THE COMMUNICATION ECOLOGY
OF CONFLICT TRANSFORMATION AND SOCIAL CHANGE

DISSERTATION

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By

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* * * * *

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PUBLICATIONS

"Intergroup Communications." Today's Speech, Nov. 1960

"Debating in India." Speech Teacher, Fall, 1962.

**Leadership Development.** (Text and Handbooks), Kappa Alpha Psi, 1966.

**Technical Objectives and Plans.** Training Corporation of America, 1966.

"The Speech Therapist's Role in Poverty Communities."
*Catholic University Forum*, 1969.

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CHAPTER I

PURPOSE, PERSPECTIVE AND PROCEDURE

Introduction

A vast number of research efforts have been conducted to find ways of resolving human conflict, but intrapersonal, interpersonal and group conflict continue to compromise a significant portion of all human interaction. There is a need to continue the study of conflict situations and human behavior both because of the escalation of conflict into violence and because of the continued existence of conditions—such as the population explosion or the philosophical displacement resulting from modern technology—that are likely to increase the probabilities of conflict.

Various aspects of human behavior in conflict situations have been studied under the rubrics of culture, communication, group behavior or conflict. Although studies in one of these areas often include references to concepts derived from study in the other areas, the approach most frequently used is to consider communications, conflict, culture, and group behavior as separate entities. This confinement of study to separate areas results from our compartmentalized view of human behavior—often along disciplinary lines—and at the same time enhances the continuation of fragmented views of human behavior.
A major thesis of this study is that aspects of human behavior that have been investigated under the rubrics of culture, conflict, communications, or group behavior can be organized into one conceptual scheme, and that such a conceptual scheme can be used to (1) analyze human behavior more effectively than the fragmented approaches permit, and (2) plan for more effective human functioning in conflict situations.

A central question in the study is: How can the action of cultural groups, the energy of conflict, and the instrumental effects of communications be organized into systems which stimulate societal development?

Although the objectives of the study, social development and conflict handling, are related to social utilitarian purposes, the study will be conducted in a manner consistent with the standards of effective research in the development of general systems.

Bonner has dealt with the apparent dilemma between social utility purposes and standards of research. He suggests that although studies concerned with reduction of intergroup hostilities are often criticized as being based on social utility purposes, the goal is objective description rather than formulation of ethical premises or advocacy. He writes:

This criticism of social utility can be met by pointing out that our interest is not, however, in the advocacy of plans of action but in an objective description of the psychological nature of the resolution of intergroup tensions.
If people are engaged in activities to reduce hostilities or conflict, Williams observes, the social scientist has a "social raison d'être for scientific study directed toward testing the results of various means used in these attempts." ²

The present study does not advocate a plan of action, and it does not proceed on the basis of an ethical premise. It does seek to describe a conceptual scheme which explains human behavior in conflict situations, and it does analyze patterns of behavior to determine the relative effects of various theories used to achieve conflict resolution.

**Purposes**

This investigation is conducted in an effort to add to and organize knowledge about human behavior in conflict situations, to contribute to the development of a specific model, to identify a series of propositions for research, and to assist social planners in human behavioral management.

These purposes will be achieved by: (1) analyzing relevant literature, studies and experiences in the areas of culture, groups, communication and conflict, (2) developing a conceptual scheme which organizes relevant theories into one system, and (3) applying the conceptual scheme to cultural groups in conflict situations in order to understand patterns of human behavior.
More specifically, these purposes consist of:

1. **A review of the literature to determine the concepts and constructs that should be considered in developing a comprehensive, conceptual scheme, i.e., a general system.**--This review is not an attempt to develop a topology of factors considered in studies relating to communications, conflict, culture, groups, and natural resources. The specific focus of this review is on the range of concepts or constructs that scholars and researchers consider central and mandatory in the various fields. They will be used in defining the functions and characteristics of each of the components (communications, conflict, cultural groups, and natural resources) in the general system.

2. **Development and explanation of a conceptual scheme called the Communication Ecology.**--The core concepts, or observations about the functions and characteristics of human behavior, derived from the works of researchers and scholars, will be organized into a general system type of model. In this system, the components (conflict, cultural groups, communications and resources) will be considered as co-equal entities which have specialized functions and roles within the overall system. The system is developed in terms of the nucleus of the various fields rather than in terms of their boundaries.

3. **Application of the conceptual scheme to the analysis of conflict situations.**--In addition to organizing the information and concepts into a system, the conceptual scheme will provide a different perspective from which to analyze human behavior in conflict.
situations. In developing this perspective, particular attention will be given to patterns of behavior and to methods of increasing a group's options among various patterns.

Achieving the general and specific objectives of this study constitutes phase one of a continuing project. During phase one, the parameters of the conceptual scheme will be outlined and evaluated. This will be followed by efforts which seek to operationalize the system and by projects which test the usefulness of the conceptual scheme in both experimental and actual situations. Phase one will be accomplished as part of the work required for this dissertation; the other activities will be accomplished as part of the writer's continuing interest in research.

Need for Study

There are three principal reasons for this study: (1) research in the areas of cultural groups, conflict, and communications indicates that each of the three is important to the successful functioning of society, and that the three areas are inherently interrelated; (2) although relationships between the areas or components have been noted, there have been few attempts to analyze the relationships as part of one system or to produce a synthesis of the findings; and (3) conflict as a significant and pervasive condition warrants the specific attention given to it in this research. Each of these three reasons will be considered in detail in Chapter II,
Existing Theoretical Frames, which is primarily a literature review. Therefore, only a brief statement of the need for study is required here.

The interrelationships between the components can be indicated by core concepts or constructs (conclusions supported by researchers and scholars in a variety of disciplines) relating to communications, cultural groups and conflict. Simple statement of three of the core concepts that will be elaborated on later can serve at this point to illustrate the interlocking nature of relationships between the components. (1) The cultural milieu has a profound influence on the group's communications. (2) Different uses of communications by cultural groups often result in conflict between groups. (3) Differences in ways of communicating and of handling conflict can result in (or result from) cultural differences within and among groups.

