, approaches, and concepts, the general theoretical direction and perspectives of authors within this framework coincide well enough to be described as a school of thought. Individual scholars may well repudiate either the suggested label or the implications of being classified in some particular school of thought. However, without making any reference to the intellectual commitment or political roles of individual authors, we have used here the sole criterion of the theoretical congruence of their major concepts with the

distinctive trend which is here studied. The individual features described may not be present in each of the authors who shares the perspective. Rather, these features are abstracted and presented as a whole, with the implication that they are not only theoretically congruent, but also reinforce one another.

Next it is the intention here to analyze these features of the approach and suggest the bases of its weakness.

The Modernization Syndrome in the Social Psychological School

To place the matter in a broad context we might point out that studies of modernization have differed widely along several dimensions. Horowitz (1966, p. 394) refers to two different trends of studies as the entrepreneurial and structural, which correspond roughly to Weiner's (1966, p. 10) categories of psychological and structural studies. Manning Nash (1963, p. 5) classifies modernization studies into three modes: (a) the index mode which contrasts poor economies ideal typically to the rich ones, (b) the acculturation view which considers the diffusion of knowledge, skills, values, and institutions from the rich to poor countries, and (c) the analytic mode which studies the process as it now occurs in less developed countries.

Viewing the matter differently, we suggest another kind of classification, tentative and incomplete, on the following page.

TABLE 11. A Classification of Approaches to the Study of Modernization

- Value as object of study
  - Individual as unit (McClelland, Hagen, Lerner, Inkeles)
  - System as unit (Weber, Bellah) (religions, ideologies etc.)
- Structure as object of study
  - Descriptive ideal types
    - Static
      - Pattern variables (Parsons, Hoselitz) (universalism, functional specificity etc.)
      - General features of traditionality (Lerner, Inkeles, (illiteracy, sacredness, rurality etc.) Rogers)
    - Processual
      - Stages of growth (Rostow, Reisman, Black)
      - Transfer and development of new institutions (Eisenstaad, Hoselitz, Nash)
  - Analytic explanations
    - Systemic static features
      - Institutional blockages (Shils, Galbraith, Eisenstaad) (elites, markets, educational base etc.)
      - Functional Integration (W. Moore, Apter)
    - Systemic holistic change
      - Historical process (Marx, B. Moore)
      - Ecological, economic process (Keyfitz, Geertz)
      - Sociological process (Marx, Horowitz, Baran, Frank) (socio-economic and political factors)

It highlights the main object of the studies as well as some other variables. It is incomplete in so far as a similar and fuller classification would tabularly list and compare such items in the various theories as the following: their unit of analysis, their theoretical and ideological assumptions, the uni/multilinearity of their analysis, their consensus/conflict perspective, their elite/mass orientation, the chief agencies of developemnt, the rolse of coercion and of the public sector, the policy implications etc. Such a detailed clasification would readily indicate the distinctive trends in the various theoretical anlyses.

Our interest here concerns specifically what we have termed the social psychological school. Perhaps with some injustice to this theoretical framework, we will consider here only a few salient features of the approach. Not much attention will be given to the fine distinctions and nuances of each characteristic. Rather, only a brief summary of the central concept will be presented. We will consider the following features: the consensualist perspective, social psychologism, values as independent variable, education as remedy, gradualism, and elitism.

The Consensualist Perspective

As regards its most general and sytemic feature, this approach to modernization can be characterized as approximating a

consensual model. In sociology the word consensus has been used in different meanings (Horowitz 1966, p. 367). In its relation to developmental theories consensus models focus on the following.

Ideal-typically in this approach the maintenance of social equilibrium is emphasized (Parsons 1961). It is implicit that an increase in social consensus yields an increase in functional efficacy and democratic polity. It is further implied that the society rests upon a contractual or informal agreement made between equals to secure common goals. This notion of stable structures which are in equilibrium tends to stress the realities of social status over those of class, to emphasize similarities, continuities and common goals over polycentric interests, social differences, social cleavages, and social change.

Basing themselves primarily on the experience of developed countries, the consensualists show great respect for the regularities that obtain in the amazingly complex organization and specialization in industrial economies. Dissensus and conflict are viewed as dysfunctional, destructive, almost as disorganization. Moore (1962, pp. 93-105; 1963) suggests that there obtains a "normality of change;" however, below the surface, this only implies modification, not change, strains but not conflicts. He points to instruments of "tension-management" capable of working towards the golden mean solution. Still, the tendency here is to rely on spontaneity and on the operations of the free market.

Social Psychologism

A second feature of this trend, theoretically congruent with the first, is the nature of its analysis. The individual figures most prominently as the unit of analysis. It is not the structural features of group domination, historical blockages resource hoardings, control mechanisms and such like, which are considered to be crucial to the understanding of social change. Rather, it is assumed that social action and change are hardly anything more than the totality of behavior of the individuals who constitute society.

Social psychologism, as this approach has been called (Inkeles 1959, pp. 249-75), can be understood as a reaction against the theories of social determination. As such it reinforces the virtues of capitalistic ethic, free enterprise, and achievement motivation, and reposes slight faith in regulatory mechanisms, planned development, and controlled growth.

McClelland's (1961) case is a typical illustration of this approach. Inkeles (1959), Lerner (1958), and Rogers (1969), among others, have contributed to this trend through their studies which focus on values, attitudes, communication, and diffusion of innovations.

Individualism is a prime factor in a progressive change towards affluence. And this notion naturally holds in great respect the role and function of entrepreneurial attitudes and

skills in the modernization process. Social achievement is assumed to be linked to individual motivation. Hence the psychology of development is found to be unevenly distributed in society. "High-achieving mystics" are to be found among the business-oriented types, while "low-achieving tradtionalists" are to be found in peasant sectors (McClelland 1961). Thus the developmental problem narrows itself down to the specific task of inculcating and diffusing business skills and achievement motivation all throughout society which aspires to modernity. Considerable research effort has been stimulated by such a theoretical premise (Inkeles 1959), Lerner 1964, Rogers 1969).

