Chapter I:

The Social Psychology of Modernization

Of all the changes which make up the complex process of modernization, those which take place in people are among the most difficult to understand. A new school can be built with a set of foreign plans; roads can be constructed to meet universal specifications; dams, factories, television facilities, and government structures can be designed by visiting experts. But no one can make people modern as quickly or as completely as one can change the environment. Changes in attitudes, value systems, and ways of life are essential, however, if modernizing trends in the environment are to survive and grow.

There are many complex relationships between the level of technology which a people can maintain and the way they think about themselves and live with one another. As technological modernization proceeds, people also change. Sometimes it appears that change in people is a prerequisite of technological change; at other times it appears to be a product of a modified technology. But cause or effect, changes in men are of great importance because the beliefs and attitudes of people play a significant part in determining how readily modernizing trends will spread.

This century, particularly the last two decades, has witnessed a remarkable transformation of the world. Many areas have begun to change rapidly under the impact of technology and education. Often, natural resources such as oil have brought in much wealth. Great as these improvements have been, however, it is frequently suggested that the gap between the rich nations and the poor nations has widened. To be certain, few poor countries have managed to catch up with the technologically advanced. A rapidly growing population, lack of capital, a shortage of skilled people, scarcity of natural resources, and an ineffective government apparatus have been suggested singly or together as causes of this slow economic development. Although social psychological factors are also involved, they have been the object of less investigation—it has been taken for granted that education would prepare people for the subjective component of modernization.

What is Modernization?

At the outset, we should perhaps clarify an idea which will play a crucial role in our discussion. This is the concept of *modernization*. Unfortunately, modernization may be used to refer to different sorts of change, and, often, it is only by examining the context that it is possible to determine what the writer has in mind. There is a general consensus that modernization implies the development of industries, the growth of cities, the establishment of schools, and building of roads, harbors, airports and other infrastructural facilities, and improvement of communication by the use of telephone, radio, television, and printed media.

To the individual citizen, modernization may mean that he learns to read, gets better care when he is sick, can buy new things, can travel more easily, can know more about the world outside his village, and can find more ways to make money.

A common assumption is that modernization will involve him more in the processes of government and thus enable him to influence the powerholders. There is grave doubt that this is so, for recent history has shown that modernization can proceed under almost any political system, even in those where the governed do not participate in the making of decisions of national consequence. Indeed, there are highly democratic communities that have remained completely stagnant.

The term modernization, itself, is unfortunate in that it implies a process which is, historically speaking, relatively recent. In the pre-Christian era, however, the Egyptians, Persians, Chinese, as well as other groups, had cities, roads, schools, some industries, significant literacy, and elaborate art forms. To focus on our region of interest, remarkable development took place in Southeast Asia more than 700 years ago under the Khmers in Cambodia and the Buddhists in Central Java. Temples were constructed then which, viewed now, seem quite beyond the capacity of the present inhabitants of those countries as they are presently organized.

But whether ancient or modern, modernization has usually resulted in an increase of goods and services for some or most people; improved health through better medical treatment, disease prevention, sanitation, and diet; and greater opportunities for education. These are the effects felt by individuals and the goals for which many may strive. In order for them to come about, industries must be established, governmental structures organized, communication and transportation systems built, and large numbers of individuals trained to perform unfamiliar services. Furthermore, each of these developments must go on at more or less the same time.

It is difficult enough to understand the process within the social sphere alone; the task becomes exceedingly complex when one tries to conceptualize

social, political, and industrial processes simultaneously. The result has been that theorists have tended to concentrate on those aspects of change which are the concern of their specific discipline, while action agencies have tried crash programs in areas of greatest need, such as health, roads, or political power. Sometimes, recognizing the many factors involved in modernization, the latter have promoted "shotgun" programs which spread their efforts across many areas. In the case of either single or diversified approaches, there has been an unfortunate lack of systematic research, with the result that we know little about the actual results of development efforts and even less about the processes by which the results are achieved.

