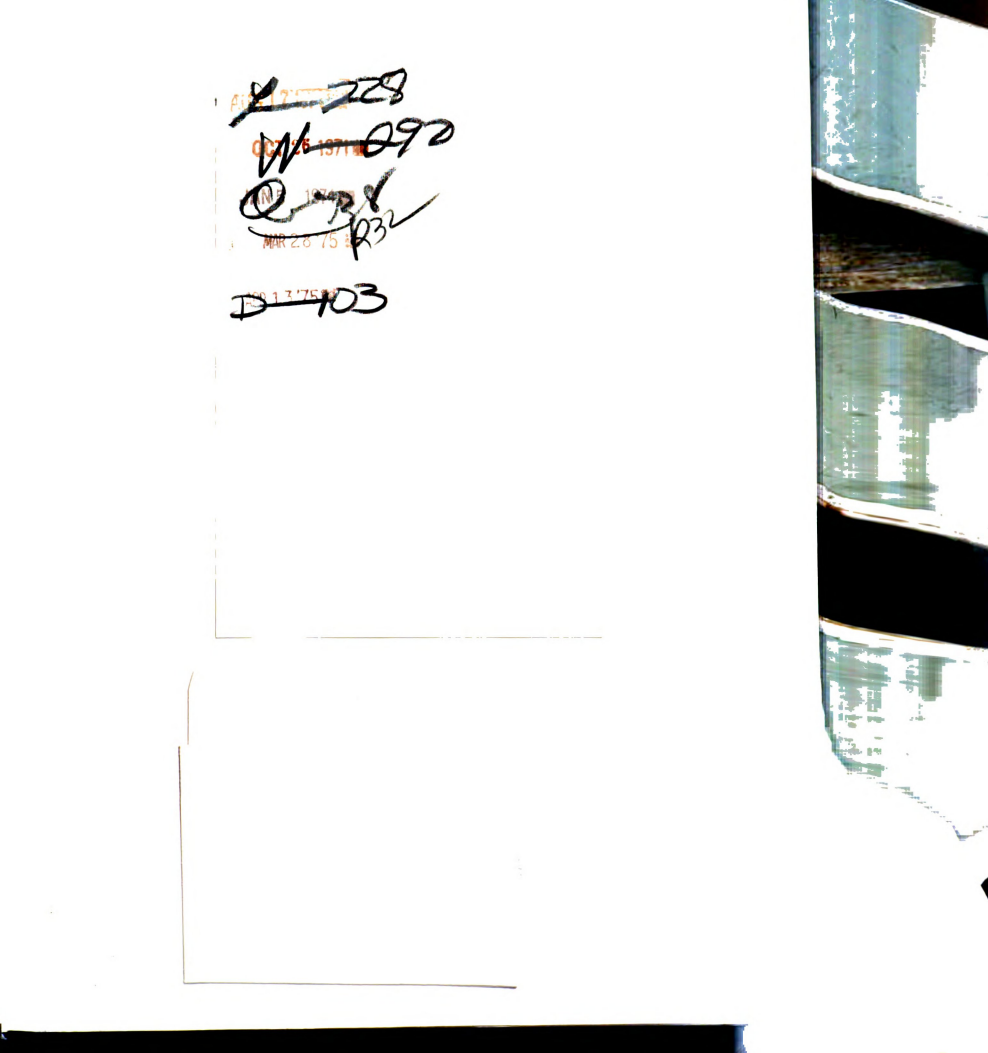

ABSTRACT

PLANNED CULTURAL BORROWING FOR NATIONAL DEVELOPMENT: AN ANALYSIS OF THE EGYPTIAN EXPERIENCE AND A THEORETICAL BASIS FOR ACTION

By

Salah El-Din A. Gohar

This study is a search for more effective methods and strategies of cultural borrowing. It had the purpose of answering, for Egypt - the United Arab Republic - as an example of contemporary developing nations, the major question of "how to facilitate a rational, diversified, and effective multi-source cultural borrowing by a developing country".

The study was based on the assumption that cultural borrowing is a healthy phenomenon if it is adequately planned and implemented. It is a healthy phenomenon if it contributes to solidarity and a sense of nationhood. It is a healthy phenomenon if it helps reduce the world tensions and the gap between the "haves" and the "have-nots". It is also a healthy phenomenon if it increases areas of world cooperation and international understanding.

Planned cultural borrowing was defended on the basis of four factors: the reduction of probability of initial

failure of novel ideas; the provision of material and moral support for the diffusion of acceptable innovations and new practices; minimizing frustrations which are likely to develop as a result of rising aspirations without adequate fulfillment of human wants; and protecting the society and the innovative enterprise.

This study is primarily analytical in nature. It drew heavily on the literature and previous research in such fields as anthropology, communication, education, psychology and sociology. Three criteria determined whether or not a given literature was to be reviewed: relevance to the broad subject of national development and social change, significance to the analysis of cultural borrowing and cultural diffusion, and applicability of conclusions and theoretical formulations to developing countries' settings.

A conceptual model of the process of planned cultural borrowing was developed. Seven stages were identified in the planned cultural borrowing process. These are the setting of objectives of cultural borrowing, exposure to foreign cultures, pooling new ideas and innovations, screening the borrowed ideas and innovations, experimentation, diffusion and integration, and evaluation.

On the basis of the conceptual model of the process of planned cultural borrowing, seven sets of variables were identified, each pertaining to one of the seven stages of the process. It was possible to develop, on the basis of

the identified variables, seven sets of hypotheses for future testing.

The study provided a detailed description of a proposed organization for planned cultural borrowing for the United Arab Republic. Given the political and administrative structures of the United Arab Republic's government, it was proposed that the organization for planned cultural borrowing would best serve its objectives if it takes the form of a special council attached to the Presidency. From there it can derive the freedom and power of action needed for its progressive tasks and can maintain favorable relationships with other organizations and agencies in the public and private sectors.

Recommendations:

On the basis of the study, the following suggestions are made for improving cultural borrowing and enhancing its effectiveness in national development:

1) Efforts to borrow new ideas and technologies undertaken by developing countries ought to be encouraged and supported by the world's modern and highly industrialized countries.
2) Developing nations must be provided with background information that will enable them to evaluate and understand the significance of messages from abroad.
3) Adequate machinery and personnel are needed to cope with the difficult and diverse tasks of cultural borrowing.

4) There is a need for adapting the imported technologies to the conditions and social values of the borrowing nation.

5) Developing countries should avoid heightening the anxiety level of their publics to a point that later creates real psychological problems. Individuals and groups must find roles to play as changes occur.

6) Developing nations in their readiness to adopt innovations must avoid the tendency to "chuck the old and grab the new" or to take on an attitude of unreasoned skepticism regarding a given cultural heritage.

7) Developing nations must be prepared to manage the introduction of conflicting values which are likely to lead to hostility and threats to integrity.

8) There is a great need not only for the professional prepared to deal with his specialty, but also for "gifted generalists" whose education and experience include both depth and breadth necessary for handling the problems of cultural borrowing and national development.

9) Professional associations in collaboration with universities must pool their efforts in continuing education both for their alumni and for those preparing for entry into professional fields.

10. There is need for combining the experience and knowledge of many experts from within and from outside the developing countries to facilitate the planning and implementation

of borrowed innovations.

11. Universities in developing countries must educate for adaptability, a quality which is necessary for modern, forward-looking societies.
12. There must be a continuous effort to reduce resistance to the adoption of innovations by developing nations.

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PLANNED CULTURAL BORROWING FOR NATIONAL DEVELOPMENT: AN ANALYSIS OF THE EGYPTIAN EXPERIENCE AND A THEORETICAL BASIS FOR ACTION

by

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To my father and mother whose memory continues to inspire and encourage me, I dedicate the cumulative result of this effort.

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CHAPTER I

INTRODUCTION

Background

> O mankind! Lo! We have created you male and female, and have made you nations and tribes that ye may know one another. Lo! the noblest of you, in the sight of Allah, is the best in conduct. Lo! Allah is knower, Aware.
>
> (The Holy Quoran)*

Cultural borrowing is the process through which a people adopt ways of thinking or behaving of other people. It may, or may not, involve the transfer of material products from the latter to the former.

Cultural borrowing is the major force in national development after local invention and discovery. One reason for its importance to national development is that individuals, in any culture, are limited by background and time. Cultural borrowing requires less time and effort on the part of the borrower, though it has the disadvantage of risking development of the habit of borrowing, and therefore, inhibiting creativity and originality. It also has the

---

* The Holy Quoran. Surah Al-Hujurat (The Private Apartments).

potential of increasing the area of world understanding, though it has the serious disadvantage of importing already conflicting ideologies and innovations which might handicap the whole process of development.

Most cultural borrowing in the past has not been planned; that is, ideas or technologies have passed from one culture to another without any planning or deliberation. This may explain why cultural borrowing in the past has not generally led to a real and self-sustaining development, as is illustrated in most former European colonies in Asia and Africa. Most of the technical and non-technical borrowing that occurred was not seen as significant and relevant to members of the borrowing colonies.

The term "development" has different meanings to different people. In many countries, development means industrialization. To some, development symbolizes the achievement of political independence. In others it is equated with the opportunity for education, the construction of a huge dam, rural and land reform, steel mills, or a modern communication system. Economists tend to equate development with economic growth, and are mainly concerned with the accumulation of savings, investment, national income, productivity, and trade activities. Sociologists and political scientists tend to think of development as building of social and political institutions. One basic dimension which is often neglected or underemphasized is the fact that today's development efforts

often mean change in the form of large-scale cultural borrowing and effective diffusion of new ideas and innovations from other cultures within the developing countries. Most economists seem to reject making a cultural approach to their theory of development on the assumption that for their tasks cultural variables can normally be taken as constant.

The term innovation, as used in this study, goes beyond the discovery of a new method, machine, or system of organization. It includes adaptation of new technologies borrowed from other cultures to domestic problems, and the securing of recognition and acceptance of these imported ideas and concepts.

Governments, in most developing countries, are the most effective elements in the development process. Many of them perform the role of change-designers; they plan the organization of enterprises and program the hiring and development of local manpower, they suggest new methods and formulate general strategies, they create favorable climates for the small-scale entrepreneurs, and they design development plans to be executed by the different segments of the society. They are able to undertake the responsibility of comprehensive programs of cultural borrowing since they have the capacity to facilitate, or inhibit, a free flow of ideas and new technologies into their countries.

Leaders of most developing nations share an urgent and understandable desire to make gigantic leaps across time, to

bypass slower and more natural processes of economic and scientific growth and place science at the service of an immediate technology; a technology of improved agriculture, of industrial expansion, of health and sanitation, and of starting new methods in education and training.

Development has been a major objective of the United Arab Republic (Egypt) since 1953. In 1960, the Republic launched its first national plan for comprehensive development. As an integral part of the plan, it was decided to develop and upgrade the country's manpower resources. Several thousand graduates of colleges and technical institutes have been selected and sent on educational missions abroad to continue their professional or technical training in universities and colleges in Canada, Europe, the United States, the Union of Soviet Socialist Republics, and in some selected countries in Africa, Asia, and South America. Upon finishing their education they are expected to go back to the U.A.R. to contribute their newly acquired skills and knowledges to the several development projects which have already started or which will be started in the near future.

The Problem and Purpose of the Study

This study seeks insight for answering, for the United Arab Republic, as an example of contemporary developing nations, the major question of "how to facilitate a rational,

diversified, and effective multi-source cultural borrowing by a developing country".

Cultural borrowing and the diffusion of borrowed ideas and innovations take place through individuals, groups, organizational structures, and communities. Those are generally governed by habits, attitudes, norms, beliefs, and laws, which shape their behavior and influence their interactions with each other. Not all such behaviors and interactions are facilitative of the diffusion of new ideas and innovations and of an effective utilization of them. Some tend to hinder, rather than facilitate them. Thus, the purpose of this study may be restated: "To seek insight into the nature and behaviors of individuals, groups, organizations, and communities that are likely to enhance, rather than hinder, the effective diffusion and utilization of borrowed ideas and innovations in a developing nation, and the role that can be played by social institutions toward the achievement of that goal".

Significance of the Study

The significance of this study becomes clearer if we realize that no viable theory of planned employment of cultural borrowing in social change has been established. Present theories are almost silent on matters of directing and implementing national development through planned cultural

borrowing. They tend to explain the dynamics of change without providing clues to the identification of strategic leverages for alteration. As such, they are more suitable for observers than for practitioners and designers of social change. This study is intended to seek insight into the rational employment of cultural borrowing which is badly needed by practitioners of social change and development planning. As such, the study should have implications for theorists, agents of change, administrators of development projects, and community and national leaders.

Methodological Overview

This study is primarily analytical in nature. It consists of four basic steps. First, literature in the fields of anthropology, communication, education, psychology, and sociology as it relates to social change and development is reviewed. Three criteria determine whether or not a given literature is reviewed: relevance to the broad subject of national development and social change, significance to the analysis of cultural borrowing and cultural diffusion, and applicability of conclusions and theoretical formulations to developing countries.

Second, research findings and theoretical formulations drawn from the reviewed literature are synthesized to find out the extent of their congruence and assistance in

understanding the problems involved in cultural borrowing. Third, based upon this synthetic analysis of the literature, conclusions are drawn with respect to the problems, methods, and techniques of cultural borrowing. Finally, a model strategy for effective cultural borrowing is developed on the basis of the research findings and theoretical formulations and upon the development needs of the United Arab Republic.

Two assumptions underlie the investigation: first, it is assumed that planned cultural borrowing is more likely than unplanned borrowing to increase the probability of adopting innovations which are relevant and valuable to borrowing nations. Second, multi-source cultural borrowing is viewed as having the advantages of multiplying the benefits to be gained by developing countries by widening the base for option, and of broadening the area of international understanding.

Definition of Terms

1) Continuing Education:

The definition adopted for this study has been developed by Kleis:

> Continuing education is the planned part-time and usually voluntary engagement in learning activities on the part of older youth or adults who have completed, withdrawn from, or been denied, the formal education normally required by law or the life style of their choice, who in addition to their primary responsibilities as adults, allocate a portion of

their time and effort to initiate, resume, or continue their education.[1].

2) Culture:

The definition adopted for this study is that of Arensberg and Niehoff. Culture is defined as "the sum total of what human beings learn in common with other members of the group to which they belong".[2].

3) Ideology:

Ideology is defined as a coherent structure of ideas and values considered by its adherents to have some intrinsic worth.

4) Innovation:

An innovation is an idea perceived as new within a social system.

5) Institution:

An institution is defined as a set of activities organized around the commitment to an ideology.

6) System:

A system is defined as a set of diverse units functioning as a whole.

A living system is one that maintains, by its own activity, a dynamic balance within itself and with the environment.

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1. Kleis, R.J. Lecture Notes of Educ. 822-B. Fall, 1967. Michigan State University, East Lansing, Michigan.

2. Arensberg, Conrad M. and Arthur Niehoff. Technical Cooperation and Cultural Reality. Department of State, A.I.D., Washington: 1963.

Organization of the Study

This dissertation is divided into seven chapters. Chapter I, Introduction, includes a general background of the problem under investigation, a statement of the problem and the general purpose of the study, a statement of the significance of the study, a methodological overview, definition of terms, and organization of the study.

Chapter II is devoted to understanding the United Arab Republic within the past and present international setting. The chapter consists of two sections; one deals with the present international setting, and the second is a brief cultural analysis of the United Arab Republic (Egypt).

Chapter III, Problems of Cultural Borrowing for National Development, consists of: (1) an anthropological view of cultural borrowing, (2) education and development, (3) mass communication and national development, (4) diffusion of borrowed innovations and technologies, (5) formal organizations and diffusion of innovations, and (6) summary.

Chapter IV is devoted to developing a conceptual model of planned cultural borrowing as a process, identifying some relevant variables in the process, and providing some tentative hypotheses for future testing.

Chapter V deals with the identification of possible ways and means of improving the effectiveness of cultural borrowing. It includes sections on: (1) Introduction,

(2) Improving Innovativeness of Individuals, (3) Improving Organizational Innovativeness, (4) Facilitating Community's Adoption of Innovations, (5) Effective Knowledge Utilization, (6) Improving the Effectiveness of Technical Assistance, (7) Improving the Effectiveness of Cultural Borrowing through University-based Continuing Education, and (8) Summary.

Chapter VI presents a proposed organization for planned cultural borrowing in the United Arab Republic. It provides, first, a background for the proposed organization, second, some reasons for the essentiality of planned cultural borrowing, third, a description of the proposed organization for planned cultural borrowing, fourth, a description of work relationships necessary for the operation of the proposed organization, and finally, a summary.

Chapter VII consists of three sections: (1) summary, (2) conclusions, and (3) recommendations.

CHAPTER II

THE UNITED ARAB REPUBLIC

The International Setting

The newly developing countries differ from the developing countries of two or three centuries ago. They are experiencing very different fields of internal and external forces generated by a demanding set of ideas and ideals in an over-shrinking world. They face a situation which cannot be dealt with by simply applying old formulas. Isolation from the products, ideas, and techniques of the richer and technologically more powerful countries is impossible. A long succession of scientific discoveries and the subsequent quickening tempo of political and economic change leave little time and space for developing nations to relax and maintain cultural status quo. Nor can they maintain an acceptable state of equilibrium through the action of their internal forces and resources alone. World interdependencies have become too immense. Communication systems now intrude to the extent that it is impossible for any nation to shut its eyes and close its ears to what is going on in the world around it. It has become necessary for every developing nation to develop structures open enough to receive, dynamic enough to respond to, and stable enough to manage the cultural shocks of

inter-cultural exchanges without losing their delicate equilibrium.

At least five trends that are taking place in the international scene are identifiable. These are the polarization of power, pluralism in power, increasing development of science and technology, a widening knowledge gap between the developed and the underdeveloped countries, and a rising wave of nationalism.

POLARIZATION OF POWER

Following World War II, power polarized about two nations, the United States of America and the Union of Soviet Socialist Republics. The world became an arena of cold conflict between the giant power blocks and their allies. Efforts of neutral nations to develop independently proved very difficult.

PLURALISM IN POWER

By the early sixties another trend, pluralism in power, came to characterize an increasingly untidy world. The satellites in Eastern Europe showed varying degrees of independence of Soviet policy. New regional power centers, such as the Arab World and the African Bloc, emerged; France and Red China chose to pursue paths different from those followed by their traditional allies.

In the period of growing pluralism of power, the world

is haunted by two specters. One is the difficulty of keeping secrets related to nuclear power and the persistent possibility of irresponsibility in leadership. The other is an increasing economic gap between the developed and the underdeveloped nations and the potential for revolution in an international scene in which the rich get richer while the poor get poorer.

SCIENCE AND TECHNOLOGY

A new form of change is occurring in the arena of science and technology. Automation and cybernetics are realities in many industries. With the increasing developments in science and technology deep-rooted feelings of hope and fear arise, hope in what science and technology are able to offer the human race, and fear of the possible abuse of scientific discoveries and technological innovations.

KNOWLEDGE GAP

The fast-growing accumulation of scientific knowledge and technology by the developed countries of the world has led to a widening knowledge gap between them and the less-developed countries. To complicate the situation further, the distribution of knowledge in the world is becoming more like the distribution of income; countries in which the stock of knowledge is large are rich while those in which the stock is small are poor. Countries with high rates of

increase in knowledge accumulation are becoming richer faster than those in which the rate is low. There appears to be no way of narrowing the gap except through increasing the stock of knowledge by the poorer countries. This means, in a sense, forming human capital. But, the mere formation of human capital is no guarantee against poverty and underdevelopment because knowledge becomes income-producing only if it is put to use, that is, if it is acted upon by men who possess it.

Some social scientists argue that the redistribution of income in the world requires, as a prior condition, the redistribution of knowledge. But, as Rottenberg observes,

> knowledge does not move from place to place at zero cost. Real resources must be devoted to both its transmission and its reception....The quantity moved will be a direct function of the total cost of movement. The larger the total quantity of resources devoted to the spatial transfer of knowledge, the larger will be the magnitude of movement.[3].

This poses a serious problem for the developing countries whose resources and limited wealth do not allow for any substantial transmigration of worthwhile knowledge.

RISING NATIONALISM

The rising wave of nationalism since World War II, especially in Asia and Africa, represents a powerful force in

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3. Rottenberg, Simon. "The International Exchange of Knowledge." Education and Economic Development. C. Arnold and Mary Jean Bowman (eds.). Chicago: Aldine Publ. Co., 1965. Pp. 281-290.

the international scene. Because of its relevance to the theme of this study, it needs more detailed analysis and closer examination.

Behavioral scientists have not been completely successful in understanding nationalism as a phenomenon. One study approach has yielded a wealth of empirical data, as well as excellent techniques for the qualitative recognition of characteristic features of nationalism, its symptoms, or typical sequences of nationalistic behavior. This approach, according to Karl Deutch,4. has not yielded quantitative measurements or predictions.

A second approach to understanding nationalism has been confined to the treatment of some limited features of nationalism as particular cases within the broad field of each special science. Yet the pieces of the puzzle have remained unassembled and, indeed, very often did not fit together.

Nationalism denotes at least three things. First, it denotes a form of group consciousness, i.e., consciousness of membership in, or attachment to, a nation. Such consciousness is often called consciousness of nationality. Second, nationalism denotes ideologies seeking to justify the nation-state as the ideal form of political organization. Third, nationalism also denotes the modern historical process whereby nations have been established as independent political

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4. Deutch, Karl W. Nationalism and Social Communication. Second Printing. Cambridge, Mass: The M.I.T. Press: 1962.

units.[5]

> As group consciousness nationalism implies a cohesiveness, a sense of unity, or of community that identifies the individual with an existing political state, or with the desire for one. It has been variously described as a "state of mind", a "feeling", as "common sympathies", as a "corporate sentiment", and as "certain affinities", prevalent among groups of human beings.[6]

Several objective and subjective factors that produce the group awareness necessary for nationalism are identified in the literature. These include common religion, language, values, and literature; common government, experiences, historical traditions, and symbols; common enemies; the existence of a common communication system.

Nationalism as the justifying ideology of a nation-state is characterized by at least four distinct components. First is the devotion to the ideal of achieving an independent nation-state and the preservation of its freedom of action. A second ideological component of nationalism stresses national progress in different ways. To a considerable extent nationalist beliefs may be regarded as the source of most creative cultural energy and economic well-being. A third component of nationalism as an ideology implies a responsibility to spread a "true faith" to other national groups.

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5. Gould, Julius and William L. Kolb (eds.). A Dictionary of the Social Sciences. New York: The Free Press, 1967. Fourth Printing.

6. Ibid.

The American devotion to spreading democracy is one example. This kind of devotion stems from a deep belief in a "national mission". A fourth component of nationalism delineates a priority of loyalties with supreme loyalty to the nation-state.

Nationalism as an ideology may be liberal, integral, or a mixture of both. Liberal nationalism stresses political democracy, the rights of man, and individual freedom. On the other hand, integral nationalism stresses that the individual exists to serve the state, glorifies it, and values aggressive international behavior as something desirable.[7].

Nationalism treated as an historical process is seen by some writers as essentially a modern phenomenon which rose out of a set of historical circumstances in the middle of the 18th century.[8].

It is clear that understanding nationalism as a process and a phenomenon requires at least three components: first, understanding the behavior of individuals as well as groups; second, understanding the rational as well as the irrational behavior of individuals and groups; third, utilizing data obtainable by strictly external methods as well as subjective data available from introspection.

From the standpoint of modernization and social change,

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7. Bowman, M. Jean and C. Arnold Anderson. "Role of Education in Development" in Development of Emerging Countries. Washington: Brookings Institute, 1962.

8. Kohn, Hans. Nationalism. Princeton: van Nostrand, 1965.

nationalism may be a powerful agent that can lead to positive or negative outcomes depending upon its goals and their implementation. Nationalism can be a powerful positive agent of change if its aim and effect are to overcome internal divisions and to focus the energies of men on a goal beyond that of family or regional concern. On the other hand, nationalism can be a powerful negative agent it if leads to isolationism which tends to shut off alleys of exchange between a nation and the outside world. Today's newly developing nations rely heavily on the magic of nationalism. This is an appropriate path if such nations choose the appropriate nationalism. Inappropriate nationalism is characterized by too many irrational orientations that might harden to a point where every communication that may be conflicting with them, or even merely different from them, will be rejected without even minimal consideration. This would mean the closing of the "national mind", a behavior known to both the developed and the developing nations. A closed national mind is perhaps more harmful to the cause of a developing nation than it is to the cause of a highly developed country. Closed national mind means and leads to the closure of the convenient and necessary channels of communication with the outside world. The situation becomes even worse when communication channels <u>within</u> a given society become blocked or inefficient.

Developing countries can and ought to make their own

contributions for the sake of world cooperation and world peace. There is no doubt that today's developing nations are emerging on a world scene in which they must help shape man's destiny in our time as well as in the future. To achieve this goal, they must understand the nature of international forces and the institutions which man has established to control these forces and to advance the cause of human rights and world peace. As the beneficiaries of external economic and technical assistance, they must be committed to the ideal of making their contribution balance what they receive. They must accept the responsibility of contributing their newly acquired skills and knowledge, their insights into the process of modernization, to other peoples who happen to be less fortunate.

A Brief, Cultural Analysis

It is important for those interested in introducing social change to be guided by a clear understanding of the culture within which they will be working, and by an appreciation of the beliefs and values which govern a nation's life. For this reason and for the purposes of this study we will limit our investigation of the Egyptian culture to those aspects which seem most relevant to cultural borrowing and social change.

As Stevens describes them,

> The people of Egypt today are an amalgam, that is, a homogeneous blend of several dominant strains. Of these strains the earliest known were of African Hamitic stock. The Hamites were the chief native population of North Africa. They were Caucasians and belonged to the broad racial classification known to anthropologists today as Mediterranean man. In the view of such anthropologists as Professor Carleton Coan, nearly all Arabs, Oriental Jews, and most Egyptians were of the Mediterranean race....[9]

EGYPT AND ISLAMIC CULTURE

Safran argues that,

> For many centuries before the nineteenth, Egypt had belonged culturally, without any ambiguity or reservation, to a larger Islamic society whose chief characteristic was a religious attitude to life. William James has described such an attitude as the belief that there is an unseen order, and that man's supreme good lies in harmoniously adjusting himself thereto.[10]

In Islam, he adds,

> The Shariah is a vast system of norms and regulations encompassing all areas of the Muslem's life - his religious duties, regulations concerning ritual cleanliness, food, and dress; laws of family, inheritance and endowment, contracts and obligations; criminal, fiscal, constitutional, and international law. Theoretically, the Shariah derives entirely from the Quran and the Tradition of the Prophet's deeds and sayings. Its purpose is not to determine the relations between men, but to define the standards of right and wrong in all matters considered by God as ethically relevant. Whether or not something is ethically relevant is known not only from its being specifically mentioned as such in the Quran and the Tradition, but also from its being implied in the texts and principles of these two sources.

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9. Stevens, Georgiana G. Egypt: Yesterday and Today. New York: Holt, Rinehart and Winston, Inc., 1963.

10. Safran, Nadav. Egypt in Search of Political Community. Cambridge, Mass.: Harvard University Press, 1961.

> Implications are discovered by the use of analogy and, in case of uncertainty, the consensus of the community or of its learned leaders is decisive....[11.]

These are the most important and politically relevant elements of the Islamic ideology, which constitutes the basis of the Egyptian political community at the beginning of the nineteenth century.

Gulick and Pollock state that,

> In Islam, all men are equal before God, and therefore the law. Neither rulers, nor priests, nor any class or caste, can separate a man from his rignts, his obligations, or his God. Special priviledge and exploitation are immoral....
>
> Leadership is not hereditary, but rests on selection and is justified by ethical standards and by service. Community "mutual consultation" (Shura), local and national, is required in arriving at governmental decisions, actions, and elections.
>
> The ownership of private property is a Divine institution and carries with it the obligation to use property productively and to devote part of the income to the support of the needy, (Zakat), to community welfare (Infaq), and to taxes.
>
> The community, and such government as the community may establish by "mutual consultation" have the obligation to decide what is right (Marruf) and what is wrong (Munkar) as reasoned derivations of established ethical and religious principles....
>
> Labor in itself is honorable and is entitled to equitable remuneration....
>
> Man has the obligation to learn and to use his reason, and to use the knowledge thus gained without limit for human welfare and the Glory of God....

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11. Egypt in Search of Political Community.

> The Islamic culture encourages the application of human reason to the needs of the modern world, with full reliance on responsible leadership and mutual consultation.[12].

EGYPT AND WESTERN INFLUENCE

Stevens pointed out that,

> At the turn of the nineteenth century, in 1798, Egypt drew the attention of contesting European powers in a way that was to alter permanently its situation in the Mediterranean world....From this time on, Egypt became the theater of economic and political rivalry between British and French traders.[13].

This trade contest was one of the reasons for the subsequent French invasion of Egypt in 1798. The French brought with them new ideas in science, engineering, etc., which had several significant and lasting effects on Egypt's way of life. The effect of the invasion, which lasted formally for three years, was, as Stevens pointed out, "to open for the Egyptians a new window on the West, and to initiate some of the two-way traffic with Europe which later flourished in the nineteenth century".[14]. Muhammad Ali, the founder of the dynasty which ruled Egypt from 1805 till 1952, relied heavily on French technicians. French ideas and ways of doing things thus

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12. Gulick, Luther and James K. Pollock. Government Reorganization in the United Arab Republic. A Report submitted to the Central Committee for the Reorganization of the Machinery of Government. Cairo: 1962. P. 5.

13. Stevens, Georgiana G. Egypt: Yesterday and Today. New York: Holt, Rinehart and Winston, Inc., 1963. Pp. 60-61.

14. Ibid., p. 62.

took root among the rising generation of Egyptians.

The British occupation of Egypt in 1882 opened a new, crucial, and intricate phase in the country's political evolution. The British refrained from undertaking any large-scale social reform largely because of their peculiar legal position in Egypt until World War I. Under their firm hand, the economy of the country was expanded and stabilized, but the Egyptian nationalists, as Safran indicated, became

> fond of contrasting the remarkable achievements of the British occupation in the spheres of agriculture, finance, and communications with the dismal record it made in public education in order to substantiate the charge that the British were mainly interested in those improvements that enabled them to exploit the country economically.[15]

Student missions continued to be sent abroad, but there was now a great policy shift with respect to the country to which they were sent and in the subject matters studied. In the whole previous history of student missions, 80 percent had studied in France and 96 percent had learned technical subjects; under the British, however, 75 percent were sent to Britain and 65 percent took up subjects related to the humanities and the social sciences. Besides these governmental missions, hundreds of students studied on their own in Europe, particularly in France.[16]

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15. Egypt in Search of Political Community. P. 55

16. Ibid. Pp. 55-56.

By the time the British came to Egypt, the basis of the economic structure had been changed from a feudal to a private one; the economy had become attached to the world market through specialization in cotton cultivation and export; and the foundations for further economic development had been laid in the form of social capital, financing institutions, and a judicial and administrative framework.

Safran argues that,

> The country had been unified under a central government and a Western-style administration had been established. Western education had been introduced in addition to the modified traditional system, and had been geared to supply the state with civil servants. Foreigners had been encouraged to settle in the country, and Western technology, manners, and fashions had gained a strong foothold, particularly in the cities.[17]

At the beginning of the nineteenth century, Egypt entered a period of rapid transformation which revolutionized its entire economic, social, and governmental structures within a relatively short time. However, unlike the transformation of the medieval Western civilization, the change in Egypt did not proceed gradually, organically, and indigenously, but was the result of the initiation of individual autocrats in imposing certain reforms on a reluctant population in an effort to emulate particular aspects of Western civilization. The national changes were therefore not preceded or accompanied by an intellectual reawakening, as they

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17. Egypt in Search of Political Community. P. 56.

had been in the West, but proceeded independently while the ideology prevailing at the beginning of the process remained unchanged. It was not until the last quarter of the nineteenth century that the discrepancy between the traditional ideology and the implications of the new reality began to provoke intellectual discomfort and to elicit some attempts to reconcile it.

The cumulative effects of the developments that took place in the nineteenth century amounted to nothing less than a complete transformation of the basic character of the life and organization of Egyptian society. Traditional Islamic ideology was challenged by modern conditions on the comprehensive ground of world views, ethics, and law, as well as power. The ideas of Jamal al-Din al-Afghany, a Muslim leader from Afghanistan, were pervasive and strong at that period of history (1839-1897). He was convinced that the power of the Europeans was a function of science and technology, methods or organization, and diplomacy. To counter their power, he urged Muslims to adopt and develop the same means to the utmost extent. This proposition was not in itself new to the Muslim world; in Egypt it had already received thorough application in the work and career of Muhammad Ali, the head of the Ex-Monarch family of Egypt. Al-Afghany introduced his students at the then nine hundred-year-old University of Al-Azhar to some translated Western works from which he endlessly drew practical lessons about civic virtues,

duties, and rights, and about what makes the greatness of nations. He encouraged his students to come down from the ivory tower of scholastic studies, to take a stand on worldly subjects, and to express their opinions on them in writing.

RISE OF EGYPTIAN NATIONALISM

The windows to the West opened successively by Napoleon and Muhammad Ali and his successors had let in many new ideas. However, Egyptians everywhere began to see that their country was being exploited by the European powers. Al-Afghany and his Egyptian disciples have had a stimulating effect on the new generation of Egyptian nationalists since 1871.

The British occupation came in 1882 as a reaction to the rising nationalism and defiance to the foreigners in Egypt. Nationalism had not abated during the early years of the British occupation. A tentative step toward appeasing Egypt's nationalism was finally taken by the British in 1913. Provincial and municipal councils were given real powers in local affairs.[18]

Modern Egyptian nationalism first manifested itself during the violent reaction against the French invasion. Issawi argues that:

It is hardly necessary to inquire why the Egyptian

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18. Egypt: Yesterday and Today. P. 86.

> nationalist movement came into being. Foreign rule, however mild in its methods, inevitably causes a reaction among the ruled, especially when the two are separated by race, religion, language, and culture, and where there are no possibilities of intermarriage. At the same time Egyptian nationalism was to some extent stimulated by such external events as the Russo-Japanese War and the Young Turk Revolution.[19]

When we think of nationalist movement, Mustafa Kamil (1874-1908) is generally considered to be the founder of modern Egyptian nationalism. He studied two years in France and obtained his Law degree there. He associated with diplomats, politicians, nationalist leaders, writers, and journalists of Liberal inclinations. He was instinctively oriented toward the modern concept of the nation-state as the basic political-social entity.

Nationalism as seen by Mustafa Kamil is

> the food which the body and soul of Egypt need before any other food....It is the mainspring of all miracles and the principle of all progress....it is the blood in the veins and the life of all living things....Nationalism is the noblest tie for men and the solid foundation upon which great and mighty kingdoms are built.... Life is merely transitory and it has no honor without nationalism and without work for the welfare of the fatherland and its children....[20]

Only two decades after Mustafa Kamil had begun his preaching, the revolution of 1919 broke out. The whole nation fought with great courage and heavy sacrifice in support of the

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19. Issawi, Charles. Egypt in Revolution: An Economic Analysis. London, Great Britain: Oxford University Press, 1963. P. 41.

20. Egypt in Search of Political Community. P. 87.

Liberal Nationalist ideals he represented.