Values as Independent Variables

Operating somewhat on the systemic level other authors have arrived at conclusions congruent with the individualistic premise and conclusions. Taking off on the Weberian thesis, Bellah (1957) has analyzed the long term effect of different value systems on the developmental process. Hoselitz (1964) has tried to apply the pattern variables of Parsons' Social System (1951) to the study of economic development and cultural change. He argues that the developed countries exhibit the pattern variables of universalism, ascription, and functional specificity. The conclusion then seems vastly similar in content and implication

to that of the social psychologists. Very much along the lines of McClelland, the underdeveloped countries are counselled to eliminate the values and pattern variables of underdevelopment and adopt those of development if they aspire to modernity.

Education as Remedy

The above approach explains the heavy stress placed on the importance of education as an instrument for less developed countries to generate and diffuse attitudes, roles, and values conducive to modernization. This implicit faith in education stands out prominently in practically all the authors belonging to this school. Functional literacy and formal education are among the favorite variables for researchers who point out high correlations between literacy and most other dimensions of modernization.

The relation education bears to modernization is summarized by Rogers (1969, pp. 70ff). Literacy provides reading skills and a consequent exposure to print mass media and the new ideas which the media carries. The literate peasant is able to store and retrieve technical and innovative information for delayed use. Literacy promotes growth of mental abilities helpful for modernization; manipulation of symbols, abstraction, empathizing with strange roles, and restructuring reality.

There are studies which associate the literacy rate of a nation and its economic development (Lipset 1960, Simpson 1964) as well as those which relate individual literacy to innovativeness (Lerner 1958, 1964, Deutschmann 1963). In Columbia and India Rogers found the link between literacy and various modernizing variables (1969, pp. 80-92).

Several kinds of educational programs have been suggested and experimented upon, from McClelland's (1969) formal training towards n-achievement, to Galbraith's consumerist concept of education (1962). The earlier works of Galbraith consider the most serious deficiency in the developmental process to be the absence of popular and proper education. With typical confidence in the individualistic ethic he asserts that "a dollar or a rupee invested in the intellectual improvement of human beings will often bring greater increase in national income than a dollar or rupee devoted to railways, dams, machine tools or other tangible capital good" (Galbraith 1962, p. 49).

Gradualism

The fruits of education are not instantaneous, but have to be awaited patiently. Thus, consistently the individualists remain committed to a gradualist philosophy of change. An individualistic analysis views social change from the standpoint of the consensus and equilibrium model. The sources of change are considered in

terms of spontaneity and creativity rather than in terms of social conflict, class divisions, and government planning and initiative. These latter would pose a treat to an equilibrated society and portend chaos, hence they are considered dysfunctional. The functional integration and mutual dependence of roles, institutions, and structures of the social whole are the outcome of a functional balance of social forces. Any massive planning for a rapid change may be an unwitting step towards chaos, hence towards retrogression (Moore 1962b, 1963).

Elitism

The individualistic school smacks of elitist tendencies. Modernism often becomes an argument for elitism and a faith in business trusteeship. It is argued that the managerial, elitist class is the one most concerned with development. Kerr and Others (1964) have asserted that industrial development is a necessary function of managerial preeminence. With slight thought given to working class and peasant elites, and at the same time divorcing the idea of industrial change from revolutionary development, it is often assumed that modernization is a process moving from top to bottom (Kerr 1964). The developmental mentality is said to obtain primarily among the elite high achievers. Hagen (1962) describes the "authoritarian" personality type to be more

prevalent in peasant economies and the "creative outsider" found in advanced industrial economies. In this system, change is induced from outside, from marginal creative elites.

The entrepreneurial class therefore is an invaluable agent of modernization. There is, further, an implicit assumption of the social enlightment of the business sector which is conceived of in the role of trusteeship. Where corporation interests tend to be obviously narrow and at cross purposes with national development, the remedy is not sought in the elimination of inequities and in structural rearrangements, but in the value of moral suasion (Moore 1962b). The developmental benefits that accrue to society are important and scarce enough for one to ignore or postpone the more tricky problem of social development.

This is a brief, summary presentation of the salient features of one distinct approach to modernization. It omits some important theoretical and practical implications, underlying assumptions, and logical links of the features described. Some of these are alluded to in the second half of this chapter.

Critique

The validity of any criticism can rest on several factors, important among which is theoretical inadequacy. This would involve lapses in logic, internal contradictions, faulty assumptions,

narrowness of scope, selective generalizability and dubious predictive value. Another source of criticism is the obvious challenge of contradictory data. A final source of criticism is the policy implications of an approach, implications which would prove impractical or dangerous.

The following critique rests on all these bases. Though the criticism is not neatly presented according to each of these sources, these three nevertheless form the general framework within which the adequacy of the approach to modernization is called into question. We will not again bring in here the results of our own present study as an aid in our critique.

Inadequacy of the consensualist Model

The perspective of the consensualist-equilibrium model ill-suits the analysis of less developed countries in their struggle for development. It is a perspective derived from the experience of the affluent societies. As such, its implications of a contractual balance of forces moving towards common goals tends to ignore the reality of widespread inequality of sectors, regions, and groups in many a poor country. Foreign and domestic exploitation, monopoly structures, autocracy, and domination are structures not derived from mutual consent or consensual institutionalization. What equilibrium obtains in such situations is less an expression of consensus and more the triumph of domination

of one group or sector over the other.

The non-appropriateness of the consensus model is further underscored by the special role of social change and conflict in less developed countries. It is unrealistic to imply that in every situation dissensus and conflict are destructive of and dysfunctional for order and development. The management of dissensus and conflict within programmed channels is characteristic of mature democracies. But the evolution of Western democratic societies was a long drawn out institutional process whereby independent power bases were developed capable of mutually checking and balancing forces (Wittfogel 1956). The general absence in poorer societies of Western style democratic institutions and parliamentary traditions points to long standing, structured social inequalities. In such contexts it is much more realistic and fruitful to view social change and development as emergent from dissensus and a clash of forces.