There are at least two ways of defining this type of interrelatedness. One could attempt to define boundaries for the areas of human behavior represented by the terms and/or one could attempt to identify the primary processes that are central to a given area, without ruling on secondary processes in which considerable overlapping of function and purpose may occur. The latter course is followed in this study.

Although there is a large reservoir of information, experimental findings, case histories, and books on communication, conflict
and cultural groups, the data are not available in the most usable form. Matson's and Montagu's observations about the field of communications can be applied equally well to considerations of conflict or cultural groups.

In all this wealth of perspective on communication, curiously enough, there is a remarkable poverty of synthesis of even comparative discussion. The jealous conventions of academic specialism, which tend to convert new pathways into exclusive provinces, operate . . . with . . . constricting effect.³

Bonner views the need for synthesis and theory-building from the viewpoint of their effect on social conditions. He writes:

Group dynamics has greatly increased our knowledge and understanding of intergroup antagonisms, and "action research" based on group-dynamic principles has offered us better tools for reducing them than exhortations and good will. While these developments are positive contributions, they do not yet form a sufficient body of reliable skills to enable us either to control or eliminate with certainty the conflicts that plague every community.⁴

Seeley, in his analysis of personality, society and human development noted a problem that may characterize research in the areas of culture, groups, conflict and communications. He contends that these concepts are logically related, rather than casually, since they are different ways of viewing or stating the same things. The solution, in his opinion, is one of developing a common theory based on a combination of research and common practice.

If there is to be any advance of any magnitude, there has to be a common theory. A common theory will come only . . . out of joint or common practice--not from another interdisciplinary research. Theories generally develop best out of problems . . . problems faced, problems that follow upon commitment and accompany responsibility.⁵
The study of conflict provides the "people problem" that Seeley sees as necessary for the development of a common theory. It also leads to an approach suggested by Blake, Shepard and Mouton in their study of labor-management conflict. They recommend a shift from legislative controls in the labor-management relationship to approaches based in behavioral science theory about intergroup relations. They write that the behavioral science orientation is based on:

recognizing union and management disputes as symptoms of pathology in the problem-solving area, diagnosing the causes that produce the symptoms, and treating the causes directly, rather than dealing with symptoms only. The steps are straightforward. On the one hand, development of a comprehensive theory concerning the circumstances of intergroup conflict and cooperation is required. . . . On the other hand is the development of methods which permit such theory to be immediately useful . . . as a basis for cutting through their conflicts and coming to an awareness of the conditions that promote cooperation. The final step is that of guiding the transformation from theory . . . to concrete steps of problem-solving collaboration. 6

There are a number of different ways of developing the comprehensive theory and the skills needed to transform theory into practice. Marksberry recommends that "many ideas treated separately may be better understood and integrated if considered from a common point of view." In her approach to creativity, she emphasizes mediational processes as the integrative unit, and stresses adaptability to change, rather than performance in a relatively stable environment, as the key standard for evaluation. 7
Ruesch, in his concern for developing a method that would provide a common point of view from which separate ideas and concepts could be integrated, selected communication theory as the means for integration:

The very fact that communication theory does not deal with identified people or the idiosyncratic interpretation of words makes it admirably suitable as a general system theory. In order to transcend the different scientific universes, biologists, physiologists and psychologists have followed the lead of the cyberneticists and have attempted to view people and animals as being made up of systems of reception, transmission, evaluation and storage. In modern vernacular, perception has become input; action is viewed as output and judgment is transformed into decision-making.

While communication theory and systems built upon communication models have a clear relevancy and can be of service, there are severe limitations to what can be expected of them. The organization of data is not the same as the prediction of events. A communication system can be used to organize information and make it more understandable, but the system requires an operational model that has been proven in practical or sometimes simulated situations before it has predictive value. Nagel states both a reason for the development of systems and a major limitation of social science:

In no area of social inquiry has a body of general law been established comparable with outstanding theories in the natural sciences in scope of explanatory power or in capacity to yield precise and reliable predications.

An effort will be made in this study to meet some of the theoretical and applied needs just discussed. The study will provide a synthesis of the data; it will organize information around a
"people problem," and it will provide a system model based on communication theory. It will not be possible in this study, however, to meet the requirement outlined by Nagel for yielding precise and reliable predictions. Subsequent work will be required to transform the conceptual scheme into an operational model that can be tested for its predictive ability.

The organizing factor.—In the review of the literature, the development of the conceptual scheme, and the application of the scheme to human problems, the organizing factor is conflict. The fields of communication, culture and groups can be reduced to manageable size by focusing on, but not restricting the study to information, theories, and concepts that relate to the handling of conflict.

Conflict was selected because it is an important and pervasive part of human life at all levels (individual, group, institution, and society) of man's functioning, and because the incidence and intensity of conflict are increasing. A comparison of 1958 news reports with those of 1968 shows both a consistency and an increase in conflict situations. Today's newspapers carry scores of reports about escalated conflicts between students and university administrators; between persons in poverty and established institutions; between racial and ethnic groups; between hippies and police; and among teachers, parents, boards of education, and tax payers.

Many factors account for the presence and continuing existence of conflict. "Differences of race and culture that traditionally
divided mankind into mutually suspicious groups have become not less but more susceptible to explosion during the past generation in which communication has brought together but has failed to unite the peoples of the world," Oliver observes.  

Many conflict-producing forces exist which are likely to cause existing conflicts to become even more potentially dangerous. Included among these forces are: (1) the population explosion and increased population density, (2) philosophical displacement of man caused by technological advances, (3) the rapidity and severity of changes, and (4) dissatisfaction with the status quo.