A recent volume on modernization edited by Weiner (1966) delineates the large number of simultaneous processes involved in the phenomenon and indicates the complexity of their relationships. The book contains papers by no fewer than 25 scholars discussing different aspects of modernization. The editor suggests that one crucial issue on which writers divide is whether the attitudes and behavior of people must change in order for technological and economic change to occur, or whether technological change creates the atmosphere favorable to attitudinal and value change. The issue is important since one's approach to development depends on his view of which aspect of modernization has primacy in reality: a planning authority may choose to put priority on schools and communications on the one hand, or on the construction of roads and establishment of industries, on the other. A choice must often be made between trying to change men, who in turn will establish industries, or setting up industries first, with the expectation that individuals will make the necessary accommodations to industrial life. The fact that those in development programs frequently insist that all phases of development need attention is an indication that we have only a very limited knowledge of the actual preconditions of development.

Some views on the problem, particularly the emphasis on education as a modernizing influence, reflect an excessively rational view of man. More attention needs to be given to the role of imitation as a factor in the changes of behavior which accompany economic development. The mass media, even the schools, may provide models rather than information—models which may in fact conflict with the content of their instructional message. Thus, in a developing country, teachers and public figures may exhort the people to direct their energies to acquiring agricultural or industrial skills, but may demonstrate simultaneously that political shrewdness is the most rewarding skill.

Several articles in Weiner, notably those which discuss education and mass communication, reflect the view that certain attitudes and values are essential in order that economic change may take place. Most notable for our purposes is McClelland's discussion of his research on the achievement motive. In this

connection, Weiner reminds us that one of the most influential exponents of the primacy of attitudes was Weber, but cautions that subsequent research has shown that many societies have progressed without meeting the conditions of the Protestant ethic.

· On the other hand, a number of economists and other social scientists have contended that appropriate attitudes and behavior will appear only if incentives and opportunities of an economic nature are provided. Anecdotal evidence can be cited to support this position, particularly in the case of those Chinese and Indians who become highly successful entrepreneurs once they are free of the cultural restrictions of their home countries. Generally, however, evidence to support either position is indecisive because efforts directed at change have not been set up as formal experiments. The result is that the relative contributions of various factors within a given program remain unknown. However, in the course of this report, we shall argue that an experiment is possible, although the research reported here is by no means an experiment.

With important issues at stake and with little factual data, a planner is likely to adopt the most skillfully argued strategy. As Weiner suggests:

> Any policy maker calling for the advice of social scientists is likely to be bewildered by the enormous range of persuasive recommendations. An educational adviser may press for a heavier investment in schools; a geographer, for an urbanization policy or a program of regional development; an economist, for an agricultural development program, a reorganization of the tax system, or an elaborate planning program; a sociologist, for a community development program and for social overhead investments; a psychologist, for rewriting the textbooks for school children; a political scientist, for the expansion of local government or the creation of a national party with local cadres; a communications expert, for the establishment of a radio or television network; a lawyer, for the reform of the legal code; and a specialist in public administration, for the reorganization of the bureaucracy. They may all be right (1966: 13–14).

In this volume, we shall be concerned with the role of psychological factors in social change. We shall try to identify some of the modifications in outlook and in interpersonal behavior that are associated with the modernizing influences of the city, with its industries, schools, mass media, and its promise of an advanced technology and a unique way of life. The subjects of study will not be people examined over a span of time, but four similar communities in the Philippines which are located at different distances from the major city, Manila. Varying distance rather than time, we shall examine the effects of urban, modernizing processes such as industry and television. By selecting people carefully, we will try to determine the changes in the rich and the poor, in men and women, and in those who live in the town as opposed to those living in the countryside. At the same time, there will be an attempt to identify some of the social factors which impede development. Finally, we shall try to offer a social psychological approach to understanding both the process of change and resistance to change—an approach which may lead to empirically verifiable implications for social-action programs.

Modernization in the Philippines

The Philippines is an especially congenial area in which to study modernization. Compared to other developing nations, it is relatively well along the road to the modern society. The present century has witnessed a remarkable spread of education, with the result that there are schools even in remote places. Communication too has improved vastly, electricity, radio, and television having reached many communities. Transportation, which was once largely by sea, is often now by road or air.

Within this one country, one can observe almost all stages of development: one passes from Manila with its computers, atomic reactors, higher education, and jet airports; through provincial cities characterized by infant industrial development projects and sugarlands with mechanizing agriculture; to isolated communities which produce almost all of their own food and build almost all of the material objects which they use. One can see everything from a multi-million-peso corporation to farmers who plant with wooden tools on mountain-sides, burning a new clearing when the present field erodes.