Coercion is often necessary where the private sector in these economies has neither the means nor the will for the kinds of long-range investments necessary for national development as against short-range substantial private gain. Coercion, the formal sanctioning of force, would thus be necessary as a potent factor in individual and group motivation in rationalizing productivity, avoiding excessive expenditures on consumer goods, creating the basis for unprofitable but necessary lines of

scientific industrialization, curbing speculative spending, and minimizing the exercise of power by the ruling classes (Horowitz 1966, p. 343).

Furthermore, the consensus model cannot successfully cope with the new varieties of social and political changes in the new states. Political control, economic growth, and social structure are often and increasingly bound up with one another as never before. The consciousness of development has revolutionized the structure of development. Commitment to change and participating in the developmental race have become both a political necessity and economic need. The wave of popular nationalism mandates the clearing away of long-standing roadblocks and poses questions of risk taking, national planning, public sector allocations, and coercion that go beyond the immediate reach of the consensualist explanation. For example the allegiance to socialistic goals and methods of polity have led some countries to adopt programs of "protective discrimination" (Galanter 1961, 1963) wherein long discriminated against minority groups have been given preferential access to educational, economic, and political opportunities. The political and social forces of coercion and legitimation which makes such programs possible, as well as result from them, cannot be comfortably accommodated within the consensualist model.

The fallacy of Individualism

The analysis of individual behavior in social development suffers from severe limitations. Social psychological studies have not been able to address themselves to some crucial factors on which rest the pace, direction, and success of the developmental process in many countries.

McClelland (1961) for instance pays not the slightest attention to the structural constraints for development: patterns of investment and savings, trade blockages, limits on resources, the differential political and economic costs of development, the possibility of aggravating the existing political and social schisms etc. The analysis of personal attitudes and behavior cannot successfully address itself to distinctive group phenomena such as class relationships, class divisions, and the patterns of ownership and control which determine the allocation and investment of resources. In other words, change of attitudes and behavior alone cannot hold out the promise of development without the prior identification of structural defects.

Even the structuralist analysis in the Parsonian tradition consistently skirts issues and distinctions which are inconsistent with the consensualist, social psychological model. Thus Hoselitz's (1964) suggestion that developed countries exhibit the pattern variables of universalism, achievement orientation,

and functional specificity, ignores the empirical evidence in the United States and Europe (Granick 1962), in Britain (Zweig 1952), and in Japan (Abegglen 1958). In addition, one can point to considerable inheritance and ascription of wealth and role-sets alike in rich countries, factors which lead to a monopoly situation. In traditional societies there is considerable incidence of achievement orientation, universalism and functional specificity. Many tribes assign some roles and leadership on the basis of performance and skills; in many new nation states national leadership, political and military status, and business and professional roles are not infrequently rewards for achievement; their mass-media and political leadership exhibit concerns for norms of universalism sometimes higher than those of highly modernized countries; they show increasing number of functionally specific roles like those of military officials, bureaucrats, executives, administrators, policemen etc.

In addition to its shaky empirical basis, there are grave theoretical weaknesses in this approach. Firstly, there is an omission of obviously crucial theoretical distinctions. The incidence and functionality of universalism differ substantially on the normative and the existential level; so does achievement orientation as regards recruitment to and rewards and motivation within a role; so does functional specificity and diffusiveness as regards roles at the top and at the bottom of the economic and

political stratification systems (Frank 1968, pp. 3-9).

Secondly it is questionable whether one can view values and normative structures in an antithetical framework, i.e. either promoting or impeding modernization. Such an assumption, which is implicit in this approach, ignores the possibility and fact that there is considerbale coexistence of these polar values and norms sometimes with the mechanism of compartmentalization, as in India in the religious realm (Singer 1966), sometimes in positive, functional relationship, as in the case of family particularism in the extended family situation (Hirschman 1965, Weiner 1966, p. 6, Singer 1968).

Thirdly, there is no theoretical or empirical justification that the values and norms considered crucial for modernization are in fact the prerequisites to modernization. The principle of substitutability (Gerschenkron 1962), for example in the accumulation of capital, can operate replacing the role of the Protestant ethic and private frugality by the role of the state. The state accumulated capital through taxation in Japan, through holding down consumerism in Russia, through borrowing as in many less developed countries today, or through deficit financing etc. in other cases. The Rudolph's (1967) have strongly argued that there is in India potential for modernity hidden within traditionality, there are "the latent, deviant and minority alternatives" which, with some alterations in the historical circumstances, may become

the source of social change and new realities.

Fourthly, in general the social psychological approach, and in particular some of its dominant concepts, appear to be a product of ethnocentricity. There is a tendency here to generate theories based on limited experience of Western societies, a tendency to ignore the variety and richness of alternatives of social action. Thus the concept of achievement motivation considers only economic outlets thereby ignoring the potentiality of artistic and other professional outlets to satisfy the achievement aspirations of different individuals. Frank (1967) makes the same charge against the pattern variable of universalism by suggesting that there are forms of universalism in the underdeveloped countries quite apart from those considered by Hoselitz.

Finally, there is the serious charge that McClelland's argument for the concept of achievement orientation is nothing more than a simple case of a post hoc ergo propter hoc argument.

Lack of Historicism

Underlying the consensual, social psychological theories is the assumption that the problems of the poor countries are simply those of historical backwardness, and therefore capable of resolution through massive effort at diffusion of developmental attitudes, values, and institutions in the fields of communication, transportation etc. (Lerner 1958, Cutright 1963). Such an

assumption confuses the notions of undevelopment and underdevelopment.