With increasing frequency, hostilities are escalated beyond the persuasive phase by long existing or newly formed alliances to a form of verbal or physical attack. Typical examples include the premediated shelling of civil rights headquarters by off-duty policemen in New Jersey; a statement by a coalition of minority group leaders in the nation's capital justifying the slaying of a policeman and calling on private citizens to arm themselves in defense against the city's police force; or, on a less violent level, the frequent outbursts in civic meetings across the country.

Riots are often directed against bodies once considered sacred. This open willingness to confront "the establishment" is indicative of the readiness of groups to engage in violent forms of conflict; in many ways, these times can be likened to prerevolutionary periods throughout history. Increasingly, many cultural groups
are giving expression to the belief that we are living today under
a form of political feudalism, perpetuated by a legal structure
based on property rights, which does not afford each participant in
society an opportunity to be heard and listened to as if he had
influence.

Since riots, and the response to them, which considers them
as criminal behavior, have both proved to be ineffective, there is
a need to develop forms of communication that can accomplish construc-
tive or developmental purposes. "We ought to be thinking about how
to stop the riots of 1972, because I doubt if there is much of any-
thing we can do about the riots of 1968; they are pretty much already
built in," the President's Advisory Committee on Civil Disorders was
told in 1967.11

A means must be developed for efficiently resolving conflict.
The cycle of conflict, crisis and compromise, which results as groups
make their demands known and apply pressure to achieve them is
becoming too costly, inefficient and dangerous.

Effective communication has been considered a key to con-
flict resolution, but efforts to achieve resolution by means of
communicative techniques frequently have not been effective. This
study holds that one of the reasons for failure to use communications
effectively is that communications and conflict have been considered
as single or separate entities.
It is the author's contention that communication, one of the tools used in attempts at conflict transformation, can serve the instrumental function of redirecting conflict-produced energy into constructive uses by means of more effective behavioral management, thereby avoiding either stalemated conflict or ultimate violence.

Methods Used

The methods used in this study are those that are generally applied to the development of general systems and in making a critical analysis. The overall method of the study consists of three steps: (1) an analytical review of the works of scholars and researchers to determine the nucleus of the general system, (2) a synthesis of the findings into a general system, the Communication Ecology, which organizes the information and leads to different or new perspectives on cultural groups in conflict situations, and (3) the applications of the perspectives that result from the system view of the situations to specific theories and approaches to conflict handling.

Analytical review.—The analytical review of the literature covers a wide range of disciplines and research. Literature has been reviewed in disciplines such as sociology, psychology, communications, psychiatry, cybernetics, systems engineering, synectics, learning theory, anthropology, business and administration, and urban planning. Partial listing of the scholars and researchers whose works have been
considered includes Freud, Ruesch, Sullivan, Simmel, Watson, Hearn, Cartwright, Kohler, Boulding, Kroeber, Kluckhohn, Cose, Bernays, Hovland, Gordon, Duncan, Rogers, Insko, Brembeck, Zelko, Blake and others.

A wide range of disciplines and researchers is necessary for the purposes of the study. One of the requirements for a general system is that it should include and be applicable to a wide variety of different processes and situations. The wide range of disciplines provides the required informational input from a wide variety of situations, processes and theories. In addition "area of coverage" requirements, the components, activities, events and processes that are incorporated within the system should be validated. In this study, validation of the system's parts and functions is based on the concepts used by scholars and researchers in their works and theories. The review of the literature was made to determine if the researcher's concepts were based on reasonableness and raw data and theory. If a concept met these three conditions, it was considered to be available for use when one additional criterion was applied. The additional criterion is that the concept should have support from researchers in two or more disciplines. For example, researchers in communications, sociology and cybernetics accept the concept that symbolic communication serves instrumental functions in human relationships. The instrumental function of communication, therefore, can be considered a core concept and a function included within the Communication Ecology.
During the design phase, validation of a general system depends essentially upon validation of the data used in the organization of the system. In this study, the standard for validation is agreement between two or more scholars and researchers in different disciplines on the existence of some components or functions which can be verified by the theories, findings or raw data available.

The study can be classified as a metatheoretical investigation into the question of conflict handling between cultural groups in conflict situations. Gross explains the metatheoretical approach by stating:

To provide room for new ideas, sociology needs a metatheoretical framework referable to the largest possible universe of rational and intuitive knowledge. The central premise of the framework, called "neodialnetical" implies that all words, either as opposites, complements or synthesizing terms, must have directional sense before their use can be understood . . . . It recognizes that careful deliberations proceed from the widest range of perspectives rather than from any narrow base and that colligation of perspective is essential to the advancement of learning.\(^{12}\)

A metatheoretical analysis is suited to the purposes of developing a general system. A system is concerned with the organization of raw data at the level of concepts and theory. Relationships between raw data and systems can be understood from the following progression. The analysis of raw data results in concepts and processes; the analysis of concepts and processes results in theories; and the analysis of theories results in systems. The level of abstraction at which a system operates is usually based on theories and concepts, not on raw data.
Schermerhorn supports the use of metatheoretical and system analysis as the base for increasing knowledge about the ways societies cope with problems of integration and conflict. In his approach, societal relations are viewed in the broadest and most generic sense rather than as separate or unrelated fields of inquiry. His scheme (system) is a way of conceptualizing independent, intervening and dependent variables in terms of congruent and incongruent orientation toward centripetal and centrifugal directional movement between subordinate and superordinate groups on a polar integration-conflict continuum.13

While the Gross use of metatheoretical and neodialectical methods emphasizes the level of abstraction at which a system operates, the Schermerhorn scheme stresses the dynamic action character of the system concept. Both of these characteristics of the analytical step will be applied to determining the functions, components, events and activities of the Communication Ecology that is proposed.

Synthesis.—After analyzing the works of researchers and scholars to arrive at a list of the various functions, components, events, etc., that should be accounted for and/or included in a general system pertaining to cultural groups in conflict, the information will be synthesized and organized into a conceptual scheme.