The Philippines resembles many developing countries in that it is in the tropics and has a history of foreign occupation. Like other developing countries, too, its mineral resources have had limited development, and the majority of its people, about 80 per cent, live outside the cities. Likewise, it has a rapidly growing population and a growing need for the products of industry.

Education has been a major concern of the Philippine government and of the rank and file of Filipinos With an extensive school network, almost every child can get a minimum of four to six years of elementary school. It is estimated that the level of literacy has reached 70 per cent. Higher education is also relatively well developed, with numerous high schools and colleges whose fees are within the reach of many Filipino families.[1] The supply of educated people is probably not a deterrent to development. For that matter, in many fields there are more trained personnel than the economy can employ.

New Rice and a Different Society

Perhaps there is no better way of illustrating the close relationship between technological modernization and its social psychological correlates in the Philippines than by examining the successes and vicissitudes of IR-8, or "miracle rice."

The development of a strain of rice which increases yields from two to four times or more is the most important event of the decade in the Philippines and

[1] Given widespread literacy and a large number of people with higher education in the rural areas as well as the cities, the Philippines is an area where research is not hindered, particularly by suspicion or unreasonable hostility to strangers. For these reasons also, Filipinos do a good deal of research on their own society, and talented research assistants are available for the foreign scholar.

probably in the whole of Southeast Asia as well. Developed by the International Rice Research Institute in the Philippines, this rice strain seems likely to change the lives of millions of rice farmers and increase the food supply in a part of the world where starvation seemed imminent.

Older varieties of rice did not respond satisfactorily to fertilizer. Although the straw grew longer, the yield did not increase; indeed, the longer straw was responsible for flattening the stalk against the ground when it rained heavily. Furthermore, many varieties were subject to insects and viruses. Some of these problems have been reduced by the new varieties—IR-8 has been joined by IR-5 and BPI-78, and there are more in the test plots—but they require special treatment to achieve their greater productivity. Sprays must be applied at certain times; fertilizer must be used; and irrigation water must be controlled. Ripening more quickly because it is not responsive to day length, the new rice must be harvested not only in the dry weather but also during the rainy season. This necessitates dryers, and the larger crop requires more storage facilities. If one should ignore both the basic and incidental requirements of the crop, he might curtail or eliminate its higher productivity.

There are many parallels between the case of the new rice and that of other enterprises in the Philippines, such as the raising of chickens or pigs, or local household industries. What is needed is not so much an intensification of present practices as a new set of procedures. Improved feed results in virtually no extra eggs from native chickens, and native pigs grow only half as fast as improved breeds on the same diets. Hiring more workers than he can personally supervise yields little gain, often a loss, to the small-scale entrepreneur. He must introduce foremen and electric-powered equipment to expand beyond a certain limited size. In short, redoubling present efforts is often fruitless; new processes, animal or mechanical, are required, and these will often come from outside the community, even from outside the country. As in the case of rice, there must be local adaptations. Another consideration is that new methods will inevitably require diligence on the part of the workman.

It must be noted, however, that high-laying chickens and faster-growing pigs have been available for several decades. An exploration of the persistence of native chickens and pigs may reveal why useful advances are not adopted immediately.

To return to IR-8, however, before it was introduced, rice had not been greatly improved in tropical areas for centuries in spite of the need for better yields. The same is true of many of the other crops and fruits of the Philippines. But "miracle rice" has led to "miracle corn," which promises gains of the same order as IR-8. There is even talk of a "miracle coconut." One idea brings others in its wake. Once the calm is broken, many new ways of doing things may be introduced. Changing may become a habit or an approach to life once the mechanisms are established which permit and encourage change.

In these opening paragraphs we have raised the question of the role of attitudes, beliefs, and behavior in the processes of modernization. Human behavior has a variety of forms, and people in technologically advanced societies have ways of doing things that differ from those of people in less advanced societies. Using the Philippines as the model of a modernizing society, our goal is to identify some of these differences in behavior and to try to determine the part they play in bringing about modernization. In the process we may be able to increase our understanding of factors which increase or retard acceptance of change, as well as develop suggestions as to how desired changes can be promoted.