The latter notion of underdevelopment implies structural defects which would pose problems far more grave and painful than those ever faced by most developed countries in their early stages of growth. It is incorrect to suggest that the present structure of underdevelopment was the original state of the poor countries of today. This assumption would equate the experience of the richer countries with that of the poorer ones. The more developed countries can be correctly considered as having been in an initial stage of undevelopment from whence they evolved upwards. They never went through the experience of underdevelopment.

Underdevelopment is a structure imposed on poor societies by the vagaries of a history which is largely absent in the consensualist's explanation. There are a growing number of studies that have documented that the economic growth of poor countries was once comparable to if not better than other nations and that their progressive decline is directly and proportionately related to their political and/or economic domination by "colonial" nations. For documentation of this argument one may refer to Clairemonte (1960) for a general study; Desai (1959), Dutt (1955), and Singh (1964) for studies on India; Casanova (1964), Di Tella (1962), and Frank (1967) for studies on Latin America.

Frank (1967) has characterized underdevelopment as a structure

polarized on a metropolitan-satellite axis. The metropoles are the centers that develop, while the organically dependent satellites exist largely for the economic advantage of the metropoles, while at the same time they lapse steadily and surely into underdevelopment. The develpomental pattern is that of a growing polarization directed outwards from the satellite groups in favor of the metropoles whose position is secured on a monopoly basis. Historical colonialism and contemporary economic imperialism do not let capital, technology or institutions flow to the satellite nations except on a highly selective basis and only when it is conducive to the institutionalization of a monopoly structure favoring the dominant nations.

Generally, no country has been able to launch into development without a massive infusion into it of capital and skills in its earlier stages. The underdevelopment structure of the poor countries on the other hand has been the result both of heavy forced outflow of capital and raw materials and at the same time of a situation where these countries were forced to be ready monopoly markets for the factory products of the metropoles.

The outer polarization of the "metropolitan" societies and satellite societies corresponds to a twofold internal polarization: first, between a small minority of rich industrialists and land holders on the one hand and on the other the vast dependent servile masses; second, between a few highly developed regions

and vast underdeveloped but totally dependent regions. The outer polarization cannot adequately function without the active participation and help of the small affluent sections in the poor countries in league with the "colonial" outsider.

Atomistic Analysis

The ignoring of the decisive factors of history which have influenced development also points to the non-holistic frame of reference which is a serious shortcoming of this analysis. It is impossible to understand the realities and processes of development without considering the political and economic interrelations between societies. The metropolis-satellite analysis emphasizes this point. The industrial revolution and the rapid economic growth of the European community in the 18th and 19th centuries have to be understood within the context of their colonial thrusts that secured them monopoly access to sources of raw material and to ready, captive markets for their factory products.

In the contemporary world situation, the international frame of reference is crucial. The important implication of foreign aid, of entering into a world market late when the world market is already characterized by quotas, patents, cartels, import regulations etc., of the political reality of allignment

with super powers, of the necessity and ease of importing technology as well as ideas, values, and institutions which were gradually developed in the West at a great price of blood and human suffering--the implications of all these factors cannot be understood or dealt with without considering the world situation that inevitably and organically links one country with another.

This holistic analysis is significantly absent in the approach to modernization which we have described. The international links of historical colonialism and contemporary imperialism are consistently ignored. Instead, there is an atomistic analysis of poor countries and an attribution of their poverty to the high incidence of illiteracy, of traditional values, norms, attitudes, and role sets. The internal as well as international interactional structure, decisive for development, cannot be fruitfully ignored in favor of an analysis of isolated units that compose the whole.

The dysfunctions of Education

The emphasis on education as a panacea for developmental problems seems very much misplaced. The advocates for massive investment in illiteracy eradication have not faced up to the problems such investments have given rise to. Illich (1970, pp. 105-120, 1971) has noted the functionality for vested "metropolitan" powers of the present emphasis and structures of

education. Many Asian countries are now paying the belated social and political costs of massive educational investments. Not only is there the ironic drain of highly trained talent out of some of these countries to affluent societies, but also in some of them the phenomenon of the rising numbers of educated unemployed bears close relation to social cleavages, alienation, and radical politics, all of which aggravate the developmental problems (Rosen 1966, Appendix).

Gradualism and Sociological Realism

The gradualist thesis rests on an assumption common to most other sectors of the social psychological school. There is a marked tendency to equate modernization, meaning industrial growth, with development, which implies political and social growth oriented to maximization of mass welfare and participation.

In the first place, it is unrealistic to view modernization as unilinear if simply because of the multi-range repercussions that industrialization would have on the political, social, and religious aspects of a society. While the political life of any Western nations could be considered as a function of their economic reality, the economic growth of many poor countries is directly related to and based upon their political life. The economic man is ultimately bound up with the sociological man.

The nature of the legitimation of the political set up, the internal and external pressures it bears, its potential for coercive mobilization of resources, for risk taking etc., are vital factors that have to be considered simultaneously and as a part of the problem of individual growth. Economic decisions therefore cannot be divorced from sociological wisdom.

Rostow's (1960) analysis of underdevelopment in terms of stages of growth, howsoever helpful it be from a strictly economic point of view, on a sociological level shows considerable unrealism especially as regards its self-proclaimed ambitions of being a non-Communist manifesto. For Rostow it is essentially a problem of temporality, not of any need for adjustment in interactional patterns. Understandably, he describes the stages, rather than say anything about how to get from one to the other. This latter task would have implied a weighing of the political and social reality that cannot be divorced from the economic. The price of ignoring the structures of underdevelopment would be to make any implementation of the Rostowian model a cause for further social hostilities and the consolidation of the bases of backwardness. "....It should be duly noted that hideous environment, cultural bankruptcy, and fragmented lives—the very warp and woof of life in the Third World—are precisely a consequence of incomplete, partial development, of a process of imitative modernism that ultimately makes structural reform more, rather than less, difficult"

(Horowitz 1966, pp. 408-409).