The synthesis step follows patterns used by (1) Lippitt, Watson, and Westley,14 (2) the Berkeley researchers,15 and (3) Hills.16 Essentially, the pattern is to read a body of literature from a wide variety of fields in which each researcher tries to explain the subject
under investigation, to derive common core processes from the literature, to translate these core concepts into one of several types of system models, and then to apply the model to the examination of situations for which it was designed.

The synthesis step in the methods used in this study follows this specific pattern: The literature review is conducted to evaluate the relationship of a given concept or process to the raw data on which it is based. If this relation is valid and/or statistically supportable, the concept is included on a list. If the concept is found in the works or theories of two or more scholars or researchers in different disciplines, it is included within the system as a core concept or functioning part. The synthesis of such concepts into an organized pattern leads to an operational definition of the system, operational in the descriptive rather than the experimental sense of the term.

The synthesis, as indicated above, occurs at the theoretical level of abstraction. The theories in the synthesis are treated as if they represent generic features of the system, i.e., they define the attributes that characterize the components, functions, events and relationships of the system. Theories relating to specific levels of the system (individual, group, institutions, and society) are considered as class action for purposes of the study.

The synthesis step is primarily a means of organizing knowledge and of identifying points at which additional knowledge is needed. It is not a means of theory building although it will
result in hypotheses for testing. One of the reasons why a system is more a means of organizing knowledge than of theory building is that it is principally a way of describing and locating phenomena rather than a method of explaining causes.17

The main body of the attempted synthesis is contained in Chapter III, The Communication Ecology. There the review of the literature from Chapter II and the analyses of theories are converted from separate observations into an organized view of the data.

Application.--Before a general system can make a direct contribution to the development of theory, it must be converted into operational statements, in the behavioral and experimental senses of the terms. The "if-then" statements of the system result from the application of the system to problem and testing situations. Step three, application, initiates the bridge between the synthesized model of the system and the operation definition and use of the system.

Chapter IV, Implications and Applications of the Communication Ecology, is the major part of the study in which application of the system is considered and used. One of the functions of the synthesis of the interpretations is to develop a different, if not new, perspective on cultural groups in conflict situations. This different perspective, the Communication Ecology, can result in different perceptions about ways of dealing with conflict.

Using the perception gained from the system view of the situation, the author, in Chapter IV, will: (1) review and criticize
several theories of conflict handling, (2) analyze important considerations of conflict handling that result from the perspective of the system, and (3) list several important hypotheses that can provide research direction.

**Perspective.**—There are several factors which influence the methods by which the study is conducted. The following are a few of the assumptions on which the study proceeds.

Communication, cultural groups and conflict are considered as permanent features of society; individually or collectively, each of these forces can be used for creative or destructive purposes. The focus throughout the study is on people and their ways of dealing with symbols and not upon the technology (equipment) of communication.

Interactions within the system context are viewed as being holistic, a necessary condition for arriving at and using a conceptual scheme which deals with broad areas of interest such as communication, conflict, cultural groups and natural resources.

Human relations are holistic, not additive. The forces at work in group relations are influenced and modified by personal, cultural and collective trends within the groups and between them. The properties of groups are transferred to intergroup contacts, where they are integrated, modified or rejected variously according to how effectively they promote intergroup conflict or harmony.  

A study that is as comprehensive as the one being conducted and which uses critical methods of analysis, synthesis and application is subject to criticism on several counts.
The level of abstraction involved may not be specific to a given issue, problem or theory, and, therefore, may subject the study to the criticism that intuition rather than scientific reasoning has been used, that tautological answers are given or that specific directions are not clear. While these limitations are almost inherent in studies at the system level of abstraction, efforts will be made to guard against them. For example, the core concepts and system functioning will be documented by specifics. Although the system approach is not specific, it has an offsetting advantage in that it organizes a group or class of specifics into a more meaningful and comprehensive picture.

The study is comprehensive but not exhaustive; therefore, it is subject to the challenge that some particular study or finding not included should have been considered. The theories included represent classes of theories; no attempt will be made to list the various theories within one class. An attempt will be made to deal with theories that represent contrasting viewpoints. If a significant viewpoint is not accounted for in the system, its absence represents a time rather than a conceptual problem of the writer.

Because a variety of disciplines and works of many researchers within particular disciplines are considered in the study, there is difficulty in insuring the integrity of the terms as used by the researchers and in the system. Insofar as terms may represent different thought processes, the difficulty of insuring the same meaning for terms used probably introduces misalignment into the system.
The study deals with this problem in two ways. (1) When a term is introduced as part of a discipline, it is defined in terms used by researchers in that discipline. (2) When a term has special meaning within the system, this special meaning is noted.

In spite of its limitations, the author feels that it is desirable to develop and use a system approach to the problem under investigation in order to profit from advantages such as organization of information, identification of theories by system location, and coordination of research effort.

Summary

The central focus of this study is on cultural groups in conflict situations. The methods of analysis, synthesis and application of theories for conflict handling are applied in the development and use of a conceptual scheme, the Communication Ecology. This scheme, in turn, will be used to review and add to knowledge about the behavior of groups in conflict situations.
CHAPTER I FOOTNOTES


4Bonner, 152.


17 Hearn, 22

18 Bonner, 64
CHAPTER II

EXISTING THEORETICAL FRAMES

A major purpose of this study is the development of a conceptual scheme, a general system, which will be helpful in understanding and analyzing the dynamics of cultural group interaction during conflict situations.

The general system is composed of four major subsystems or components. They are: (1) conflict, (2) communications, (3) cultural groups, and (4) resources. Findings and observations about three of these subsystems will be collected and analyzed in this chapter.

The various observations made by scholars and researchers about communication, conflict and cultural groups will be considered as frames, or bits of information, that contribute to a system view of the conflict situation. These frames will be incorporated first into core concepts and then into a general system. The core concepts are constructs that are considered to be valid in two or more disciplines. The general system developed through this process is called the Communication Ecology.