Nationalism in Egypt found its practical expression in the Al-Afghany-Urabi movement. It had failed to develop into an enduring movement because of its lack of anchorage in a specific social group. But with Mustafa Kamil and Lutfi al-Sayyid, Safran argues,

> nationalism finally developed a positive ideology of secular liberal inspiration and could count on the lasting support of a substantial middle class of professionals, officials, and intellectuals which had emerged in the interim.[21]

In 1928, the Muslim Brotherhood was founded as a movement to protect Islam by positive religious and ethical action designed to counter the spread of secularism and moral and religious laxity under the impact of modernization and imitation of the foreigners. At first, its appeal was exclusively to the lower class, but as the movement grew it moved in quest of a larger field of operation and began to appeal to other classes as well. The movement has great appeal among Muslims all over the world, and although it originated in Egypt its activities were never limited by its boundaries. It grew as a religious movement in the broadest sense of the term religion in Islam.

By the end of World War II, it became clear that Egyptians had hoped too much that membership in the United Nations would provide a real chance to win the case for

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21. Egypt in Search of Political Community. P. 102.

evacuation of all British forces. Egypt had declared war on the Axis so as to qualify for membership in the U.N. Egypt's hope was never realized in the way it had anticipated, and, it was not before the new revolutionary regime of 1952 that the British were compelled to withdraw completely.

Issawi pointed out that:

> The second World War, and its aftermath, put a great strain on the Egyptian social and political structure....The gap between rich and poor, already great, was further enlarged; the unskilled rural and urban laborers suffered severe privations; and the salaried middle and lower classes whose money incomes rose very little, were relentlessly pressed down....Another trend which was accelerated by war-time conditions was urbanization, with its manifold social consequences....
>
> Egypt had done its best to stay out of the war, World War II, but it had been engulfed by the flood of propaganda pouring in from every quarter. Britain and the United States harped incessantly on the themes of democracy, social justice, and, perhaps the one which found the most appreciative audience, the upholding of national independence against Nazi aggression. The Germans struck still more responsive chords, whole-heartedly supporting the Egyptian and Arab cause against the Western Powers;....As for Russian propaganda, it was provided with a unique opportunity, often carried out unintentionally by over-eager British or American officials.[22]

NEW REVOLUTIONARY TRENDS

In July, 1952, the Revolutionary regime came into power. It inherited a demoralized and almost bankrupt country. It soon realized the impossibility of depending on constitutional

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22. Issawi, Charles. Egypt at Mid-Century. London, Great Britain: Oxford University Press, 1954. P. 262.

government to effect reforms and reorganize the country. Foreign affairs were creating many problems for the regime and provided it with fresh reasons for putting off constitutional experiments.

One of the primary beliefs of the revolutionary regime is that Egypt's economy cannot depend permanently on agriculture. The population is growing fast indicating that the race between population and irrigation is a losing one. Egypt must develop other potentialities if it is to improve the standard of living. Industrialization has become since then the most attractive supplement and support for Egypt's economy. Besides, it is realized that Egypt's success or failure in reaching the status of a modern healthy country depends on the enlightenment of its people. Education has been the major institution and source of such enlightenment.

The Egyptian revolutionary regime has been preoccupied since late 1952 in eliminating the old superstructure of foreign ownership and political control. An entirely new middle class of Egyptian managers, officials and foremen is taking over all the clerical and utility jobs formerly held by Europeans and other nationality groups. This becomes understandable in the light of the new search for dignity and for a purely Egyptian identity and culture.

The socialist solution to the problem of economic and social underdevelopment in Egypt has been seen by the revolutionary regime as an historical inevitability imposed by

reality, the broad aspirations of the masses, and the changing nature of the world following World War II. Socialism is seen as the way to social freedom and

> is not confined to the mere re-distribution of the national wealth among the citizens but foremost and above all it requires expanding the base of this national wealth, to accede to the lawful rights of the working masses.[23]

As a result of this thinking the adoption of a national development plan became a necessity and a rational solution to the incapability of the budgetary system to solve the economic and social ills of the people comprehensively.

Government machinery since 1953 has been actually transitional, experimental and distinctly pragmatic. New administrative organizations which were found necessary were adopted in the course of time. Institutions have been created because they were needed to meet particular transitional problems, much of this without design or consideration of their relation to traditional structures and processes.

The central authority has been strong and the local authority has been weak, although since the establishment of the system of local administration in 1960 there is some indication of a move toward greater strength in local units.

Public enterprises have replaced older business corporations, and the entire economy has been brought under

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23. United Arab Republic Information Dept. The Charter. Cairo: National Publication House Press, 1962.

effective control, utilizing central planning machinery, since 1961.

In conclusion, it is important to recognize that when we look into the future of the United Arab Republic (Egypt) to suggest important changes, we must weigh two great forces: first, the momentum of the culture which tends towards the traditional, and second, the increasing value of new ideas and new institutions. These two forces will certainly shape the country's policies and attitudes toward cultural borrowing now and in the future. A third important element is the fact that Egyptians are generally neutralists. As Lacouture describes them:

> They do not regard themselves as involved in the great debate between East and West, having no reasons - with a few thousand exceptions among them - for feeling that the capitalist system is in any way superior to the communist one, or vice versa.[24]

Summary

The first section of this chapter described some major differences between developing countries of today and of two centuries ago. Five forces that are taking place in the international scene affect the efforts undertaken by developing countries. These are the polarization of power, pluralism

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24. Lacouture, Jean and Simonne. Egypt in Transition. Criterion Book, English translation by Francis Scarfe, 1958.

in power, the increasing development of science and technology, a widening knowledge gap between the developed and the underdeveloped countries, and a rising wave of nationalism.

It has been pointed out that nationalism, from the standpoint of modernization and social change, may be a powerful agent that can lead to positive or negative outcomes depending upon its goals and their implementation. Nationalism can be a powerful positive agent of change if its aim and effect are to overcome internal divisions and to focus the energies of men on a goal beyond that of family or regional concern. On the other hand, nationalism can be a powerful negative agent of change if it leads to isolationism which tends to shut off alleys of exchange between a nation and the outside world.

As background to the analysis of cultural borrowing by the United Arab Republic (Egypt), the second section of this chapter was a brief discussion of the cultural factors that influenced Egypt's history; politically, religiously, economically, and socially. It pointed out that Islamic culture is not only a most favorable foundation for effective social change and progress, but that it also offers the people of the U.A.R. the age-old principles on which they may build their new democratic institutions, with effective leadership, community participation, mutual consultation and a responsible use of private and public property in the service of the

nation.

It also pointed out that the effect of the French and British occupation in 1798 and in 1882 respectively was to open for the Egyptians a new window on the West, and to initiate some of the two-way traffic with Europe which flourished in the nineteenth and twentieth centuries.

The second section of this chapter also indicated that the ideas of Jamal al-Din al-Afghany, the Russo-Japanese War, the Young Turk Revolution, the ideas of Mustafa Kamil, the Muslim Brotherhood movement, and the revolutionary regime which came to power in 1952, are perhaps the most powerful forces in shaping the country's history and in stimulating its efforts toward progress and modernization.

CHAPTER III

PROBLEMS OF CULTURAL BORROWING FOR NATIONAL DEVELOPMENT

An Anthropological View of Cultural Borrowing

Anthropological literature is relatively rich in theories dealing with and trying to explain the phenomenon of cultural borrowing. Among the anthropological theories most relevant to this study are the "economy" theory, the "competition and continuity" theory, the "learning" theory, the "appetite" theory, the "energizing" theory, the "creativity" theory, the "selectivity" theory, the "bottleneck" theory, and the "integration" theory.

ECONOMY THEORY

Cultural borrowing is seen by Arnesberg and Niehoff[25] as primarily a matter of "economy" of effort. They argue that it is much easier to take over the idea or discovery of someone else, whether he is a neighbor in one's own culture, or someone from another culture, than to invent something new. In any culture, individuals are limited by background and time. They can get new ideas with far less

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25. Technical Cooperation and Cultural Reality. P. 44.

investment of time and effort by borrowing them than by investing them; and chances are that the person they borrowed them from had already borrowed them from someone else.

COMPETITION AND CONTINUITY THEORY

According to the "competition and continuity" theory of cultural borrowing we find that in each culture, as Arensberg and Niehoff put it "there is a built-in drive toward continuity. In very few cultures will people voluntarily abandon the old ways to adopt new customs wholesale. The members of each culture have an ingrained belief that their own ways are superior to those of others, despite actual achievement".[26] There is often an insistent effort, and need, to retain their familiar modes of social behavior, preserving a social equilibrium and a sense of stability. This causes conservatism, which is reflected in the average man who acts as the carrier of tradition. Along with this goes a contrasting effort, and need, to break up traditional ways of thinking and behaving to give borrowed technologies a chance to take root. This constitutes an effort to make the culture competitive with other cultures without losing its continuity. The drive for technological change on the part of developing countries may be viewed, in the light of the "competition and continuity" theory, as a device by

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26. Technical Cooperation and Cultural Reality.

which they may survive in a competitive world, while hoping to preserve at least the essence of their cultures.

The necessity of some degree of cultural continuity for the maintenance of society itself is generally agreed upon, but if it is so highly organized that it excludes processes of change, it can make the whole development effort, on the part of developing countries, ineffective.

As tradition can be overdone, change can be overdone too, depriving the members of a society of a basis for reasonable expectations of future social and economic relationships. It is clear that some balance, some measure of both cultural continuity and cultural fluidity, is highly desirable.

LEARNING THEORY

Sufrin[27] presents a different view of culture which contributes to our understanding of cultural borrowing. According to Sufrin's view culture is defined as a model of learned behavior which is transmitted from one generation to another. This learned behavior is not limited to any particular aspect of human endeavor, but would include the arts, sciences, religion and philosophy, etc., which are not peculiar to a particular small group or family but are

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27. Sufrin, Sidney C. Technical Assistance: Theory and Guidelines. Syracuse, N.Y.: Syracuse University Press, 1966.

generally widespread. "The essence of culture," as Sufrin sees it, "is that it consists of learned behavior, and so is not natural in the sense of being automatic or instinctive."[28] It logically follows that the central idea of cultural borrowing and cultural diffusion is that individual and social behavior can be changed, and that stimuli in such forms as advice, assistance, and examples of technology and organization, will produce behavioral changes.

APPETITE THEORY

The "appetite" theory of cultural borrowing implies that people of different cultures have different appetites for cultural borrowing, and the reasons for it are related to the economic, political, geographic, and cultural conditions of the borrowing nation. It may be said for example, as LaPiere put it,

> that one of the reasons why American society has changed with such great rapidity during the past hundred and fifty years is that the American people have been in a favorable position, geographically and socially, for borrowing tools, techniques, ideas, and modes of organization that were devised and developed in another place or at another time.[29]

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28. Technical Assistance: Theory and Guidelines. P. 9.

29. Social Change. Pp. 105-106.

ENERGIZING THEORY

Borrowing technological innovations from advanced countries is believed, according to the "energizing" theory, to have great potential for helping developing societies break through an overthick institutional crust. This is often done by releasing energies, which customary methods have restrained, and encouraging new leadership roles in every field, which will draw out talents that would otherwise have remained dormant.

CREATIVITY THEORY

According to the "creativity" theory in cultural borrowing, a great deal of adaptation of what is being borrowed is an essential ingredient of rational borrowing. Creativity is necessary to devise the needed adaptation. The cultural borrowing process is, therefore, innovative in the limited sense that it involves the perception that a foreign element can with advantage be incorporated into one's own way of life. Furthermore, a borrowed element may be combined with a native one to produce something entirely new. In this way, borrowing may stimulate innovation since the conditions that foster borrowing, namely, flexibility and progress motivation, are very much like those which facilitate innovation. This may explain, at least in part, why some societies that have been eager borrowers for a period of time, like the United States and Japan, have also become

internally innovative.

Asher argues that creativity which is needed by developing countries involves intelligence and energy. It calls for such characteristics as pleasure in facing and attacking new problems, freedom from a sense that one must seek someone else's judgement before judging what will work, and a knack of seeing that familiar elements have new possibilities, lead to new conclusions, and can be organized in new ways.30.

SELECTIVITY THEORY

Arensberg and Niehoff have identified another theory in cultural borrowing, that of "selectivity".31. According to this theory, people do not borrow indiscriminately. They borrow what they perceive as best fitting the pattern of their own culture without modification. Arensberg and Niehoff argue that

> When change is not forced upon a people, and when they have a comparatively free choice, they are much more apt to borrow ideas of a technological nature than of social organization or of supernatural belief.32.

When people favor the borrowing of innovations of material nature over ones of social nature they do so without

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30. Asher, Robert E. and others (eds.). Development of the Emerging Countries: An Agenda for Research. Washington: The Brookings Institution, 1962. P. 19.

31. Technical Cooperation and Cultural Reality.

32. Ibid.

realizing that the borrowed innovations of material nature will cause cultural changes of social nature as they become absorbed into the new way of life. The advancement of technology is generally the prime purpose when developing countries consciously resort to cultural borrowing. However, the advancement of technology through borrowing cannot proceed without impinging upon goals and values that are built into the fabric of the receiving culture.

BOTTLENECK THEORY

The "bottleneck" theory in cultural borrowing is closely related to that of "selectivity". The "bottleneck" notion is based upon the observation that borrowing a modern technology calls for change in at least three aspects: the social systems and human attitudes, the knowledge and human skills, and the physical implements in which modern technology is embodied. The problem of bottlenecks is likely to appear as a result of the fact that the process in each of these three aspects tends to be slow, but may not be equally slow in all respects. The problem of bottlenecks has no general pattern and tends to differ from one country to another. For example, in some countries the equipment that represents modern technology may not be available. In some others, the required managerial skills may be missing. Obviously, the kind of bottleneck and its location will determine the strategy for development borrowing. In order to

speed up the process of technological borrowing a country must find and eliminate those bottlenecks that create the primary resistance to change. Spencer points out that:

"The problem of strategy is, however, complicated by the fact that development is interrelated in the three indicated respects...." He added that "we know far too little about these interrelations; they form a very important field for future research".[33]

INTEGRATION THEORY

Cultural "integration" has at least three senses in anthropology. First, it is used to refer to the strain of consistency and the relative consistency present in cultural systems among objects and meanings, customs and beliefs, norms and actions. Second, cultural integration is used to mean "patterning" which can be expressed in some, though not all, cultures as a master principle or culture pattern. Third, and more relevant to cultural borrowing, cultural integration is being used to refer to the process of incorporating new customs or beliefs into a culture and is commonly reflected in three ways: (1) the selectivity of innovation; (2) the modification of the form, function, meaning, or use of a borrowed item to bring it into fuller harmony with the culture; (3) the adaptation of the cultural system itself

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33. The Transfer of Technology to Developing Countries. P. 177

to fit the new usage at any point of stress.[34]

CONCLUSION

In concluding this section it may be added that cultural borrowing is perhaps the major force in cultural change, after local invention and discovery. It logically follows that societies that afford their members ample contact with other societies may be expected to change more rapidly and to become more complex than societies whose members have little contact outside their local groups.

Occasions for cultural borrowing are many. Generally, whenever different peoples are brought together they will tend to adopt each other's ideas and imitate each other's behaviors, depending of course on the perceived usefulness, importance, or relevance of such ideas to the adopters. As Arensberg and Niehoff put it,

> this process has been so constant in man's history that it is possible to trace the growth of a culture primarily in terms of what has been borrowed from other cultures....The whole world's history shows that conquerors take over the ways of the conquered, and the colonizers and civilizers learn from their pupils....The Normans of England learned much from the lowly Saxons, as did the Portuguese and Spaniards from the Indians and Negroes they enslaved....There is no better proof for this than the U.S., which has taken techniques from cultures all over the world, from the highest to the lowest, in order to develop the cultural whole which has enabled it to assume a

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34. A Dictionary of the Social Sciences. P. 158

position of world leader.[35]

Cultural borrowing brings with it difficulties and conflicts which are likely to lead to problems of adjustment at both the personal and social levels. This is due, at least partly, to the fact that, as Novak and Lekachman put it: "the culture of each people is a living unity in the sense that a change in any one aspect will have repercussions in other aspects".[36] Also, "as each human individual embodies the culture through which he lives, inconsistencies and different rates of change of parts of culture will have their expression in the personality organization of the individuals who live within changing cultures".[37]

Arnesberg and Niehoff argue that:

> Quite often people have adopted technical devices superior to those they had before, but ultimately detrimental to their culture. Because of the technical superiority of the device, they failed to weigh the cultural loss. The Maori of New Zealand are reported to have decimated their own people in intertribal warfare once they obtained guns, which they had sought most eagerly. In Australia, a whole culture fell to pieces simply because the people adopted steel axes to replace those made of stone. In this instance, the rituals, trading relationships with other tribes, and the social position of older men depended on their possession of stone axes. When steel axes became available through White missionaries, the urge to replace the stone axes was too strong to resist; all of the tribe who had the opportunity acquired them. They had acquired a better implement for cutting wood but the ritual life, the trading relationships, and the prestige of older men

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35. Technical Cooperation and Cultural Reality. Pp. 44-46.

36. Novak, David E. and Robert Lekachman (eds.). Development and Society: The Dynamics of Economic Change. New York: St. Martin's Press, 1964. Pp. 293-307.

37. Ibid. Pp. 293-307.

disappeared, the culture ultimately disintegrated because the social and religious life of the people became so weakened.[38]

Education and Development

AN OVERVIEW

The term education in its most common usage denotes bringing up; intellectual and moral training; the development of mental powers and character, especially through the provision of systematic instruction.

Differences in defining education stem mainly from differences in perceiving its methods, its content, its participants, or its relationship to other social institutions. For example, E. Durkheim took the view that scientific usage should be more discriminating and proposed to reserve the term for the influence exercised by adult generations on those that are not yet ready for social life, defining it succinctly as follows: "Education consists of a methodical socialization of the young generation."[39] Apparently, this definition ignores the fact that adults themselves are in a continuous process of socialization and resocialization.

A second example is K. Mannheim's who "classed

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38. Arensberg, Conrad M. and Arthur Niehoff. Introducing Social Change. Chicago: Aldine Publ. Co., 1964. P. 34.

39. A Dictionary of the Social Sciences. P. 227-228.

education among the social techniques - a general category of methods of influencing human behavior so that it fits into the prevailing patterns of social interaction and organization".[40]

The concern of the traditional schoolroom for knowledge acquisition represents a narrow approach. This concern has blocked the conceptualization of education as a process of behavior change. Consequently, traditional schooling has been relatively efficient in producing retention of verbal material but has been extremely ineffective in changing character, personality, or skills.

For the purposes of this study, education is defined as a process in which an educational agent selects, arranges, and directs a sequence of progressive tasks that provide systematic experiences to achieve learning on the part of a learner or community of learners whose active participation in the process will determine the extent and quality of the educational outcomes in personal growth or in community development. This definition involves five basic elements: education is viewed as a process, an educational agent, learners, the possibility of learning within a community context, and active participation on the part of the learners.

The task of defining development is perhaps more

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40. A Dictionary of the Social Sciences. P. 228.

complicated. There is no single, clear-cut definition of development. This fact has been made clear by Lewis who stated that:

> To the economist development typically means economic growth as measured by investment rates, national income, industrial productivity. To those with social concerns development might mean an increase in literacy, more responsible social and political participation, identification with national symbols and authority, the prevalence of certain modern attitudes and values, or the level of health of the population.[41].

Perhaps more relevant to the purposes of this study is Vaizey's statement:

> Development implies a variegated but simple process with social as well as economic characteristics which is measurable in both aggregate and individual terms.[42].

EDUCATION AND ECONOMIC DEVELOPMENT

Throughout the literature, the relationship between education and economic development is being viewed in three different ways. First, education is being viewed by some scholars as an economic input. Second, some other scholars perceive of economic development as instrumental to human development, that is, to education. Still a third group of scholars sees education and economic development in symbiotic relationship with each other.

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41. Lewis, W. Arthur. "Education and Economic Development." Social and Economic Studies. June 1961, Pp. 113-127.

42. Vaizey, John. The Economics of Education. London: Faber and Faber, 1962.

One scholar who regards education as an input in the economic development is Hanson. He stated that:

> Serious studies by economists of the leap from traditional to modern economics indicate what educators had long suspected and maintained - that in modern societies the economic output has been far greater than might be accounted for strictly in terms of the investment in plant and raw materials. The unaccountable increment in economic output may be attributed to several factors - but obviously the most significant of these is the quality of the human resource input which is likewise part of the economic equation. The quality of the human resources, which so largely accounts for the change in economic output, is in turn in very large measure dependent upon the quality of the educational system of the nation... The obvious but by no means the only way in which an investment in education is an investment in economic growth is through the production of skilled labor.... Administrative, managerial, professional and scientific personnel of all types.[43].

Hill seems to be in agreement of what Hanson claims. He stated that:

> The lesson of the post-war period is that development stands or falls with the improvement of human and institutional competence. Trained men and women in effective institutional settings, although not the only prerequisite to development, are the key to progress and the essential condition of useful assistance from the outside. The development of a country's human resources is basic to the effective, balanced development of its natural resources.[44].

Spencer and Woroniak object to the treatment of education as a kind of investment. They argue:

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43. Hanson, John W. "Educational Task for a Nation." Education and Development of Nations. John W. Hanson and Cole S. Brembeck (ed.) New York: Holt, Rinehart & Winston, 1966. Pp. 35,36.

44. Hill, F.F. "Education in Developing Countries." International Development Review. Vol. 4:4 (Dec. 1962). P. 2.

> By treating human capital as analogous to physical capital we encourage the implicit assumption on that training - and ultimately the educational system as well - should be looked on as part of an economic production function, determined by the imported technology and without much respect to the contemporary cultural values. The approach to training and education, at least at the lower levels, tends to become mechanistic and functional.[45].

The second view of the relationship between economic development and education, that which looks on economic development as instrumental to human development, i.e., education, may be represented by Bowman and Anderson who argue:

> Presumably the essential reason for wanting economic development is to bring about a resource base which will make it possible to improve the lot of human beings so that they can have access to knowledge and culture and the opportunity to fulfill their human potential in a better world. In this sense, education is one of the main objectives of economic development, and one of the main purposes for which it is sought.[46].

A third approach to the relationship between education and economic development views them in symbiotic relationship to each other. This view has been tactfully projected by Hirschman in his question:

> Is a substantial degree of educational growth and progress a prerequisite to economic development, or is the achievement of educational objectives one of the primary reasons for which economic growth and development are sought?[47].

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45. The Transfer of Technology to Developing Countries. P. 152.
46. Bowman, M. Jean and C. Arnold Anderson. "Role of Education in Development." Development of Emerging Countries. Washington: Brookings Institution, 1962.
47. Hirschman, Albert O. "Comments on a Framework for Analyzing Economic and Political Change." Development of Emerging Countries. Washington: Brookings Institution, 1962.

Several scholars have studied the relationship between economic development and an array of social and cultural factors, including education, and have concluded that there is certainly a close relationship between level and dissemination of education and level of economic development, without arguing causality among them.[48]. It is a fundamental presupposition of this study that education and economic development are interdependent.

Though his position is not universally accepted, Vincent Barret, Jr. suggests the following conclusions with respect to the relationship of education to economic development:

1) Education, although a central factor, has until recently been neglected in the study of economic growth.
2) Education, usually treated as a consumption good, is now recognized as an investment and as a direct contribution to increased productivity, in quite the same sense as capital, technology, machinery.
3) Education is, however, still a consumption good as well; to "live the good life" as a basic aim of education has

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48. Almond, Gabriel and J.S. Coleman. The Politics of the Developing Nations. Princeton: 1960.
Hagen, Everett. "A Framework for Analyzing Economic and Political Change." Development of Emerging Countries. Brookings Institution, 1962.
Lipset, Seymour M. Political Man. New York: Harcourt, Brace and World, Inc., 1961.

no demonstrable relationship to the rate of economic growth.

4) Moreover, education has a very high political and social component which makes it more difficult to treat as a neutral economic input than is the case with technology, machinery, external capital, and the like.

5) The human and political appeal of universal free primary education....buttressed by concepts of human rights which can be demanded by this generation....defies treatment on pure economic grounds; the latter would support a gradual move toward this goal with greater attention in the meantime to secondary education, on-the-job training, and perhaps vocational training.

6) Aside from the argument among some economists as to whether unbalanced growth in the economic sphere is an unmixed evil, the certainty that it will characterize educational planning and development should not deter us from striving to find a rational model relating economic growth to manpower needs, and those needs to educational goals at various levels.

7) Education is a political and social hunger which cannot be held to a minimum even if such minimum might be defined by the manpower inputs necessary to meet development goals.[49]

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49. Barrett, Vincent M. Jr. "The Role of Education in Economic Development" in Education and the Development of Nations. Center for Development Education, Syracuse University, Syracuse, N.Y.: 1963.

Approaches to Measuring Economic Returns of Education

Economists have utilized four different approaches to measure the economic returns on a particular educational investment. One approach is the forecasting-manpower-needs approach in which an attempt is made to determine the number of skilled and professional persons needed to achieve a certain level of production by a target year.

A second approach focuses on the returns to the individual by attempting to measure the additional income of the educated over that with less education. This approach is most widely familiar in educational circles although there is no proof that personal income increases with education necessarily lead to increased national productivity.

A third approach consists of taking the total increase in economic output of a country over a given period of time, identifying as much of the total increase as possible with measurable inputs, like capital and labor, and then concluding that the residual is attributed to the unspecified inputs, which include education. This approach is referred to as the "residual" approach and it focuses directly on the educational contribution to the total national economic output. However, it has a serious disadvantage since the "residual" might well reflect a variety of economic and social factors in addition to education.

A fourth approach is frequently referred to as the correlational approach in which some educational index,

an enrollment or literacy ratio, is correlated with an economic index, usually GNP per capita, at a fixed point in time for several countries. This approach is especially useful in inter-country comparisons where it is necessary to know the range of educational efforts among countries at various stages of development.

The drive for education in many developing countries is creating needs which are not likely to be met in the foreseeable future. Hence, it is creating frustration. Education that creates excessive frustration is not apt to be education for development. This has led Hanson to believe that throughout the underdeveloped world, with few exceptions, the drive for education is one of the most unexorable forces in operation. Once whetted, the drive for education does not slacken, and the consequences may merely serve to feed the smoldering fires of social discontent, disorder, and violence.[50]

Some developing countries in their strong drive toward education have overinvested beyond what their present level of development would allow. Unemployment among their educated groups is one sure consequence of such overinvestment. To correct their unbalanced educational systems there are perhaps three ways: first, they may extend their assistance to other developing nations who suffer from shortage in

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50. Hanson, John W. Imagination and Hallucination in African Education. Institute for International Studies, College of Education, Michigan State University, East Lansing, Michigan, 1967. Third Printing.

skilled manpower. Second, they may cut back school and university enrollments while improving the quality of their education. Third, they may go for kinds of economic development that give maximum opportunities for the employment of the highly skilled people.[51]

Conclusion

In conclusion, it may be stated that there is still much controversy concerning the relationship of education to national development. It is clear, however, that education influences the productivity of a nation through at least three ways. One way is by upgrading the skills of the labor force; second is, through trained administrators, improved organization of human activities and more efficient use of physical resources and capital; and third way is through professional competence and inventiveness of scientists and technicians. It is also clear that economic development makes possible wider availability and higher levels of education, thus contributing to the quality of life of individuals and of the nation. The task of expanding educational opportunity and economic development and of keeping the two on appropriate balance is a principal task of those who develop policy in a developing nation.

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51. Imagination and Hallucination in African Education.

MANPOWER DEVELOPMENT AND PLANNING

In the early twentieth century, two gross concepts dominated the world thinking about manpower. The Western World generally regarded manpower resources as something created automatically as a product of economic incentives. The U.S.S.R., which was undertaking its early five-year plans, looked upon manpower as an economic resource to be fed into the economy in a manner fundamentally no different from that of material resources. Both concepts became obviously incorrect in certain ways in the depression days of the 1930's because, as John Hilliard put it:

> Manpower was more than hands, more than the agent of a command. It was the one resource that could feel and think and act upon its own volition. It was the one resource that could not be left in the ground or stockpiled in semi-finished form. It was the resource that demanded economic progress, but whose skills and attitudes were the ultimate determinants of the rate and direction of progress.[52]

Planning for manpower development is a concept which is being understood differently by different groups. As Hilliard put it:

> Educators tend to regard it as a form of educational planning. Government administrators tend to see it as a staffing problem connected with the administrative service of state-administered industries. Some see it essentially as a problem of training engineers, finding jobs for the unemployed, counseling young people, and so on.[53]

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52. Hilliard, John F. "Manpower Planning." Dynamics of Development. Gove Hambridge (ed.). New York: Frederick A. Praeger, Publ., 1964. P. 85.

53. Ibid. P. 84.

He argued that

> all of these are part of the process of manpower planning, but they are not the whole of it. Manpower planning means the total process by which proper development and wise utilization of the human resources of a nation is achieved in attaining the objective to which the nation has committed itself.[54]

This conception of manpower planning requires at least four things on the part of manpower planners; an adequate understanding of the nation's goals and of the general strategy by which those goals are to be achieved, a careful and continuous study of the activities that create manpower requirements and of the institutions that develop manpower resources, a continuous projection of manpower resources and requirements into the future, and a systematic taking of timely action to balance manpower requirements and resources. Put in more practical terms,

> manpower planning includes identification of the human skills required for every major activity, and a determination of the magnitude and timing of such requirements. It involves the use of existing or the development of new institutions to produce the manpower required, at the right time, in the right quantity, and of the right quality. It requires careful integration of the various institutions so that, in the total of their functions, they produce the people with the skills and knowledge necessary to the nation's economic, technological, intellectual, and spiritual growth.[55]

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54. Dynamics of Development. P. 74.

55. Ibid. P. 84.

EDUCATIONAL PLANNING AND CULTURAL BORROWING

Educational planning within the context of cultural borrowing may be viewed as a method for delineating educational goals and ways of achieving them with focus on cultural borrowing as a mediating process.

Advocates of the manpower approach to educational planning have been almost exclusively concerned with manpower analysis and forecasting. Precise educational planning and the establishment of educational priorities require going beyond the manpower approach. This means that educational planners must be able to answer very fundamental questions about what effect schooling has on an individual and on a nation - questions not often asked in manpower planning circles.

Issues Affecting Cultural Borrowing

Three issues affecting cultural borrowing come to the forefront of any discussion of rational educational planning. These are: (1) What constitutes a sound national plan for education? (2) What are the goals to be sought by a sound national plan for education? and (3) Who decides what is to be changed in the educational scene?

Hanson has identified several characteristics of a sound national plan for education.[56] Most relevant to the

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56. Hanson, John W. and Cole S. Brembeck, (ed.) Education and Development of Nations. New York: Holt, Rinehart and Winston, 1966.

purposes of this study are the following characteristics:

1) A sound national plan for education will provide for an intelligible set of goals which includes political, social, aesthetic and moral goals as well as national economic goals.
2) It will be based upon consideration and weighing of the wide variety of alternatives which are available.
3) It will provide for the continued flow of new ideas and the preparation of personnel to carry on the processes as the job expands or alters by giving high priority to producing the manpower necessary to educate further manpower, by supporting research for the production of ideas and the assessment of problems, and by leaving room for planned experimentation within the framework of the established goals.
4) It will provide for the periodic and systematic evaluation and revision of plans as progress is made, new problems discovered, or new goals established.
5) It will include realistic means for placing the plan in operation by indicating the extent and possible sources of financial support needed for various phases or aspects of the plan, including specific charges or delegating specific responsibilities to existing agencies or proposing new agencies where no existing agency is appropriate, and by providing for some overall coordination in carrying out the plan.

The second issue in educational planning deals with the formulation of goals to be sought by the educational system.

Goals of any educational system are those ends which are both desirable and acceptable from the society's point of view and are regarded as necessary for the preservation of society's cultural values as well as for its continued progress and change.

In order for the goals of education to be fruitful and practical they must always be based upon careful consideration of two basic factors: one consists of the basic ends or principles of ethics and social thought, while the second consists of the empirical and other premises about human nature, life, and the world in general.

Examples of what may be classified under the first factor, that of the basic ends or principles of social ethics and social thought, would include the following:

1) Democracy in education is committed to an equality of concern for each individual to develop himself as a person.[57]

2) A free society does not merely aim, through education, to produce the craftsmen and the fashioners of the means to achieve ends laid down by the ruling political group but strives to develop citizens critically aware of these

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57. Hook, Sidney. Philosophy of Education. New York: Alfred A. Knopf, 1967. New Edition. P. 36.

ends and capable and willing to evaluate them.[58]

3) The strategic freedoms which hold the greatest promise for the greatest cultural freedom are the political, social, and ethical freedoms that address themselves critically to the values and institutions of the society.[59]

Examples of what may be classified under the second factor, that of the empirical and other premises about human nature, life, and the world, would include the following:

1) Man is a biological organism subject to definite laws of growth....a member of society, heir to a cultural heritage and social organization that determines the forms in which his biological needs and impulses find expression....and a personality or character that exhibits a distinctive pattern of behavior, rooted in biological variation and influenced by the dominant norms of his culture, which he gradually develops through a series of successive choices.[60]

2) Mind is never found disembodied, but always immersed in concrete problems of finding out and exploring meanings.[61]

3) The world we live in is a world of danger which fluctuates in intensity but ~~is~~ always present. It is also a

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58. Philosophy of Education. P. 21.

59. Ibid. P. 21.

60. Ibid. P. 59.

61. Ibid. P. 27.

world of opportunity, sometimes narrow and restricted to grim alternatives; sometimes broad and multiple in its possibilities of choice.[62]

Obviously, the defining of national purposes of education in any given society requires direct attention to the principal social aims of education. It demands increased attention to the economic and technological needs of the nations and to developing a new spirit of economic and social innovation.

Efforts to establish goals for an educational system in any given society must be accompanied by a clear conception of the kind of citizen to be desired or developed through the processes of formal socialization by educational institutions. Depending upon where curricular emphasis goes there are four basic types of persons that may result from the educational processes and experiences; these are the efficient man, the intellectual man, the well-informed man, and the expert. Harry Miller's paradigm provides a useful tool for understanding what is meant by these four types of man.[63] He perceives of the educational process as dealing with two major problems; the learner's activity vs.

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62. Philosophy of Education. P. 16.

63. Miller, Harry. Teaching and Learning in Adult Education. New York: The MacMillan Co., 1964. Pp. 24-28.

passivity in the teaching-learning process and the emphasis on the individual's growth vs. the individual's adjustment to his social roles. Both problems represent two continua and when put together, as shown in Figure I, produce four cells with each one representing a different outcome, a different type of man.

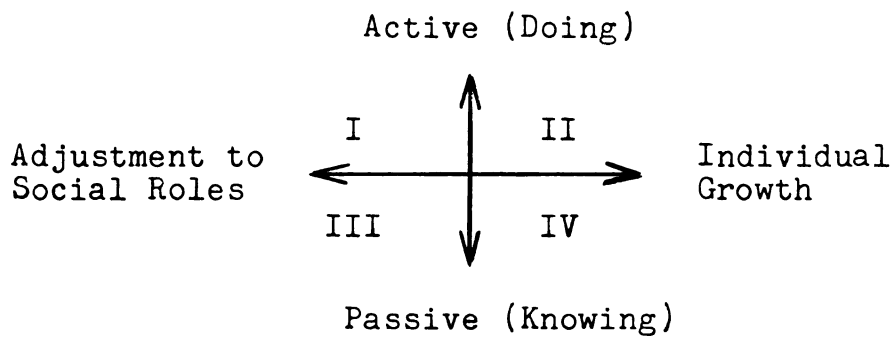

Figure I. Areas of Emphasis in the Education Process and Its Possible Outcomes.