Often the legitimacy of the polity, even its survival, rests on its premise of national strength, of social justice, of the goal of equal opportunity etc. Hence massive efforts at planning and quick development are the very conditions for stability in some societies. In these situations any commitment to a gradualist stance may be taken as a commitment to a status quo, and possibly as a retrogressive step.

Realistically, revolution may be the only feasible alternative that can at the same time smash age-old blockages and promise any realistic opportunities for growth. The mounting possibilities for revolution and chronic political instability in some poor countries point to this problem of frustration at an immobile structure and of the unacceptability of a gradualist growth. Galbraith has suggested that the U.S. aid in Latin America has had the function of perpetuating the positions of non-functional elites, thus making a rapid growth impossible. Thus, he claims, the U.S. has been responsible in promoting leftist, radical revolutionary movements in Latin American countries (Galbraith 1965, pp. 40-43).

The Problems of Business Trusteeship

A defence of the private sector and the entrepreneurial class fails to account for several critical variables. In the

first place, the assumption of the efficient causality of values and roles of traditionality or modernity, when they are considered separately from the holistic structure, has not been surely established by the social psychologists. The system cannot be changed by changing its parts.

Secondly, it is empirically false to associate the rise of the middle class with the greater prevalence of the skills and values of development (Johnson 1958, 1961). The countries in Latin America with the largest middle classes, Argentina and Chile, are not at all the ones with the most development (Hoselitz 1960b). The elitist stance which ignores the possibility of working class or peasant elites is blind to the fact of the uneven spread of the psychology of development in a nation. In Mexico the middle classes tend to be less concerned about overpopulation and are more tradtion-bound than the poor (Kahl and Stycos 1965). McCord (1965, p. 143) has pointed out that latent entrepreneurial talent exists in almost every region and in every economic class. Many authorities have evidenced the fact of peasant innovativeness and economic skills when incentives and structural opportunities have been provided (Weiner 1966, p. 10).

Thirdly, the selective and uneven process of economic development would pose the question as to why creative elites would be present in one sector of the economy and not the other.

Fourthly, the managerial elites approach avoids the issue of

personal aggrandizement being not necessarily conducive or responsible to the common welfare or national development. The very strategy for guided growth which keeps in step with the political reality and social aspirations of a nation would demand that the accumulation of private wealth be accountable to public bodies which keep national goals and strategies in mind. The assumption of goodwill and social understanding on the part of the affluent business minority is palpably unrealistic if one considers the situations of South Korea, Taiwan, Hong Kong etc., where the considerable economic growth on the capitalistic model has done little to redress social schisms and to inequities. The potential for political radicalism arising from uneven benefits of progress has been documented for India by Frankel (1971, pp. 191-215) even in such seemingly innocuous areas as introduction of high yielding rice and wheat varieties. The case of Pakistan is also illustrative of the above argument. Before the latest conflict, Westerners generally considered it to be somewhat of a capitalistic model of a fast developing country that made good use of foreign aid. Nulty (1971) on the other hand has documented, in the case of Pakistan, that "foreign aid is using money of poor people in rich countries to pay the rich people in poor countries for their allegiance to rich people in rich countries." In Pakistan economic growth is a highly uneven process generating great divisions between a small privileged group of families and

the vast masses of poor people. National development has taken the route of self-aggrandisement of a few at the cost of common welfare.

Societal Modernization

The particular approach in modernization studies which we have been critiquing stresses what has been referred to as individual modernization. In contrast we have been implying that much more fruitful research would result from the investigation of modernization on the societal level. Such an investigation would have the following characteristics.

Firstly, the substance of modernization would be lifted out of its individualized base and viewed in the context of group relationships which we consider are the decisive factors affecting modernization. We view, as suggested in Chapter I, Section II above, the key conceptual element in the modernization process to be the element of rationality. Rationality implies conscious, deliberate selection of appropriate means to attain consciously and deliberately chosen goals. It is important to stress that social arrangements which generate and absorb change towards greater rationality are at the heart of modernizing societies. This change would not only consider ever better means to accomplish societal goals, but it would also imply social mechanisms that constantly subject social and humanitarian goals to rational

analysis, control, and choice. Such an incorporation of functional and substantial rationality into the production sytem of a society, its economy, and consequently into its social structures, for example, by the differentiation and professionalization of social life, would be considered to be the proper study of modernization.

Secondly, the study of societal modernization would demand a structural analysis which would stress socio-ecological factors which promote or retard the incorporation of rationality as described above. These factors would include the following: a historical analysis that discovers the roots and processes that have generated institutional arrangements conducive to foster or impede the modernization process; the internal dynamics of the social unit as expressed in its stratification system, monopoly structures, population composition and growth, communication networks, investment patterns, resource exploitation, institutional stability etc.; the social unit's extra-systemic linkages, particularly its relations with super or world powers which are in a position to control its economy and political decisions through the mechanisms of self-serving aid, investment, and trade arrangements. This holistic viewpoint which analyzes the structural features of the social unit would be the most fruitful both in terms of understanding the meaning of the modernization process, as well as in terms of predicting its pace and success.

Thirdly, and consequently, attitudes and beliefs would not

constitute the prime focus of the approach we are here describing. Any social psychological questions raised would not deal with behavioral dispositions either as the prime independent or dependent variables in the modernization process. Rather attitudes would be researched in their dialectical relationships with the behavioral and structural needs. They would be viewed in their adaptative contexts and processes in which alone would their genesis and functions attain any meaning and significance. A more worthwhile issue than the conduciveness or nonconduciveness of attitudes to modernization is the role of beliefs and ideologies as mechanisms of stability, protest, legitimacy, group pressure, and aspirations, all of which are factors related to the modernization effort involving coercion, deferrment of consumerism, political viability, charismatic leadership etc.

Conclusion

This chapter has attempted a critique of the social psychological school in the study of modernization. By far this approach is the most common among social scientists today, though there is evidence that an increasing number of scholars are departing from the assumptions and perspective characteristic of this approach.