Purpose of Chapter

The behavior of cultural groups in conflict situations is the central and organizing concept of the study. Conflict has been the subject of investigation and theorizing in a wide variety of disciplines. In order to get a comprehensive perspective of the
problem of conflict, it is necessary to examine findings and observations from sharply different fields such as decision theory and philosophy.

In addition to providing a focus on the problem and surveying a wide variety of disciplines, this chapter is also intended to:

1. Analyze the findings and observations in the stated areas of concern.

2. Determine and extract from these interpretations and observations those factors that should be included and/or accounted for in a general system that is concerned with cultural groups in conflict situations.

3. Provide the data base for the Communication Ecology and its subsequent applications.

Organizational Plan for the Chapter

The principal components (communication, cultural groups, and conflict) will be analyzed separately from a cross-disciplinary point of view. These areas or subsystems will be analyzed in this manner:

1. The range of human behavior that is generally included within the concept will be defined. Information in this category is related to the role of each component within the system as well as to the components' inter-relationships with each other within the system.
2. The functions and characteristics of each component will be analyzed to distinguish between specialized and cooperative functions. The specialized functions are those for which the subsystem has primary, but not exclusive, responsibility within the system. Cooperative functions, on the other hand, are those carried out jointly by the various components as properties of the general system.

3. A brief analysis will be made of several theories relating to the components. This consideration adds to the development of the general system by providing both a level of abstraction and the theories needed for constructing a general system. The general system must be conceptually manageable and sufficiently flexible to be useful in understanding different types of conflict situations.

The three phases of the analysis, therefore, are: range, functions (elements), and theories. Each of these phases provides information that is needed for the development of the general system and for determining its applicability to conflict situations.

**Conflict**

In general, theories about social conflict can be divided into two groups, general theories (such as Boulding's\(^1\)), and specific theories (such as Schelling's\(^2\)). In addition to consideration in general and specific theories, conflict has been
studied in relation to tension, fear appeals, motivation, social organization, group formation, etc.

Definitions

One of the ways to define a concept is to examine the definitions that have been ascribed to the concept by scholars and researchers. The following definitions give some indication of the range of view included with respect to the concept of conflict.

Simmel offers the broadest definition of conflict when he states:

The sociological significance of conflict (Kampf) has in principle never been disputed. Conflict is admitted to cause or modify interest groups, unifications, organizations. ... If every interaction among men is a sociation, conflict, after all one of the most vivid interactions... cannot possibly be carried on by one individual alone. ... Conflict is thus designed to resolve divergent dualisms; it is a way of achieving some kind of unity, even if it be through the annihilation of one of the conflict parties.3

In contrast to Simmel who viewed conflict as a form of sociation and interaction, Coser is more specific in his view that conflict represents a struggle between opponents. He states that conflict is:

A struggle over values and claims to scarce status, power, and resources in which the aims of the opponents are to neutralize, injure or eliminate their rivals.4
Both Coser and Cooley recognize the potential destructive-ness that can come from conflict; however, they feel that conflict also has certain positive values and functions. Cooley states that:

Conflict, of some sort, is the life of society, and progress emerges from a struggle in which an individual, class or institution seeks to realize its own idea of good.\(^5\)

The opposing nature of the parties in conflict receives attention in Stagner's definition of conflict:

A situation in which two or more human beings desire goals which they perceive as being attainable by one or the other but not both . . . . There must be at least two parties; each party is mobilizing energy to obtain a goal, a desired object or situation; and each party perceives the other as a barrier or threat to the attainment of his goal.\(^6\)

The barrier may or may not be real, but according to Stagner, "perception determines reality." The actions of the parties will be based on how they see the situation; therefore he recommends that "the resolution of conflicts requires a thoughtful consideration of how the opponent perceives the goal of power and whether we are really communicating about the key issues as he sees them."\(^7\)

Bateson and Sorokin in their early work conceived of conflict as an exchange of oppositions; however, the essential feature of conflict in Sorokin's work on revolution was that he considered conflict a process.
He described conflict as a process of internal disturbances which begins with a breakdown of a "crystallized system of relationships" and moves on to outbursts of "confusion, conflict and overt violence."  

Bernard elaborates on Weber's thesis that conflict is a social relationship in which action is oriented to carrying out a group's will against the resistance of other groups. She suggests that conflict is a selecting and ordering function in any community which arises from incompatible differences when the existence of one group poses a threat to the existence of another.  

Boulding adds another dimension when he suggests that awareness and occupancy of space are essential features of conflict. His view of conflict includes these concepts:  

Conflict is a situation of competition in which the parties are aware of the incompatibility of potential future positions and in which each party wishes to occupy a position that is incompatible with the wishes of the other.  

Nations compete for territory and for spheres of influence. . . . In industrial relations, there is a constant source of conflict in the encroachment of one side (usually labor) on fields of decision making that have previously been the prerogative of the other (management). A frequent source of racial or group conflict is the encroachment of one group on jobs, housing or privileges that were previously reserved for another. In all these cases, we have some concept of a space or field within which the conflict takes place.  

Four essential features of conflict can be determined from the frames discussed so far: (1) Conflict involves two
or more parties. (2) It is related to opposing interests, in terms of values, power, space, or goals. (3) The interests can be incompatible on a real or perceived basis. (4) The effects of the conflict can be helpful or destructive.

These frames, or definitions, however, do not cover the broad range of factors that are included in all the studies and investigations of conflict. To develop a more comprehensive view of conflict, it is necessary to look beyond simple definitions.

Elements of Conflict

Another method of ascertaining the range of human activities that can be categorized within the concept of conflict is to examine the various elements or components of conflict as set forth in studies of the conflict situation. They can be classified as parties, causes, types, interactions, methods of handling, effects and objectives or processes.