According to Miller, an education that emphasizes the individual's active participation in the learning process together with his adjustment to his social roles will tend to produce an "efficient" man.(I) Similarly, an education that emphasizes the individual's active participation together with his growth as an individual will tend to produce the "intellectual" man.(II) The "well-informed" man (III), will tend to develop as a result of an education process emphasizing the individual's adjustment to his social roles and a passivity in the learning process. The "expert" (IV), is

kind of person who tends to develop as an outcome of an education emphasizing his individual growth and a passivity in the learning process.

There is always a danger in that too much emphasis on developing the efficient man may produce highly conformist persons who are ready to shift their behavior to conform to the demands of others who happen to be in power positions. Another danger stems from too much emphasis on developing the intellectual man which may produce sophists for whom social reality is merely a convenient source of stimulating discussion. Both dangers are detrimental to the cause of development and modernization that are aspired to by developing nations and it is up to them to choose the path which is more conducive to their objectives.

The orientation of education in developing countries must always be an orientation toward the future without discarding the heritage of the past. It should not ignore active participation in the world of today. Its sharpest focus must be upon contribution, "contribution in terms of solving the problems of today and building the better world of tomorrow".[64]. In essence, then, the national purpose for education is to equip people to participate in, and contribute to, the modernization process, the process of creating a

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64. Education and Development of Nations. P. 33.

style of life that will bear the imprint of traditional strengths even as it adapts new technologies to its new national way of life.

The third issue in educational planning deals with the problem of who decides what is to be changed in the educational scene.

The educational task at any given point in time may be looked at as consisting of five basic components in continuous interaction with each other and with the outside environment. These are:

1) The current basic ends, values or principles of social ethics and social thought.
2) The current empirical and other premises about human nature, life, and the world.
3) The current educational goals and desirable ends to be achieved by education.
4) The current empirical or scientific knowledge about how to produce the desired ends.
5) Concrete conclusions about what should be done, when, how, and by whom, in order to attain the desirable ends or goals.

Societal ends, values, or principles of social ethics and social thought are not determined by a single individual, group, or institution. In a democratic society they are the outcomes of several factors and forces in continuous interaction. Societal values generally represent what the

majority of a society perceives as valuable and worthwhile living for. National leaders and social philosophers are perhaps more influential in directing the attention of their publics toward what is to be valued and aspired to.

The empirical and other premises about human nature, life, and the world are not determined by an individual person or group. Rather, they tend to develop as a result of scientific discoveries or common observations and experiences.

Educational goals and ends are generally derived from both the current social thought and societal values, and the most established empirical premises about human nature, life and the world. It is not easy to specifically pinpoint the individuals, groups, or institutions who are responsible for setting educational goals in a democratic society. We may assume that they are ideally enunciated by loyal, responsible, and well-informed individuals and groups who, in their totality, represent the views, hopes, and aspirations of the society at large.

Current empirical or scientific knowledge about how to produce the desired ends is to be evolved on the basis of research and scientific investigations conducted by scholars and researchers in such fields as psychology, sociology, social psychology and biology.

Specific implementation of what should be done, when, how, and by whom, must be left for trained teachers and administrators. It is believed to be their area of competency.

These conclusions, or others which substitute for them, must finally be established in the form of institutional policy by which the education enterprise is governed. Such policy development is almost always a political function.

Mass Communication and National Development

AN OVERVIEW

In the process of communication someone initiates action in the form of symbols which usually are verbal or visual or a combination of both. Someone else interprets these symbols in accordance with a culturally determined understanding of what they mean. When both parties are in basic agreement as to the meaning of the symbols, effective communication occurs.

The more people share common language and culture the easier their communication is made. Sharing either a common language or a common culture alone does not make communication as easy as in the case of sharing both a common language and a common culture. For example, members of distinct cultures may make use of the same symbols, but usually the meanings that are attached to these symbols are different. It is very likely that effective communication in this case will not occur. Similarly, members of one culture who lack a common language may find it difficult to communicate effectively with each other.

When such difficulties occur in the process of communication, it is generally recognized that the use of other means of communication may help to facilitate effective communication. Illustrative of such means is the use of demonstration or posters. Yet even here there are dangers that the meaning of the symbols to the initiator of the action will not be the meaning attached by the observers. For example,

> In New Zealand a successful health education poster designed to encourage students to brush their teeth showed a whale jumping out of the water in pursuit of a tube of toothpaste. This poster was reproduced for use in Fiji. The response was immediate and overwhelming: Fiji fishermen sent a rush call to New Zealand for large quantities of this wonderful new fish bait.[65]

Communication is most effective when both a common language and a common culture are present. It becomes less effective in the absence of either of these two elements and becomes futile in the absence of both. This explains why the use of local change agents who share both a common language and a common culture with their client systems has been more frequently effective than the use of foreign change agents who lack both commonalities with their client systems in underdeveloped countries.

Communication can take one of two basic forms: mass communication, or interpersonal or face-to-face communication.

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65. Foster, George M. Traditional Cultures: and the Impact of Technological Change. New York: Harper & Row, 1962. P. 138.

They can be differentiated in terms of at least five factors: the potential size of the simultaneous audience that can be reached, the degree of difficulty of obtaining feedback from the message receiver, the possibility of delay in reception, the degree of mutual source-receiver surveillance, and the influence of selectivity on the effectiveness of the transmitted messages. Mass communication, in contrast to interpersonal communication, is generally characterized by a potentially larger size of audience that can be reached simultaneously, a relatively greater difficulty of obtaining feedback from those who receive the transmitted messages, a greater possibility of delay in reception, a lesser possibility of mutual source-receiver surveillance, and a much greater influence of selectivity in attending to the messages, perceiving them, and retaining them.

Communication is being viewed as playing essentially the same role within a social system as the nervous system does in our human physiological system. Communication processes convey information to the system from outside its boundaries and transmit information from part to part within the system. It, thus, facilitates the system's adjustment to strains and tensions occurring both in its environment and among its constituents.

MASS COMMUNICATION AND SOCIETY

Lerner perceives the major linkages between communication and national development as follows:

> Mass communication is both the index and agent of change in a society. That is, the size of the communication activity - the development of the mass media and their audiences, the transfer of the individual communication roles of traditional society to organizations, and the stretching out and multiplying of communication chains, reflects the economic development of society.[66]

Schramm[67] identified six essential functions which communication must contribute to society, and, hence, to national development:

1) Communication must be used to contribute to the feeling of nation-ness. Citizens in their local communities should supplement their local loyalties and local awareness by a growing national loyalty and awareness. This involves a gradual widening of horizons, and a gradual change in focus of attention from local matters and local concerns to national ones. But the citizen cannot extend his environment unless the communication system extends its environment. The process of nation-nessization requires mass media, some of which must be national. When accompanied by adequate leadership the

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66. Lerner, Daniel. The Passing of Traditional Society. Glencoe, Ill.: The Free Press, 1958. P. 1.

67. Schramm, Wilbur. "Communication Development and Political Development Process." Communication and Political Development. Lucian Pye (ed.). Princeton: Princeton University Press, 1963.

communication system can help enhance the sense of nationness.

2) Communication must be used as the voice of national planning. People of a developing nation must learn new skills and new ways of living, and must be willing to defer gratifications until the nation as a whole can afford them. An efficient communication system will carry the information, the discussions, by which the people arrive at an understanding of the national needs and a consensus upon the national plans. An efficient communication system must also communicate to the entire country the agreed-upon goals, the national decisions, and the reports of progress.

3) Communication must be used to help teach the necessary skills. Communication systems in the developing countries must help teach technical specialties and diffuse the new ideas and innovations so that progress can be made faster in all fields. All forms, all channels of communication are required to do this task. This would include textbooks for schools, films, radios, print for community education, and organized group and individual instruction to supplement the media. While training in technical skills, the developing nation must not overlook the importance of developing communication skills themselves.

4) Communication must be used to help extend the effective market. If the developing countries are to have national industry and foreign trade, there must be effective communication

directed to these ends.

5) As the development plan develops, communication must be used to help prepare people to play their new roles. Communication must not only stimulate people to greater efforts but also prepare them for new roles, new responsibilities, and new solutions to problems called for by the planning and development programs.

6) Communication must be used to prepare the people to play their role as a nation among nations.

> The process of economic development inevitably requires that horizons be widened from local to national and hence to international events. Partly, this is a consequence of expanding trade and growing national importance.[68]

MASS COMMUNICATION AND DEVELOPMENT

Changes due to exposure to communication, interpersonal and mass, are either direct or indirect changes.

Pool argues that,

> Among the direct and immediate effects which exposure to the media may have upon the individuals are changes in:
>
> 1) Attention
> 2) Saliency
> 3) Information
> 4) Skills
> 5) Taste
> 6) Images
> 7) Attitudes
> 8) Actions

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68. Communication and Political Development. P. 42.

> Changes in any one of these may in turn change each of the others: changes in one's actions may change one's attitudes just as changes in one's attitudes may change one's actions; changes in the information one has may change one's distribution of attention, or changes in what one attends to may change one's information.
>
> Various experimental and survey results suggest that the mass media operate very directly upon attention, information, tastes, and images....Changes in skills and attitudes are less apt to be brought about by the mass media operating alone. Here the best we can say is that sometimes they are but often they are not.[69]

Changes in all these dimensions are important to the development process. What changes in attention, tastes, information, images, attitudes, and actions are actually leading to is a change in expectations. Rising expectations constitute a major power toward development if they are rationally formulated and adequately met.

Seven major variables are identifiable in any systematic analysis of the relationship between the developmental level of a society and its communication system. These are the structure of social communication, the size of the communication activity, the differentiation of communication, the ownership of communication facilities, the controls upon communication, the content of communication, and the patterns of communication networks.

The structure of social communication reflects the

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69. Pool, Ithiel DeSola. "The Mass Media and Politics in the Modernization Process." Communication and Political Development. Lucian Pye (ed.). Princeton: Princeton University Press, 1963. Pp. 250-251.

structure and development of society. The size of communication activity and the differentiation of communication roles reflect the level of economic development of society. The ownership of communication facilities and the controls upon communication reflect the political development and philosophy of society. The content of communication reflects the norms and value pattern of society. The patterns of communication networks, which is a result of where information flows and who shares it with whom, is one indication of the place of a society on a democratic-authoritarian continuum.

Despite these close connections no one has yet claimed a cause-effect relationship between communication development and societal development. Apparently, there is a two-way interaction between them. Development in one stimulates development in the other. For example, a more efficient communication system makes industrial development easier, and industrial development may make communication development easier. The typical history of communication development in countries where it is farthest advanced is a chain of interactions in which education, industry, urbanization, national income, political participation, and the mass media have all gone forward together, stimulating each other.

"There is a growing body of research studies in less developed nations that indicates the crucial, integral role

of mass media in modernization."[70].

Students of development and political leaders of many developing countries appear increasingly convinced that mass communication is a powerful factor in the modernization process. By mass communication is usually meant such mass media as newspapers, magazines, film, radio, and television which enable a source of one or a few individuals to transfer messages to an audience of many.

Some scholars in the field of communication argue in favor of the use of mass media in development programs and tend to put less emphasis upon interpersonal communication. Their arguments usually run as Rogers stated:

1) Interpersonal communication channels alone are inadequate to reach the huge peasant audiences of less developed countries, even when these channels are primed by governmental change agents at the village level. These local development workers may not be perceived as credible by villagers, and even if they were, the cost and effort necessary to train sufficient numbers of them for every village is impractical.

2) In recent years, advances in mass media technology have made it economically practical for governments to provide radios, films, and other mass media facilities to villagers. Therefore, this mass audience can be reached with rapid, standardized, and highly accurate messages about development. By improving mass media facilities, such as radio and television broadcasting stations, news gathering services, newspaper publishers, etc., the governments of less developed countries could reach larger audiences with these media channels

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70. Rogers, Everett M. "Mass Media Exposure and Modernization Among Columbian Peasants." Mass Communication and the Development of Nations. David K. Berlo (ed.). The International Communication Institute. Michigan State University, East Lansing, Michigan, 1968.

3) Wider mass media audiences and accompanying higher levels of mass media exposure per capita can be expected to lead, among those so exposed, to favorable attitudes toward change and development, greater awareness of political events, higher knowledge of technical information, and other modernizing effects.[71]

Despite the apparent advantages of mass media, research in the United States as well as in some less developed countries has shown that wide-spread mass media exposure alone is unlikely to effect large changes in human behavior. As Rogers put it:

> Communication research has shown that the "hypodermic needle" model of mass media effects, with the mass media playing the stimulus role in causing direct and immediate response, is largely a false conception. One reason is because mass media communication channels are more important in changing cognition (that is, in increasing knowledge of ideas), while interpersonal communication channels are more important in causing attitude change. Further, we know that the mass media are usually perceived and used in a very selective manner. Only the messages that reinforce prevailing attitudes and beliefs are likely to "get through", while conflicting messages will be shut out by the mental screens of selective exposure and selective perception. For example, peasants often give more attention to music and other consumatory radio programming than to such pro-development messages as news and technical information, which may not agree with the audience's traditional beliefs.
>
> Interpersonal communication with fellow villagers can help overcome the selectivity barriers. So why not combine mass media with interpersonal communication so as to obtain the wide audience potential (and other advantages) of the mass media with the ability to 'get through' of interpersonal communication? This combination of mass media with group discussion has been utilized in radio farm forums in India and Ghana, in

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71. Mass Communication and the Development of Nations. P. III-4

> study groups in Communist China, and in Radiophonics 'schools' in Latin America. These experiences to date suggest that the modernization effects of mass media communication channels among peasants in less developed countries are greater when these media are coupled with discussion groups.[72].

A MODEL FOR MASS MEDIA EXPOSURE AND MODERNIZATION

Rogers[73]. provides a useful model for mass media exposure and modernization represented by the following paradigm which relates mass media exposure to some important modernization variables including empathy, innovativeness, political knowledge, achievement motivation, and educational and occupational aspirations.

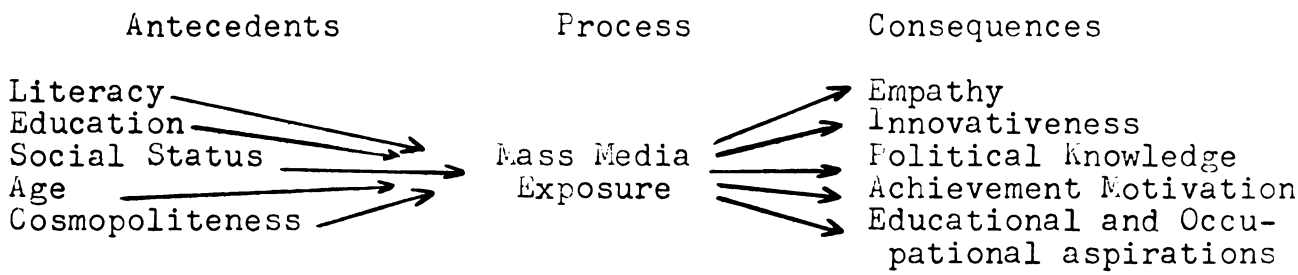

Figure II. Relationship of Mass Media Exposure to Modernization Variables.

The paradigm represents the theoretical model underlying an investigation undertaken in five Colombian peasant communities in 1963-64. Three of these communities are relatively more modern than the other two.

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72. Mass Communication and the Development of Nations. P. III-4, 5.

73. Ibid.

The main variable in the study is mass media exposure. Much of the content in all of the media, including advertising, is informational, educational, or propagandistic in nature, designed to inform or persuade people about various kinds of modernization.

On the left-hand side of the paradigm are variables that appear to act to determine whether an individual will be in the mass media audience or not. These variables include literacy, formal education, social status (one indicator of economic ability to afford the mass media), age, and cosmopoliteness, which is an alternative avenue (to mass media exposure) to contact with modern, urban life.

Specific measures of modernization found correlated with mass media exposure are empathy, innovativeness, political knowledge, achievement motivation, and educational and occupational aspirations. Empathy is defined as the degree to which an individual is able to take the role of others, "to put himself in the shoes" of others. Innovativeness is the degree to which an individual adopts new ideas earlier than others do in his social system. Political knowledge means awareness of political news and events. Achievement motivation is defined as a desire for excellence in one's occupation. By educational and occupational aspirations is meant the parents' aspirations for their children's education and occupation. Some development theorists have postulated that the need for higher aspirations is an important step in

modernization.[73.a]

The study showed a positive correlation between mass media exposure and these five consequent variables. More important, perhaps, is the wide difference in mass media exposure between the three modern and the two traditional communities.

Rogers does not claim any cause-effect relationship between the antecedent and consequent variables and mass media exposure. What he found is that mass media exposure is related to both the antecedent and the consequent variables. His results showed that mass media exposure is an intervening variable. These findings have very useful implications for diffusion planning; the more we develop and secure the antecedent conditions, namely literacy, education, social status in terms of ability to afford mass media equipment, and cosmopoliteness, the more likely it is that the disseminated ideas and innovations through mass media channels will lead to higher degree of modernization as measured by the degree of empathy, higher innovativeness, more political knowledge, higher achievement motivations, and higher educational and occupational aspirations for one's children.

In our discussions we have assumed that Rogers'

73.a. McClelland, David D. The Achieving Society. Princeton: van Nostrand, 1961.

findings and theoretical model have a high degree of generalizability and applicability. While this may be an accurate assumption it is still necessary for any developing country to undertake similar studies to verify and support or modify and supplement what Rogers has found.

CONCLUSION

In concluding this section one agrees with Schramm that:

> As nations move from the patterns of traditional society toward the patterns of modern industrial society, spectacular developments take place in their communication. From one point of view, developments in communication are brought about by the economic, social and political evaluation which is part of the national growth. From another viewpoint, however, they are among the chief makers and movers of that evolution.[74]

Information campaigns in developing countries can perform more than one function. They can teach new techniques, activate and reinforce desires for change, prepare the ground for the adoption of improved techniques, and focus attention on the desirability of new ways of doing things.

Mass media can contribute to economic development by mobilizing public support for development programs and by helping to give people hope for a better life without losing sight of the existing realities and limitations.

Media planners have to take into account the traditional

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74. Communication and Political Development. P. 30.

communication habits and psychological characteristics of the people. At the same time, opinion leaders from the traditional systems have to be involved in the operation and interpretation of mass communications, and representatives of the media must be brought into direct contact with the traditional systems at the grass roots. Recruiting and training local reporters and developing local opinion leaders on new subjects are fully as important as assuring an adequate supply of technicians who are versed in modern techniques.

A great deal of debate is often wasted, when a new idea or a new practice is to be introduced, over the relative desirability of using print or radio, films or discussion groups, cartoons or dramas, practice or demonstration or illustration, as ways of teaching new procedures and promoting new attitudes. These discussions tend to ignore the fact that all media for dissemination of new knowledge are to be judged in terms of effectiveness, and effectiveness in turn is a function of the extent to which the new practice becomes part of the way of life of the people among whom the changes are to be introduced. Any reliance on a method which is purely intellectual or purely aesthetic, purely emotional, or purely moralistic, purely social or purely individual, will necessarily restrict the area of involvement. Whether, in a given culture, films or group discussions will evoke a more whole participation in adults or children, in the educated or

uneducated, are matters which have to be decided by experiment, with the full participation of the particular people on the spot.

Diffusion of Innovations

DEFINITIONS

An innovation may be broadly defined as "an idea for accomplishing some recognized social end in a new way or for a means of accomplishing some new social end. The idea or pattern of ideas may become manifest as a new kind of tool or mechanical device, as a new process or technical procedure, as a new material or substance, as a place or terrain previously unknown to man, as a new mode of human action, or as a new concept or belief".[75]

"Innovativeness is defined as the degree to which an individual is relatively earlier in adopting new ideas than the other members of his social system,"[76] whether it be a small group, a community, or a society.

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75. Social Change. P. 107.

76. Diffusion of Innovations. P. 19.

CHARACTERISTICS OF INNOVATIONS

It is generally recognized that innovations differ in their adoptability and the likelihood of being diffused. This difference is attributable to at least five characteristics; the relative advantage of an innovation, its compatibility, its complexity, its divisibility, and its communicability.

Relative Advantage

The relative advantage of an innovation refers to "the degree to which it is superior to ideas it supercedes".[77] The degree of relative advantage is often expressed in economic terms but it may be measured in other ways depending upon the nature of a given innovation. The relative advantage of an innovation is generally determined, or affected, by promotional efforts,[78] the individual's or society's need for it,[79] the presence of a crisis.[80]

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77. Diffusion of Innovations. P. 124.

78. Wilkening, E.A. "Informal Leaders and Innovators in Farm Practices." Rural Sociology. Vol. 17 (1952). P. 36.

79. Ross, Donald H. "Rate of Diffusion for Driver Educatio." Safety Education. Vol. 32:1952. Pp. 16-32.

80. Wilkening, E.A. Adoption of Improved Farm Practices as Related to Family Factors. Wisconsin Experiment Station Research Bulletin #183, Madison, Wisconsin, 1953. P. 13.

Compatibility

Compatibility of an innovation refers to "the degree to which it is consistent with existing values and past experiences of the adopters".[81] There are several investigations which indicate that the compatibility of an innovation, as perceived by members of a society, or community, affects its rate of adoption. Graham's study on class and conservatism in the adoption of innovations shows significant differences in the adoption rates of certain innovations by different social class members.[82] Hawley's study on the acceptance of Catholicism by two different groups of Pueblo Indians shows that it was adopted by one group rather than the other because Catholicism was more compatible with its culture.[83] Also, Parish's study on Australian farmers shows that they adopted mechanical innovations more rapidly than non-mechanical innovations because the farmers' values tend to be more compatible with mechanical innovations.[84]

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81. Diffusion of Innovations. P. 126.

82. Graham, Saxon. "Class and Conservatism in the Adoption of Innovations." Human Relations, Vol. 9 (1956).

83. Howley, Florence. "The Role of the Pueblo Social Organization in the Disseminating of Catholicism." American Anthropologist. Vol. 48.

84. Parish, Ross. "Innovation and Enterprise in Wheat Farming." Review of Marketing and Agricultural Economics. Vol. 22 (1954).

Complexity

Complexity of an innovation refers to the degree to which it "is relatively difficult to understand and use".[85] Rogers suggests the generalization that the complexity of an innovation, as perceived by members of a social system is negatively related to its rate of adoption.[86]

Divisibility

Divisibility of an innovation refers to "the degree to which an innovation may be tried on a limited basis".[87] It is suggested, on the basis of limited evidence, that the divisibility of an innovation, as perceived by members of a social system, is positively related to its rate of adoption.[88]

Communicability

Communicability of an innovation refers to "the degree to which the results of an innovation may be diffused to others".[89] Erasmus shows that, in a less developed,

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85. Diffusion of Innovations. P. 130.

86. Rogers, Everett M. and Floyd Shoemaker. Communication of Innovations: A Cross-Cultural Approach. Free Press of Glencoe, New York. 1969.

87. Diffusion of Innovations. P. 131.

88. Communication of Innovations: A Cross-Cultural Approach.

89. Diffusion of Innovations. P. 132.

preliterate society, the visibility of an innovation is particularly important in affecting its rate of adoption.[90] Rogers argues that Ogburn's cultural lag theory fits into the idea of communicability in that he claims that material innovations diffuse and are adopted more readily than non-material ideas because of the greater visibility and communicability of material ideas.[91] "Linton stated that the material techniques and their products are probably the only elements of culture which can be completely communicated, and it is significant that it is usually these elements which are accepted most readily."[92]

Rogers points out that the five characteristics of innovations; relative advantage, compatibility, complexity, divisibility, and communicability are by no means the only ones that have been used by diffusion researchers. Further, he adds, they should properly be regarded only as potentially useful tools for the analysis of the characteristics of new ideas.[93]

It is generally observed that innovations in some fields are adopted more easily and in a relatively shorter period

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90. Erasmus, Charles J. Man Takes Control: Cultural Development and American Aid. Minneapolis: University of Minnesota Press, 1963. Second Printing. P. 23.

91. Diffusion of Innovations. P. 133.

92. Ibid. P. 133.

93. Ibid. Pp. 133-134.

of time than innovations in other fields. For example, innovations in organizations are often very crude and go through a longer period of developmental refinement than is necessary with most innovations in technology. The number of individuals who are involved in the invention and development of scientific technologies is usually far smaller than the number who contribute to the emergence of a new form of social organization. In this latter case the new element is generally produced piecemeal by contributors and, each contribution consisting of a personal decision to do something in a slightly unfamiliar manner. Consequently, the emergence of new forms of social organization is a slow and laborious process when compared to that of innovations in other realms.

Rogers points out other reasons in support of the common observation that innovations in some fields tend to be adopted easier and faster than innovations in other fields.[94] New ideas in education and administration have only small increments of advantage over ideas they replace. In such fields, innovations are most often perceived as having low advantage; they are low in visibility; and their consequences are often difficult to appraise in the short

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94. Rogers, Everett M. Developing a Strategy for Planned Change. Paper presented at the Symposium on the Application of System Analysis and Management Techniques to Educational Planning in California. Orange, California, June, 1967.

run. It is in this type of field, he argues, that the decision makers may have to base their adoption decisions on a general faith in the new as being "better", rather than on "harder" criteria of demonstrated advantage. On the other hand, innovations in the field of agriculture, for example, often produce vividly pronounced effects and, as a result, are more likely to be adopted faster.

NEGATIVE ASPECTS OF ADOPTING INNOVATIONS

Developing nations who decide to utilize cultural borrowing as a method of achieving a comprehensive change and modernization must be aware not only of the characteristics of innovations they borrow but also of the possible negative aspects of innovations. One negative aspect of innovations, identified by Adelson,[95] is that an innovation may inhibit further innovations. This usually comes in four ways. First, the adoption of a very large innovation which absorbs a considerable proportion of the available resources of any kind will tend to make the adopting group, or society, refractory to subsequent innovations requiring the same resources. Second, an innovation which is generally accepted and becomes a way of life tends to be accompanied

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95. Adelson. "Educational Ends and Means." Innovating Education for the Future. Werner Z. Hirch and others. San Francisco: Chandler Publishing Co., 1967. P. 250.

by the development of bureaucratic structures and vested interests which may increase the real cost over the estimated cost and make subsequent change difficult. Third, communities tend to be characterized by a maximum rate at which they are willing or able to accept changes, no matter how beneficial the changes appear to be. Finally, innovations may be intrinsically mutually exclusive.

A second negative aspect of innovations identified by Adelson[96]. is that improperly devised innovations, such as those based on too narrow a view of the future, could, if adopted without adequate evaluation, seriously damage the lives of individuals subjected to them.

What is suggested by the possible negative aspects of innovations is that the process of scrutiny needs as much attention by the developing countries as any vital process in the development program.

RESISTANCE TO INNOVATIONS

No analysis of the diffusion of innovations should ignore the sources of resistance which hinder effective and smooth adoption. Resistance to adoption of innovations may generally be expected if their nature is not made clear to potential adopters; also, resistance may arise when different people see different meanings in the innovations.

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96. Innovating Education for the Future. P. 250.

This resistance will certainly increase if the introduced innovations ignore the already established institutions in the society.

LaPiere classified the bases for resisting innovations into covert and rational bases.[97] Covert bases for resistance, according to LaPiere, include the fear of the unfamiliar, moral sentiments and principles, aesthetic values, and rationalizations.

Resistance to innovations based on fear may be no more than a vague and generalized response to the unfamiliar. Almost anything unfamiliar is more disturbing emotionally than something familiar. This, of course, applies to innovations which are, by their very nature, unfamiliar.

"Resistance to innovations on moral grounds stems from the fact that in every society the members are more or less effectively socialized into the feeling, as well as the mental set, that the established forms of conduct, especially those of an organizational nature, are the only ones that are right and proper."[98] Resistance to innovations based on moral sentiments and principles is especially apparent in the case of innovations in interpersonal relations, in social organization, and in philosophical ideas. Fear of the unknown under such circumstances tends to be merged with

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97. Social Change.

98. Ibid. P. 180.

apprehension concerning the moral consequences of adopting the new.

"Many innovations, particularly of a technological nature, have been resisted in some part because the change would deprive people of familiar smells, sounds, and sights and create others not to their liking."[99].

Many of the rationales expressed in opposition to innovations, especially in the period of their advocacy can be interpreted, at least in part, as rationalizations for emotional or other covert sources of resistance.

Under the class of rational bases for resisting innovations, two types are identifiable.[100]. Self-interest in the established represents one type, while status represents the second type.

Much of the resistance to innovations, however rationalized, stems from vested interest on the part of individuals and groups in the various elements of their society and may reflect a more or less rational calculation of what is to be their personal or group advantage. The simplest kind of self-interest which leads to resisting innovations is perhaps the vested interest in the knowledge and skills, manual or mental, that are involved in the use of the existing devices, procedures, or ideas.

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99. Social Change. P. 184.

100. Ibid. Pp. 188-194.

Individuals and groups are much interested in maintaining their status in the society if they happen to enjoy a higher one. Adoption of innovations is usually associated with shifts in the status structure with early adopters gaining more status while late adopters lose in status. To the extent that those whose status is threatened consciously recognize the danger, they will resist adopting the innovation.

BARRIERS TO ADOPTION OF INNOVATIONS

In addition to understanding and anticipating resistance to innovations it is equally important for the developing countries which are utilizing large-scale cultural borrowing to consider and effectively deal with the barriers to the adoption of innovations.

Cost represents one barrier. Innovations that require inordinate outlays of money, energy, or time by the adopting persons or groups are likely to move slowly. However, if the innovation can be adopted on a partial, flexible basis, the obstacle of cost may be less formidable.

Another barrier is the technological factors involved in an innovation. This would include the infeasibility of the innovation, the difficulty of its availability when it is most desired, and the inconvenience of its use.

A third potential barrier to the adoption of innovations consists of the sorts of interaction which a particular

innovation requires. For example, innovations which will have the consequence of decreasing personal initiative, increasing dependence on others where dependence is an undesired quality, or violating important values are likely to be resisted by potential adopters.

A fourth potential barrier to adopting innovations is the absence of implementation supports. It seems fairly clear that the difficulty of use or implementation of a particular innovation is a genuine barrier to adoption and continued use. Innovations accompanied with implementation supports will be likely to diffuse more rapidly than those not so supported.

Other barriers to the adoption of innovations would include perceived threats to existing practices, the requirement or necessity of making important value changes in adopters, and the lack of direct experience with a particular device and any associated materials.

THE ADOPTION PROCESS

Effective planning for cultural borrowing must include, in addition to an adequate knowledge of the characteristics of innovations and the sources of resistance to their adoption, at least one consideration - a sufficient knowledge of the adoption process.

An individual appears to go through five distinct stages

before he finally adopts an innovation. He must first become aware of the innovation in order to think about it. This may, or may not, lead to his becoming interested in the innovation. If he becomes sufficiently interested he will evaluate it in terms of its benefits or risks. Until the evaluation is positive there will be uncertainty, indecision, resistance to, or even active opposition to the innovation. When the evaluation is positive, the individual usually tries the innovation, at least psychologically, to see if it really works out as he hoped or anticipated. If the trial is successful and he is convinced that the innovation works he may adopt it. What applies to an individual adopter applies to groups, communities, and societies each taken as one unit.

The adoption process is, therefore, the mental process through which an individual, a group, or a society passes from first hearing about an innovation to final adoption. The diffusion process should be distinguished from the adoption process since the former refers to the spread of an innovation from its source of invention or creation to its ultimate adopters. It involves the adoptive process but is not restricted to it.

It is convenient for the purposes of this study to refer to the adoption process as consisting of five stages; awareness, interest, evaluation, trial, and adoption. Potential adopters do not necessarily go through all five

stages. Some skip one stage, especially the trial stage.[101] They also differ in terms of the length of time spent in each stage and the sources of their information. These two differences are widely believed to differentiate between two basic types of adopters; early adopters or innovators and late adopters or laggards. Innovators and laggards were found different in their sources of information, with the innovators relying more heavily on cosmopolite sources of information whereas laggards rely more heavily on localite sources.[102] Cosmopolite information sources are defined as those external to a social system,[103] whereas localite information sources exist within a social system. Innovators also tend to utilize a greater number of different information sources than do later adopters or laggards.[104]

STRATEGIES FOR DIFFUSION OF INNOVATIONS

An adequate understanding of the sources of resistance to innovations, of the innovation characteristics, and of the adoption process should lead to more successful identification

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101. Diffusion of Innovations. P. 96.

102. Ibid. P. 179.

103. Ibid. P. 179.

104. Ibid. P. 181.

and utilization of effective strategies for introducing the desired innovations.

The idea of innovation strategy is essentially that of a general set of policies underlying specific action steps expected to be useful in achieving a durable adoption of a particular innovation. A strategy for diffusion of an innovation, for example, may attempt to use only existing structures and tend to avoid attention to interorganizational power struggles which are likely to affect the progress of the innovation. Another strategy may involve deliberate changes in associated areas beyond that of the innovation itself. A third and perhaps more powerful strategy tries to produce a chain of changes until the adoption of an innovation becomes more or less institutionalized. A fourth strategy would rely on inducing manageable discontent with the old by providing new standards for evaluating it. The rationale behind this strategy is that most people have fairly fixed standards for evaluation, and shifts in these standards usually come only through time and as a result of actual experience. And, since it is seldom possible to demonstrate the relative inadequacy of an old social element which has become interwoven in the value structure of a given society, advocates of new ideas often use this strategy of inducing discontent with the old by providing new standards for evaluating it and thereby open the way to the acceptance of the new.

POSITIVE FORCES IN THE DIFFUSION OF INNOVATIONS

Effective planning for cultural borrowing and diffusion of borrowed innovations involves not only the identification and neutralization of barriers and sources of resistance, but also the identification and utilization of acceptable positive forces - economic, social, and psychological - which will challenge the conservative forces and tendencies.

Among the positive forces which can be constructively manipulated are the deferred gratification tendencies, motivations to change, and achievement motivation.

Deferred gratification may be defined as

> the postponement of immediate satisfaction in anticipation of future rewards. Implicit in this definition is the assumption that anticipated rewards are perceived to be of greater value than immediate rewards....An important component of the concept of deferred gratification is that of time orientation. Being able to postpone rewards seems to imply an ability to plan and organize one's behavior on a long run basis. To the extent that an individual's planning horizon concerns the long run, rather than the immediate future, one would expect such persons to be more receptive to innovations which would provide not only delayed rewards but to innovations that would continue to pay dividends over an extended period of time.[105]

Little research has been done utilizing the concept of deferred gratification in developing countries but there is some promise that it can be one positive force that may be encouraged and developed for the sake of diffusing

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105. Keith, Robert F. and E.M. Rogers. Phase II Concepts: Definitions and Suggested Measurement. A.I.D. Diffusion Project, Michigan State University, East Lansing, Michigan. February, 1966. P. 27.

long-range innovations.

The second positive force suggested for constructive manipulation is motivation to change. Motivations, generally, may be culture-bound or universal.[106]. Universal or near universal kinds of motivations cut across all kinds of societies and cultures and are found in varying degrees almost everywhere. Examples of such motivations would include the desire for prestige or for economic gain, the wish to comply with friendship obligations, the religious appeal, and the like.

A third positive force is generally referred to as achievement motivation. Neill and Rogers define achievement motivation

> as that value, instilled in the individual through the socialization process, in which the individual feels a need or desire to excel in reaching certain goals only for the satisfaction of reaching the goals and not for the rewards of the goals or ends involved.[107].

McClelland provided evidence of positive relationships between achievement motivation and national levels of entrepreneurial activity, economic growth, and rate of economic growth.[108]. Neill and Rogers found occupational achievement

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106. Traditional Cultures: and the Impact of Technological Change. P. 144.