Though the critique has concentrated on the examination of the theoretical, empirical, and policy implications of the approach,

a fascinating critique could be attempted from the point of view of the sociology of knowledge. Most scholars who have been quoted in this chapter as representing aspects of this approach, possess pronounced political views, and many have served in the highest policy making positions in the government, and have worked in university or research institutions heavily subsidized and relied upon by the government or business interests. Their theoretical analysis and practical prescriptions therefore would not entirely be unrelated to their own economic and political positions, their connections with the business community, their faith in the capitalistic ethic, and their other vested interests. Their educational and social background would perhaps point up many traces of cultural ethnocentricism in their theoretical perspective.

This also suggests the pronounced structuralist angle of the critique. Despite the evidence that emerged in the present research, and the other data presented in our argument, the sociologist of knowledge would have his own conclusions to draw from it. But as agreed upon by the sociologists of knowledge, the consciousness of the social bases of one's knowledge and perspective can liberate one, provide him with added control, and suggest further stimulation to understand the real dimensions of the reality under study.

REFERENCES

REFERENCES

Abegglen, James
1958 The Japanese Factory. Glencoe, Ill.: The Free Press.

Bachenheimer, F.G.
1959 "Elements of Leadership in an Andhra Village." In Richard L. Park and Irene Tinker (eds.), Leadership and Political Institutions in India, Princeton, N.J.: Princeton University Press.

Bailey, F.G.
1957 Caste and the Economic Frontier. Manchester: Manchester University Press.

1960 Tribe, Caste, and Nation. Manchester: Manchester University Press.

Barnabas, A.P.
1958 "Nationalism and Casteism." Aikya, October.

Barnabas, A.P. and Subash C. Mehta
1965 Caste in Changing India. New Delhi: The Indian Institute of Public Administration.

Beals, Alan
1959 "Leadership in a Mysore Village." In Richard L. Park and Irene Tinker (eds.) Leadership and Political Institutions in India, Princeton, N.J.: Princeton University Press.

1962 Godalpur. New York: Holt, Rhinehart, and Winston.

Bellah, Robert
1957 Tokugawa Religion. Glencoe, Ill.: The Free Press.

1965 "Epilogue." In Robert N. Bellah (ed.), Religion and Progress in Modern Asia, New York: The Free Press.

Black, C.E.
1966 The Dynamics of Modernization: A Study in Comparative History. New York: Harper and Row.

Caplow, Theodore, and Kurt Finsterbusch.
1964 Development Bank: A New Method of Rating National Development. Unpublished Paper, Columbia University, Bureau of Applied Research.

Clairemonte, Frederick.
1960 Economic Liberalism and Underdevelopment: Studies in the Disintegration of an Idea. Bombay and London: Asia Publishing House.

Cutright, Phillips.
1963 "National Political Development." In American Sociological Review, 28, 2, April.

Danda, Ajit Kumar, and Dipali Gosh Danda.
1968 Development and Change in a Bengal Village. Hyderabad: National Institute of Community Development.

Desai, A.R.
1959 Social Background of Indian Nationalism. Bombay: Popular Book Depot.

Deutschmann, Paul J., and Orlando Fals Borda.
1962 Communication and Adoption Patterns in an Andean Village. San Jose, Costa Rica: Programma Inter-Americano de Informacion Popular. Mimeo Report.

Deutschmann, Paul J.,
1962 "Mass Media in an Underdeveloped Village." In Journalism Quarterly, 40.

Dhillon, H.S.
1955 Leadership and Groups in a South Indian Village. New Delhi: Planning Commission, Government of India.

Di Tella, Tocuato.
1962 "Los Processos Politicos y Sociales de Industrializacion." In Desarrallo Economico, 2, 3, October-December.

Dube, S.C.
1958 India's Changing Villages, Human Factors in Community Development. Ithaca, N.Y.: Cornell University Press.

Dutt, Palme R.
1955 India Today and Tomorrow. London: Lawrence and Wishart.

Eister, Alan Wardell.
1962 "Critical Factors in the Modernization Process in West Pakistan." Yearbook of the American Philosophical Society.

Epstein, T.S.
1962 Economic Development and Social Change in South India. Manchester: Manchester University Press.

Faunce, William A.
1968 Problems of an Industrial Society. New York: McGraw-Hill Book Company.

Ford Foundation, The
1970 India's Family Planning Program in the Seventies. New Delhi: India Field Office.

Frank, Andre Gunder.
1967 Capitalism and Underdevelopment in Latin America: Historical Studies in Chile and Brazil. Monthly Review Press.

1968 "Sociology of Development and Underdevelopment of Sociology." Unpublished Manuscript.

Frankel, Francine R.
1971 India's Green Revolution: Economic Gains and Political Costs. Princeton, N.J.: Princeton University Press.

Fromm, Eric
1941 Escape From Freedom. New York: Holt, Reinhart, and Winston; Avon Books Reprinted 1965.

Frey, Frederick W.
1964 "The Mass Media and the Peasant." Paper presented at the Association for Education in Journalism, Austin, Texas.

Fuchs, Stephen.
1950 The Children of Hari. Vienna: Velag Herold.

Galanter, Marc.
1961 "Equality and 'Protective Discrimination' in India." Rutgers Law Review, 16.

1963 "Law and Caste in Modern India." Asian Survey, 3.

Galbraith, John K.
1962 Economic Development in Perspective. Cambridge, Mass.: Harvard Universtiy Press.

1965 The Underdeveloped Country. Toronto: The Canadian Broadcasting Corporation.

Gerschenkron, G. (ed.)
1962 Economic Backwardness in Historical Perspective. Cambridge, Mass.: Harvard University Press.

Ghurye. G.S.
1950 Caste and Class in India. Bombay: Popular Book Depot.

Gould, Harold.
1961 "Sanskritization and Westernization: A Dynamic View." Economic Weekly, June 24.

Granick, David.
1962 The European Executive. Garden City, N.Y.: Doubleday and Company.