Parties.--According to the theories discussed above, conflict always involves two or more parties. The parties to conflict can be competing systems within an individual, within a group or within two or more groups. Boulding defines party as a "behavioral unit, that is, some aggregate or organization that is capable of assuming a number of different positions while retaining a common identity or boundary."¹² A behavioral unit becomes a party when it becomes involved in conflict with another behavioral unit.¹³ A party to conflict cannot exist in the singular--there must be at least two parties.
In decision theory, the parties are viewed in terms of their roles and the rules they should follow in conflict situations. Decision theorists hold that one or more players makes a choice between a specified number of alternatives under varying conditions of information and rules in order to secure payoffs. Game theory also distinguishes between the parties to a conflict and by-standers by the observation that bona fide players (parties) are those who (a) make choices, and (b) receive payoffs.\textsuperscript{14}

Studies in arbitration add a third party to the parties, the negotiator. The role of the negotiator or arbitrator is to act as a neutral party in an effort to assist the conflicting parties in resolving the conflict.

Simmel also notes that third parties can become part of a conflict, by taking sides with one of the original parties. He notes:

\begin{quote}
There is a motive of the easy reciprocal stimulation of hostility. Even within a group which feuds with another, all kinds of latent or half-forgotten hostilities of its members against those of the other group come to the fore. In this way, war between two groups usually evokes in a third group much ill will and resentment against one of the two.\textsuperscript{13}
\end{quote}

Many groups may be involved in any particular conflict within a society: (1) there are two or more groups who are in conflict, i.e., making moves and expecting payoffs; (2) there is one or more group which can serve as an appeal group, i.e., arbitrators or potential side-takers; and (3) there are several
groups who may have no immediate concern with the conflict. The concept of parties to a conflict, then, includes more than just the participants.

Causes.--The essential characteristics of the causes of conflict were stated in the definitions provided earlier. The characteristics are asynchronistic relationships that derive from the desire to obtain some objective that is or may be desired by another group or system. These asynchronistic, opposing relationships may be due to a vast number of specific causes: space boundaries, values, goals, resources, status, or system failures. The relationships may be placed under stress due to endogenous or exogenous factors, and they may be directed toward the destruction of one system and/or the creation of another.

The causes of conflict exist at all levels of human behavior. Psychiatry, for example, is concerned with conflict between the internal systems or beliefs of one individual. Intergroup relations studies focus upon the causes of conflict within and among groups. Urban planning is concerned with conflict between institutions. Philosophy, on the other hand, is concerned with causes at the cultural level.

While specific causes or issues will give rise to specific conflicts, the literature suggests that conflict situations have in common the feature of asynchronistic, opposing relationships that are relevant to some common objective or object; for example, both groups
want to control a given land resource (common object); they both
feel that the other is seeking control (opposing); and each thinks
that it is impossible or difficult to secure agreement (asynchronistic)
on who should control the land.

**Types.**—In addition to parties and causes, researchers often
investigate conflict in terms of the **type of conflict involved.**
The types may be classed in terms of: fundamentals, defenses, treat-
ment patterns, solution, level, purposes and systems.

Sullivan, Fromm, Frankle, and others have written about
a type of conflict that is structurally related to human behavior.
They use the concepts of positive strivings and defensiveness to
account for the opposing tendencies of man to associate and with-
draw and to have internal agreement or disagreement between affective
and cognitive systems.

Guntrip viewed structural conflict as man's need to master
chronic infantile life styles in order to become independent, and
suggested that fear of weakness rather than guilt is a basic cause
for resistance. The concept is that both of these actions (depend-
ency and independency) are constantly present and working for
behavioral control. The group dynamics concept of people being
drawn to join groups and, at the same time, resisting group controls
is another way of expressing the dependency-independency conflict.
Bion uses the concept of a structural or fundamental conflict in his discussion of groups and individuals:

All groups stimulate and at the same time frustrate the individuals composing them; for the individual is impelled to seek the satisfaction of his needs in his group and is at the same time inhibited in this aim by the primitive fears that the group arouses. 21

Conflict growing from the simultaneous need to associate with and to withdraw from others has been used in Lewin's field theory and Festinger's cognitive dissonance theory to explain how choices are made and alternatives are selected. 22,23 This type of conflict can lead both to the formation and to disintegration of groups.

Frankle uses conflict in his existential dynamics as a necessary means for defining meaning. In logotherapy, the analyst confronts a patient with meaning and purpose and a challenge to fulfill them. This use of conflict is based on the existence of fundamental conflicts; it seeks to create or maintain conflict at an optimum level. The lack of tension or conflict is viewed as being as dangerous to mental health as is too much conflict. 24

In contrast to the fundamental and structural type of conflict, Blake, Shepard and Mouton in their discussions of inter-group conflict in industry describe three types of conflict situations: (1) Conflict is inevitable and agreement is impossible; this is a win-lose power struggle in which a third party judgment or fate will decide the issues. (2) Conflict is not inevitable, yet agreement is not possible; this condition usually results in
withdrawal, isolation, or indifference. (3) Although there is conflict, agreement is possible; this condition may result in a compromise and peaceful coexistence, depending upon whether the stakes are high or low.\textsuperscript{25}

When viewed in terms of normative regulatory mechanisms, conflict-handling methods have been classified into two types, normal and pathological.\textsuperscript{26} If the parties are responding to real issues (actual or perceived) in ways that allow for change and with resources that are adequate to the situation, the methods are classified as normal. When this condition does not exist, the methods are classed as pathological. Pathological forms of conflict are considered to be more severe than normal forms and to require extensive treatments to alter.

Three important observations for the development of a system can be based on considerations of the types of conflict just outlined: (1) Some types of conflict are fundamental to the behavior of humans; conflict handling within the system is an essential requirement. (2) Conflict can be analyzed in operational terms, for example, whether agreement is possible under the given circumstances. The system to be developed, therefore, should have the capability of analyzing a given situation in terms of its fundamental conflict and its operational components. (3) Conflict has the potential of resulting in pathological conditions; therefore, the system should have a capability for verifying affect
and cognition and action relationships to insure that they are related
to reality and are in a synchronistic state.