107. Neill, Ralph E. and E.M. Rogers. Measuring Achievement Motivation Among Farmers. Columbus, Ohio. Agricultural Experiment Station, Departmental Series, AE 346, 1963. P. 2.

108. McClelland, David C. The Achieving Society. Princeton van Nostrand, 1961.

motivation positively related to productive man work units and innovativeness.[109] Morrison found achievement motivation positively related to various measures of innovativeness.[110] Based upon these findings one may conclude that there is considerable theoretical basis to expect that persons with high levels of achievement motivation are more innovative in terms of adopting new ideas earlier than others. If this is true, it becomes obvious that developing nations who aspire to higher standards of living and modernization must stress the development of achievement motivations in their socialization efforts, formally as well as informally.

Formal Organizations and Diffusion of Innovations

AN OVERVIEW

Planned cultural borrowing, and more generally, planned social change programs are carried out primarily through organizations. This is because organization becomes necessary when the achievement of objectives requires cooperative efforts, specialized roles, and the mobilization of capital,

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109. Measuring Achievement Motivation Among Farmers.

110. Morrison, Denton. Achievement Motivation: A Conceptual and Empirical Study in Measurement Validity. Ph.D. Dissertation, Madison: University of Wisconsin, 1962.

material and human resources. Social change, including the proposed planned cultural borrowing, takes place within, as well as through, organizations. This is true partly because they occupy so much of the life space of individuals and societies.

Esman and Bruhns[111]. postulate that:

1) Development, or more modestly, social change, and the concomitant new values, functions, technologies and action patterns, cannot be effectively introduced and sustained in transitional societies unless they are embedded in a supportive network of social structures, process and norms. In short, these innovative values, functions and technologies must be institutionalized.

2) This process takes place in and through organizations which must either be newly created or adapted and restructured for this purpose.

3) As development occurs, social functions or technologies become increasingly specialized. With specialization, interdependence develops.

Two factors essential for the rise and growth of organizations in transitional societies are differentiation and rationality. When we talk about organizations we assume that, first, a certain degree of differentiation exists, for it is

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111. Esman, Milton J. and Fred C. Bruhns. "Institution Building in National Development: An Approach to Induced Social Change in Transitional Societies." Comparative Theories of Social Change. Ann Arbor: Hollis Peter (ed.) Foundation for Research on Human Behavior, 1966.

the process of differentiation which allows the establishment of new social units to assume specific societal functions. Second, a certain degree of rational thinking and decision-making prevails. This, in turn, requires a commitment to long-run rather than short-run goals, a quality necessary for the development and growth of organizations.

The less developed countries of the world vary in terms of the degree of social differentiation. At one extreme are those traditional societies which are entirely controlled by an absolute monarchy or a tight feudal system. In such societies there is often little differentiation of structure in performing various societal functions. Almost all functions are served by an extended family system, a tribal system, or village committees, under the surveillance of a single chief aided by his close kin.

Societies closest to the modern pattern are those in which the organizational web penetrates deeper into the societal structure down to the villages. The trend in the less developed areas of the world seems to be moving toward more differentiation and the establishment of a greater number and larger variety of more encompassing organizations.

In the absence of rationality, the trend toward organization has been accompanied by organizational ills, including corruption, favoritism, bribery, rigidity, and other forms of inefficient utilization of organizational potential. The elimination of such ills cannot be attained by focusing on

the symptoms. Only through changing the psychological and sociological relationships within the organization will it be possible to eliminate these ills. This is a long process which has to be started by developing nations and, the sooner this is done the better.

The promotion of new ideas, beliefs, professional techniques, modes of human relationships, or forms of organization, usually proceeds in one or the other of two ways. Either the advocate begins as a free lance and, if successful, builds an organization to implement his work, or else he works within an existing organizational framework and endeavors to persuade its leaders that the organization should adopt the innovation and assume responsibility for its further promotion and development. The latter has commonly been the way in which organizations and organizational procedures have been changed.

Most of the literature on the diffusion of innovations is mainly concerned with the acceptance or rejection of innovations by individuals, and not by organizations or collectivities. In general, studies of individual adopters have characterized innovators as younger in age, more educated, having a more cosmopolite orientation. Based upon these findings, it may be hypothesized that organizations containing large proportions of innovative persons will also be innovative organizations.

ANALYSIS OF FORMAL ORGANIZATIONS

In analyzing formal organizations and their role in the process of cultural borrowing, three of its aspects are uppermost: technology, the structure of authority, and the structure of communications. Each of these aspects has important social and psychological consequences for the development of group and interpersonal relationships, and, hence, for the diffusion of new ideas and practices.

Technology

Technology has been conceptualized in a number of ways, each of which suggests different theoretical and historical approaches. The simplest version views technology as involving only changes in artifacts. A more sophisticated approach adds to the physical objects, labor and managerial skills. A third approach views technology as a socio-technological phenomenon; that is, besides involving material and artifact improvements, technology is considered to incorporate a cultural, social, and psychological process as well.

From the viewpoint of organizations, technology refers to the specific ways in which work operations perform tasks. It is always in interaction with the type and patterns of interpersonal relationships; that is, the kind of technology which prevails in any given organization has considerable influence upon the patterns of interpersonal relationships, and

vice versa. This interaction, in turn, affects the flow of information within the organization and between it and other organizations.

Structure of Authority

The authority structure in an organization is a set of formally designated relationships between positions. It prescribes the flow of authority, or chain of command, and locates the position of people whose orders a member of an organization must obey and the positions of those who must obey him. The authority structure of an organization may be either a pyramidal hierarchy or a flat organization. The differences between these two organizations stem from a different distribution of power, influence, or control among positions. Unilaterally downward influence signified an hierarchical form, whereas a greater degree of mutual influence - upward as well as downward - denotes the flatter form. Barnes[112] found significant the third aspect of differences between the two types of authority structures; in the flatter structure he found a greater autonomy among subordinates, a greater degree of mutual influence between levels, and more opportunities for interaction by subordinates. All are favorable conditions for the exchange of ideas and the diffusion of new practices.

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112. Barner, L.B. Organizational Systems and Engineering Groups. Harvard Business School, Division of Research, Boston: 1960.

Two sources of authority in formal organizations are identifiable[113]: authority of position which underlies hierarchical relations in traditional organizational structures, and professional authority which is based on knowledge, ability, and reason. It has been hypothesized that in any organization one of the authority systems tends to be dominant. Individuals whose authority stems from the dominant system will have more influence than others.

The authority structure affects the patterns of interaction, activity and influence, and the sentiments of individuals in a formal organization.

Structure of Communications

The third aspect of organizations which is of great importance in organizational analysis if the communication structure. Communication, defined as the exchange of information and the transmission of meaning, is the very essence of organizations. It is a social process of the broadest relevance in the functioning of any organization. For example, communication reveals problems as well as eliminates them; a conflict of values or perceptions which may be detrimental to the smooth operation of an organization may go unnoticed until communication is attempted.

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113. Barnes, L.B. and G.W. Dalton and A. Zaleznik. The Authority Structure As A Change Variable. A paper presented at the 57th annual meeting of the American Sociological Association. Washington: August, 1962.

Communication within organizations may be analyzed in terms of direction - who communicates to whom, structure - how information is being communicated, and content - what is being communicated.

Direction of communication within organizations may be downward, horizontal, or upward. Downward communication follows the authority pattern of the heirarchical positions and may include job instructions, job rationale and interpretation, feedback to the subordinate about his performance, and indoctrination. Emphasis on any of these types varies from one organization to another according to the type and goals of the organization.

Horizontal communication takes place between people at the same hierarchical level. It includes communication for socio-emotional support to individuals involved, communication which is problem oriented, and communication for coordination of actions.

Upward communication takes many forms including the individual's feedback to his superiors about his performance, the individual's reporting on other's problems, the individual's feedback and reactions to organizational practices and policies, the individual's proposals as to how a task needs to be done and why, the individual's request for clarification about general organizational goals or specific directions, and the individual's grievances.

The structure of a communication network includes

such elements as the amount of organizational space covered by given types of information and the nature of the communication circuit. Open circuits allow feedback whereas closed circuits do not provide for feedback and, consequently, are not open to change or modification. In closed circuit communication, the communication process is necessarily one of issuing directions and responding to the original mission without any provision for admitting new information at various points in the transmission chain. The structure of the communication network influences both information flow and the satisfaction of participants.

Leavitt studied communication pattern, or shape.[114] He experimented on twenty groups of five men each. Subjects were assigned a uniform task and were required to communicate with each other according to one of four communication patterns; a circle, a chain, a wheel, or the letter Y. He found an indication that the wheel and Y groups tended to work faster than the others and to have fewer errors.

One characteristic of effective communication patterns is the existence of a clear, unambiguous, central position. Clear centrality leads to clearly perceived authority. The existence of a communication center makes it likely that the

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114. Leavitt, Harold J. "Some Effects of Certain Communication Patterns on Group Performance." Communication and Culture. Alfred G. Smith (ed.). New York: Holt, Rinehart and Winston, 1966.

position would also become a "decision" center. In the case of the "circle" communication pattern, where the members of the interacting group are seated in a circle, there is no clear central position. The "Y"-shape communication pattern, on the other hand, provides for a clear central position. The combination of centrality and clear decisional authority results in more effective task performance, which was the case with the "Y"- and "Wheel"-shaped communication patterns. The degree of member satisfaction of the four groups were, however, in inverse relationship to their performances and the clarity of authority. This led Leavitt to the conclusion that "centrality" determines behavior by limiting independence of action, thus producing differences in activity, accuracy, and satisfaction.

In addition to the experimental method there are at least five ways to perform field study of communication patterns and networks within organizations. One is the "living-in" type of observation in which members of small groups can be interviewed and observed for a period of time and subjective judgements about communication patterns can be made. A second way is the indirect analysis. A third way is the "duty" study by which communications are studied as they pass any particular spot. It provides information about the flow of information but, it can show only in a general way the overall patterns of communication. A fourth way is the cross-section analysis by which communications in process at

any point in time are recorded and analyzed. A fifth way is the "ECCO" analysis (Episodic Communication Channels in Organizations) in which it is made possible to record and analyze communication patterns in terms of such variables as timing, media, subject matter, and organizational level.[115.]

In a study reported by Davis[116.], ECCO analysis was used to study communication patterns among sixty-seven management personnel of the Tex Tan Company. The basic approach was to get from each communication recipient data about how he first received that information. The resulting jigsaw puzzle, when it was assembled, showed the pattern of how that information spread within the organization. From this information a multitude of other variables were derived and compared with the pattern, such as whether the person was line or staff, what his function was, what his age was, and what his seniority was. Among the most relevant findings are perhaps the following:

1) Face-to-face communication was the predominant medium and it spread information the fastest.
2) Communications generally were blocked between the fourth and fifth organizational levels where there were work groups relatively isolated from communication networks.

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115. Davis, Keith. "A Method of Studying Communication Patterns in Organizations." Personal Psychology, Vol. 6 (1953), pp. 301-312.

116. Ibid.

3) Grapevine patterns showed that a few people tended to spread information, others acted as passive receivers only.

David pointed out that ECCO analysis is not completely free from limitations. For example, since ECCO data is secured from many individuals, it depends upon adequate rapport with respondents. Also, individual communication sequences cannot be easily secured in large organizations of 1,000 or more because the respondents would often not know their communicator's name. ECCO method of collecting data is perhaps more suitable for showing how information is originally spread. In subsequent studies of the same information to the same recipients data might be more easily secured by duty study or cross-section analysis.

ORGANIZATIONAL RECEPTIVITY TO CHANGE

One way of conceptualizing organizations is the "system" approach. The concept "system" is often used to refer to a boundary-maintaining set of interdependent components. By "interdependence" is meant a relationship of parts in which anything happening to one component of a system affects, no matter how slightly, the balance and relationship of the whole system. By boundary-maintaining is generally meant a state in which the components are so related that it is possible to tell where the system ends and its environment begins.

Schramm postulates that:

> Organizations achieve the status of a 'system' when their various component roles are widely recognized and encouraged to persist even though the individuals in these roles can, in theory at least, be replaced; when the lines of communication tieing the roles together are established and generally recognized; and when aspects of organization are to some degree internalized by the members.[117]

Formal organizations need efficient systems of communication both to keep the internal machinery running and to deal with their environments. The requirements of each organization for both internal and external communications are determined by its structure and functions, as well as by the characteristics of the individuals in it.

Communication networks within formal organizations are usually dominated by certain centers where information from various sources converges. The most important communication channel in formal organizations is likely to be the chain of command. However, informal channels of communication usually spring up and may facilitate or impede the formal channels. It may be hypothesized that whenever the formal and informal channels of communication are in harmony the organization is more likely to function more effeciently than if both are in disharmony.

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117. Communication and Political Development.

Models of Complex Organizations

Three basic models of complex organizations are identifiable in the literature: the Weberian, the human relations, the professional models.[118] The Weberian model stresses the traditional areas of knowledge rather than social skills. By traditional areas of knowledge is generally meant knowledge of engineering, of chemistry, of economics, of the law, of company rules, and the like. By social skills or abilities is meant the actual capacity to communicate with others, and to internalize the values of the organization. The Weberian model of organization is regarded as the most efficient when dealing with uniform events since it stresses secondary relations and conformity to organizational rules.

The human relations type of organizations, i.e., research units, medical treatment agencies, and graduate training departments, stress primary group relations and organizational goals, as opposed to secondary relations and organizational rules which are stressed by Weberian-type organizations. Organizations following the human relations model are believed to be most efficient in dealing with non-uniform events and interpersonal relations since they stress social

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118. Litwak, E. "Models of Bureaucracy Which Permit Conflict." American Journal of Sociology. Sept. 1961.

skills as technical aspects of the job. They pose little a priori limitation of duty and privilege to a given office and a minimum of general rules to govern the organization's operations. They also provide for and, in fact, encourage horizontal patterns of authority and communication.

The third organizational model is the "professional" model which covers the great bulk of organizations in the contemporary modern societies. Professional-type organizations deal with events both uniform and non-uniform and, hence, have jobs that require social skills as well as jobs requiring traditional areas of knowledge. Research organizations and large hospitals are two examples of the professional-type organizations.

Professional-type organizations are perhaps exposed more to "conflict" than the other two models since they include contradicting forms of social relations and deal with both uniform and non-uniform events. For this reason, professional-type organizations must provide for segregation mechanisms to coordinate, toward some common goals, the potentially contradictory social relations and events. Among the several segregation mechanisms that have been identified by Litwak[119]. are:

1) Role separation, which restricts primary group behavior

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119. "Models of Bureaucracy Which Permit Conflict."

to one set of individuals; e.g. the research staff or the treatment team, and formal relations to another group; e.g. the administrative staff in a large hospital or research organization.

2) Maintaining physical distance between those who deal with uniform events, the administrative staff, and those who deal with non-uniform events, the research or treatment staff.

Where organizations are subject to constant changes, due to continuous flow of new ideas and practices for example, there must be special evaluation procedures for determining points at which one kind of social relations should be replaced by another.

In Weberian-type organizations the superior, by virtue of his position, has the right to monopolize communication, both official communication between the unit and the outside world and communication between the members of the unit. In this way, the rigid hierarchical structures of the sort which exists in Weberian-type organizations will tend to act as barriers to the exchange of ideas and the free flow of information, both vertically and horizontally.

In Weberian bureaucracies there is integrated a series of offices, of hierarchical statutes, in which inhere a number of obligations and privileges closely defined by limited and specific rules. Authority, the power of control, inheres in the office and not in the particular person who

performs the official role. The system of prescribed relations between the various offices involves a considerable degree of formality and clearly defined social distance between the occupants of these positions. Formality in this type of organization serves to minimize friction by largely restricting contact to modes which are previously defined by the rules of the bureaucracy. It is often claimed that Weberian organizations achieve efficiency in operation through reducing the various activities of the members to rules and routine.

Adherence to prescribed rules, which are originally conceived as a means, becomes transformed into an end in itself and, hence, a displacement of goals occurs. Emphasis on conformity to rules, resulting from the displacement of the original goals, develops into rigidities and an inability to adjust when adjustment is most needed. Anyone who continually can and will follow the rules of office without doubt or deviation is certainly demonstrating a lack of imagination, initiative, and courage to innovate anything or to adopt the innovation of another, unless, indeed it comes to him by way of an order from above.

The problem with rigid conformity to the organization's rules is that it is rewarding; it provides protective shelter and systematic direction which most men need. On the other hand, any innovative endeavor is often loaded with risks and uncertainties. Thus, potentially innovative individuals who

are drawn and attracted by bureaucratic rewards will very likely be reduced to bureaucratic conformity. It is this protective sheltering and systematic direction which are believed to often discourage the emergence of innovative individuals and even more to retard the adoption of whatever innovations do appear.

Human relations-type organizations are dominated by colleague relations rather than a sharp authority leader. Members maintain friendly relations with each other and, therefore, keep channels of communication open, upward, downward, and horizontally.

Professional-type organizations involve elements from both Weberian and human relations models. Therefore, it is characterized by the presence of colleague relations for some tasks and a sharp ladder of authority for others. Also, there is strict delineation of duties and privileges for performing some tasks while there is no such delineation for others.

Conflict may arise when persons with strong professional orientations take over administrative roles. Professional activities are much more likely to be recognized as the major goal activity, and the needs of professionals will be more likely to receive understanding attention. If professional needs are over-emphasized, however, the integration of the organization will be jeopardized. On the other hand, if a lay administrator, one who has no training in serving the major goal activities of a professional organization, takes

over the administrative role, the likelihood that administrative activities will be over-emphasized becomes greater and the integration of the organization will be jeopardized.

To overcome this dilemma several organizations have resorted to the employment of professionally-oriented administrators who are able to combine professional education with a managerial personality and practice. Another way to secure professionally-oriented administrators, especially where there is shortage in professionals, is to prepare potential administrators for performing particular roles and for understanding the organization in which they are about to function before they enter it.

It is theoretically conceivable that an organization with more elements of the human relations type will probably be more receptive to change, more open to new ideas, and generally more innovative than either the Weberian or the professional-type organizations. Whether this will actually be the case is an empirical question which needs to be investigated in relation to both the organizational variables and the environmental influences. It may be hypothesized that, given an environment which is favorable to change, an organization of the human relations type is likely to be more receptive to new ideas and more innovative than other types of organizations.

ORGANIZATIONAL CHANGE

Organizations are both key and convenient units for analysis and action in social change. Organizations, as immediate targets for most planned change and development programs, are in fact both the laboratory for testing and creating change and change strategies and the instrument for the wide diffusion of new practices and technologies in the larger society.

The term change as used in this context means an alteration in the structure of the organization, in any of its processes, or in its goals or purposes. The altering of rules, the introduction of new procedures and technology and the revision of the organization's relations with other organizations are all assumed to fall under the concept of organizational change.

When organizations are viewed over a relatively short period of time their outstanding characteristic appears to be stability. This stability is so great in the life of social organizations, especially the formal types of social organizations, as to constitute powerful resistance to change. In fact, however, organizations do change. In many the increments of change are small, while in others change is so radical as to cause the disappearance of the original organization and the emergence of a new one.

Organizational change may be attributed to two sources: changed inputs from the environment and internal system strains

or imbalance. Changes in inputs include changes in information coming directly from the environment or from the power which legitimizes the various aspects of organizational functioning. A second type of input change has to do with maintainance inputs, which represent the values and motivations of the members of the organization. Internal strains and imbalances include competition between the different units of the organization as well as conflict between the various levels in the power hierarchy. The former is known as horizontal strain while the latter is known as vertical strain.

Griffiths[120] speculates that when change occurs in an organization the major impetus for the change is likely to be from outside the organization. In his view administrators who initiate change are more likely to be influenced by those outside their system than by those inside.

Relatively little is known about organizational change. Social scientists stress the study of the dynamics in social systems, but few of them accept the risks involved to gain knowledge and skills needed to infuse change and measure it in a functioning organization. The actual steps and skills necessary to initiate and sustain change within an organization are therefore relatively unknown. Human relations people, however, although they have relatively little theory about

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120. Griffiths, Daniel E. "Administrative Theory and Change in Organizations." Innovation in Education. Matthew B. Miles (ed.). New York: Teachers College, Columbia University, 1964. Pp. 425-436.

processes of organizational, attitudinal, and behavioral change, do know a great deal intuitively about the problems of changing people in organizations.

Katz and Kahn argue that:

> Most of the experimental attempts to produce change in organizations have been directed at individuals and not at the organization itself. This is true of the typical psychological approach with its emphasis upon individual training programs and of the group dynamics movement with its concentration on the small group irrespective of its organization dependence. The group therapy approach recognizes the organizational structure but makes no direct attempt to change it....In everyday life, however, attempts are made to change an organization as a social system, i.e. to deal directly with organizational characteristics as properties of the organization rather than as the outcome of group and individual properties. Such an attempt involves the legitimation of changes in the role relationships making up the system....There have been very few attempts at experimental manipulation of organizational variables by social scientists, partly because of the practical difficulties of attaining sufficient power to introduce organizational changes or of persuading organizational leaders already planning a change program to carry it out with experimental controls and measurements.[121]

Some administrators assume that, since organizations are made up of individuals, one can change an organization by changing its members. This assumption is an oversimplification of the reality because it neglects the interrelationships of people in an organizational structure and overlooks

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121. Katz, Daniel and Robert L. Kahn. The Social Psychology of Organizations. New York: John Wiley & Sons, 1966. P. 426.

or fails to point to the aspects of individual behavior which need to be changed. On the other hand, the assumption that any alteration in human behavior can be brought about in organizations by manipulating the organizational structure is also an oversimplification because the problems of change are too complex for such simplistic generalizations.[122]

Administrators, as authority figures, are crucial in introducing innovations, particularly those which involve structural change. Because they usually have more power they can handle the organization's problems associated with the introduction of innovations more effectively than other members of the organization.

In a study of school superintendents, Carlson found that those appointed from inside the system tend to act in such a way as to maintain the system, while those appointed from outside tend to be innovators.[123] One reason in support of Carlson's findings is that when an insider is appointed to the top post in an organization the communication channels which have been established over the years function to keep him operating in the same manner; whereas an outsider,

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122. The Social Psychology of Organizations.

123. Carlson, R.O. "Succession and Performance Among School Superintendents." Administrative Science Quarterly. Vol. 6 (1961), pp. 210-227.

being without ties in the system is not likely to get the same feedback that would keep an insider from initiating procedures and policies differing from the ones already in use. Griffiths proposes that the number of innovations is inversely proportional to the tenure of the chief administrator. What he is implying is that the longer an administrator stays in a position, the less likely he is to introduce change. This may be due to the fact that all the processes which bring about a "steady" state have been given time to operate and the feedback channels have become fully established.[124]

Methods of Organizational Change

Several methods and strategies have been proposed by social scientists to enhance organizational change and facilitate the introduction of new technologies and practices. The primary target of such strategies may be the individual as an individual personality, the interpersonal relationships between members of work groups, the norms of work groups, the structure of a role, or the structure of the organization as a whole. Effective methods for bringing about organizational change must aim toward significant changes in the individuals and the organizational structure simultaneously. The

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124. Griffiths, Daniel E. "Administrative Theory and Change in Organizations." Innovation in Education. Matthew B. Miles (ed.). New York: Teachers College, Columbia University, 1964. Pp. 425-436.

difficulty with many attempts at organizational change is that agents of change and organizational consultants have not clearly distinguished their targets and have assumed that the individual target and the social structural target are the same.

Methods of organizational change include skills training; individual and group counseling, manipulating the work group influences, sensitivity training, and direct structural alteration. Whichever method is used it is often recommended that a successful implementation of organizational change requires emotional and value as well as informational elements. Like individuals, organizations viewing change are not likely to be satisfied by rational persuasion alone. Also, their resistance to change and the introduction of new ideas and practices will be great where they have little or inaccurate knowledge about the change and the reasons for it, and when those promoting change have little or no credibility.

Recognizing the crucial role work groups play in the operation of organizations, several strategies have been proposed and utilized to develop work group atmospheres which are thought to be more favorable to the exchange of new ideas and information and, hence, to creativity and innovativeness. Important among such strategies are the involvement in decision-making processes of all those who are directly affected or influenced by the outcomes, the encouragement of group

discussion and participation in changing group norms, and the development of a permissive atmosphere in which spontaniety and self-expression are encouraged.

Whatever methods or strategies are utilized to influence organizational change it is important to realize that any plan for organizational change should have access to at least three elements: levers or handles for influencing the direction, temper, and quality of change, a reliable basis of diagnosing the strengths and weaknesses of the organization, and a solid basis for financing the change plan.

WORK GROUPS

A great deal of interpersonal communication within formal organizations works toward a common conception of reality and the sharing of goals. By virtue of frequent and free interaction within the limits of their own particular groups, work groups within formal organizations tend to share goals and reality perceptions. Barriers to interpersonal communication are likely to result in differentiation of reality perception and goals.

A group may be viewed as an interpersonal setting in which the dynamics of personality are manifested through behavior. Any behavior in a group setting, ranging from withdrawal and passivity to aggression and domination, carries meaning in relation to the inner state of the person. As Zaliznik and Moment put it,

> The intellectualizer frequently develops this mode of behavior to avoid closeness with other people and to keep removed from the expression of feelings. The completely 'open' person who is all too ready to express feelings often seeks protection and support from others to avoid competitiveness and to foster dependency. The 'businesslike' or task-oriented person may seek to express independence and aggression in group relationships possibly to avoid revealing to himself and to others the opposite tendencies in his personality.[125]

Groups tend to exert considerable control and surveillance over members' behaviors. Zaliznik and Moment argue that:

> The most casual observation of groups indicates the existence of strong mechanisms for controlling the behavior of members. This capacity of groups to direct, limit, and influence what members do gives considerable power to the group setting and to individuals who are at the center of power in the group. The use of this power can have either positive or negative consequences for the individual and society.[126]

It is because of this power that work groups represent a great potential for facilitating, or suppressing, the members' initiative and innovative endeavors. The strength of groups as controlling agents can operate for good or bad, in accordance with principles respecting the individual or in denial of the individual and his uniqueness.

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125. Zaleznik, Abraham and David Moment. The Dynamics of Interpersonal Behavior. New York: John Wiley & Sons, Inc., 1964. Pp. 12-13.

126. Ibid. P. 96.

Control Over Members' Behavior

Groups control the behaviors of their members mainly through the mechanism of reward and punishment. Groups reward their members in many ways. They provide the means to material satisfaction. They also provide many psychic rewards in showing respect, affection, and support for one another. Acceptance and support in turn make it possible for members to learn new skills and in other ways to develop their competence and self-confidence. Groups may also provide prestige and esteem to members with resultant beneficial effects for ego development. Of great significance for the development of members' innovativeness is the group reward realized in the validation of their thoughts, ideas, and feelings. To take the extreme case, complete absence of validation of one's perceptions can undermine his sense of reality.

Validation of individual perceptions and the development of norms as social processes have been the subjects of a series of classic experiments conducted by Muzafer Sherif.[127] The common frame of reference in Sherif's experiments is related to the need for validation of perceptions as a basis for reality. This need operates as a force within the

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127. Sherif, Muzafer. "Group Influences Upon the Formation of Norms and Attitudes." Readings in Social Psychology. Maccoby, Newcomb, and Hartley (eds.). New York: Holt, Rinehart, pp. 219-232.

individual predisposing him to conform to the norms of groups with which he actually seeks membership. Zaleznik and Moment support Sherif's view and assert that the need for consensual validation represents one of the forces tending toward conformity in all individuals. But, in their view, excessive acquiescence and overconformity are related to a special set of personality characteristics that are established in the individual well before he reaches the interpersonal settings in organizations.[128]

Types of Work in Interpersonal Settings

Four types of work are identifiable in an interpersonal setting: individual tasks performed in a group, learning, information exchange, and problem-solving. For the purposes of this study, only two types of work settings appear to be most relevant: information exchange and problem-solving. A typical example of information exchange in group settings is found in organizations of almost all types. Information exchange meetings are a valuable and necessary aspect of organizational life. The basic assumption underlying this type of work is that each individual has some information that others need, and that each individual's performance will be facilitated by pooling information in the group meeting. In terms of the three criteria proposed by Zaleznik and

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128. The Dynamics of Interpersonal Behavior.

Moment[129.], which distinguish work in interpersonal settings, namely, the psychological interdependence among members required by the task, the personal involvement of individuals with the task, and the personal risks facing group members by virtue of their working together, the information exchange type of work requires little psychological interdependence or group identification on the part of group members. Also group members seem to have little to risk. The greatest demand on the individual is that he should listen and understand the content of the communication of others and that he present information to them which is relevant to their work as individuals. However, requests for clarification and questions often lead the group into more aggressive and competitive forms of work, which, though relevant in other settings, may merely create confusion with regard to the content of the information which was suggested to be exchanged.

In problem-solving activity, the group attempts to define issues or problems involving a variety of solutions. High levels of tension and psychological interdependence among work group members are likely to occur. Problem-solving is a potentially creative task in itself; the group approaches solutions through data-gathering, evaluation, and sometimes,

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129. The Dynamics of Interpersonal Behavior. Pp. 137-138.

intuition. Regardless of the particular process used by the group, consensus is necessary for obtaining effective results after the decision has been reached. The need for consensus commits group members to a high degree of psychological interdependence and risk that arises from attempts of group members to influence one another. In support of this view, Zaleznik and Moment stated that:

> The influence process is accompanied by high emotional involvement and risk. Some members may gain, while others lose, a degree of respect from others as well as self-respect. The attendant emotional involvement tends to center around aggressive attempts to defend one's own. Hence, a relatively high degree of psychological risk is involved.[130]

Theory of Distributive Justice

Everywhere, members of work groups are expected to contribute toward the attainment of group goals. In return, each one of them expects some kind of reward. A group member's behavior in a group setting may be looked at as the result of several interacting factors. Important among these factors are the member's demands of the situation, his receipts from it, his social investment in it, the distribution of social rewards among members of the group, and his previous rewards in comparison with those received by others in

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130. The Dynamics of Interpersonal Behavior. P. 142.

and outside his work groups. The individual will normally have the continuing problem of trying to maintain balance between his wants and rewards in the many situations in which he is involved.

The theory of Distributive Justice holds that:

> group cultures, as well as the cultures of larger social units, develop codes of social justice. These codes prescribe how social rewards, such as rank and respect, should be distributed among members of the group according to each one's social investments - such as age, ethnic origin, education, and seniority. The basic form of the code specifies that individual rewards, when compared with the rewards received by other group members, should be proportional to social investment. When rewards and investments are out of line, underrewarded individuals experience a feeling of injustice.[131].

They tend to be dissatisfied, to complain, to feel irresponsible. Overrewarded individuals tend to feel guilty and overresponsible. Persons whose rewards are in line with their investments tend to feel satisfied.

Innovativeness in Work Group Settings

It is theoretically conceivable that individual innovativeness and creativity are associated with a certain degree of dissatisfaction with the status quo and the existing norms and limitations on behavior. It remains doubtful, however, that a high degree of dissatisfaction will increase the individual's innovativeness. In fact, it is

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131. The Dynamics of Interpersonal Behavior. P. 400.

theoretically plausible that continued, intense dissatisfaction is likely to lead to experiencing mental and emotional disturbances more than displaying innovativeness and creativity. On the other hand, experiencing full satisfaction in work group settings may not be motivating at all for creative personalities. It may be hypothesized, therefore, that experiencing satisfaction in the work group setting is basic to the development of creative and innovative personality and that mild and temporary feelings of dissatisfaction trigger one's creativity and innovativeness.

INTER-ORGANIZATIONAL EXCHANGE

> We know a great deal about interaction among persons, something about interaction among groups, but surprisingly little about interaction among organizations.[132]

Organizational study seems to have a long way to go before it will do justice to the crucial question of the interaction among organizations, and the study of organizational interaction will not be complete until there is a thorough investigation of the various mechanisms through which organizations interact.

Relations among organizations are to some extent regulated by laws, administrative codes, and agency regulations.

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132. Etzioni, Amitai. Modern Organizations. Foundation of Modern Sociology Series. Englewood Cliffs: Prentice-Hall, Inc., 1965. Second Printing. P. 110.

Societies differ greatly in the degree to which they control actions by organizations. At one extreme, societies which believe in "laissez-faire" ideology refrain from interfering in the relationships among organizations, unless absolutely necessary. At the other extreme, totalitarian societies subordinate most of the organizations, if not all of them, directly to the state as officially represented by superior state organizations controlled by one organization, the party. Between those two extremes we find societies which, in varying degrees, regulate organizational interaction.

Levine and White built a theory upon the notion of "exchange".[133] They use the term "exchange" to refer to the exchange of scarce elements such as consumers, labor services, and other resources which are necessary for goal achievement and they posit "domain consensus" as a prerequisite to exchange. Processes of negotiation or orientation may be employed as antecedents to exchange and, whenever negotiation or orientation occurs it means that organizations are in communication, or informational interaction with each other. These processes of achieving domain consensus constitute much of the interaction between organizations. While

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133. Levine, S. and P. White. "Exchange as a Conceptual Framework for the Study of Inter-organizational Relationships." Administrative Science Quarterly. Vol. 3 (1961), Pp. 583-601.

they may not involve the

> immediate flow of elements they are often necessary preconditions for the exchange of elements, because without at least minimal domain consensus there can be no exchange among organizations.[134]

The interaction pattern among organizations, as proposed by Levine and White, will be influenced by three factors: the organizational function, the organizations' access to the necessary elements from outside the system, and the degree of domain-consenses. Apparently they overlook the competition and conflict which may arise among organizations regarding the flow of elements among them. This possible conflict is perhaps better taken into consideration by Litwak and Hylton who assume that every society has situations of partial conflict because of the limited resources for maximizing all values simultaneously.[135] Their theory on "Interorganizational Analysis" takes the conflicting values in a society as given and tries to prescribe some forms of social interaction that can function under conditions of partial conflict.

Litwak and Hylton propose that mechanisms of coordination tend to develop to maintain areas of both conflict and

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134. "Exchange As A Conceptual Framework for the Study of Inter-organizational Relationships."

135. Litwak, E. and L. Hylton. "Interorganizational Analysis: A Hypothesis on Coordinating Agencies." Administrative Science Quarterly. March (1962), Pp. 395-420.

cooperation among organizations, and that such mechanisms become more formalized in the presence of three factors; namely, the organizations are interdependent, this interdependence is observable to them, and can be defined in standardized units of action.[136]

It is important at this point to differentiate between two types of organizational interdependence, facilitative and non-facilitative. The former occurs when organizations cooperate with one another toward the same goal or each one of them works toward a goal which is not competing with the goals of the others. The non-facilitative type of interdependence occurs whenever the maximization of goal-attainment of one organization leads to lesser goal-attainment by the others. We assume that the organizational interdependence referred to by Litwak and Hylton includes both the facilitative and non-facilitative types since their model is concerned with areas of both cooperation and conflict.

On the basis of the current literature on organizational interaction we are able to identify two basic sets of variables. The first set may be looked at as a prerequisite or necessary condition for the initiation of inter-organizational linkages and exchange. This set would include the organizations' interdependence and the organizations' awareness of their

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136. "Interorganizational Analysis: A Hypothesis on Coordinating Agencies."

interdependence. The second set of variables consists of such factors as the organization's function, its source of support, the number of organizations involved, and the degree of standardization of their units of behavior. Such variables are not prerequisites in the same manner as the variables of the former set are. However, they are believed to have influence on shaping the pattern and intensity of organizational interaction.