Hagen, Everrett E.
1962 On the Theory of Social Change: How Economic Growth Begins. Homewood, Ill.: Dorsey Press.

Harper, Edward B.
1959 "Political Organization and Leadership in a Karnataka Village." In Richard L. Park and Irene Tinker (eds.), Leadership and Political Institutions in India. Princeton, N.J.: Princeton University Press.

1968 "A Comparative Analysis of Caste: The United States and India." In Milton Singer and Bernard Cohn (eds.), Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Harrison, Selig S.
1960 The Most Dangerous Decades. Princeton, N.J.: Princeton University Press.

Healey John.
1958 "Caste and Economic Development in India." Religion and Society. 5, September.

Herzog, William A., Jr.
1967 "The Effects of Literacy Training on Modernization Variables." Ph.D. Dissertation. East Lansing, Michigan: Michigan State University.

Hirschman, A.O.
1958 The Strategy of Economic Development. New Haven, Connecticut: Yale University Press.

Hodgdon, Linwood L., and Harpal Singh.
1966 Adoption of Agricultural Practices in Madhya Pradesh. Hyderabad: National Institute of Community Development.

Horowitz, Irving L.
1966 Three Worlds of Development: The Theory and Practice of International Stratification. New York: Oxford University Press.

Hoselitz, Bert F.
1960a Sociological Factors in Economic Development. Glencoe, Ill.: The Free Press.

1960b "Economic Growth in Latin America." Contributions to the First National Conference in Economic History. The Hague: Mouton and Company.

1964 "Social Stratification and Economic Development." International Social Science Journal, 16, 2.

Hutton, J.H.
1961 Caste in India: Its Nature, Function, and Origins. London: Oxford University Press.

Illich, Ivan.
1970 Celebration of Awareness: A Call for Institutional Revolution. Garden City, N.Y.: Doubleday and Company.

1971 De-Schooling Society. Edited by Ruth N. Anschen. New York: Harper and Row.

Inkeles, Alex.
1959 "Personality and Social Structure." In R.K. Merton, L. Broom, and L.S. Cottrell, Jr., (eds.), Sociology Today: Problems and Prospects. New York: Basic Books.

Inkeles, Alex.
1966 "The Modernization of Man." In Myron Weiner (ed.), Modernization: The Dynamics of Growth. New York: Basic Books.

1969 "Making Men Modern." American Journal of Sociology, 75, September.

Johnson, John J.
1958 Political Change in Latin America: The Emergence of the Middle Sectors. Stanford: Stanford University Press.

1961 "The Political Role of the Latin American Middle Sectors." The Annals of the American Academy of Political and Social Science, 334, March.

Kahl, Joseph, and J. Mayone Stycos.
1965 "The Philosophy of Demographic Policy in Latin America." Studies in Comparative International Development, 1, 2.

Karve, Irawathi.
1961 Hindu Society: An Interpretation. Poona: Deccan College.

Kerr, Clark, John T. Dunlop, Frederick Harbison and Charles Myers.
1964 Industrialism and Industrial Man. New York: Oxford University Press.

Keyfitz, Nathan.
1965 "Political-Economic Aspects of Urbanization in South and South East Asia." In Philip M. Hauser and Leo F. Schnore (eds.), The Study of Urbanization. New York: John Wiley and Sons.

Kumar, Krishna.
1970 "Ritual Caste Ranking and Modernization in India: A Study of Peasants in Six Villages." Master's Thesis. East Lansing, Michigan: Michigan State University.

Leach, Edmund, and S.N. Mukerjee.
1970 Elites in South Asia. Cambridge: Cambridge University Press.

Lerner, Daniel.
1958 The Passing of Traditional Society: Modernizing the Middle East. New York: The Free Press.

1964 "Literacy and Initiative in Village Development." In Rural Development Research Report. Mimeo Report. Cambridge, Mass.: MIT-CIS.

Lewis, Oscar.
1958 Village Life in North India. Urbana, Illinois: University of Illinois Press.

Lipset, Seymour Martin.
1960 Political Man: The Social Bases of Politics. New York: Doubleday and Company.

Lynch, Owen M.
1968 "The Politics of Untouchability: A Case from Agra, India." In Milton Singer and Bernard S. Cohn (eds.), Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Majumdar, D.N.
1958 Caste and Communication in an Indian Village. Bombay: Asia Publishing House.

Mandelbaum, David G.
1968 "Family, Jati, Village." In Milton Singer and Bernard S. Cohn (eds.), Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Marriot, McKim.
1968 "Caste Ranking and Food Transactions: A Matrix Analysis." In Milton Singer and Bernard S. Cohn (eds.), Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Mason, Philip (ed.)
1967 India and Ceylon: Unity and Diversity, A Symposium. New York: Oxford University Press.

McCord, William.
1965 The Springtime of Freedom: Evolution of Developing Societies. New York: Oxford University Press.

McClelland, David C.
1961 The Achieving Society. Princeton, N.J.: Van Nostrand.

McClelland, David C., and David G. Winter.
1969 Motivating Economic Achievement. New York: The Free Press.

McCormack, William.
1959 "Factionalism in a Mysore Village." In Richard L. Park and Irene Tinker (eds.), Leadership and Political Insitutions in India. Princeton, N.J.: Princeton University Press.

Moore, Wilbert E.
1962a "Society as a Tension-Management System." Behavioral Science and Civil Defence Disaster Research. Washington D.C.: National Academy of Sciences, National Research Council.

1962b The Conduct of Corporation. New York: Random House.

1963 Social Change. Englewood Cliffs, N.J.: Prentice-Hall.

McNelly, John T.
1966 "Mass Communication and the Climate for Modernization in Latin America." Journal of Inter-American Studies, 8.

Murphy, Gardner.
1955 In the Minds of Men--The Study of Human Behavior and Social Tensions in India. New York: Basic Books.

Nash, Manning.
1963 "Introduction: Approaches to the Study of Economic Growth." Journal of Social Issues, 29, 1, January.