**Interaction.** Interaction is another common element in the
various theories; many characteristics of interaction during con­
flict conditions have been identified. Coser states the general
view that conflict is one of the few forms of human interaction. Lieberson holds that neither "conflict nor assimilation is an
inevitable outcome of racial and ethnic contact." Schelling
maintains that conflict behavior is based on expectation of what
opponents will do in a situation. Lewin felt that the strength
of the conflict increases with the weakness of boundaries between
groups. Rogers stresses the influence of systems of tension
and barriers in the interactions. Bernard adds that conflict
occurs in cycles in which new conflicts emerge as old ones are
solved; "action, behavior, process and interaction are the key
words" in understanding conflict, she suggests. Simmel views
conflict as a cause for group formation. Dahrendorf saw conflict
as a structure.

In his general theory of conflict, Stagner postulates
several dimensions of conflict. The purpose of his study was
to identify significant dimensions that could be used for measuring
conflict as an aid in studying functional relationships between
influences on the situation and the outcome of the conflict situation.
He listed eight dimensions: (1) site, (2) duration, (3) evaluation, (4) intensity, (5) regulation or structuring, (6) realistic-neurotic, (7) magnitude of unmet expectations, and (8) discrepancy of power.35

In addition to views of interaction in terms of specific factors or relationships that are present and in terms of the dimensions in which interaction occurs, other researchers have viewed interaction in terms of reciprocal relationships.

Kaplan, for example, spelled out the rules of the balance of power game, part of decision or game theory, in international relations. He lists six rules that govern the interactions. They are:

1. Act to increase capabilities but negotiate rather than fight.
2. Fight rather than pass up an opportunity to increase capabilities.
3. Stop fighting rather than eliminate an essential national actor.
4. Act to oppose any coalitions or single actor which tends to assume a position of predominance with respect to the rest of the system.
5. Act to constrain actors who subscribe to supranational organizing principles.
6. Permit defeated or constrained essential national actors to re-enter the system as acceptable role partners or act to bring some previously inessential actor within the essential actor classification. Treat all essential actors as acceptable role partners.36
In a study of interracial relations, Deutsch and Collins found evidence which supports the contention that there are relationships between housing occupancy patterns and attitudes. They studied two housing projects: one integrated and one segregated. Their findings indicate that status contacts result in attitude change when the behavior of the minority group does not conform with the stereotype but is relevant to the common purposes of the white group, and when the white person is capable of resisting cognitive distortions and holding beliefs of democratic equality that are supported by public policy.  

He suggested that through successive phases of conflict between paired opposites, each conflict results in a synthesis. Marx then applied this formulation into a system of government in which the final synthesis would be classless society. To date it remains a philosophy.

Conflict and interaction are related concepts. When the factors associated with conflict interactions, the dimensions of conflict, and the reciprocal uses of conflicting interaction are combined, they describe a class of interactions. The essential feature of conflict interactions is the presence of a win-lose-solve condition. Since conflict is pervasive and structurally present, persons and groups are in a situation of potential conflict
at all times. This means that most interactions are either explicitly or implicitly conflict-laden. Another essential feature of conflict interactions are scarce resources (land, status, power, boundaries) which serve as both the object of the conflict and the basis for comparisons between groups.

In summary, interactions within the conflict situation provide: (1) explicit and implicit forms of communications, (2) methods of producing synchronistic relationships, (3) means of assessing opponents and taking relevant actions, (4) base line reference points, and (5) means of dealing with specific and structural conflict, i.e., dependency-interdependency needs.

Methods.—There are many methods for handling conflict. They range from annihilation to assimilation, from national mobilization to individual development, from suppression to creativity, and from institutional controls to therapy.

The methods, both theoretical and applied, can be classified in a number of different ways. For example, they can be categorized according to the level of society with which they are concerned (individual, group, society); the area to which they apply (industry, race relations, international affairs); the method used (therapy, education, laws); or the purpose for which they are intended (resolution, control or avoidance).
For purposes of this study, classification according to purpose is most effective since the Communication Ecology is designed to be applied to different levels and areas and to make possible the use of various methods. It should be noted, however, that there is some slight overlapping in these classifications. For example, the method of reconciliation might be categorized with methods of control, resolution, transformation or corrective action.

1. "Use the conflict."—This method is used by those who recognize the potent force of conflict. They seek to stimulate or intensify it to cause people to take actions they would not ordinarily take or even consider possible. This method can have either constructive or destructive goals.

For example, Hitler used the forceful nature of conflict to unite the Nazis together and concentrate their efforts on wiping out entire populations. Duncan, on the other hand, refers to the creative power that lies within conflict situations; this power can be released, he suggests, to enable the parties in the conflict to achieve higher levels of understanding and to overcome their conflicts.40

2. Strategies.—The development of strategies for using conflict situations has the purpose of insuring a group's best interest by planning moves based on what the opponent does or can be expected to do.
The theories of limited war or deterrence that are commonly used between nations today involve this strategic use of conflict. Each nation bases its moves on what it anticipates that its enemies might do. For example, the United States and Russia each keep stockpiling armaments to defend themselves in case of nuclear attack by the other. The absurdity of this situation was pointed out by Sherif who suggested that each country keeps stockpiling armaments even though it already has too many, and that actions of this sort do not reduce the level of conflict. In fact, they may just serve to postpone a final holocaust.

The same type of reasoning is used by groups who base their moves on expectations of what their opponents may do. For example, city fathers may concentrate more on plans of containment that can be used in case of a riot in the ghetto than on the alleviation of conditions giving rise to unrest in the area.

3. Avoidance.--This method is used to remove a conflicting party from the environment, thus reducing the chance of additional or continuing conflict. It may be accomplished by a party removing itself, as when a person quits his job because he can't get along with his boss, or it can be used by a nation carrying out genocide on a particular cultural group within its borders.