Emerging Hypotheses

Within the framework of the current literature on organizational interaction and exchange, three hypotheses emerge:

1) Organizations which are highly interdependent will tend to communicate with each other more than the less interdependent organizations, given that their interdependence is of the facilitative type.
2) The higher the degree of the organizations' awareness of their interdependence (facilitative type) the greater the volume of communication among them tends to be.
3) The higher the domain consensus among organizations is, the easier the exchange of information and flow of communication among them will be.

Summary

This chapter consists of five sections, each of which represents a contribution from a different field of knowledge toward understanding cultural borrowing and facilitating the attainment of its objectives.

The first section presents an anthropological view of cultural borrowing. In this section it was possible to identify eight anthropological theories explaining cultural borrowing. These are the "economy" theory, the "competition and continuity" theory, the "learning" theory, the "appetite" theory, the "energizing" theory, the "creativity" theory, the "selectivity" theory, the "bottleneck" theory, and the "integration" theory.

The second section described the relationship between education and development. Education was defined as a process in which an educational agent selects, arranges, and directs a sequence of progressive tasks that provide systematic experiences to achieve learning on the part of a learner or community of learners whose active participation in the process will determine the extent and quality of the educational outcomes in personal growth or in community development. Development, it was pointed out, means different things to different people. To the economist development means economic growth. To those with social concerns development might mean an increase in literacy, more responsible social and political

participation, identification with national symbols and authority, the prevalence of certain modern attitudes and values, or the level of health of the population.

Three points of view were pointed out concerning the relationship between education and economic development. First, education is being viewed as an economic input. Second, economic development is considered instrumental to human development. Third, education and economic development are seen in symbiotic relationship with each other. The latter view is more congruent with the purposes of this study.

Four approaches to the measurement of the economic returns on a particular educational investment were discussed. These are the forecasting-manpower-needs approach, the individual income approach, the residual approach, and the correlational approach.

Education, it was pointed out, influences the productivity of a nation through at least three ways: by upgrading the skills of the labor force, through trained administrators, and through professional competence and inventiveness of scientists and technicians.

Three education issues affecting cultural borrowing were discussed in detail. These are:

1) What constitutes a sound national plan for education?
2) What are the goals to be sought by a sound national plan for education? and

3) Who decides what is to be changed in the educational scene?

The third section of this chapter explored the relationship between mass communication and national development.

Effective communication, it was pointed out, is most effective when both a common language and a common culture are present and becomes less effective in the absence of any of them. Communication, particularly mass communication, is viewed as acting as a kind of social lubricant. It facilitates the society's adjustment to strains and tensions occurring among its constituents. Mass communication is considered as both an agent and index of change in a society.

Six essential functions which communication must contribute to society were identified. First, it must be used to contribute to the feeling of nation-ness. Second, communication must be used as the voice of national planning. Third, communication must be used to help teach the necessary skills. Fourth, it must be used to help extend the effective market. Fifth, communication must be used to help prepare people to play their new roles called for by the development programs and planning. Sixth, communication must be used to prepare the people to play their role as a nation among nations.

It was pointed out that mass communication is believed

by students of development and political leaders to be a powerful factor in the modernization process.

It was also pointed out that there is evidence that widespread mass media exposure alone is unlikely to effect large changes in human behavior. Communication research has shown that the "hypodermic needle" model of mass media effects, with the mass media playing the stimulus role in causing direct and immediate response, is largely a fake conception. When combined with interpersonal communication in some fashion, mass media can be more effective in achieving its objectives.

In general, it was indicated that mass media can contribute to economic development by mobilizing public support for development programs and by helping to give people hope for a better life without losing sight of the existing realities and limitations.

The fourth section of Chapter III dealt with the problem of diffusing innovations and technologies. An innovation is broadly defined as an idea for accomplishing some recognized social end and in a new way or for a means of accomplishing some new social end.

Innovations differ in their adoptability and the likelihood of being diffused. This difference, it has been pointed out, is attributable to at least five characteristics; the relative advantage of an innovation, its compatibility, its complexity, its divisibility, and its communicability.

It was indicated that innovations of material nature tend to be diffused faster than innovations of organizational or social nature.

It was pointed out that adoption of innovations may have negative consequences to the development effort undertaken by developing countries. One such negative aspect is that the adoption of an innovation may inhibit further innovations. Another negative aspect is that improperly devised innovations could, if adopted without adequate evaluation, seriously damage the lives of individuals subjected to them.

Innovations are generally resisted on covert or rational bases. Covert bases for resistance include the fear of the unfamiliar, moral sentiments and principles, aesthetic values, and rationalizations. Under the class of rational bases for resisting innovations, two types were identified: self-interest in the established and status interests.

It was possible to identify seven potential barriers to the adoption of innovations which developing countries need to consider thoroughly. These are cost factors, technological factors, interactional factors, the absence of implementation supports, perceived threats to existing practices, the necessity of making important value changes in adopters, and the lack of direct experience with a particular device and any associated materials.

The idea of innovation strategy was described as

essentially a general set of policies underlying specific action steps expected to be useful in achieving a durable adoption of a particular innovation. Four types of innovation strategies were identified. One strategy may attempt to use only existing structures. A second strategy may involve deliberate changes in associated areas beyond that of the innovation itself. A third strategy tries to produce a chain of changes until the adoption of an innovation becomes more or less institutionalized. A fourth strategy would rely on inducing manageable discontent with the old by providing new standards for evaluating it.

Three positive forces were described as being constructively manipulatable for the sake of promoting cultural borrowing and the diffusion of innovations and new technologies. These are the deferred gratification tendencies, motivations to change, and achievement motivation.

The fifth section of this chapter describes the dynamics of formal organizations as they relate to innovativeness and the diffusion of innovations and new practices.

It was pointed out that cultural borrowing and almost all programs of social change, take place within, as well as through, organizations, partly because they occupy so much of the life space of individuals and societies. Despite this reality, much of the literature on the diffusion of innovations is mainly concerned with the acceptance or rejection of innovations by individuals rather than by

organizations or collectivities.

Three aspects of organizations appear most relevant to analyzing formal organizations and their role in the process of cultural borrowing. These are technology, the structure of authority, and the structure of communication.

It was possible to identify three basic models of complex organizations: the Weberian, the human relations, and the professional models. They differ in terms of their efficiency in handling uniform and non-uniform events. They also differ with respect to the types of skills and knowledge required for the job. The structure of communication patterns is another area where the three models differ. As a result of these differences, the three models are believed to differ in terms of their receptivity to change and to innovations.

When organizations are viewed over a relatively short period of time their outstanding characteristic appears to be stability. Organizations do, however, change and in many the increments of change are small while in others change is so radical as to cause the disappearance of the original organization and the emergence of a new one. When organizations change they do so as a result of changed inputs from the environment and internal organizational strains or imbalance.

It was pointed out that administrators, as authority figures, are crucial in introducing innovations into

organizations. This is so because they usually have more power to handle the problems associated with the introduction of innovations more effectively than other members of the organization.

It was also pointed out that the primary target of strategies for organizational change may be the individual, the interpersonal relationships between members of work groups, the norms of work groups, the structure of a role, or the structure of the organization as a whole.

Work groups in formal organizations were described as exerting considerable control and surveillance over members' behaviors. It is because of this power that work groups represent a great potential for facilitating, or suppressing, members' initiative and innovative endeavors.

Interactions among formal organizations, it was pointed out, are to some extent regulated by laws, administrative codes, and agency regulations. Societies differ greatly in the degree they control actions by their organizations.

Two sets of variables affecting organizational interactions were identified. The first set was looked at as a necessary condition for the initiation of inter-organizational exchange of services, information, or other resources. This set includes organizations' interdependence and organizations' awareness of their interdependence. The second set of variables consists of such factors as the organization's function, its source of support, the number of organizations involved,

and the degree of standardization of their units of behavior. The latter set of variables is believed to have influence on shaping the pattern and intensity of organizational interaction. Organizational interaction is considered throughout that section of the chapter as a major factor influencing the diffusion of innovations and new practices among organizations.

CHAPTER IV

THE PROCESS OF PLANNED CULTURAL BORROWING

A Conceptual Model of the Planned Cultural Borrowing Process

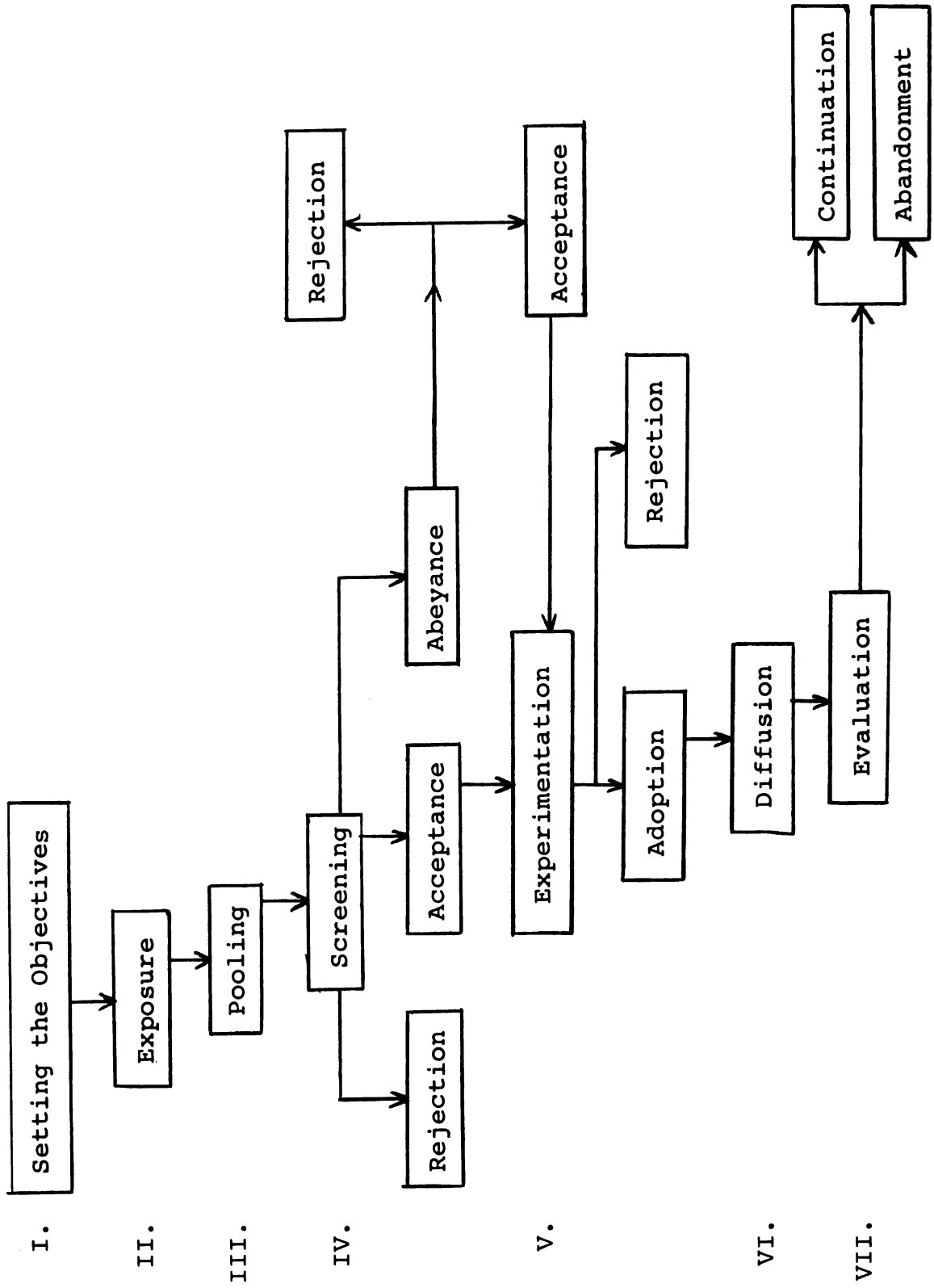
Viewed as a process, planned cultural borrowing may be looked at as consisting of seven stages: setting the objectives, exposure to foreign cultures, pooling new ideas and innovations, screening the borrowed ideas and innovations, experimentation, diffusion and integration, and evaluation (Figure III).

First Stage - Setting Objectives

In this stage, a borrowing country will have to formulate clearly and precisely the specific objectives to be sought through cultural borrowing. Such objectives may be either of a long or short-range nature. Long-range objectives will tend to be general and less specific than short-range objectives. Assuming that the overall objective of cultural borrowing is the development and modernization of the developing country, several sub-objectives can be identified. Some of them will be of material, technical nature while others will be organizational and behavioral. Material objectives will be easier to quantify and measure for purposes

FIGURE III

Stages in the Process of Planned Cultural Borrowing



of implementation and evaluation than other types of objectives.

Objectives of planned cultural borrowing should be established through active participation of all those concerned. Channels of communication among interested groups and individuals must be kept open if worthy objectives are to be firmly established and generally accepted.

Second Stage - Exposure to Foreign Cultures

Under a planned program of cultural borrowing a developing country exposes itself deliberately to new ideas and technological innovations coming from foreign sources. This exposure takes place in two ways. It may occur through direct interaction among individuals or groups from different cultures. Examples of this type of exposure include visits of foreign nationals in a developing country to consult or advise, and the travel abroad of nationals of the developing country for the purpose of training, education, or attending professional meetings. The exposure may also take place through mass media, whether it be radio, television, films, or print. The two ways differ basically in terms of coverage and intensity, and consequently, in terms of effectiveness and durability. Exposure to foreign cultures through interpersonal and inter-group visitation can cover fewer numbers of people than mass media can do, but the exposure is likely to be much greater in intensity. The end results in terms of effectiveness and durability will be

determined by the balance between extent and intensity of coverage.

In a program of planned cultural borrowing consideration ought to be given to the costs of exposure to foreign cultures relative to the benefits to be gained and any undesirable side effects like, for example, alienation of individual citizens and the possibility of abruptly changing the national image and identity.

Open societies differ from isolated societies in that the former have little control over the process of exposure to foreign cultures. In addition to specifically planned exchange of persons and ideas, individuals and groups will tend to expose themselves to foreign cultural influences on their own in pursuit of personal goals. In isolated societies, on the other hand, individuals and groups will lose almost all their freedom to expose themselves to foreign cultural elements and will have no control over whether, when, or how to expose themselves to such elements. Planned cultural borrowing implies, for a society, selective exposure and openness to foreign cultural elements. Selective exposure and openness are based on rationality, utility, and judgements as to the desirability of foreign cultural elements to be borrowed.

Not all exposure to foreign cultures can be controlled. With the best of planning, such exposure will be accidental or coincidental. What a planned system of cultural borrowing

can do in such cases is to maximize the positive and minimize the negative outcomes of this non-planned input.

Third Stage - Pooling New Ideas and Innovations

Under a program of planned cultural borrowing there is a great need for systematic accumulation and pooling of new ideas and innovations from foreign sources. Sources of input into the "pool" are numerous. They may be individuals, groups, research and other organizations or mass media. Effective accumulation of new ideas and innovations from foreign sources depends on two factors; the presence of effective channels of communication between the sources and the receiver and the efficiency of the receiver.

Individuals or private groups are generally not equipped to undertake the responsibility of a systematic and objective pooling of new ideas and innovations under the prevailing conditions of most developing nations. Some kind of organization becomes necessary. However, no organizational arrangement is likely to be able to do the task without serious and continuous contributions by private individuals and groups. To contribute freely and generously to establishing a bank of new ideas and innovations, individuals and groups should be encouraged and rewarded in some way relevant to the specific objectives of cultural borrowing.

Developing countries should be able to establish and maintain offices where the sources of foreign ideas and innovations relevant to the development process are. Such

offices must be in a position where they can actively gather significant new ideas and innovations from their sources in a legitimate manner. On the other end of the pooling process there can be a special organizational arrangement where new ideas and innovations coming from abroad can be grouped together, classified and catelogued in some manner suitable for the next step, that of screening.

Fourth Stage - Screening the Borrowed Ideas and Innovations

Planned cultural borrowing requires a careful and thorough investigation into the nature of borrowed innovations to determine their adequacy and utility. This is screening. Screening, in order to be effective, must be based on clear, objective criteria which are directly related to the objectives of cultural borrowing. The more this connection is made clear the easier the process of screening is likely to be.

Criteria for screening borrowed ideas and innovations should be developed on the basis of general agreement and consenses among specialists representing as many as possible of the society's areas of interest, and should be sanctioned by a representative body of the people.

Some innovations, especially those of social nature, will not lend themselves easily to the screening efforts. Under such circumstances, expert and professional judgement is likely to be called for and relied upon. Where a wide agreement can be secured among the experts a reasonable

degree of objectivity may be assumed to exist. On the other hand, where such agreement cannot be secured it would be wiser to exclude the specific borrowed innovation from any immediate consideration or to accept and test it under carefully specified conditions.

The success of the screening efforts in achieving their objectives is dependent on the ability to predict the consequences of borrowed innovations by those in charge of the screening process. Predictions can be made efficiently and reliably by using computer programming on the basis of the best research findings available. In the absence of computers and a reliable research base, which is the case with almost all developing countries, reliance on professional and expert judgement is inevitable. Professional and expert judgement can be made more reliable by conducting small-scale experimentation on the innovation being screened.

In a tightly closed society, screening efforts are likely to result in one of three alternative decisions; unconditional acceptance of the innovation under consideration, abeyance, or rejection. Holding an innovation in abeyance implies that further investigation of its nature and possible effects is needed. It may also mean that the social atmosphere is not ready for its adoption at the

time the innovation is being screened and investigated. Innovations held temporarily in abeyance may prove to be worthy of adopting later on. Rejected ideas and innovations are not likely to be accepted in the future unless the whole environment changes drastically or until the criteria for acceptance of innovations are modified.

In a free and open society, screening of borrowed ideas and innovations is not an easy task. It will not consist of deciding which to admit and which to exclude, for exclusion is well-nigh impossible. The choice may turn out to be which to encourage and how, and which to discourage and how.

Fifth Stage - Experimentation

Experimentation with borrowed ideas and innovations is a necessary step if cultural borrowing is to achieve its goals with minimal risks and friction. Experimentation may be looked at as a trial effort on a small-scale where all possible elements known to influence, or be influenced by, the borrowed innovations are brought into direct interaction to discover what would be the outcome, or alternative outcomes. Innovations of material nature generally lend themselves to experimentation much more easily than innovations of social or organizational nature. Where experimentation is difficult or impossible, developing countries will have to rely heavily on expert judgements, past experiences, or the experiences of other countries with cases similar to the ones under

consideration.

Experimentation which is recommended as a necessary step in a program of planned cultural borrowing may take place in a laboratory, a field, an organization, a neighborhood, or a community, depending upon the nature and type of the innovation being considered. The more closely the experimental setting simulates the real situation the more valid the conclusions are likely to be.

Whether or not to adopt an innovation will be determined in the light of the experimentation outcomes. Such outcomes may or may not be favorable to the established objectives of cultural borrowing. Where the probability exists for the unfavorable outcomes to exceed the favorable ones it would be wiser to abandon the innovation under consideration. If the favorable and unfavorable outcomes balance each other it would be wise to postpone the adoption of the innovation for future testing and experimentation. Where the favorable outcomes far exceed the unfavorable ones there would be no technical reasons for not accepting the innovation and diffusing it.

Sixth Stage - Diffusion and Integration

Diffusion is the process by which an innovation spreads. Research on the diffusion of innovations indicates that the diffusion of any given innovation will be affected by such factors as its relative advantage over ideas it supersedes, its compatibility with existing values and past

experiences, its complexity and difficulty to understand and use, its divisibility for purposes of trial, and its communicability.[137] Innovations are often perceived differently by donor and recipient cultures. Acceptance of a borrowed innovation will depend primarily upon its being perceived as having immediate utility to the borrowing culture, while its integration into the culture rests upon its being perceived as compatible with the existing culture configuration and values.

Innovations of material nature will tend to be diffused more easily and rapidly than innovations of social or organizational nature. The benefits of the former type can be demonstrated and communicated more easily. Diffusion of social or organizational innovations generally takes more time because their adoption will not depend solely on the individual will and initiative. They generally require collaboration and cooperation among several individuals or groups before they can be finally adopted.

Oftentimes, the diffusion of innovations and new practices calls for the use of positive and negative incentives for individuals, corporate bodies, communities, and the nation as a whole. Such incentives must not become ends in themselves and must be used in the best way possible to enhance the diffusion of innovations.

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137. Spencer, Daniel L. and Alexander Woroniak (eds.). The Transfer of Technology to Developing Countries. New York: Frederick A. Praeger, Publ., 1967.

Seventh Stage - Evaluation

Evaluation must be an integral activity of the whole process of planned cultural borrowing. Without evaluating the diffusion and outcomes of the borrowed innovations developing countries will never be able to tell how they have affected general development and progress. For this reason evaluation must be a continuous activity.

Involvement of all those directly influenced by, or influencing, the innovation, as well as objective experts, is a necessary step if evaluation is to achieve its objectives. Without direct participation of such persons or groups the evaluation process is likely to be incomplete and biased.

Evaluation of an innovation must try to relate the outcomes to the general and specific objectives behind its adoption. It must also relate those outcomes to the costs incurred. Whether or not the innovation is to be continued in use will be dependent upon such considerations.

A close look at Figure III indicates that decisions have to be made at different points of the planned cultural borrowing process. The first set of decisions pertains to the objectives to be sought. A second set of decisions deals with such questions as to how, when, and where to seek new ideas and innovations and by whom. These are the decisions that belong to the "exposure" stage. A third set of decisions pertains to the screening stage and deals with the selection of criteria and such questions as how far the

innovations fit the established criteria and how to make them more adaptable to the borrowing culture. Based on how these questions are being answered a decision has to be made as to whether or not to accept the innovation. A fourth set of decisions pertains to the experimentation stage and deals with such questions as what kinds of testing the innovation should undergo and for how long. On the basis of outcomes of experimentation a decision has to be reached to formally adopt or reject the innovation under investigation. A final set of decisions deals with operation and outcomes of the evaluation process. On the basis of this evaluation a decision has to be made to continue the use of the innovation or abandon it and the means for implementing or terminating it.

It is apparent that not all such decisions can be reached with the same degree of objectivity. Personal and expert judgements enter into the process at different points in varying degrees. This, we believe, is neither avoidable nor undesirable.

Relevant Variables in the Cultural Borrowing Process

From the discussion and the conceptual model of the process of planned cultural borrowing several forces can be seen to influence the process. These forces, or variables, fall into seven distinct, though interacting, categories.

Each category pertains to one of the seven identified stages in the process of planned cultural borrowing.

I. Variables Pertaining to Setting the Objectives of Cultural Borrowing:

1. Relevance of the borrowing objectives to the goals of national development and modernization.
2. Specifity of the stated borrowing objectives.
3. Clarity of the stated borrowing objectives.
4. Measurability of the stated borrowing objectives.
5. Practicality of the stated borrowing objectives.
6. Participation in setting the borrowing objectives.
7. Source and extent of endorsement of the borrowing objectives.

II. Variables Pertaining to Exposure to Foreign Sources of New Ideas and Innovations:

1. Regulatability of the exposure process.
2. Number of channels utilized in the exposure process.
3. Nature of methods utilized in the exposure process.
4. Length of the exposure process.
5. Deliberatness in the exposure to foreign cultures.
6. Number of sources of cultural borrowing.
7. Level of credibility of sources of cultural borrowing.
8. Personal qualities of cultural transfer agent.

III. Variables Pertaining to the "Pooling" of New Ideas and Innovations:

1. Receptivity of those in charge of pooling and building a reservoir of ideas and innovations.
2. Objectivity of those in charge of the pooling process.
3. Number of communication channels open to individuals and groups to contribute to the reservoir of ideas and innovations.
4. Rewarding of contributions to the general reservoir of ideas and innovations.
5. Adequacy and appropriateness of grouping, classifying and categorizing innovations.
6. Effectiveness of methods utilized in bringing in ideas and innovations.

IV. Variables Pertaining to Screening the Borrowed Ideas and Innovations.

1. Clarity of the criteria utilized in screening.
2. Effectiveness of communication channels among experts and specialists who are to do the screening.
3. Knowledgeability of those in charge of screening of the nature of the ideas and innovations to be screened.
4. Awareness of those in charge of the screening of the possible effects of specific innovations and interactions between them and environmental elements.
5. Objectivity of those in charge of screening.
6. Openness and freedom of those in charge of screening

to express their views and opinions with regard to the ideas and innovations being screened.

7. Respect for all views and opinions expressed with regard to the ideas and innovations being screened.
8. Availability of rewards and sanctions for implementing screening decisions.

V. Variables Pertaining to Experimentation of Ideas and Innovations:

1. Isolation of the experimental setting from daily life.
2. Similarity of the experimental atmosphere to real-life situations.
3. Clarity and specifity of procedures to be followed in the experimentation process.
4. Nature of the idea or innovation under experimentation.
5. Expertise of those doing the experimentation.
6. Objectivity on the part of those doing the experimentation.
7. Allowance of adequate time to observe the outcomes of an innovation being studied.

VI. Variables Pertaining to Diffusion of New Ideas and Innovations:

1. Relative advantage of the innovation to be diffused over ones it supercedes.
2. Compatibility of the innovation with existing

values and past experiences.

3. Complexity of the innovation to be diffused.
4. Divisibility of the innovation for the purpose of partial or small-scale trial.
5. Communicability of the innovation as perceived by potential adopters.
6. Number of communication channels utilized in diffusing the new ideas and innovations.
7. Effectiveness of channels of communication utilized in the diffusion of new ideas and innovations.
8. Awareness of sources of resistance to innovations on the part of those in charge of the diffusion process.
9. Availability of counter-resistance measures to enhance the desirability of innovations.
10. Support given to potential adopters of innovations in the early stages of the diffusion process.

VII. Variables Pertaining to the Evaluation Stage:

1. Knowledgeability on the part of those in charge of evaluation of the nature of innovations and their probable outcomes.
2. Awareness on the part of those evaluating the outcomes of adopted innovations to their side-effects and unanticipated influences.
3. Objectivity of those in charge of evaluation.
4. Measurability of the outcomes of adopted ideas

and innovations.

5. Clarity of the criteria utilized in evaluating outcomes.
6. Adequacy of procedures and tools utilized in evaluating outcomes.
7. Immunity of those in charge of evaluation from application of external pressures and irrelevant criteria.

Hypothesis for Testing

On the basis of the variables identified in the previous section as having relevance to and influence upon the process of planned cultural borrowing, it is possible to develop seven sets of hypotheses, each pertaining to one of the stages in the borrowing process.

I. Hypothesis Pertaining to Setting the Objectives of Planned Cultural Borrowing:

1. The more the borrowing objectives are relevant to the goals of development the more likely it is that they will lead to real development and modernization.
2. Borrowing objectives which are stated in specific terms will tend to facilitate the planned borrowing process more than objectives states in general terms.
3. Clearly stated cultural borrowing objectives will

facilitate selection and evaluation of borrowed ideas and innovations more than ambiguously stated objectives.

4. Attainment of cultural borrowing objectives of material nature will be easier to measure than will attainment of objectives of social or organizational nature.
5. Practical borrowing objectives are easier to communicate than less practical objectives.[138]
6. Attainment of practically stated borrowing objectives will be easier to measure than will attainment of less practically stated ones.
7. Participation in setting cultural borrowing objectives by all those concerned is likely to facilitate the process of cultural borrowing more than non-participation.
8. Participation in setting the cultural borrowing objectives is likely to lead to a wider acceptance of borrowed ideas and innovations by all those concerned, than is non-participation.
9. Borrowing objectives that are endorsed by a legitimately powerful body or source of authority will

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138. By practical objectives is meant those objectives which have directly observable utility.

tend to enhance the effectiveness of cultural borrowing more than unendorsed borrowing objectives.

II. Hypotheses Pertaining to the Exposure Stage of Planned Cultural Borrowing:

1. Regulatable exposure to foreign ideas and innovations can be related more directly to the goals of development than exposure which cannot be regulated.
2. Regulatable exposure to foreign ideas and innovations can lead to more balanced development and modernization than unregulatable exposure.
3. The larger the number of effective channels utilized in the exposure process the more effective it is likely to be.
4. Some methods of exposure to foreign ideas and innovations are more effective than others in achieving the objectives of cultural borrowing.
5. The longer the exposure to sources of foreign ideas and innovations the more effective it is likely to be.
6. Lengthy exposure to foreign ideas and innovations is likely to be accompanied by side effects which cannot all be anticipated ahead of time.
7. Deliberate exposure to elements of foreign cultures is more likely to contribute to development and modernization than unplanned exposure.

8. Exposure to a greater number of sources of foreign ideas and innovations is likely to provide developing nations with wider opportunities for selection than exposure to one or a limited number of sources.
9. The greater the number of foreign sources exposed to the greater the possibility of cultural conflict and friction.
10. The higher the credibility of foreign sources of ideas and innovations the more easy would be their adoption and diffusion.
11. The higher the credibility of the cultural transfer agent the more favorable the borrowed innovations will be perceived.

III. Hypotheses Pertaining to the Pooling Stage of the Planned Cultural Borrowing Process:

1. The greater is the receptivity to new ideas and innovations on the part of those in charge of the process of pooling the greater the reservoir they are likely to build.
2. The more objective those in charge of the pooling process are the more effective the cultural borrowing is likely to be.
3. The greater the number of communication channels open between private individuals and groups and those in charge of building a reservoir of new ideas

and innovations the faster the process is likely to go.

4. Rewards are likely to encourage more contributions to the reservoir of new ideas and innovations than penalties or no rewards.
5. The more adequately the accumulated ideas and innovations are classified, the easier the screening process is likely to be.
6. Some methods of attracting and bring in new ideas and innovations to the general reservoir are likely to be more effective in achieving that goal than others.

IV. Hypotheses Pertaining to the Screening Stage of the Planned Cultural Borrowing Process:

1. The clearer the criteria for screening borrowed ideas and innovations the faster and more decisive screening is likely to be.
2. The more effective the communication among experts and specialists in charge of the screening process is, the more fruitful the screening will be.
3. More knowledgeability on the part of those in charge of screening new ideas and innovations will lead to more effective screening.
4. The more aware those in charge of screening are to the possible effects and side effects of the ideas and innovations being screened, the less risky

their adoption will be.

5. Objectivity on the part of those in charge of screening new ideas and innovations is more likely to lead to a balanced program of cultural borrowing than are less objective procedures.
6. The more open and free those in charge of screening new ideas and innovations are in expressing their views and opinions regarding the ideas and innovations being screened the less the likelihood of unfavorable consequences.
7. Respect for all views and opinions regarding the new ideas and innovations being screened will encourage more careful and effective screening than will prescribed and restricted views.
8. Power to enforce screening decisions is likely to enhance the effectiveness of the screening process.

V. Hypotheses Pertaining to the Experimentation Stage of the Planned Cultural Borrowing Process:

1. Isolation of the experimentation setting from the current daily life is likely to facilitate effective experimentation more than non-isolation.
2. The more similar the experimenting atmosphere to real life situations the more valid the outcomes of experimentation are likely to be.
3. Clear and specific procedures for experimenting with new ideas and innovations is likely to increase

the efficiency of the experimentation operations.

4. Some ideas and innovations will lend themselves to experimentation more easily than others.
5. The higher the expertise of those doing the experimentation the more reliable the results will be.
6. The more objective those doing the experimentation are the more reliable the results will be.
7. Experimentation based on adequate time to observe the outcomes of an innovation under investigation is likely to lead to more accurate adoption decisions than experimentation based on a relatively short time.

VI. Hypotheses Pertaining to the Diffusion Stage of the Planned Cultural Borrowing Process:

1. Innovations that are perceived as being relatively more advantageous than practices they supercede are likely to be adopted more readily and diffused more rapidly than innovations which are perceived as less advantageous.
2. Innovations that are compatible with the borrowing culture will be more readily diffused than innovations which are not.
3. The more complex the innovation is the more difficulty it will present in communication and, hence, the more difficulty it will present in diffusion.
4. Divisibility of an innovation for the purpose of

trial will increase the chances for its adoption and diffusion.

5. The more communicable an innovation is to potential adopters the faster its adoption and diffusion are likely to be.
6. The greater the number of effective communication channels utilized in diffusing new ideas and innovations the faster adoption of those ideas and innovations is likely to be.
7. Some communication channels are likely to be more effective in diffusing new ideas and innovations than others.
8. Awareness of sources of resistance to new ideas and innovations on the part of those in charge of the diffusion process is likely to lead to counter-resistance efforts which may facilitate diffusion.
9. Psychological and material support given to potential adopters of an innovation are likely to increase the chances of its adoption.

VII. Hypotheses Pertaining to the Evaluation Stage of the Planned Cultural Borrowing Process.

1. Knowledgeability on the part of those in charge of evaluating ideas and innovations is likely to increase the validity and reliability of evaluation.
2. The more aware those in charge of evaluation are of the possible effects and side effects the more

valid their evaluation will be.

3. Objectivity on the part of those in charge of evaluation is likely to increase the reliability of the evaluation outcomes.
4. Some outcomes of adopted innovations lend themselves more readily to measurement than others.
5. The clearer the criteria utilized in evaluating the outcomes of adopted innovations the more reliable evaluation will be.
6. Adequate procedures and tools utilized in evaluating the outcomes of adopted innovations are likely to increase the reliability of evaluation.
7. The evaluation process is likely to be less objective where external pressures and irrelevant criteria are imposed on those in charge of evaluation than where such pressures and criteria do not exist.

Summary

This chapter consists of three sections. In the first section, planned cultural borrowing was conceptualized as a process consisting of seven stages: setting the objectives, exposure to foreign cultures, pooling new ideas and innovations, screening borrowed ideas and innovations, experimentation, diffusion and integration, and evaluation. Each stage

involves a different set of decisions to be based on expert knowledge and professional judgement.

The second section presents seven sets of variables, each pertaining to one of the seven stages in the process of cultural borrowing.

On the basis of the identified variables it was possible to develop, in the third section, seven sets of hypotheses for testing within the context of cultural borrowing in a developing country.

CHAPTER V

IMPROVING THE EFFECTIVENESS OF CULTURAL BORROWING

Introduction

In this chapter an effort will be made to identify those methods, techniques, and strategies which are likely to enhance the effectiveness of planned cultural borrowing on three levels: individual, organizational and community. Dealing with the problem on the societal level will be the subject of the next chapter.

Three other aspects have direct relevance to, and influence upon, enhancing the effectiveness of planned cultural borrowing. These are knowledge utilization, technical assistance, and continuing education. Each of these aspects will be analyzed in terms of its nature and impact upon cultural borrowing.

Improving Innovativeness of Individuals

Innovativeness is defined as "the degree to which an individual is relatively earlier in adopting new ideas than the other members of his social system",[139] whether the social system be a group, a neighborhood, a community, or a society.

Innovators and inventors are two terms which "are not mutually exclusive nor are they mutually inclusive".[140] The latter are the individuals who create new ideas; the former are those who adopt them; sometimes, though not always, the same individuals do both.

There is consensus among social scientists that the individual is a social product; his values and behavior are mainly determined by the society of which he is a member. Values are systematically instilled through socialization and a system of rewards and punishments ensures that individuals internalize them. These internalized values become the directing or motivating forces in the individual. The complex of internalized values constitutes the individual's value-orientation.

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139. Diffusion of Innovations. P. 19.