Nicholas, Ralph W.
1968 "Structures of Politics in the Villages of Southern Asia." In Milton Singer and Bernard S. Cohn (eds.), Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Nulty, Timothy and Leslie.
1971 "Pakistan: The Busy Bee Route to Development." Transaction, 8, 4, February.

Orenstein, Henry.
1959 "Leadership and Caste in an Indian Village." In Richard L. Park and Irene Tinker (eds.), Leadership Political Institutions in India. Princeton, N.J.: Princeton University Press.

Pannikar, K.M.
1955 Hindu Society at Crossroads. Bombay: Asia Publishing House.

Pareek, Udia, and S.N. Chattopadhyaya.
1965 "Measuring Levels of Aspirations of Farmers Through a Projective Technique." Indian Journal of Social Work, 25.

Parsons, Talcott.
1951 The Social System. Glencoe, Ill.: The Free Press.

1961 "The Point of View of the Author." In Max Black (ed.), The Social Theories of Talcott Parsons. Englewood Cliffs, N.J.: Prentice-Hall.

Petrini, Frank.
1966 The Rate of Adoption of Selected Agricultural Innovations. Uppsala, Sweden: Report 53 of the Agricultural College of Sweden.

1967 An Experiment with an Increasing Amount of Information. Uppsala, Sweden: Report 84 of the Agricultural College of Sweden.

Rahim, Syed A.
1961 The Diffusion and Adoption of Agricultural Practices: A Study of a Village in East Pakistan. Comilla, East Pakistan: Pakistan Academy of Rural Development. Technical Publication 7.

Rao, Laksmana Y.V.
1963 "Communication Development: A Study of Two Indian Villages." Ph.D. Dissertation. Minnesota: University of Minnesota.

Reserve Bank of India.
1961 Rural Credit Follow-Up Survey, 1958-59. Bombay: Examiner Press.

Rogers, Everrett M., and Wickey L. Meynen.
1965 "Communication Sources for 2, 4-D Weed Spray Among Columbian Peasants." Rural Sociology, 30.

Rogers, Everrett M., and Lynne Svemming.
1969 Modernization Among Peasants: The Impact of Communication. New York: Holt, Rhinehart, and Winston.

Rogers, Everrett M., Joseph R. Ascroft, and Niels G. Roling.
1970 Diffusion of Innovations in Brazil, Nigeria, and India: Research Report 24. East Lansing, Michigan: Michigan State University, Department of Communications.

Rosen, George.
1966 Democracy and Economic Change in India. Berkeley: University of California Press.

Rostow, Walter.
1961 The Stages of Economic Growth. New York: Cambridge University Press.

Roy, Prodipto
1967 The Impact of Communications in Rural Development in India. Hyderabad: National Institute of Community Development. Mimeo Report.

Rudolph, L.I., and S.H.
1960 "The Political Role of India's Caste Associations." Pacific Affairs, 33, 1, March.

Schuman, Howard and Others.
1967 "Social Psychological Effects and Noneffects of Literacy in a New Nation." Economic Development and Cultural Change, 16.

Sen, Lalith K.
1966 Awareness of Community Development in Village India. Hyderabad: National Institute of Community Development.

1969 Opinion Leadership in India: A Study of Interpersonal Communication in Eight Villages. Hyderabad: National Institute of Community Development.

Shils, Edward.
1961 The Intellectual Between Tradition and Modernity: The India Situation. The Hague: Mounton and Company.

Simpson, Dick.
1964 "The Congruence of the Political, Social, and Economic Aspects of Development." International Development Review, 6.

Singer, Milton, and Bernard Cohn.
1968 Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Singer, Milton.
1966 "The Modernization of Religious Beliefs." In Myron Weiner (ed.), Modernization: The Dynamics of Growth. New York: Basic Books.

1968 "The Indian Joint Family in Modern Industry." In Milton Singer and Bernard Cohn (eds.), Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Singh, V.B.
1964 Indian Economy Yesterday and Today. New Delhi: People's Publishing House.

Srinivas, M.N., and A.M. Shah.
1960 "The Myth of the Self-Sufficiency of the Indian Villages." Economic Weekly, 12.

Srinivas, M.N.
1966 Social Change in Modern India. Berkeley: University of California Press.

1968 "Mobility in the Caste System." In Milton Singer and Bernard Cohn (eds.), Structure and Change in Indian Society. Chicago: Aldine Publishing Company.

Stone, John T.
1952 How County Agricultural Agents Teach. Mimeo Bulletin. East Lansing, Michigan: Michigan State University, Agricultural Extension Service.

Taylor, Carl C., and Others.
1966 India's Roots of Democracy. New York: Frederick Praeger.

United Nations.
1961 "Capital Formation in Agriculture—A Case Study in Uttar Pradesh, India." U.N. Economic Bulletin for Asia and the Far East, 12, 2, September.

Weber, Max.
1930 The Protestant Ethic and the Spirit of Capitalism. New York: Scribner.

1946 From Max Weber: Essays in Sociology. Translated and edited by H.H. Gerth and C. Wright Mills. New York: Oxford University Press. Reprinted in 1958.

1964 The Sociology of Religion. Boston: Beacon Press.

Weiner, Myron.
1963 The Politics of Scracity. Bombay: Asia Publishing House.

1966 "Introduction." In Myron Weiner (ed.), Modernization: The Dynamics of Growth. New York Basic Books.

Whiting, Gordon C.
1967 Empathy, Mass Media and Modernization: A Study of Rural Brazil. Ph.D. Dissertation. East Lansing, Michigan: Michigan State University.

Wittfogel, Karl.
1956 Oriental Despotism: A Comparative Study of Total Power. New Haven, Connecticut: Yale University Press.

Zweig, Ferdynand.
1952 The British Worker. Hammondsworth: Penguin Books.

1962 The Worker in an Affluent Society: Family Life and Industry. London: Heinemann Publishers.