140. Ibid. P. 196.

VALUE ORIENTATIONS

Individuals vary in their value orientations and, hence, vary in behavior. Singh and Beal[141] have pointed out five dimensions to the human's general value-orientations which have considerable relevance to the problems of innovativeness and diffusion of innovations. They are summarized in the following:

1) Conservatism - liberalism

Conservatism may be defined as positive attitude toward traditional institutions and practices and maintenance of the status quo, producing a tendency to resist change. Liberalism is defined as a positive attitude toward a search for new ways and new ideas and a change in the status quo.

2) Fatalism - scientism

Fatalism may be defined as belief that human situations and acts are predetermined by some supernatural power and cannot be influenced by individual volition or by human act. Scientism may be defined as a belief that human situations are the result of natural and/or social forces which can be understood and influenced by human volition or human action.

3) Authoritarianism - nonauthoritarianism

Authoritarianism may be defined as a positive attitude toward accepting an authorized person or institution for

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141. Singh, Shyan N. and George M. Beal. Value Orientations and Adoption Behavior of Indian Cultivators. Paper presented at Rural Sociological Society Meeting. San Francisco: August, 1967.

setting tasks, prescribing procedures and/or judging results without permitting others to share in the decision process. Nonauthoritarianism may be defined as positive attitude toward accepting the decision process as shared responsibility and understanding and tolerance of variations in thinking and behavior.

4) Localite - cosmopolite

A localite individual largely confines his interest to his community. He is generally preoccupied with local problems to the virtual exclusion of the problems existing outside his community. The cosmopolite person has some interests in the community and must, of course, maintain a minimum of relations within the community since he, too , is influenced and exerts influence there, but he is highly oriented to problems and affairs outside the community and regards himself as part of the "outside" world. Cosmopoliteness tends to characterize newcomers to a community or society and others who ignore locally established norms and methods of doing things and are not committed to them. Because their orientation is not fully "within", they have less to lose and may support innovation and change more than others.

5) External conformity - individualism

External conformity may be defined as decision-making by an individual in agreement with friends, neighbors, relatives, superiors, authorities, or other "significant others". Individualism may be defined as conviction that the best

state of affairs is one in which self-reliant and independent men assume the responsibility for their own decisions.

CHILD REARING PRACTICES AND INNOVATIVENESS

Hagen stresses the idea that the principal difference between developed and underdeveloped countries is a relative lack of innovation in the latter, which he attributes to family child rearing practices and processes of socialization.[142] The typical family in an underdeveloped society, he claims, tends to stress conformity rather than innovation and creativity. He holds that indulgence in the first five years in childhood fails to develop problem-solving ability. In a childhood so indulgent, the child is left with a very few chances to exercise his own ingenuity and is seldom stimulated to find new ways of satisfying wants in his early years.

He sees the drastically different stage which follows early childhood as equally discouraging to the development of innovation through the family in developing countries. At this period of life, the child rearing pattern changes from one of indulgence to one of obedience and deference. Any effort to reason with the parents is considered insubordination and is often punished. Raised in this manner, if an

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142. Hagen, Everett E. On the Theory of Social Change. Homewood, Ill.: The Dorsey Press, 1962.

individual encounters frustration and disappointment in the process of his life he cannot react directly against his superiors and so directs his aggressive impulses against those who are subordinates, whether they be younger siblings, servants, work subordinates, or people of lower social status in general. The end result is a kind of life that consists of either giving or receiving deference, of solving problems by the usual patterns offered in the tradition, or receiving punishment for violation of customary roles, and, in turn, of inflicting aggression upon those of lesser status and power.

Child rearing practices in Western societies, according to Hunt, tend to develop a "guilt" complex, whereas in non-Western societies they tend to develop a "shame" complex. It is not known which complex is less harmful to the child's psyche; however, "guilt" may be looked at as coming from a failure in achievement while shame comes from one's perception of deviation from his expected role. The important difference is that the reaction to guilt is often an effort to reach a respectable level of achievement, whereas the reaction to shame is either withdrawal from society or a compensatory assertion of one's own perception of deviation from his expected social role. The important difference is that the reaction to guilt is often an effort to reach a respectable level of achievement, whereas the reaction to shame is either withdrawal from society or a compensatory assertion of one's

own dominance over a lower status group.[143]

There is no solid basis for arguing for or against these views concerning the differences in child rearing practices between the developed and the underdeveloped countries of the world. This is an empirical question which developing countries have to consider for themselves. It may be assumed, however, that the way children are reared and socialized affects their attitudes and behavior, including, of course, their innovative behavior. In addition. we may assume that liberal child rearing may be as harmful as conservative child rearing, depending upon the adequacy of available outlets for innovative behavior. Developing nations therefore, need not necessarily copy the child rearing practices developed and utilized by the more advanced nations. They may appropriately try different practices and develop for themselves practices which are conducive to the improvement of individual innovativeness.

CHARACTERISTICS OF INNOVATORS

LaPiere argues that,

> If a person is to be innovative in any specific regard, he must not only reject the conventional thinking in that regard, but, it would seem, be somewhat skeptical of the validity of conventional thinking in general.

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143. Hunt, Chester L. Social Aspects of Economic Development. New York: McGraw-Hill, 1966.

> Should his skepticism be apparent, it will most likely be decried by his contemporaries as the result of ignorance, as a sign that he is opinionated if not bigoted, or as evidence that he thinks in an illogical fashion. Mental nonconformity of this sort certainly tends to isolate the individual intellectually from his fellows; in ordinary discourse he may seem to them unpleasantly cynical or at least unpredictable, even as they may seem to him dull and uncomprehending.... Mental nonconformity does not of itself lead to innovative endeavor. A person may doubt and question the going opinions, the traditional answers, and the stock values all his life without bringing into being one new opinion, belief, value, or tangible object.... Ability to think in an other than conventional fashion must, apparently, be backed with an abnormally strong motivation to be innovative in whatever the particular field.[144]

Innovative persons in the eyes of their groups are frequently seen as deviants. They are not always the most respected members simply because they prefer venturesomeness to the respect of their peers. When they deviate noticably from the group norm, a sequence of events is uaually to be expected. The group will increase its amount of communication directed to them in an effort to alter their attitudes. If this effort fails, one group member after another will abandon them as hopeless. Communication to them will decrease gradually until they are ignored or excluded. When faced with this end, the innovator loses any hope of getting support and sympathy for his ideas or thinking. He usually ends up by breaking with the group and acknowledging other reference groups which happen to be more supportive and permissive of

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144. Social Change. Pp. 130-132.

his innovative behavior and his way of thinking.

Innovativeness, defined as the early adoption of innovations and new ideas, is thought of by some people as a way of satisfying their ambitions to improve their status in life, of winning wealth and power, or of demonstrating their superiority over their fellows. This is not necessarily the case, for as LaPiere reminds us:

> Although a would-be innovator may in some instances realistically expect that success in his particular endeavors will bring him material and status returns; innovation is still the hard and doubtful way; for there never is and never can be any certainty that innovative endeavors will be successful.[145]

Men who are simply ambitious to get ahead in the world are unlikely to select innovation as the means because they soon discover that the most likely and easy way to wealth, renown, and other rewards for social achievement is through the conventional channel, i.e. conformity to the prevailing norms.

Studies of the processes of culture change and modernization have revealed the extreme importance of innovators, persons who for some reason espouse a new idea and devote themselves energetically to "selling" it to their societies. The motives and personalities of such individuals may vary widely from one society to another, but each generally differs in some respects from the average, typical member of his society.

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145. Social Change. P. 133.

Innovators are found, upon study, to differ from the typical member of their social system with respect to values, attitudes, orientations, and behavioral patterns. They "have more favorable attitudes toward new ideas".[146] Their "major value is venturesomeness";[147] they are eager to try new ideas. Innovators "use more technically accurate sources of information, such as direct contact with scientists, and place more credibility in these sources than the average individual".[148]

Innovators as movers of change are generally creative and venturesome persons in their fields; in government service, in private activities, in education, and elsewhere. Movers of change may be classified, according to Harbison[149], into two different categories: the change-designers who make new discoveries, suggest new methods of organization, and plan broad new strategies, and the change-pushers who persuade and inspire people to put new ideas to work. Some individuals are both change-designers and change-pushers; but whether they are designers, pushers, or both, movers of innovation and change must have special skills and

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146. Diffusion of Innovations. P. 111.

147. Ibid. P. 169.

148. Ibid. P. 111.

149. Harbison, Frederick. "The Prime Movers of Innovation." Education and Economic Development. C.A. Anderson and Mary Bowman (ed.). Chicago: Aldine Publ. Co., 1965. Pp. 229-241.

knowledge.

Innovators may be drawn from rank-and-file groups or the ranks of high-level manpower. They may be motivated by a desire to rise in social status, to build up material wealth, to acquire political influence, or to preserve an already-established prestige position. Many of those in the ranks of high-level manpower belong to the latter category and, hence, are able to control, and sometimes inhibit, the processes of change. A strategy suggested by Harbison, which may be worthwhile trying by those developing nations which are trying to improve their overall innovativeness, is to make the high-level manpower group as innovation-conscious as possible while, at the same time, developing within the rank-and-file group as many creative innovators as possible.[150]

Innovators are to be found in many social contexts. From the standpoint of developing countries, leaders of independence movements are perhaps the most spectacular innovators and agents of change. Top administrators whose function is to organize and stimulate the efforts of others and infuse energy and vision throughout their organizations may be looked at as innovators. Entrepreneurs who perceive and exploit new business ventures belong to the group of innovators. Agronomists who discover better methods of

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150. Education and Economic Development. P. 3.

cultivation are also innovators. Professors, teachers, and administrators of educational institutions "constitute the largest group of movers of innovations; they are the 'seed-corn' from which new generations of manpower will grow".[151.]

POSSIBLE PATHS FOR IMPROVING INNOVATIVENESS OF INDIVIDUALS

There is no rule of thumb for improving a nation's level of innovativeness and receptivity to change. There are, however, several paths which are likely to lead to that goal, and it is up to developing countries to choose one or more of these promising paths. Several paths which have been identified are the following:

1) Trying new methods of child rearing that are likely to encourage the child's independent thinking rather than undue conformity and submissiveness.
2) Promoting group and societal atmospheres as favorable to change and innovations as possible.
3) Rewarding innovative thinking and innovative actions by individuals and groups rather than suppressing and inhibiting them.
4) Stressing the importance of small groups, including work groups, in supporting the birth and development of innovations and new ideas.

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151. Education and Economic Development.

Improving Organizational Innovativeness

Innovativeness in the context of formal organizations expresses itself in at least two ways: a general receptivity to change and an early adoption of new ideas and technologies which have direct, or indirect, relevance to the organization's goal attainment.

There are four basic aspects of formal organizations that affect their innovativeness. These are the organizational structure, the organizational leadership, the organizational personnel-inputs, and organizational stress. It is necessary to understand each of these aspects in some detail before any worthwhile strategy for organizational innovativeness can be developed.

ORGANIZATIONAL STRUCTURE AND INNOVATIVENESS

Three major structural themes are recurring in the literature which appear to bear upon organizational innovativeness. Lilienthal[152.], Guest[153.], and Argyris[154.] argue that decentralization enables internal adaptation to external

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152. Lilienthal, David E. TVA: Democracy on the March. New York: Harper and Bros., 1944. P. 161.

153. Guest, Robert H. Organizational Change: The Effect of Successful Leadership. Richard D. Irwin, Homewood, Illinois: 1962.

154. Argyris, Chris. Integrating the Individual and the Organization. New York: John Wiley & Sons, 1964. P. 321.

change. A second theme is that flexibility of the internal structure of organizations facilitates change. Gardner's notion of "fluidity of internal structure" is viewed as an important means to preventing "organizational dry rot".[155] What Blau calls "impersonal mechanisms of control" perhaps reflects a comparable notion.[156] Parsons' and Selznik's natural-systems models possess this characteristic of "flexibility", in contrast to Weber's ideal-type bureaucracy. A third theme, the importance of boundary positions, is stressed by March and Simon[157] as well as Kahn et al.[158] Boundary positions refer to those positions whose occupants are in interaction with the external environment. They serve as input sources for both intra- or inter-organizational change. Boundary positions by their very nature are more other-organization oriented positions than any other position in the organization. If occupied by innovative persons, these boundary positions can highly serve the organizational innovativeness and change goals. On the other hand, it may be hypothesized that assigning persons who are mostly conservative

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155. Gardner, John W. "How to Prevent Organizational Dry Rot." Harper's Magazine. Vol. 10 (1965), p. 20.

156. Blau, Peter. "Formal Organizations: Dimensions for Analysis." American Journal of Sociology. Vol. 7 (1957), p. 66.

157. Ibid.

158. Kahn, Robert L. et al. Organizational Stress: Studies in Role Conflict and Ambiguity. New York: John Wiley & Sons, 1964.

and change-resistant to such boundary positions may lead to stagnation and lack of responsiveness to the changes and needs of the environment. Similarly, it may be assumed that innovative persons who are not in boundary positions will not function as effectively in interorganizational innovation.

ORGANIZATIONAL LEADERSHIP AND INNOVATIVENESS

Thompson[159.], and Dimock and Hyde[160.] ascribe considerable importance to organizational leadership. It is theoretically conceivable that the contrast between a conservative, timid organization with a low rate of growth and an aggressive, expansion-oriented organization depends to a considerable extent on the nature of the person who occupies critical leadership roles. Organizational leaders are, in a sense, gatekeepers. They are likely to allow the inflow of new ideas and practices which enhance their positions while suppressing the ideas and practices that threaten their interests even if such ideas and practices are favorable to the organizational goals. Some organizations are aware of this fact and are able to minimize the unfavorable consequences of the leadership vested interests by filling organizational leadership positions by innovative persons from outside the

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159. Boulding, Kenneth E. Conflict and Defense. New York: Harper and Bros., 1962.

160. Ibid.

organization. Such persons are not likely to have vested interests in the organization which handicap their innovativeness or threaten their change-orientedness.

ORGANIZATIONAL PERSONNEL-INPUTS AND INNOVATIVENESS

Current literature reflects concern with the relationship between the kind of personnel an organization employs and its potential for innovation and change. Gardner sees the recruitment of innovating personnel as a means to renewal of the organization itself.[161] The interpretation which social psychologists frequently put on the role of personnel-inputs for innovation has to do with the relationship between the organization and the individual. The thesis posits a need for personnel capable of internalizing organizational goals to a degree which permits fluid internal interaction with minimal sacrifice of organizational goal achievement. For example, Thompson views the pre-entry training, professional identification, inter-organizational mobility, and collegial orientation of professionals as a means of procuring personnel who are neither totally committed to the organization nor totally alienated from it, a condition which he feels is crucial for innovation.[162]

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161. "How to Prevent Organizational Dry Rot."

162. Conflict and Defense.

The input of new kinds of personnel seems to have indirect bearing on the organization's innovativeness through the informational inputs into the organization. This could be a reason for some organizations' insistence to frequently replace the occupants of boundary positions by others known to hold new orientations and attitudes toward the organizational environment.

ORGANIZATIONAL STRESS AND INNOVATIVENESS

There are several ways that organizational stress may lead to increased organizational innovativeness. Kahn, et al, believe that intra- and inter-person role conflict is chronic for persons occupying boundary positions and that demands for innovation are associated with such stress.[163] Gross attributes an important role to crisis in motivating change.[164] An opposite point of view is represented by Coser who argues that where stress is in the form of conflict an organization's response is usually characterized by an increase in internal cohesion, which is dysfunctional for innovation.[165] On the other hand, this might be functional

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163. Organizational Stress: Studies in Role Conflict and Ambiguity.

164. Gross, Bertran M. "What are your Organization's Objectives?: A General Systems Approach to Planning." Human Relations. Vol. 18:3 (1965), p. 215.

165. Coser, Lewis A. The Functions of Social Conflict. Glencoe, New York: Free Press. Pp. 87-103.

for the creation of inter-organizational coalitions in the face of a common threat. Gomersall reminds us that stress is a subjective state; the presence of a heavy backlog of work may look like stress while actually serving to provide a sense of job security.[166].

The contradiction implicit in these two contrasting points of view may be partly reconciled by distinguishing between organizational adaptation, and innovation. Thompson points out that "an adaptive organization may not be innovative....but an innovating organization will be adaptive".[167]. March and Simon provide a synthesis of both points of view by suggesting that the rate of innovation may be the product of changes in the environment which make existing procedures unsatisfactory, or a product of the rate at which opportunity for change is encountered. In each instance they believe that a moderate level of stress is conducive to innovation.[168].

Facilitating Communities' Adoption of Innovations

Rogers points out that:

> Almost all past diffusion research has been based upon the implicit assumption of optional decision-making by

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166. Gomersall, Earl R. "The Backlog Syndrome." Harvard Business Review. Vol. 9 (1964), p. 107.

167. Conflict and Defense.

168. "Formal Organizations: Dimensions for Analysis."

> individuals, rather than collective decision-making <u>within</u> rather than between social systems.[169]

Optional decisions are made when individuals have almost complete freedom to exercise their own choices. Collective decisions are made when individuals in a social system agree to behave in a certain manner by some sort of consensus, and all must conform to the joint decision, once it is made.

Five steps have been identified by Rogers in the collective innovation decision-making process. These are:

1) Stimulation of interest in the need for the new idea (by stimulators).
2) Initiation of the new idea in the social system (by initiators).
3) Legitimation of the idea (by power-holders or legitimizers).
4) Decision to act (by members of the social system).
5) Action or execution of the new idea.[170]

Facilitating a community's adoption of an innovation requires four basic processes on the part of the agent, or agency, in charge of promoting the innovation: fact finding, diagnosis, diffusion, and evaluation. Each of these processes will be discussed in detail in this section.

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169. <u>Communication of Innovations: A Cross-Cultural Approach</u>. Chapter 9.

170. <u>Ibid</u>.

FACT FINDING

Fact finding for the purpose of facilitating a community's adoption of an innovation should answer at least the following questions:

1) What is the actual or conceptual boundary of the community?
2) What are the community segments that are likely to be affected by the adoption of the innovation? What are the segments in a position to contribute significantly to the diffusion efforts?
3) What are the functional relationships among these segments - their relative positions, power, prestige, skill, influence, resources, attitudes, beliefs, orientations, relative to the innovation to be diffused?
4) What aspects of the surrounding environment are likely to facilitate or hinder the adoption of the innovation by the community?

The information necessary for answering these questions may be secured in at least four ways: direct questioning of community leaders and residents, through neighboring communities, use of written materials, and direct participant observing.

DIAGNOSIS

Diagnosis for the purpose of facilitating community adoption of an innovation is an effort which may be undertaken in three different ways: as a self-analysis by the community itself, as an independent assessment by the agent or agency promoting the innovation, or as a collaborative assessment through joint effort by the community and the agency in charge of promoting the innovation.

Diagnosis consists mainly of four major acit vities; analysis of potential resistance to the innovation, analysis of forces and factors which are thought to be favorable, or unfavorable to the diffusion of the innovation, determination of major resources available to facilitate the diffusion of the innovation, and assessing the community's readiness and climate of opinion with respect to the adoption of the innovation. Each of these activities will be discussed in some detail.

1) Analysis of potential resistance

Community resistance to an innovation originates for different reasons. Faulty perception of the innovation is one reason. The community's lack of skills necessary for the adoption of the innovation is a second reason. Faulty internal communication between the community segments may make the diffusion of the innovation difficult. A fourth reason stems from a faulty distribution of community energy and resources which makes the adoption of new ideas and practices difficult.

2) Analysis of forces and factors favoring, or disfavoring, the innovation

Forces favorable to the adoption and diffusion of an innovation by a community include a general feeling of dissatisfaction with the current situation or practices, a natural drive from within the community toward change and improvement, and an increased felt capacity for progress and development.

Forces unfavorable to the adoption and diffusion of an innovation would include a general opposition to any kind of change in the status quo growing out of fear, ignorance, lack of skill, experience or capacity for adopting anything new, fear of failure, fear of losing some existing satisfaction, resistance to the agent or agency promoting the innovation, and resistance generated by unfavorable characteristics of the innovation itself.

3) Determination of major resources available to the community

Such resources would include finances, expertise, and community leadership and organization which are needed for effective diffusion of the innovation.

4) Assessing community readiness

This step is perhaps the most crucial step in the diagnostic process, for a community, even it it is favorable to an innovation, it may or may not be ready for its immediate adoption.

DIFFUSION OF THE INNOVATION

Diffusion of an innovation on a community-wide basis calls for the following activities on the part of the agency promoting the innovation:

1) Defining the objectives of adoption from the community's standpoint.
2) Arousing and supporting intentions to change the existing practices by, for example, the use of success stories.
3) Developing or locating those individuals and groups which can assume leadership in the promotion campaigns, or skills training.
4) Giving direct support to the community during the trial stage of the innovation through consultations or rewards.
5) Creating and stabilizing a new community structure to maintain the innovation and the new pattern of behaviors and relationships accompanying it.
6) Supporting the new pride or status gained as a result of adopting the innovation.

EVALUATION

Within the context of cultural borrowing, evaluation must cover the following aspects:

1) The material gains of adopting the innovation.
2) The costs to the community of adopting the innovation.
3) The kinds and extent of change in social relationships

within the community and between it and other communities.

4) Whether or not the changes due to adopting the innovation are in the anticipated direction.

5) Influence of the innovation upon other practices and values.

6) Whether the changes due to the innovation serve the goals of the community or of the society.

7) The extent to which the innovation has been integrated within the fabric of the community.

8) The influence of adopting the innovation upon future adoption of other innovations.

Effective Knowledge Utilization

KNOWLEDGE UTILIZATION AND NATIONAL DEVELOPMENT

Rottenberg[171] has pointed out that the spatial distribution of income in the world is much like the distribution of knowledge; countries in which the stock of knowledge is large are rich whereas those in which the stock of knowledge is small are poor. Also, countries in which the rate of increase of the stock of knowledge is high become richer faster than those in which the rates of knowledge increase is low. He adds:

> Knowledge on paper is not per se income-producing, but only that knowledge commanded by men. Put

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171. Education and Economic Development.

> somewhat differently, knowledge is income-producing only if it is put to use; this occurs only if it is acted upon by men.[172]

If Rottenberg's proposition is true, it follows that a change in the redistribution of knowledge will be associated with a change in the redistribution of income. The peaceful and rational way for the redistribution of knowledge seems to be through the international and inter-regional transfer of knowledge which has relevance to developing countries.

A problem in most developing countries is a lack of sufficient resources to accomplish the needed transfer of knowledge since it does not move from place to another at zero cost. Substantial amounts of resources must be devoted to both its transmission and its reception.

Human societies may be assumed to go through four stages in terms of their knowledge base. In the first stage, societies become aware of the role of knowledge and recognize its importance in the achievement of their goals. The second stage is one of openness and receptivity to knowledge. In the third stage, a society becomes a heavy user and consumer of knowledge. Many societies stay longer in this third stage than in the other stages. Only those societies who can direct part of their energies to knowledge accumulation and production can reach the fourth stage, that of knowledge generation.

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172. Education and Economic Development. P. 281.

Most underdeveloped countries of the world are either in the first or second stage of knowledge development. Developing countries are moving toward the third stage, that of knowledge comsumption, at varying speeds. It may be assumed, therefore, that the first two stages represent the pre-development phase whereas the third stage represents the take-off stage in the development process. The fourth stage comes after development is relatively advanced. It is, in a sense, a post-development phenomenon.

MODELS OF KNOWLEDGE UTILIZATION

Today's developing countries cannot afford the luxury of adopting, or developing, technical knowledge without directly and immediately putting it to work. Knowledge utilization, therefore, is perhaps the most immediate task for developing countries in all possible fields. The claim that accumulation of knowledge is good in itself does not work for most of today's developing countries. Therefore, it is hard to expect that scientific institutions in developing countries would gain their societies' support unless their practical usefulness is proved in advance.

Knowledge utilization is being viewed as a system and as a process[173]. and it is believed that it can be properly

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173. Havelock, Ronald G. and Kenneth D. Benne. "An Exploratory Study of Knowledge Utilization." Concepts for Social Change. Goodwin Watson (ed.). National Training Laboratories, NEA, Washington, D.C., 1967. Pp. 47-70.

understood only by using both models. Viewed as a system, knowledge utilization may be thought of as analogous to the human body with the basic research establishments functioning like the brain, abstracting, generalizing and ruminating, and a chain or a network of relationships which has the function of carrying information and producing behavior. In the same way as the nervous system is supported, supplied, protected, and to some extent controlled by other organs within the total body system, the structure of knowledge utilization is supported and controlled by groups and individuals in the society who are not necessarily information carriers. Such groups and individuals are the administrative structure of knowledge utilization which is perceived as consisting of five components: education, financial support, legal or administrative control, protection, and growth or change maintenance.[174]

Havelock and Benne state that

> The educational structure provides for the replenishment of the professionals, the maintenance of standards, and above all, the preparation of consumers for the use of knowledge....the educational system as a whole seems to lay great emphasis on training for basic and for practice roles at the expense of the equally important roles of development and consumption. There has also been a tendency to concentrate on recruitment and training of new members at the expense of the equally important educational functions of continuing education and consumer

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174. Concepts for Social Change.

information.[175]

The extent of financial support may determine the rate of knowledge utilization. Reliability and stability of support are equally important.

Successful knowledge utilization requires that goals be specified and that people coordinate their activities toward the fulfillment of these goals. Certain persons should have the power to see that this is the case. Such persons should be objective, with little self-interest or special prejudices, if they are to adequately perform the legal or administrative control function.

The fourth aspect of the administrative structure of knowledge utilization is the protection structure. This would include such processes as gate-keeping, licensing, patenting or copyright procedures. The protection structure deals not only with these processes but also with the persons in charge of each of them.

The fifth aspect of the administrative structure of knowledge utilization is served by a growth or a change structure. "Within any utilization system provisions should be made to insure adaptability to new knowledge and new circumstances, and to keep abreast of the changing needs of the consumer."[176]

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175. Concepts for Social Change.

176. Ibid.

One advantage of the systems approach to knowledge utilization is that it gives a good overview of knowledge utilization. It shows the number and variety of roles and subsystems involved in a utilization chain, (a utilization chain involves countless communicative acts, exchanges of information, contacts between persons and between groups) and it gives some idea of how utilization fits into the structure of society as a whole. However, the approach becomes more cumbersome when we want to get a more detailed picture of what is going on at each of the exchange points or linkages in the flow structure.

Viewed as a process, knowledge utilization is almost identical with communication in that a message of some sort is transmitted from a source to a receiver, but, as Havelock and Benne put it

> The problem of knowledge utilization is not simply to get a given piece of information across from a sender to a receiver, but to change it - to transform it - so it can be recognized and accepted as something of value in a system which views information differently.[177]

The relationship of the knowledge sender to the receiver may be viewed on a continuum, with the sender at the basic or producer end of the knowledge utilization chain and the receiver at the applied end of the chain. Those who are at the basic or producer end of the chain will more likely deal with information abstractly and theoretically,

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177. Concepts for Social Change.

and may share to some degree the common prejudices and value orientations of the scientific mind. Those who are at the applied end of the chain may be tuned to receive information which is practical, concrete, and of relevance to consumer needs. They may also share the common prejudices and values of the practitioner's mind.

VARIABLES IN KNOWLEDGE UTILIZATION

Three sets of variables bear direct relevance to knowledge utilization as a process. These are the motivational, interpersonal, and technical variables.

Motivation comes from the consumer first and foremost. His needs constitute the reason for utilization. Another group of motives is not based on consumer needs. These would include ego involvement, the need to know, the need to tell, the need to control others, status seeking, and financial gains.

The second set of variables pertains to the interpersonal atmosphere. Rapid and effective utilization of knowledge requires open communication channels between two groups which are basically different in their values and orientations; namely those who develop knowledge and those who consume it.

In order to get a message through to another part, it is necessary to penetrate some interpersonal or intergroup barriers. The overall permeability of barriers is a function

of their degree of rigidity, durability, interconnectedness, and visibility. Age and educational levels, geographical separation, cohesiveness, and self-preservation also cause boundaries to be more or less permeable.[178]

Perhaps the best channels of communication between groups are those persons who are in intermediate positions between them. Those are the men who pass on information, who get it applied, who create linkage. Unfortunately, such persons are often regarded as having lower status than their colleagues. They exist on the periphery of one discipline because of their connections with another. Marginality is what makes linkage positions undesirable, and sometimes feared by persons who are perhaps best suited for such positions. It is of the utmost importance, therefore, to understand their problems and help them overcome or adapt to the problems of marginality if we are to attract more and more of them to take on similar roles. They should be helped to maintain a firm base in both basic and practice fields, through dual membership. In a university setting, the problem of marginality may be approached by the establishment of a separate base such as an extension service or an institute for research application which is to be organizationally tied to and to overlap with basic research and practice fields. Another way is to maintain a system of periodic

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178. Concepts for Social Change.

rotation of certain members from basic to applied settings or from practice to research settings.

Two factors are required in order to develop and maintain effective linkages between the giver and the receiver of knowledge. These are security and trust. Both the giver and the receiver should have a sense of security or trust in themselves. Beyond that, and building on that, they must have a sense of trust in each other. These conditions can be brought about, as Havelock and Benne suggest, "when there is full recognition of the importance of self-esteem, self-identity maintenance, group identity maintenance, and group esteem".[179]

A third set of variables directly affecting knowledge utilization consists of technical variables. Havelock and Benne perceive the technical aspect of the utilization process as consisting of two phases.

> The first is the preparation of the message, including gathering information, coding in suitable discourse, screening, and possibly labeling or titling. The second phase is the transmission of the message, the process of actually getting the message to the receiver.[180]

The preparation phase consists of four basic steps:

1) Assembly of the message

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179. Concepts for Social Change.

180. Ibid.

2) Coding or recoding the information so that it is understandable and acceptable to the receiver
3) Screening the message with respect to reliability, validity, safety, and relevance, and
4) Packaging and labeling the message.

Messages may be transmitted in different forms through a variety of channels depending on such variables as the nature of the message, the size of the audience, the relationship between the source and the receiver, the desired effect, the speed of transmission, and other factors. When information is transmitted, it is necessary to seek the most effective way to approach a known barrier, to insure that new knowledge, once absorbed and tested will be retained and kept in use, and to instill in the receiver, or receivers, the desire to pass on the newly acquired knowledge to others who are similarly in need.

KNOWLEDGE DEVELOPMENT

The fundamental problem in knowledge development for developing nations involves not merely the accumulation of knowledge through importation but, further, the creation of a favorable atmosphere in order for this knowledge to be acted upon by men in all fields and development of the capacity to create and generate knowledge. The most immediate problem, however, is to find the techniques and methods for transferring the most knowledge possible from the more

developed countries at the least cost and sacrifice.

Borrowed knowledge is most likely to develop and multiply where interaction between the knowledge producers and knowledge consumers is most effective. This applies to inter-organizational as well as inter-individual interaction. Knowledge production without subsequent diffusion of that knowledge will create cultural lags among nations as well as among the segments of any given society. Entire nations or sections of nations may be inconducive to the desired goals of knowledge development and, in general, of total cultural development.

KNOWLEDGE TRANSMISSION

In designing a program for borrowing knowledge several variables will tend to determine the volume of knowledge transmitted from places with large stocks to those with small stocks. Important among these variables are the following:

1) The quantity of knowledge emitted at the source;
2) The number of resources employed in emissions;
3) The number of channels over which transmission occurs;
4) The degree of freedom with which emitted knowledge flows through the designated channels; and
5) The number of resources employed in reception of knowledge.

On the basis of these identifiable variables we may hypothesize that:

1) The larger the quantity of knowledge emitted at the source the larger the quantity received will be, given adequate channels of communication.
2) The larger the number of resources employed in emission the larger the amount of knowledge received will be, given adequate channels of communication.
3) The larger the number of channels over which transmission occurs the larger the amount of knowledge received will be, given efficient flow of information.
4) The more freedom with which knowledge flows the more effective its contribution to the development of underdeveloped countries will be, given that the right selection is made among the flowing knowledges.
5) The greater the number of resources employed in reception of knowledge the greater the benefit gained from the received knowledge, given adequate coordination among the resources employed in reception.

Knowledge of these identifiable variables which tend to affect the outcomes of knowledge borrowing should have relevance to the borrowing countries, in terms of the diversification of their knowledge sources, in terms of the channels to be employed in borrowing knowledge, in terms of the channels to be employed in the diffusion of borrowed knowledge, and in terms of the necessary organizational structures for effective knowledge borrowing, diffusion and adoption.

Improving the Effectiveness of Technical Assistance

AN OVERVIEW

Viewed from the cultural borrowing viewpoint, technical assistance is the diffusion of ideas from a technically richer society to a technically poorer society. It "is an aspect of cultural diffusion in that the problem is the transference or origination, by means of advice, of new ways of social behavior".[181].

Technical assistance, despite its importance in today's world, accounts for a relatively small fraction of the total transfer of know-how and innovations from the developed to the less developed countries. It is the aspect of cultural transfer that is most exposed to selective control by recipient countries; and it has been the subject of criticism by both donors and recipients.

Little and Cliffored pointed out that,

> Technical assistance from the donor's point of view takes two main forms. First, people are recruited in the donor country for service overseas, partly, often largely, at the expense of the donor government; secondly, scholarship and training facilities are provided in the donor country.[182].

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181. Technical Assistance: Theory and Guidelines. P. VIII.

182. Little, I.M.D. and J.M. Clifford. International Aid. Chicago: Aldine Publ. Co., 1966. p. 174.

Technical assistance is operationally defined as consisting

> in the transmission of learning, knowledge, and techniques or material and human resources in order to help those who receive it to solve specific problems in a more suitable manner in keeping with their needs. It is an external contribution which assumes a very wide variety of forms: visits of experts and technicians, receiving fellowship holders, organizing courses and seminars, exchanging or disseminating information or documents, and supplying material and equipment, and occasionally financial means.[183]

The definition stresses knowledge and information, with material and financing being of secondary importance.

Technical assistance is generally viewed as being especially useful when it takes the form of educational and training facilities in helping countries and when the recipient countries play an active role in the choice of courses and selection of candidates. In this manner, the types of training offered can be more closely geared to the needs of the recipient country.

MAJOR SHORTCOMINGS OF TECHNICAL ASSISTANCE PROGRAMS

In order to increase the effectiveness of technical assistance as a channel of cultural borrowing some basic problems and shortcomings inherent in technical assistance programs must be overcome.

A major chortcoming in international technical assistance

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183. International Institute of Administrative Sciences. 12th International Congress. Technical Assistance in Public Administration: Lessons of Experience and Possible Improvements. July, 1962. P. 12.

programs arises from failure to consider adequately the environmental results in recipient countries. Ecologists have been very critical of international technical assistance programs and have pointed out that

> the adverse environmental consequences of much well-accepted technological progress are perhaps most readily and dramatically seen in international development programs where alien technology and alien goals interact with a traditional culture and values.[184]

The development efforts undertaken through international technical assistance has tended to deal with single problems and to ignore the multiple side effects that are usually brought about by the resultant changes in the environment. Other factors cited as contributing to ecological disruptions include the lack of attention by the developing nations themselves to possible environmental problems and the failure of the scientific community to study adequately the impact of introducing technology where evidence of environmental problems exist. The scientific community has an obligation to communicate its concerns to officials, to the public of the sponsoring countries, and to citizens of the countries affected.[185]

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184. Christian Science Monitor. "Pitfalls in Aid Projects." Report on the Conference on the Ecological Aspects of International Development. Warrenton, Virginia, December, 1968. P. 1.

185. Ibid. P. 3.

Another major shortcoming is that successful technical assistance projects undertaken by the industrialized countries in the developing countries have in many cases created unsettled political and social results. Cultural borrowing, especially in the form of imported large scale industrial firms, is likely to disrupt the social fabric of the developing nation. For example, Morgenthau pointed out that,

> by creating an urban industrial proletariat, it loosens and destroys the social nexus of family, village, and community, in which the individual had found himself secure. And it will not be able, at least in the forseeable future, to provide a substitute for this lost social order. The vacuum thus created will be filled by social unrest and political agitation...,[186].

two big enemies of rational economic development and social change.

A frequent problem in technical assistance projects is that technical assistance specialists and consultants try to reproduce what they have in their own societies. It is their primary task to know how to adapt the scientific knowledge and operating techniques of their cultures to the economic, social, educational, and political realities of the countries in which they work. In order to achieve this objective they must possess some personal qualities in addition

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186. Morgenthau, Hans J. "Preference to a Political Theory of Foreign Aid." Issues of the Sixties. E. Freedman (ed.). P. 122.

to technical competence. There are such nontechnical considerations as dedication, capacity to motivate people and communicate ideas effectively to them, capacity for leadership, ability to project oneself into another situation, capacity to understand and like people, capacity to instill confidence in other people, sophistication and broad understanding, flexibility, resourcefulness, tact and diplomacy, tolerance, and lack of prejudice.

Another problem which causes great concern to both the borrowing and helping countries is the institutional problem of who gets credit for successes or blame for failures. Sharing both credit and blame by both the host country and the helping country represents one approach to the issue. This, of course, involves the political psychology of both countries. Another approach denies credit to the technicians and their respective countries, at least in public, on the grounds that this denial enhances in the host country a sense of independence, a quality highly valued by developing nations. At the other extreme is the approach that gives all the credit to the helping technician and his country.

It should be clear that a single policy concerning the issue of who is to receive credit or blame is not applicable to all technical assistance situations. There are several factors to be taken into consideration. These include the political psychology of the interacting countries, the long-range goals of the assistance program, the nature of the host

government, the capacities of the host technicians, and the prevailing conditions which may unexpectedly interfere in the operation of the technical assistance program and cause its success or failure. However, a word of recognition and appreciation on the part of the recipient country, of the good will and good intentions of the helping country will probably enhance future technical assistance and strengthen the cause of international cooperation and cultural borrowing.

EDUCATION ABROAD

From the standpoint of cultural borrowing, nationals of developing countries who study abroad furnish a corps of middlemen trained in both cultures who can, therefore, act as links between their cultures and the cultures of the more industrialized nations. Many students have returned to their homeland after completing their education abroad and have become effective leaders in their areas of speciality as well as in international cooperation. Such international exchanges of persons often have the desirable effect of setting up continuing channels of international communication and exchange of ideas.

In order to make education abroad an effective tool of cultural borrowing, developing countries, in cooperation with the developed countries, must consider and overcome at least three sets of problems. The first set has to do with professional training in the highly industrialized countries; the

second set is associated with the individual student's adjustment to the host culture; and the third set has to do with his readjustment to his culture when he goes back to his country.

Professional training in the highly industrialized countries poses three major problems for the developing nations who send their nationals to study abroad. The first is that students of the professions tend to develop an exaggerated professional pride in the contributions their professionals make to human welfare. Pride is a fine attitude, but, as Foster pointed out

> Unalloyed enthusiasm for the magic in one's own field is equivalent to wearing blinders while navigating through shoals and uncharted seas. Good professionals come to feel that, although technological development is a complex thing that involves many diverse efforts, somehow the contribution of their field is the key element, and that if they can only do what they feel is essential, most of the other problems will fall into line.[187]

The second problem posed by professional training in the highly industrialized countries is professional "compartmentalization". Professional compartmentalization is largely a function of the cultures of the industrialized countries with their great division of labor. This compartmentalization tends to be exported to the newly developing countries through professional training. Industrialized

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187. Traditional Cultures: and the Impact of Technological Change.

countries may well be served by professional compartmentalization, but the kind of social change which the newly developing countries are seeking to attain is a multilinear, not a unilinear, process, and each activity builds upon, draws from, and contributes to a broad range of activities.

When professional pride is combined with professional jealousy, the joint planning and coordinated efforts, required for comprehensive development, become difficult to achieve. The urgent problems of development can be reduced and solved only as professional workers of every kind accept the urgent need for joint explorations and concerted efforts. This will call for effort as high and as important as many scientific investigation and offers great possibilities for advancing human welfare.

The third problem posed by professional training in the industrialized countries may be called the scientific morality. Students from developing countries studying abroad, especially in the fields of natural sciences and technology, become involved in laboratory work to a point where life outside their laboratories is almost neglected. Deep involvement in scientific investigations tends to heighten their scientific morality and increases their rejection of life outside the laboratory. Consequently, their expertise in laboratory investigations is often accompanied by a naive outlook on the real and often more complex problems

of life. Social life, to most of them should follow the clear scientific rules which govern laboratory situations. If this is not accomplished, and it may never be, they tend to either withdraw from actual life situations back to their laboratories or become negatively critical of what goes on around them in the wider society. Both tendencies can become useful if they can be pursued rationally. Unfortunately, there is no assurance that this will happen.

The second set of problems associated with the process of education in a foreign culture has to do with the individual student's adjustment to the host culture. A careful observation of a foreign student's life has led to the identification of four stages through which he usually goes.[188] After arriving in the host country, he usually goes through a spectator stage, in which he is simply observing the new sights and experiences which come his way, and having an exciting adventure. He then enters a second stage, that of involvement, during which many problems arise, and a number of disappointments may be experienced. This period can be one of disillusionment and even of depression. The involvement stage is usually followed by a third stage,

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188. Lesser, S.O. and H.W. Peter. "Training Foreign Nationals in the United States." Some Applications of Behavioral Research. R. Likert and S.P. Haynes, Jr. (eds.). Paris, UNESCO, 1957. Pp. 180-181.

in which the visitor comes to terms with himself, his host country, and the training experience. Then comes the pre-departure stage, in which thought is given to the problem of readjustment at home.

A third set of problems associated with education in a foreign culture has to do with the student's readjustment to his culture when he goes back to his country.

Chester Hunt[189] argues that the educational experience abroad has been, for many students coming from developing countries, a process of cultural change which has destroyed their roots in their native land and made it difficult, if not impossible, for them to return to a constructuve career. Too often, such students are unable to make the necessary adjustment and they become museumlike custodians of an exotic foreign culture rather than active catalysts in a developing one. In other cases they feel completely unable to return to the homeland and become a part of the "brain drain".

Most of the readjustment problems are interpersonal in nature. Many returning students are seriously handicapped in communicating with their fellow countrymen and in expressing themselves effectively. The problem is that they acquire, during their stay in the host culture, many concepts and

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189. Social Aspects of Economic Development. P. 117.

meanings which do not have adequate counterparts in their own cultures. They also tend to forget concepts and meanings acquired from their own cultures.

Within the context of work groups, returned students with problems of interpersonal communication may respond in one of three ways. Faced with inability to communicate effectively with the members of their groups, they may withdraw from any direct social intercourse; they may spend some time observing and learning the group norms of acceptable behavior and then manage to behave accordingly; or if they are powerful, they may challenge the established norms and try to alter them.

One thing that students need when they go back to their homelands after study abroad is time and patience to reassimilate their society's cultural norms and ways of behavior. The process of reassimilation raises other kinds of problems, however. While some reassimilation is necessary in order to communicate effectively with their countrymen, too much assimilation may lead to a fading of the new ideas and skills which they have learned abroad. This can result in great loss and defeat of the purpose of sending them abroad.

The reintegration may be further made difficult for the returning students by forces outside themselves. Their reintegration is often threatened by resistance of those with vested interests and by their own opposite tendency to make their career a "sure thing". Rigid resistance discourages

them from introducing generally desirable changes in a desperate effort to reassure their peers that they do not threaten their interests or the society's way of life.

Also, it is a common observation that the cultures of most developing countries overvalue seniority and social status, two attributes which are not compatible with social change and technological advancement. Members sent abroad to have advanced education are generally young and have not acquired any substantial social status. What they have acquired in terms of new ideas and skills are not as highly valued by their countrymen as seniority and social status. This constitutes a practical handicap for most foreign-educated nationals especially in work situations where decisions have to be reached through free discussion among participants. This poses a serious problem for developing countries which need to be open and more receptive to new ideas, new values and new ways of doing things.

Sending students from developing countries to have their advanced education abroad represents a big investment on the part of the developing countries and, in some cases, for the host countries as well. Therefore, a rational approach to education abroad must consider three problems in addition to those which have been discussed: first, the relevance of the fields of specialization to the problems and needs of the developing country; second, whether study abroad in a special field is more economical than attempting

to create local faculties to train people in the developing country itself; and third, the extent of employment opportunities in the host cultures which may negatively affect decisions of the nationals of developing countries to go back to their homeland after they finish their formal education.

An effective program of sending students from developing countries to have their education abroad should deal successfully with the problems of selection. This involves the necessity to consider intellectual ability, aptitude, age, personality, and motivation of those to be chosen. Their status and degree of responsibility at home, their attitudes toward their own nation, their language facility, and the amount of time required for the attainment of their educational goals, are additional factors to be carefully considered in the selection process.

CONCLUSION

In conclusion, it is important to stress the following:

1) Sending members of the developing nations to have advanced education and training in educational institutions in foreign cultures is a necessary step for effective cultural borrowing and social change.
2) Having advanced education and training abroad does not automatically produce desirable results. In fact, the wrong kind of training may do more harm than good.

3) Fear of cultural alienation ought not discourage developing countries from sending their nationals to study abroad if those who are to be sent are adequately socialized and carefully selected.

4) The excessive security of foreign-educated nationals which gives them the notion that they are a part of a privileged elite is hardly compatible with a competitive emphasis required for stimulating a continued drive for creativity and improvement. Those who are more demanding than productive are not likely to be cultural innovators when they return to their home countries.

5) There is great need for modifying the organizational structures and work group norms within which returning nationals are expected to work. Traditional institutional structures which irrationally stress conformity to rigid rules and ways of behavior will tend to inhibit creativity and hinder the diffusion of the new ideas and practices.

6) Greater effort should be made to provide those who return after finishing their education abroad with sufficient insight into their homeland's problems and needs and to involve them in actual decision-making related to their respective fields of study. Active participation and involvement are likely to increase their enthusiasm for improving their society through the dissemination of new ideas they carry with them from foreign cultures.

Improving the Effectiveness of Cultural Borrowing Through University-Based Continuing Education

AN OVERVIEW

Continuing education may be looked at as a continuing socialization process that requires both organized effort and resources on the part of any society. It applies to "older youth or adults who have completed, withdrawn from, or been denied, the formal education normally required by law or the life style of their choice".[190] Put in another way, continuing education is a process that applies to individuals who have finished their formal education or to others who have had to interrupt it for some reason and are currently assuming one or more of the several adult roles.

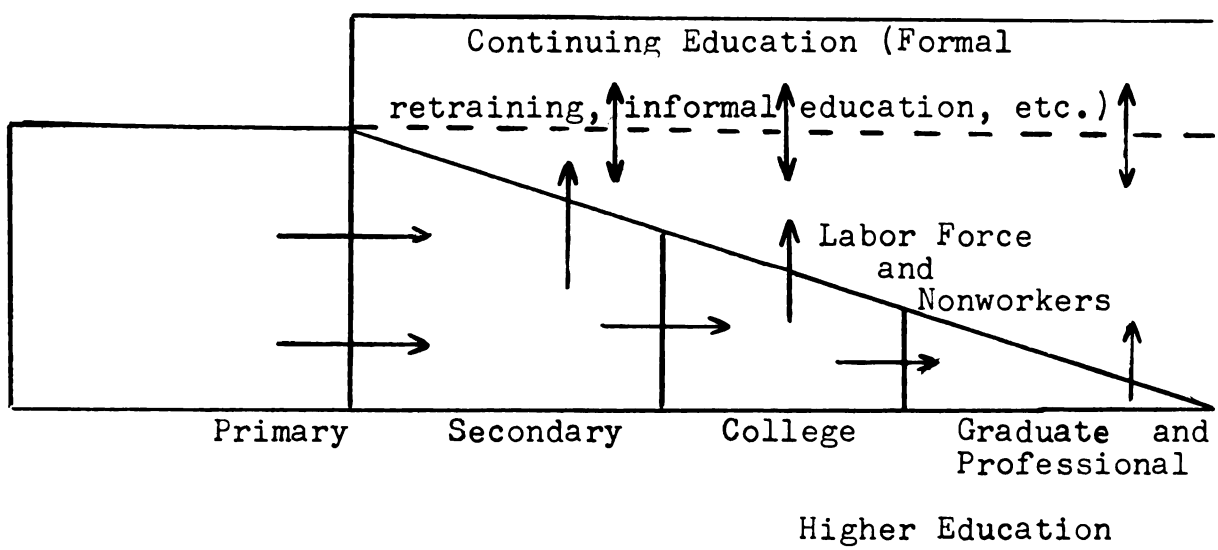

Figure IV: Continuing Education Inputs and Outputs.[191]

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190. Kleis, R.J. Lecture Notes of Educ. 822-B.

191. Adapted from "Lifetime Flow of Students Through the

Figure IV indicates that, theoretically, everyone attends the primary school. Most of those who finish their primary education go to the preparatory school, general or vocational. To a lesser degree, those who successfully finish their preparatory education go to secondary schools, general or vocational. The rest usually enter the labor force to play an active and gainful role of some kind. Preparatory school graduates may enroll, upon the fulfillment of certain levels of achievement; in secondary schools, either general or vocational depending upon their previous preparation. Upon graduating from the secondary school they may engage in gainful jobs and, therefore, become an addition to the labor force. Relatively very few of those who graduate from colleges and higher institutions go into graduate or professional education. Those who enter the labor force at any level usually get some kind of formal training or informal education and, thus, become engaged in one way or the other in continuing education activity.

There are several obvious and good reasons to believe that neither of these categories of citizens will probably have adequate chance, other than through a well-designed program of continuing education, of keeping up with the changes

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Educational System." In Morton Marcus' Information Requirements for Education Decisions. Los Angeles Institute of Government and Public Affairs, University of California, 1964. P. 5.

taking place in the world around them. It is equally true that the skills and the kind of training they got while in school will probably fade away or become obsolete in the face of social and technological changes that are taking place. It is a duty, on the part of developing countries, to retrain the huge number of people who fall into the undereducated category, and to keep the better-educated citizens informed and productive.

Continuing education programs, including manpower training for vocational and professional roles, must take into consideration raising the level of general cultural understanding if borrowed innovations and technologies are to be effective. For example, it would be impossible to teach sanitation to those who still have no comprehension of the germ theory of disease. Without an educational system which gives a grounding in some of the rudiments of scientific culture, people in the developing countries will be hopelessly handicapped in the assimilation of new technologies.

Nearly every social institution is involved to some degree in the diffusion of knowledge. Institutions direct their efforts to the general public seeking to induce changes in behavior. These efforts may take the form of a general dissemination of information or a systematic diffusion of knowledge. In both cases learning may occur although it is more likely to occur in a systematic manner using systematic

diffusion. Examples of these two types are the mass communication and the systematic programs of formal instruction. Mass communication may be assumed to be concerned with the general dissemination, whereas the area of formal instruction is mainly concerned with the systematic diffusion of knowledge and information.

Coolie Verner proposes that continuing education has three functions,[192] the acquisition of information, the acquisition of skill, and the application of knowledge. The acquisition of information may be for the purpose of having a base for rational thought either for utilitarian reasons or for the sake of the information itself without any immediate apparent utility. The techniques most often utilized for acquiring information include lecture, panel, forum, symposium, debates, field trips, and correspondence techniques.

The acquisition of skills may be motivated by the desire to develop proficiency in performing a specific task. The techniques utilized for the acquisition of skill include demonstration, drill, apprenticeship, project, and similar techniques in which the emphasis is on learning how to perform.

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192. Verner, Coolie. Adult Education: Theory and Method, A Conceptual Scheme for the Identification and Classification of Processes. Adult Education Association of the U.S.A., Chicago: 1962.

The application of knowledge, the third function of continuing education, is assumed to imply the utilization of skills or information and their application to new situations. The techniques utilized are the application of knowledge intended to help individuals to be freed of habitual action in light of new knowledge and to integrate isolated facts. They include discussion, internship, the committee or workship types, and a wide range of community organization and community development involvement.

Methods utilized in continuing education may be classified into individual, group, and community methods. The focus in the individual methods is on the isolated individual where it is not possible or, perhaps, desirable for him to become a member of a learning group. Correspondence study, directed individual study, apprenticeship, and internship are examples of the individual methods in continuing education.

Continuing education group methods involve a number of individuals in the learning activity simultaneously. Classes, discussion groups, laboratories, assemblies, and conventions are examples of the group methods in continuing education.

Community methods of continuing education are primarily oriented toward the introduction of change and the alteration of behavior patterns within the social system as a unit with changes in individuals to result in and from changes in the system of which they are a part. The motivation for learning in this context derives from the community setting, and the

learning tasks are often directly related to problems that exist within the setting. They often are directed principally toward change in the social context, with change in the person as more or less instrumental to the primary purpose.

The literature concerning continuing education information-seeking behavior may be organized, by type of source, along a continuum of formality. The most formal source is an educational institution; the next sources on such a formality continuum would be the media sources which are generally characterized by the absence of direct feedback from the receiver. The least formal source would be the general social setting, including a friend or colleague, or the much more "generalized other".

CONTINUING EDUCATION THROUGH PUBLIC UNIVERSITIES

> The University must be the castle for protecting our national social progress and must pave the way for it.
>
> Gamal Abdel-Nasser[193].

The university is being recognized by most developing nations as one of the most adaptable and evolutionary institutions of man's invention. It is becoming the object of

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193. Abdel-Nasser, Gamal. A Public speech given at the second meeting of the National Socialist Union held in the University of Cairo, July 23, 1968.

greater attention, curiosity, and affection. There is a decreasing contentment, however, with the "ivory tower" and classical traditions.

Most universities in developing countries have not been able to meet their societies' expectations. They are either too busy in doing their most traditional teaching tasks or are not aware of the societies' calls for help and assistance. The concept of involvement of the university in the community affairs is not clear or known to many such universities.

Evolution of the American University

The evolution of the American university is believed to have great relevance to today's developing countries. Early American universities followed the classical model where the university had no practical purposes. Technology was not at all its concern. Its activities were of no practical value, except incidently and inadventently.

The classical idea of the university found a less hospitable environment in the United States. The American society, commited to change, did not ask only that culture be preserved and embellished toward some point of ultimate perfection; it also asked that education help ordinary men acquire the skills and competencies needed for their contemporary tasks.

The founding of the Johns Hopkins University shortly after the American Civil War is perhaps the most signal event

heralding higher education as a research-based change agent.

> This was the first American university to copy German practice and give centrality to research in its curriculum. Up to this time, American institutions of higher education had been primarily preoccupied with teaching, with transmitting the societal culture.[194]

Brubacker has indicated that:

> The American state university came to make the next step of taking leadership, not only in research itself, but in showing how the mounting results of the expanding explosion of knowledge might be applied to human problems. Thus, in addition to teaching and research, the university came to perform its so-called 'service' function as well. Notable in this development were the land-grant colleges.[195]

With the establishment of the colleges of agriculture and later agricultural experiment stations in the United States another need became apparent - the need for the extension of research findings in order to secure earlier application on the farms and in the homes. As Robinson put it,

> Somehow the knowledge being generated at the new colleges had to be gotten out to the farms and homes where it would be immediately applied to improve the agricultural enterprise to raise the level of living.[196]

The principles which demand that the university commit

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194. Brubacker, John S. "The Leadership Role of Higher Education in Effecting Societal Change." Current Issues in Higher Education. Association for Higher Education, National Education Association, Washington, D.C. Pp. 60-61.

195. Ibid. P. 61.

196. Robinson, Russell D. "University Roles in Adult Education." Reprint from Adult Leadership. June, 1966.

its resources to the "service" or continuing education function may be clearly formulated. When the rate of change and the advancement of knowledge is relatively slow a fair proportion of the knowledge that the people can apply is assimilated by them through their regular formal schooling. But, when this rate is relatively high, which is the case now in many developing countries, the result will be such that the accumulation of knowledges and new experiences will far outrun the assimilation capabilities of most people through the regular school years.

The specific idea of university continuing education, then, becomes one of carrying to the people the knowledge which they need to assimilate for their betterment and the advancement of society along all lines of knowledge. By carrying out knowledge to the people is meant more than the regular instruction activities of the public schools and colleges. What is meant is to reach those whose knowledges have become obsolete and those who had not the opportunity to attend public schools long enough to assimilate the knowledges necessary for effective citizenship.

Van Hise argues that,

> Carrying out knowledge to the people requires the highest grade of experts. It involves comprehensive knowledge of the more recent advances along all lines. The work of carrying knowledge must be organized at some center....If a university is to have as its ideal service, on the broadest basis, it cannot escape taking on the function of carrying knowledge

to the people.[197]

This is not meant to imply that the university is the only instrument which can perform "extension service". However, it must be clear that the university is the institution which is most advantageously organized to carry on extension work.

University Continuing Education Functions

The present continuing education outreach of the American land-grant university may be considered as essentially three-fold. "First, the university seeks extension of classes, arranging for and conducting classes in the far corners of the state....A second way in which the university functions might be characterized is 'public service'".[198] In this connection, the university acts when called upon as a consultant, contractor, or other participant in problem solving. A third general function of universities in continuing education might be called "community development". Here the university seeks, as Robinson pointed out,

> to become an integral part of the community, to help the community think through its problems, select alternatives and carry out a program that

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197. Van Hise, Charles R. The University Extension Function in the Modern University. A speech given at the First National University Extension Conference held at University of Wisconsin, Madison, Wisconsin, March 10, 1915.

198. Adult Leadership.

meets the need of the community.[199.]

Extension of classes often characterizes the general extension programs of the universities, whereas community development has been more characteristic of cooperative extension in the United States. The two extensions are not mutually exclusive especially in public service functions where the distinction between urban and rural becomes more blurred.

The main argument for the introduction of extension in the university hinges on three ideas:

1) That a university should make available opportunities for a formal college education - or its equivalent - to young people and others who are unable to become regular full-time students;
2) That a university has an obligation to provide educational services to the wider community that supports it;
3) That it should provide opportunities for continuing education for those who have absorbed as much formal education as they desire, but who wish to continue learning.[200.]

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199. "University Roles in Adult Education." (Adult Leadership.)

200. Burch, Glen. Challenge to the University, An Inquiry into the University's Responsibility for Adult Education. Center for the Study of Liberal Education for Adults. Chicago: 1961.

Several issues are often raised when a university plans to develop an extension service. Important among these issues are, first, whether the extension service activities be viewed as integral or peripheral functions of the university,[201] second, whether the extension service activities should be handled in a decentralized fashion, through the separate colleges and departments, or centralized through a single extension division, and third, the manner of financing the university's extension services.

Burch argues that,

> Extension may be considered an integral part of a university's work, 1) if its content is university level; 2) if it is conducted primarily by full-time faculty members as a regular part of their assigned academic duties; or 3) if, in determining an individual faculty member's qualifications for advancement or salary increase, the same consideration is given for work in extension or continuing education as for regular teaching or research activities.[202]

Arguments for a decentralized organization of extension state that as more and more of the university's units do field work of one kind or another--consultations, research studies, surveys, and instruction--they are brought into contact with those segments of the public most interested in their subject field. Advocates of the centralized-unified-extension operation point out that a policy of decentralization

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201. Challenge to the University, An Inquiry into the University's Responsibility for Adult Education. P. 20.

202. Ibid. P. 27.

of off-campus operations tends to fragment the university; that it is costly insofar as some duplication of administration is necessary, and that it tends to put the different units in competition with each other for public attention and support. It is clear that there is no single best answer to the problem of centralization vs. decentralization of the university's service function. What seems more plausible is the view that whichever leads to a more efficient attack on the interrelated problems of developing countries should be the approach to be followed.

Arguments for "public" subsidy hinges upon the idea that just as society has a stake in the adequate provision of a balanced program of continuing education for the young, it has a stake in the provision of a balanced program of continuing education for the adult. Programs for adults which have to be entirely self-supported are, on the other hand, inevitably out of balance.

Public university "service" function today includes a wide range of new activities - in science and technology, in health, in urban problems, in the international field, in economic development, and in a great variety of other areas. It is a concept which is difficult to define precisely. It has been pointed out that,

> Although it is usually thought of as one of a triumvirate of university pursuits, it can and often does include the other two, teaching and research. For example, courses for municipal officials in a

> school of public administration can be regarded both as part of the normal teaching function and as public service....Similarly, investigations in the area of environmental pollution, although commissioned by a federal agency to solve a particular problem, may very well contribute basic new scientific knowledge.[203]

Nevertheless, a university public service is readily recognizable. It has to do with the outreach of a university to society at large, with extending the resources of the campus to individuals and groups who are not part of the regular academic community, and with bringing an academic institution's special competence to bear on the solution of society's problems.[204]

In conclusion, a public university may demonstrate that it lives for the service of the society through: 1) student-oriented traditional university service: this refers to the usual educational and research services a university normally renders to the society; 2) community-oriented continuing education service: this refers to the educational and consultation services a university provides the society or community in order to furnish alternative solutions to immediate-type problems. It should be observed that excellence in performing community-oriented service contributes richly to excellence in student-oriented service, and vice

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203. Carnegie Foundation for the Advancement of Teaching. The University at the Service of Society. Summary of a discussion by the Trustees of the Carnegie Foundation for the Advancement of Teaching, reprinted from the 1966-67 Annual Report. New York. P. 4.

204. Ibid. P. 4.

versa.

Continuing education in modern societies includes services for individuals and groups desiring further education. These services are of five types:

1) Refresher programs for professional practitioners in medicine, law, engineering and other fields which face a rapid rate of change in the stock of knowledge.
2) Learning opportunities for the late comers and late bloomers who, after leaving the formal educational structure, find new needs and new meaning in education.
3) Formal and informal programs for those who seek a fuller life in a society which offers more opportunities for individual development than were available in past years.
4) Extension services for individuals and organizations seeking knowledge of improved techniques and practices.
5) Consultation, research, and institutional services for leaders who confront problems in business, industry, government, or other community institutions as they attempt to develop or improve community life.

Another group which is being served by many universities consists of the alumni. There is a substantial body of evidence that upon graduation the learning process for many college graduates ends. The alumnus often rests secure in the mistaken belief that his degree has provided sufficient education and economic propulsion to last for his life but with the increasing rate of discoveries and innovations in almost

every field of study the alumnus may find himself, in not more than four years after his graduation, holding ideas and theories which are mostly obsolete.

Many American universities recognize the problem and believe that they have a responsibility for alumni education. Some of them have established alumni colleges, the idea of which is to get the alumnus back into an organized learning situation and to stimulate his interest as well as to inform him.

Role of the University in Developing Countries

The university in a developing country has the responsibility of making the fund of knowledge its faculty have acquired known in the society and applying it so as to improve the living conditions. It must work hard at introducing the innovative function into the scene. Developing countries are desperately in need of new ideas, and universities, through research, experimentation and consultation, are in a strong position to provide them. Universities could, and should, provide a fresh point of view and devise new techniques of dealing with the increasingly complex problems of developing countries. They should clearly be the leader and at the same time reflect the spirit of the times.

Universities are not the sole repositories of knowledge in the development field. There are several special study commissions and government research agencies amassing

knowledge about development. Yet, the university scholar can make a unique contribution. Through his access to new discoveries, confirmation of fact and theory, refinement and evaluation, he can add strands to the fabric of knowledge. The methods of experimentation, control, testing and rejection are peculiarly suitable to an academic atmosphere. As a result, the university scholar can pursue basic lines of inquiry. He can suggest new approaches to old problems, and can inject new thrusts that otherwise may not be feasible. For these reasons a university scholar engaged in development research must be prepared to demonstrate how his views are significantly different from or, in general, above and beyond what can be said by public officials, leaders of business, labor and professional organizations, representatives of civic groups, or others.

Universities in developing countries ought not to wait for government agencies to perform the informative or problem-solving services to their communities. Government agencies are deeply tied to rules and inflexible regulations. These hinder adequate performance of services; a university can perform them more easily and adequately because the structure and attitudes of universities are more flexible and adaptable, and because their guiding principle is truth rather then stability.

In the light of the commonly observed lack of understanding between the university and the society at large in

most newly developing countries, one would recommend the following:

1) Each university must assess objectively the particular kinds of expertise it can provide for serving the public at large. This is a kind of fact-finding process in which it is necessary not only to know the areas of specialization possessed by each individual faculty member and each academic unit, but also to know what kinds of additional contributions each might develop.
2) Each university should encourage faculty participation in those areas of development activities where meaningful and worthwhile contributions can be made.
3) Each university must provide courses, seminars, consultations and investigations which have in-service training value for those officials and government employees in charge of the development programs. This kind of contribution can benefit the faculty members as well. The discussions and feedback data brought by the seminars participants can serve in verifying or modifying the faculty's own theories of development activities.
4) Formal contact between the professionals on campus and the professionals working with government and private agencies should be encouraged and coordinated. Both the academicians and non-academicians can benefit substantially from such contact. The non-academician will find it challenging to refresh his mind and interesting to

get new ideas. The academician, too, will get in touch with real-life experiences which he otherwise is not likely to know about. Real-life experiences are vital to the academician who spends most of his time in the laboratory or the research office.

SUMMARY

Chapter V has provided a detailed description of how cultural borrowing can be made more effective in reaching the objectives set by developing countries by seeking to improve the innovativeness of individuals, organizations and communities.

Individual innovativeness is defined as the degree to which an individual is relatively earlier in adopting new ideas than the other members of his social system.

Four strategies were proposed for improving innovativeness of individuals. These are:

1) Trying new methods of child rearing that are likely to encourage the child's independent thinking whenever this is desirable or needed.
2) Promoting a social atmosphere favorable to change and innovations.
3) Rewarding innovative thinking and innovative actions by individuals and groups of individuals.
4) Stressing the importance of small groups, including work groups, in supporting the initiation and development of

innovations and new ideas.

Organizations' innovativeness expresses itself in two ways; a general receptivity to change and an early adoption of new ideas and technologies which have relevance to the organizations' goal attainment.

Four aspects of formal organizations that affect their innovativeness were identified. These are the organizational structure, the organizational leadership, the organizational personnel-inputs, and organizational stress.

Three structural factors are believed to influence organizational innovativeness; decentralization, flexibility, and occupants of boundary positions.

It was hypothesized that organizational innovativeness is more likely to be associated with change-oriented leadership than with conservative leadership.

Organizational personnel-inputs appear to affect the organizations' innovativeness through the informational inputs into the organizations.

Several points of view concerning organizational stress and its impact upon organizational innovativeness were presented. It is generally believed that a moderate level of stress is conducive to innovation.

Facilitating a community's adoption of an innovation was seen as requiring four basic processes on the part of the agent, or agency, in charge of promoting an innovation; fact finding, diagnosis, diffusion, and evaluation.

A special section was devoted to a detailed description of knowledge utilization in relation to national development and knowledge borrowing. It was pointed out that the spatial distribution of income in the world is much like the distribution of knowledge and that the problem with most developing countries is that they lack sufficient resources to accomplish the needed transfer of knowledge since it does not move from place to another at zero cost. It was also indicated that knowledge utilization, rather than knowledge accumulation, is the most immediate task for developing countries.

Knowledge utilization was viewed in two ways: as a system and as a process. Viewed as a system, knowledge utilization was described as analogous to the human body with the basic research establishments functioning like the brain, and a chain or a network of relationships having the function of carrying information and producing behaviors. Viewed as a process, knowledge utilization was shown to be almost identical with communication in that a message of some sort is transmitted from a source to a receiver, with the source at the basic end of a knowledge utilization chain and the receiver at the applied end.

Three sets of variables bearing direct relevance to knowledge utilization were identified. These are motivational, interpersonal, and technical variables. Five other

variables were identified as determinants of the volume of knowledge transmitted from places with large stocks to those with small stocks. These are quantity of knowledge emitted, number of resources employed in transmission, number of channels utilized in transmission, degree of freedom with which emitted knowledge flows through designated channels, and number of resources employed in reception of knowledge. On the basis of these variables five hypotheses were proposed concerning knowledge borrowing and national development.

Another section of Chapter V dealt with improving the effectiveness of technical assistance. Technical assistance, viewed from the cultural borrowing viewpoint, is the diffusion of ideas from a technically rich society to a technically poorer society. It is an aspect of cultural diffusion in that the problem is the transference or origination, by means of advice, of new ways of social behavior.

It was pointed out that in order to increase the effectiveness of technical assistance as a channel of cultural borrowing both the borrower and donor countries have to overcome four basic problems and shortcomings inherent in technical assistance programs. First, is the failure of technical assistance programs to consider adequately the environmental results in recipient countries. Development efforts undertaken through international technical assistance have tended to look at single problems and to ignore the

multiple side effects that are brought about by the resultant changes in the environment. A second major shortcoming is that technical assistance projects undertaken by the industrialized countries in developing countries have in many cases created unsettled political and social results. A third problem frequently encountered in technical assistance projects is that technical assistance specialists and consultants try to reproduce what they have in their home societies. A fourth problem which causes great concern to both the borrowing and helping countries is the institutional problem of who gets the credit for successes or blame for failures.

It was also indicated that technical assistance is generally viewed as being especially useful when it takes the form of educational and training facilities in helping countries and when recipient countries play an active role in the choice of programs and selection of candidates. In this manner, the types of training offered can be more closely geared to the needs to recipient countries.

From the standpoint of cultural borrowing, nationals of developing countries who study abroad furnish a corps of middlemen trained in both cultures who can act as links between their cultures and the cultures of the more industrialized nations.

It was argued that in order to make education abroad an effective tool of cultural borrowing developing countries,

in cooperation with the developed countries, will have to consider and overcome at least three sets of problems. The first set has to do with professional training in the highly industrialized countries. The second set of problems is associated with the individual student's adjustment to the host culture, whereas the third set has to do with his re-adjustment to his culture when he goes back to his country.

The last section of Chapter V dealt with improving the effectiveness of cultural borrowing through university-based continuing education. Continuing education, it was pointed out, is a socialization or resocialization process that applies to older youth or adults who have completed, withdrawn from, or been denied, the formal education normally required by law or the life style of their choice. Continuing education, it was proposed, has three functions; the acquisition of information, the acquisition of skill, and the application of knowledge.

It was pointed out that the university is being recognized by most developing nations as one of the most adaptable and evolutionary institutions of man's invention. It has not been able yet, it was argued, to fully meet the societies' expectations.

Reference was made to the evolution of the American university which is believed to have great relevance to today's developing countries.

The introduction of extension in the university was

discussed in detail in Chapter V. The main argument for it hinges on three ideas:

1) That a university should make available extension education opportunities for a formal college education - or its equivalent - to young people and others who are unable to become regular full-time students;
2) That a university has an obligation to provide educational services to the wider community that supports it;
3) That it should provide opportunities for continuing education for those who have absorbed as much formal education as they desire, but who wish to continue learning.

It was argued that the university in a developing country has the responsibility of making the fund of knowledge its faculty have acquired known in the society and applying it so as to improve the living conditions. It must work hard at introducing the innovative function into the scene, providing a fresh point of view, and devising new technologies of dealing with the increasingly complex problems of developing countries.

CHAPTER VI

ORGANIZATION FOR PLANNED CULTURAL BORROWING

Background

The United Arab Republic's experience in planned cultural borrowing is unique. The country has committed itself, and a large portion of its resources, to a long-range program of cultural borrowing. The program is based on sending several thousand graduates of colleges and technical institutes to seek their advanced training and professional education abroad in the educational institutions of both Western and Eastern countries as well as some selected countries which do not belong to either bloc. The experience represents a part of an overall program of national development.

This unique experience is worth further study and follow-up by those interested in large scale cultural transfer and cultural diffusion. It carries great potentiality and great dangers too. It has the great advantages of pushing high the rate of national development and social change which the country started in 1953. On the other hand, the experience embodies a great danger. It is quite possible that the borrowed innovations and technologies from the West and those

from the East will prove to be incongruent with each other and with the culture of U.A.R. They may involve built-in values which preordain conflict. What seems to be most needed as this experiment proceeds is, then, to maximize its benefits and to minimize loss or friction.

The U.A.R.'s experience in multi-source cultural borrowing has a significant value for the human race. If successful it will prove for the whole world how Western and Eastern ideas and technologies can be useful for the welfare of a nation. If it fails it may reveal where the weaknesses are in cultural borrowing, which will be a good lesson for future world cooperation. For these reasons the experience is worth not only thorough follow-up, but also true and sincere support.

Cultural borrowing is a healthy phenomenon if it is adequately planned and implemented. It is a healthy phenomenon if it contributes to solidarity and a sense of nationhood. It is a healthy phenomenon if it helps reduce the world tensions and the gap between the "haves" and the "have nots". It is also a healthy phenomenon if it increases the areas of world cooperation and international understanding.

Planned cultural borrowing implies the presence of purposefulness that manifests itself by conscious, predetermined effort and commitment of resources to borrow new ideas and technologies from the advanced countries of the world.

The element of purposeiveness involved in planned

cultural borrowing must include responsibility for the effects not only in terms of improved material living conditions, but also for the total way of life of the people involved, for reintegration as well as defense against disintegration. To fulfill these objectives will require an institutionalization of the process of change. If innovation is to occur on the needed scale, at the needed pace, and with the needed regularity, without unwarranted sacrifice of either quality or stability, planning will be necessary.

Under a program of planned cultural borrowing, people of developing countries will exercise their own choice. They will have to select among borrowed innovations and invent new combinations of these innovations which can best fit the local needs and conditions. The assistance offered them by the more developed countries of the world will be most effective if it helps them to make their choices and build their peculiar institutions, given that such choices and institutions will be in the direction of strengthening freedom of action and world prosperity.

Also, the introduction of new ideas and technologies often requires introducing new values of social behavior which must be legitimated if the new technologies really are to be adopted. If the introduced technology can be adapted to the skill and interests of those directly concerned, if associated cultural changes are facilitated, and if the governments of developing countries supply resources and moral

support, the problem of technical diffusion becomes manageable.

Essentiality of Planned Cultural Borrowing

Planned cultural borrowing may be defended on the following grounds:

REDUCTION OF PROBABILITY OF INITIAL FAILURE

In any nation fear of novelty is a common thing, yet there always seem to be progressive individuals and communities in each nation. If the change task begins in such communities and with such individuals, the chances for success are greater than if the task begins with more conservative elements. Initial success is likely to lead to a chain reaction of success later on. Similarly, initial failure is likely to lead to a chain reaction of failures in the future.

PROVISION OF MATERIAL AND MORAL SUPPORT

New ideas and innovations may be divided, from the standpoint of the governments of developing countries, into two categories. The first category includes those which can be under the immediate control of the government. The diffusion of this kind of innovation normally calls for substantial investment which is beyond what a single individual or group can afford. It may also require the consent and approval of a legitimizing body, in this case the government itself. The second category includes innovations normally not under immediate control or regulation by the government

and involves those kinds of innovations which are typically communicated interpersonally. As such, they do not require any substantial investment or effort beyond the capacity of individual adopters. However, with systematic planning they may richly supplement and minimally complicate those directly initiated by government.

MINIMIZING FRUSTRATIONS

Some scholars argue that the introduction of technological innovations into underdeveloped countries changes nothing but the structure of aspiration. Because no efforts are made by recipient social structures to meet the rising level of want, the result is frustration. A fast-growing frustration may lead to many expressions of social unrest which, in most cases, do not allow a rational, well-balanced development and growth.

Lerner argues that:

> At the psychological level, an individual's level of satisfaction is at any moment a ratic between what he wants and what he gets (his achievements). Satisfaction equals achievement over aspiration. Imbalance, usually with the denominator outrunning the numerator, engenders frustration.[205].

Maslow's conception of human needs has great relevance to the problem of cultural borrowing of innovations.[206]. At

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205. Lerner, Daniel. "Toward a Communication Theory of Modernization." Communication Policies in Development Programs. L.W. Pye (ed.) Princeton: 1963.

206. Maslow, A.H. "A Theory of Human Motivation." The Self

the bottom of his conceptual hierarchy of needs there are such basic physiological or sensual needs as food, clothing, water and sex. Once these physiological needs are satisfied, the person seeks security and safety. After these are met, he seeks to belong - to become part of a group and feel accepted and loved. Then, he wants prestige, achievement, and status. And, finally, he seeks self-actualization - the feeling that he is making the best possible use of his own competencies.

Maslow's hierarchy of needs conceivably applies to human societies as well. Physiological needs, in Maslow's hierarchy, come before the safety needs, the love needs, the esteem needs, and the need for self-actualization. The appearance of one kind of needs usually rests on the prior satisfaction of another, more prepotent need. A person, a group of persons, or a society, who is lacking food, safety, love and esteem would most probably hunger for food more strongly than for anything else. The other needs become simply nonexistent or are pushed into the background. All capacities are put into the service of hunger-satisfaction. Any serious arousal of higher-order needs will probably lead to a more bitter dissatisfaction with the person's or nation's, existing conditions. Dissatisfaction normally leads to

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in Growth, Teaching and Learning. Don Hamachek (ed.). Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965. Pp. 246-268.

investing more of one's energy in the elimination of dissatisfaction, which is the case with most developing countries, or, in the absence of an adequate social organization to mobilize the existing resources, the person or nation will very likely experience a deep feeling of frustration.

There are several ways a person's, or a nation's, latent needs may be heightened. Exposure to higher standards and different ways of life is one way. Massive importation of new ideas and new products from wealthy countries into poorer ones is another way. Theoretically, there should be few problems with such exposure or massive importation. However, a real problem occurs whenever a society's own resources are incapable of fulfilling the aroused needs. What planned cultural borrowing can, and must, do is to regulate the processes of exposure and importation and synchronize them with a process of gradual satisfaction of needs as they appear.

PROTECTING THE SOCIETY AND THE INNOVATIVE ENTERPRISE

Effective innovative enterprise usually requires physical isolation, but intellectual connectedness to the larger society and its target systems. This isolation frees new projects from conformity restraints, aids more focused work on the innovation, and protects both innovating group and the target systems of the society, or the target society itself, from the consequences of failure. But, appropriate linkages are required as well, or the innovative group may not even be able to survive.

Organization for Planned Cultural Borrowing

Organization for planned cultural borrowing may be looked at as an "organization for realistic cosmopolitanization".[207] It is a kind of organizational supplement to receive progressionistic cues from alien sources. Change-oriented personnel, through this kind of organization, may present views of the more advanced societies, views which must not be too radical nor too advanced lest they engender frustrations.

The proposed organization for planned cultural borrowing would have as its major task the investigation of the nature of borrowed innovations and technologies. It must analyze their content and possible consequences, and then actively adapt them to the populace. This strategic approach to cultural borrowing emphasizes that borrowed innovations must be selected to fit the cultural needs and serve cultural goals in harmony with the cause of world peace and international understanding.

Given the political and administrative structures of the United Arab Republic's government, the proposed organization for planned cultural borrowing can best serve its objectives if it takes the form of a special council attached

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207. Burger, Henry G. Telesis: Facilitating Directed Cultural Change by Strategically Designing Chain Reactions. Ph.D. Dissertation, Columbia University, New York: 1967.

to the Presidency. From there it can derive the freedom and power of action needed for its progressive tasks and can maintain a favorable relationship with other organizations and agencies in both public and private sectors. This place in the government structure will give the organization's personnel access to persons responsible for political or economic decision-making relevant to the innovations.

As an innovative enterprise, the proposed organization for planned cultural borrowing requires autonomy, but intellectual connectedness to the larger society and its target systems. This autonomy has the advantage of freeing new projects from conformity restraints, aiding more focused work on the innovation, and protecting both innovating group and the target systems of the society from the consequences of failure. But, appropirate linkages are required as well, or the innovative group may not be able to survive.

Three aspects of society related to borrowing of innovations and technologies need to be handled effectively by the proposed organization. These are the social forms, the motor patterns, and economic reality.

By social forms is meant that the spread of an innovation requires among many other things a supporting social structure onto which it can be grafted. If the new structures and values required by the borrowed innovation can be integrated or associated with the already-existing structure and values in any given society, the innovation will have a

better chance of being accepted than if there is nothing to tie to.

The motor patterns of a community or a society are the tools and activities which characterize daily life. Innovations most often involve new material items and new customs whose fit is not in perfect harmony with the local ways. To the extent that new tools and techniques required by the innovation can be adapted to pre-existing ways of doing things, the likelihood of successful introduction of an innovation is maximized.

Economic reality as referred to in the literature[208]. is a relatively complex factor in terms of its influence on the acceptability of innovations. George Foster[209]. believes that the most receptive people to innovations are those who are neither at the top nor the bottom of the local socio-economic scale. His belief is, however, unsupported by research on the diffusion of innovations.

A more plausible conclusion is the possibility that the kind or "type" of innovation interacts with the "economic" factor to produce different results from one type of innovation to another and from one economic level to another.

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208. Foster, George M. Traditional Cultures: and the Impact of Technological Change. New York: Harper and Row, 1962. Pp. 146-150.

209. Ibid. P. 172.

The role of the proposed organization for planned cultural borrowing may be described as one of enhancing the effectiveness and rationality of cultural borrowing. This role is three-fold. It involves:

1) The examination and evaluation of borrowed innovations prior to their adoption.
2) Raising the likelihood that "good" innovations will be adopted.
3) Allocating available resources wisely among the several innovations.

In order to adequately perform its role, the proposed organization will have to deal with the following problems effectively:

STAFFING

One danger which lies behind the planning approach to cultural borrowing is that the most conservative elements in a developing country may get hold of the dymanic centers of the planning structures and control and restrict the free flow of the most desired innovations and technologies. It would not be too difficult for conservatism anywhere to find plausible rationale for preventing innovation if it is perceived as threatening to the status quo. On the other hand, there is the danger of the extreme liberals and cosmopolitans controlling the entire planning structure, allowing for a completely free diffusion of foreign innovations regardless

of their utility or desirability. These two possible dangers call for moderation in representation; that is, both factions, conservatives and liberals, have to be represented at all levels of the planning structures with the more moderately-tempered, forward-looking persons holding the key roles.

PLANNING

Planning is a purposive anticipatory process, geared toward minimization of uncertainty, and it is bound to fail and become ineffective if it deals only with decisions related to the present.

With general background knowledge and, ideally, a pre-study directed toward specific problems, planners of social change who engineer the processes of diffusing innovations should be able to predict in broad outline the probable consequences of any proposed action. Conversely, they should be able to explain the minimum preconditions for success in innovation, or to point out the unforeseen problems that will constitute barriers.

POOLING OF NEW IDEAS AND INNOVATIONS

It is vital for developing nations and the proposed organization for planned cultural borrowing to develop a large pool of new ideas and innovations. To achieve that goal, the proposed organization has to keep all possible channels of communication open to sources of new ideas and

innovations, local and international. Innovative persons and groups should find it easy to communicate their ideas to the proposed organization. The organization, in turn, should show receptivity and openness to new ideas regardless of the sources. The pooled innovations have to be categorized and classified in preparation for another step, that of screening and selection.

SELECTION

The central assumption behind planned cultural borrowing is that individual and social behavior are changeable, and that given stimuli in such forms as reward, advice, or examples of technology, will produce behavioral changes. For this reason, it is important for developing countries to consider more carefully the likely effects of borrowed innovations that appeal to them, and to be more selective in their choice of foreign influences to be admitted or rejected. "This process of selection itself, however, requires a certain level of sophistication and understanding of the scientific approach to decisions, which is lacking in many recipient countries".[210]

Two questions have to be answered before any statement concerning the operation of cultural borrowing can be made. First, what behavior patterns are considered desirable and

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210. International Aid. P. 177.

wanted by the borrowing society? Second, what are the innovations, or forces, that can bring such desired behavior about?

The proposed organization should act as a filtering mechanism to screen out those ideas or innovations which are economically unfeasible, technologically unripe, or otherwise impracticable, and those which have undesirable consequences that outweigh their value. For some kinds of innovations, the market may be an acceptable mechanism for selection, whereas for others, special arrangements are needed to evaluate available alternatives.

INVENTIVE RESEARCH

The proposed organization may be looked at as an agency of inventive research and, therefore, should be staffed by competent researchers from the areas of natural and social sciences. Research agencies of this kind, staffed solely by natural scientists and engineers, in the absence of professionals capable of an equally vigorous and intelligent attack on social problems, will have the effect of hastening a biased type of development that in the long run might prove worse than useless from the point of view of human well-being.

Attached to the proposed organization there should be established research centers for at least two purposes:
First - Adaptive Research to translate the borrowed technology by both putting it into the local language and selecting what

is relevant and adapting it to local conditions.

Second - Indigenous Research to foster the innovating spirit by building local research institutions and training personnel whose job it is to apply scientific knowledge to the practical problems of cultural borrowing and innovativeness.

DEMONSTRATING THE BENEFITS AND USEFULNESS OF BORROWED INNOVATIONS

Before they adopt a new practice or a technological innovation, people need clear-cut evidence that the benefits talked about are truly benefits. They need to see them to believe them. Demonstrating the superior utility and usefulness of the new practices and innovations over the already-known ones should be an integral part of the task assigned to the proposed apparatus or, for practical reasons, should be supervised by it.

LEGITIMATION OF BORROWED CULTURAL ELEMENTS

Every established social or technical element is supported by a relevant body of beliefs, attitudes, values, and authority. Innovations initially lack this kind of support which usually comes very slowly in the wake of their gradual acceptance.

It is believed that the end result sought by cultural borrowing is some kind of desired behavioral pattern. This

pattern must be made legitimate in some fashion by the borrowing society.

Legitimation in the context of cultural borrowing may be defined as the approval or sanctioning of a collective innovation by those who represent the social system in its modal norms and values and in the social power they possess.

Legitimation is important to cultural borrowing because it facilitates the diffusion of the behavioral change which should accompany the adoption of borrowed technologies and innovations. Legitimation takes place in different ways: by power, by custom, by fitting the desired innovation or the behavioral change into the values of the society or any of its existing institutions, by law, or by expert consent.

The proposed organization for planned cultural borrowing can perform the task of legitimation of innovations in the following ways:

1) By fitting the desired innovation into the values of the society or any of the existing institutions.
2) By developing expert consent and agreement as to the worth and desirability of the innovations.
3) By exercising legal authority on the basis of its position in the government structure.

TIMING

The particular instant at which an innovation appears in a change situation will have much to do with its

acceptance. A well-conceived innovation can fail simply because it was not initiated, or introduced, in the right time when the circumstances were most favorable. The success in diffusing a given innovation depends in large measure on the supporting circumstances that may exist. If the innovation appears at the point in time at which the supporting factors peak, the chances for adopting the innovation will be great. The problem of timing of introduction of innovations and new projects is of vital importance in development planning, including planning for cultural borrowing. It should always be an integral part of planning. It becomes a major responsibility on the part of the proposed organization for planned cultural borrowing, then, to watch for this peak period and prepare for it.

SEQUENCING

The introduction of an innovation into a society almost invariably implies and requires some necessary changes in the organizational and value structural aspects of the society. The process of change, therefore, must be staged in some meaningful orderly fashion in order that the introduced innovation becomes accepted.

ALLOCATION OF RESOURCES

Borrowed innovations and technologies, in order to be diffused, require varying amounts of investment in terms of

finances, natural resources, and human manpower. Sometimes, such innovations and technologies compete with each other if what is required by all of them is in excess of a person's or a nation's available resources. It is the task of the proposed organization to make sure that conflict among competing innovations is minimized by rationally allocating the society's resources among the different borrowed innovations and technologies.

FOLLOW-UP OF ADOPTED INNOVATIONS

Because innovations can be abandoned at any time after they have been adopted, the follow-up process becomes a crucial one in cultural borrowing. In order for individuals and groups to maintain their enthusiasm for a given innovation they need support and encouragement until the desired change becomes an established element in their lives. This problem should direct our attention to the necessity of following the newly-adopted innovations through to avoid building a kind of negative reaction in the people we are trying to influence. On the other hand, abandonment of other innovations may be encouraged or permitted if evaluation proves them counter productive or less effective than hoped.

Work Relationships

Most of the tasks of the staff of the proposed organization involve a process of choosing among alternative policies of actions concerning the future. This process consists of three basic steps. One is forming an image of what relevant aspects of the future might be. Second is forecasting probable differential effects of actions proposed by alternative policies. Third is making preference evaluations between these alternative consequences. Each of these steps involves, to varying degrees, an element of judgment based on scientific theories and personal judgment, which in turn may sometimes consist principally of intuition.

The proposed organization for planned cultural borrowing will combine a large number of different types of specialists and professionals. Each professional will have to contribute his bits of knowhow, but the actual efficiency of the whole apparatus will depend heavily on the teamwork of specialists who possess complementary knowledge and skills. The kinds of innovative tasks to be handled by the organization require both team spirit and team skills. Unfortunately, neither of these two requirements are currently present nor can they be developed in the short-run. This is because training in the professions encourages the tendency of developing a single-sided view of the problems encountered by people in the society or in the immediate community. This

single-sided view of societal problems enlarges the gap among members of different professions and complicates the communication among them.

The problem is further conplicated by the fact that work groups designed to induce change in their environment must possess certain traits and skills which cannot be found in work groups consisting of members representing different professions. Examples of such traits and skills include group support and mutual identification with peers, high-quality problem solving via increased communication among participants and fuller use of member resources, high involvement and commitment to group decisions, and increased energy devoted to the accomplishment of new, significant shared goals.

It is not possible to develop all such qualities in work groups consisting of different professionals in a short period of time. Nor can we anticipate that all members of work groups will display the desired qualities to the same degree. If this is true, other non-direct communication techniques among different professionals may be tried and relied upon until a work climate based on interpersonal openness and respect for others is developed.

THE DELPHI TECHNIQUE

The "Delphi Technique" is proposed as a communication technique among different professionals where direct

communication methods are impossible or difficult. It is based on two assumptions. First, the utilization of the combined expertise of several professionals and specialists is preferred to complete reliance on a single expert for the kinds of tasks to be dealt with by the proposed organization for planned cultural borrowing. Second, the traditional procedure for arriving at decisions, namely by a panel of experts through a round-table discussion of problems, is open to several criticisms. In particular, the outcome of the panel discussion is apt to be a compromise among different views, arrived at too often under the undue influence of certain psychological factors including the specious persuasion by the panel member with the greatest actual or assumed authority or even merely with the loudest voice, the unwillingness to abandon a publicly expressed opinion, and the bandwagon effect of majority opinion.

The "Delphi Technique" has been recently experimented with to overcome these difficulties. In its simplist form, it eliminates committee activity among the experts altogether and replaces it with a carefully designed program of sequential individual interrogatives (usually best conducted by questionnaire) interspersed with information input and opinion feedback.

Helmer reported that:

> Convergences of opinions has been observed in the majority of cases where the Delphi approach has been used. In a few of the cases where no

> convergence toward a relatively narrow interval of values took place, opinions began to polarize around two distinct values, so that two schools of thought seemed to emerge; this may have been an indication that opinions were based on different sets of data. In such cases, it is conceivable that a continuation through several more rounds of the anonymous debate by questionnaire, which the Delphi process represents, might eventually have tracked down and eliminated the basic cause of disagreement and thus led to a true consensus. But even if this does not happen, or if the process were terminated before it has a chance to happen, the Delphi technique would serve the purpose of crystallizing the reasoning process, leading to one or several positions on an issue and thus helping to clarify it, even in the absence of a group consensus.[211]

Setting goals and reaching decisions is largely a matter of preference judgments, which can be obtained through the Delphi method from a cross section of experts from relevant fields. Reliance upon the Delphi method, however, shouls not cause serious delay in the efforts to create an organizational climate characterized by inter-personal openness and a shift from "win-lose" defensiveness attitudes to a relationship based on "everyone can win". To achieve these goals the following tasks are recommended:

First - there should be an organizational diagnosis done periodically to discover any malfunctioning as early as possible. Such diagnosis must cover the organizational climate, organizational concepts, structure, policy, procedure, personnel, operations, and the environment.

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211. Helmer, Olaf. "The Delphi Technique and Educational Innovation." Inventing Education for the Future. Werner Z. Hirsh and colleagues. San Francisco: Chandler Publishing Co, 1967, p. 77.

Second - intervention in the organization's routine work when required should be done forcefully to avoid the occurrence of serious problems in the future.

Third - conducting creative reorganization research directed toward the development of new approaches and procedures based on sufficient knowledge of what currently exists.

Summary

Chapter VI provides a detailed description of the proposed organization for planned cultural borrowing for the United Arab Republic (Egypt).

In the first section, it was pointed out that cultural borrowing is a healthy phenomenon if it is adequately planned and implemented. The United Arab Republic has recently committed itself, and a large portion of its resources, to a long-range program of multi-source cultural borrowing by sending several thousand graduates of colleges and technical institutes to seek their advanced training and professional education abroad, in both the Western and Eastern hemispheres.

It was pointed out that the United Arab Republic's experience carries great potentialities and great dangers too. Most of these dangers can be avoided, or reduced, through a well-planned cultural borrowing.

Planned cultural borrowing was defended on the basis of four factors:

1) Reduction of probability of initial failure of novel ideas,
2) The provision of material and moral support for the diffusion of acceptable innovations and new practice,
3) Minimizing the frustrations which are likely to develop as a result of rising aspirations without adequate fulfillment of the human wants, and
4) Protecting the society and the innovative enterprise.

The role of the proposed organization for planned cultural borrowing involves:

1) The examination and evaluation of borrowed innovations prior to their adoption.
2) Raising the likelihood that "good" innovations will be adopted.
3) Allocating available resources wisely among the several innovations.

It was suggested that in order for the organization for planned cultural borrowing to perform its role, it has to deal effectively with such problems as staffing, planning, pooling of new ideas and innovations, selection, inventive research, demonstrating the benefits and usefulness of borrowed innovations, legitimation of borrowed cultural elements, timing, sequencing, allocation of resources, follow-up of adopted innovations, and developing good working relationships with other organizations.

It was assumed that effective communication may be

impossible among different groups of professionals and experts working for the organization for planned cultural borrowing, especially in the early days of its operation. To avoid this difficulty, the Delphi Technique was proposed as a communication technique where direct communication methods are impossible or difficult among different professional groups. The last section of Chapter VI provided a detailed description of the Delphi Technique and pointed out its usefulness especially in the elimination of the committee activity altogether where effective communication among professionals of different interests and backgrounds is not possible.

CHAPTER VII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

DEFINITIONS

Cultural borrowing is the process through which a people adopt ways of thinking or behaving of other people. It may, or may not, involve the transfer of material products from the latter to the former.

Development is a variegated process with social as well as economic characteristics which is measurable in both aggregate and individual terms.

PURPOSE OF THE STUDY

This study has had the purpose of seeking insight for answering, for the United Arab Republic as an example of contemporary developing nations, the major question of "how to facilitate a rational, diversified, and effective multi-source cultural borrowing by a developing country".

METHODOLOGY AND CONDUCT OF THE STUDY

This study was primarily analytical in nature. A search was conducted of the related literature in such fields as anthropology, communication, education, psychology, and sociology. Three criteria were established to determine whether or not a given literature was to be reviewed: relevance to the broad subject of national development and social change, significance to the analysis of cultural borrowing and cultural diffusion, and applicability of conclusions and theoretical formulations to developing countries' setting.

The next step was to synthesize research findings and theoretical formulations drawn from the reviewed literature to find out the extent of their congruence and assistance in understanding the problems involved in cultural borrowing. On the basis of the synthetic analysis of the literature, conclusions were drawn with respect to the problems, methods, and techniques of cultural borrowing.

A final step was the development of a model organizational strategy for effective cultural borrowing which is believed to suit the development needs of the United Arab Republic, and many developing countries.

Conclusions

Less developed countries are generally characterized by: (1) a relatively low income per capita and low level of living, and (2) comparatively traditional methods of production and social organization. National development efforts, therefore, may be viewed as aiming at a type of social change in which new ideas are introduced in a society in order to attain higher per capita incomes and levels of living and more modern production methods and social organization.

Many economists fail to stress the change in the social values as a necessary condition for national development, in addition to the various economic adjustments. Social values are central in any explanation of national development, but because they are difficult to measure they tend to be underemphasized by economists.

Three major elements appear to be necessary for a real, self-sustaining national development. These are material technology, social technology, and a will to develop. By material technology is generally meant the mechanical or physical aspect of know-how. Social technology covers a wide variety of activities including the social know-how of public administration, business management, the techniques of a free and responsible press, and many others. Beyond both material and social technology is the intangible will to develop. Motivation is an important thing and unless something is done

to change it, a static nation will not turn into a dynamic one.

Technology, and consequently technological borrowing and diffusion, are viewed in a number of ways, each of which suggests different theoretical and historical approaches. The simplist version views technology as involving only changes in artifacts. A more sophisticated approach adds to the physical objects, labor and managerial skills. A third approach views technology as a socio-technological phenomenon; that is, besides involving material and artifact improvements, technology is considered to incorporate a cultural, social, and psychological process as well. According to this view, any detail of change, if it is to be effective and if the ultimate repercussions are to be anticipated, must be related to the central values of the culture.[212.]

After local invention and discovery, cultural borrowing is perhaps the major force in national development. It logically follows that societies which afford their members ample contact with other societies may be expected to change more rapidly and to become more complex than societies whose members have little contact outside their local groups. Also, it may be assumed that the greater the range of new ideas and innovations to which people are exposed, the greater the probability that they will adopt new forms and new ways of

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212. The Transfer of Technology to Developing Countries. P. 6.

thinking and behaving.

In many developing countries, emphasis on change, progress, and economic development is one of the main tenets of their political and ideological orientations. At the same time, however, their structural and institutional capacity to absorb change may be disproportionately small compared to their aspirations for it. The relatively small capacity to absorb change is often manifest in a weak and rigid administration as well as in the inability of existing institutions to change in the degree and direction required by the borrowed technology.

The extent to which developing countries may borrow new ideas and technologies from the developed countries varies according to the recipient country's level of development and its manpower skill. The scope for improving the level of technology in developing countries by raising the skill level of manpower is substantial. Raising the skill level of a country's manpower may come through one or more of three basic ways: overseas training of workers from developing countries, establishment of educational and vocational exchange programs, and importing skilled manpower from other countries.

Most social scientists agree that only through education can an ultimate state of built-in progress be achieved by the presently developing countries. While technical assistance may help these countries to achieve built-in

progress, it can never be a substitute for it. True progress, based on human investment through education, must always be a domestic product, even though it can be assisted and stimulated by foreign forces.

Education is generally being veiwed as playing a decisive role in the historical continuity of culture, in maintaining man's heritage of knowledge, beliefs, customs, and skills. Cultural transmission is a fundamental expectation of educational institutions held by the general society.

Education's role in transmitting cultural heritage is often under increasing strain in many developing countries. One source of such strain is the process of vigorous social change which such countries are undergoing. With rapid social change, educational institutions will become less sure that what is right for this generation will be right for the next.

Developing countries which are introducing new technologies rapidly over a broad range of activities will normally need a rate of increase in high-level manpower which is many times greater than the rate of increase in the labor force. The educational system in such countries should be capable of producing both the quantity and quality of high-level manpower that development demands.

Manpower development in key fields is a lengthy process which requires the making of plans, taking of decisions, and investment of capital from two to six years before any large increase in trained manpower can be expected to appear.

Training of men for the purposes of national development ideally must precede any substantial commitment to large-scale development programs.

The production of innovators is probably what the developing countries need most. Unfortunately, no one can yet specify just what kind of curriculum in education at various levels is likely to produce innovators rather than conformists. Education abroad is believed to be a powerful factor contributing toward increased innovativeness. However, developing countries might well ask whether their students who study abroad are led to learn about the processes of change in the life of their countries or whether they are merely conforming to arbitrary standards of knowledge or professional training which is an exact copy of what is there in the more advanced countries. It is also necessary to find out whether those students view their education and professional training abroad as preparation for productive service or whether they use them as an indispensable down payment for a secure and comfortable job in the higher ranks of their countries' governments.

Together with an emphasis on technological development which was started in the United Arab Republic in 1954, the government realized the importance of developing individual skills and human resources. This line of action has stimulated an increased emphasis on education and manpower planning and on the process of disseminating modern

techniques. The diffusion of borrowed innovations has been conceived primarily as an educational process, though with little recognition of the necessity of establishing an organizational base and an institutional vehicle for fostering the acceptance of innovations and new technologies by those being exposed to them.

The United Arab Republic and few other developing countries attach great importance, politically and ideologically, to political non-alignment. As a way of demonstrating its belief in non-alignment, the U.A.R. has adopted a program of cultural borrowing from both Western and Eastern countries. This path which the U.A.R. has been following for a number of years is not trouble-free. The U.A.R., by diversifying the sources of cultural borrowing, has been once accused of playing the West and East against each other. On another occasion it has been described as being concerned with its self-interests. If the U.A.R. is really interested in world peace and the promotion of international understanding as it is interested in developing its capacities for development and modernization, it must not abandon the principle of a multi-source cultural borrowing, despite accusations even if it has, under the pressure of international conflicts, to temporarily receive a higher proportion of technical assistance from one block rather than the other.

The process of planned cultural borrowing which was practically started in 1958 by the U.A.R. is far from

complete. And, there is no indication that it will be followed through as suggested by this study. Consequently, the risks involved will tend to be magnified, while many of the benefits will be sacrificed.

The university in the United Arab Republic, and many other developing countries, is a public institution supported by public funds. As such, citizens who contribute to its support have the right to share in its fruits. In a sense, they want the immediately applicable by-products of the scholar's eternal search for truth. They want some service for their support of it. The immediate service function of a public university has to be, therefore, equally emphasized as the teaching and research functions. How this service can be best discharged in a developing country is a question that can best be answered within the context of each individual country. Emphasizing the service function does not mean, however, the transformation of the university into a "service station" to the disadvantage of the more traditional functions, teaching and research. On the contrary, in a rapidly changing world, teaching and research cannot be fully authentic except as they are continuously tested against contemporary reality.

Recommendations

1) Cultural borrowing is being veiwed as a healthy phenomenon only if it is adequately planned and implemented. It may prove to be of great benefit not only to borrowing countries, but also in reducing today's world tensions through increasing international understanding and cooperation. Efforts to borrow new ideas and technologies undertaken by developing countries ought to be encouraged and supported by the world's modern and highly industrialized countries. Caution should be directed, however, against the possible utilization of cultural borrowing as a vehicle for widening the already existing gap between the great powers of the world and, hence, heightening the cold war tensions.

2) If developing nations are to benefit from the in-flow of ideas, they must be provided with background information that will enable them to evaluate and understand the significance of messages from abroad.

3) Governments all over the world are now called upon to conduct their foreign relations in almost every field of human endeavor, political, economic, social, and cultural. Developing countries must give special attention to the machinery and process by which their foreign relations are handled. The traditional machinery and personnel of foreign

offices are clearly no longer sufficient to cope with the difficult and diverse tasks of cultural borrowing.

4) Engineers as well as economists seem to ignore, or at least underemphasize, one significant aspect of technological input-output; that is, the side effects which this or that of the borrowed technologies may have on the individuals, groups, or communities. Such side effects would include drastic changes in behavior, attitudes, or ways of life which may or may not be desired from the cultural viewpoint. This fact calls for stressing, in addition to the input-output dimensions, the adaptability of the imported technologies to the conditions and societal values of developing nations. This approach is different from the social engineering approach which tries to change the populace first as a necessary step for accepting and adopting a borrowed innovation.

5) In their strong drive to change and to borrow innovations, developing countries should avoid heightening the anxiety level of their publics to a point that later creates real psychological problems. They also must actively help individuals and groups to find roles to play as changes occur. They must be aware that non-material elements of cultures do not change as rapidly or as easily as material elements. Psychological and social chaos would ensue if certain basic values and ideals were to change as rapidly as technological

elements of a culture. Stability, security, and a steadying frame of reference are needed to deal with change that comes with borrowed innovations. What is needed is not to maintain archaic institutions, but rather to make those modifications in non-material elements needed to deal with change and at the same time identify and utilize the steadying, security-giving elements needed to enhance individual and group welfare.

6) Developing nations in their readiness to adopt innovations must avoid the tendency to "chuck the old and grab the new" or to take on an attitude of unreasoned skepticism regarding a given cultural heritage. They must also be prepared to manage the introduction of conflicting values which are likely to lead to hostility and threats to integrity.

7) Developing countries face a growing need for a new type of specialist with broad and intensive training in the more comprehensive field of development, who are able to bring the relevant knowledge and expertise not only of the natural sciences, but also of the social and behavioral sciences. There is a desperate need not only for the professional prepared to deal with his specialty, but also for "gifted generalists" whose education and experience include both depth and breadth. To meet the problems of development is as much a matter of developing a broad understanding and familiarity

with many problems as it is of thoroughly mastering a specific task. All this calls for an interdisciplinary approach which will very likely facilitate the diffusion of new ideas across disciplines and enhance a more fruitful interaction among those ideas. This is believed to be the fundamental function of the university, and in times of rapid change and the struggle for community development, the function must truly be performed as continuing education.

8) In the United Arab Republic, like many other countries, professional associations exert some effort to keep their members informed of what is new in their fields. However, these efforts are not enough. Professional associateions in collaboration with universities, therefore, must pool their efforts in continuing education, both for their alumni and for those preparing for entry into professional fields. Universities most often have the resources and organization to assist in this job.

9) Knowledge required for planning and implementing borrowed innovations will be facilitated by:

(1) Mechanisms for combining the experience and knowledge of many experts from within and from outside the developing countries.

(2) Key people with good and varied professional experience.

(3) Continuing research to measure the effects of the innovations, and to feed this information back to those who implement the innovations.

10) The traditional conception of education as largely a conservator of society through the transmission of culture overlooks the increasingly large role of the university as an inventor of knowledge and technology. Under conditions of rapid social change which many developing nations are now undergoing, it is believed that the best that universities can do is to educate for adaptability, a quality which is necessary for modern, forward-looking societies.

11) Resistance to the adoption of innovations is likely to be less:

(1) If they are perceived as reducing rather than increasing the present burdens.

(2) If they are in accord with the values and ideals which have long been acknowledged.

(3) If they offer the kind of new experience which interests potential adopters.

(4) If individuals and groups have joined in diagnostic efforts leading them to agree on their importance and utility.

(5) If proponents are able to empathize with opponents, to recognize valid objections, and to take steps

to relieve unnecessary fears.

(6) If it is recognized that they are likely to be misunderstood and misinterpreted, and if provision is made for feedback of perceptions and for clarification as needed.

(7) If potential adopters experience acceptance, support, trust, and confidence in their relations with one another.

(8) If they are known to be open to modification, revision, and reconsideration if experience indicates that changes would be desirable.

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