Avoidance can be considered a "schism" approach to conflict handling. Distance--physical, social or epistemological--is placed
between the parties. Methods of avoidance, however, are usually not successful because the nature of the conflict has not changed. For example, a period characterized by withdrawal may simply be used by one or both parties to recoup for another round of a battle.

4. Control.--Control methods are used when it is assumed that the conflict cannot be resolved, but can be prevented from having destructive consequences. There are several common types:

A. Third-party methods--Mediation is frequently used as a method of handling conflict. This usually involves bringing in a mediator, as in a plant dispute. This approach has been successfully used and is reported on in the literature by Lewin and Bevalas. Fact-finding by the third party (appeal group) or mediator is the cornerstone to success. The third party presents each party with the facts and negotiates with them for a settlement. Sometimes, however, the outcome is really just a temporary lull in hostilities.

B. Procedural resolution--This method is used when the parties to a conflict know they have to continue to live together. The two major types of procedural resolution are compromise and reconciliation.
In a compromise situation, each party gives up something. This is often used successfully to bring about a temporary cessation of the conflict, but there is always the risk that each party will feel it gave up more than the other. This state of affairs may create new hostility.

Reconciliation is the result of conversation, argument, discussion or debate that leads to convergent modifications of the images of the parties to the conflict.

C. Suppression--One party to a conflict can be completely suppressed by another. This happens when the groups are totally unbalanced with respect to size and power. For example, this method can be used by male professional workers who feel threatened by the presence of female co-workers in the organization's hierarchy. In this case, a woman may work for lower wages and be left out of office procedures even though she does the same job they do. Suppression also frequently takes place when a member of a minority group begins to work in a plant or office.

D. Laws and courts--Laws and courts sometimes have the effect of or can be used to control opposing parties. Legal proceedings are often an effective way of handling
conflicts in industrial relations, Boulding points out, because of the difficulty of incorporating the necessary bargaining and reconciling process in purely legal procedure. Another example is the use in some states of laws that require a mother of two illegitimate children to undergo surgical procedures that make her sterile. This prevents the state from having to pay her additional welfare, but it denies her a basic human right.

5. **Resolution.**--Methods that place emphasis on conflict resolution are aimed at determining the causes of the conflict and bringing about cooperative interaction. These methods use persuasion, education directed at changing images, and problem-solving techniques. For example, a group of people in conflict about the goals of their organization may organize several discussion sessions in which each side presents its case and points of agreement are sought which may serve as the basis for resolution of the problems with respect to goals. Or, a group such as the Anti-Defamation League may hold community meetings to help local citizens better understand the needs, goals and problems of a minority group located in the area.

Other methods aimed at resolution include advertisements and persuasion, role-playing, and T-group discussions.

6. **Corrective Action.**--Methods of corrective action seek to predict the possible causes of conflict and establish procedures that will avoid the destructive use of any conflict that arises.
This can occur in a school system when teachers anticipate the admission of minority group members to a classroom. Their efforts to educate other teachers and students about the situation and to increase intergroup understanding can sometimes prevent an outbreak of hostilities. This same kind of preplanning can prevent hostilities in a company or business that is to be restructured; informing personnel of what is to take place can keep them from feeling threatened and insecure.

7. **Transformation.**—Methods based on transformation are designed to take an existing or potential conflict and direct the energy created by that conflict into constructive activities. For example, if a group's hostility can be redirected to trying to understand why its opponents behave the way they do, a key to conflict resolution may have been found. Transformation is also the goal of synectics, sensitivity training and T-groups (training groups). All three of these methods are said to consist of removing people from the conflict arena and bringing them together in the attempt to better understand each other and themselves. If this can be achieved, the purposes of the original conflict often become obscure or no longer important.

8. **Assimilation.**—This method is aimed at alleviating conflict by securing a common identification between the conflicting or potentially conflicting groups. This can be achieved in a variety of ways including attempts at integration, attempts at increased
and improved dialogue or achievement of a state of communion among parties to a conflict. The success of this method, of course, depends on the willingness of the two parties to bring about assimilation.

These eight methods for handling conflict can be analyzed in terms of three principal dimensions: (1) To what objective does the method contribute? (2) What is the quality of the interactions involved? (3) What action sequences are required?

The objectives of the various theories can be classified as:

1. Stimulating the conflict so that it can be used to reach some objective.

2. Providing for a release from the tension associated with the conflict so that ego-syntonic and group cooperation is more probable.

3. Establishing procedures and institutions that can control conflict and permit the operation of society to continue while accommodations are being obtained.

4. Employing early warning systems and the balance of power concept to act as a deterrence to conflicts which are potentially destructive.
5. Bringing to bear those forces that will convert the parties from conflicting to cooperative relationships and that will result in resolution of the conflict.

6. Securing shifts in the form of the conflict's structures to enable the groups to transform energy into problem-solving potentials.

If the purpose of the method or the objective of the group is viewed as one dimension of the action sequence, the style and quality of the interactions between groups is a second dimension. The style of interaction refers to the patterns of behavior used to reach the objectives. There are four possible patterns or styles of interaction indicated in the literature. They are: (1) attack, (2) avoidance, (3) compromise, and (4) problem-solving.

The third dimension of the methods relates to the time sequences of the conflict and its handling procedures. Does the method seek to increase the conflict and its handling procedures? Does the method seek adoption of some new behavior as in problem solving or does it seek the discontinuance of some behavior as in resolution? Although most researchers view the action sequences of conflict in terms of stopping the present conflict and/or securing the adoption of some other form of behavior, there are four possible action alternatives. Fotheringham discussed these in terms of the persuader's goals as (1) adoption, (2) continuance, (3) deterrence, and (4) discontinuance.44
A general system requirement for the effective accounting of methods would include consideration for the purpose of the methods being employed and their probable effectiveness, for the quality of the interaction that is used to carry out the methods, and for the action sequences that are operative at the time.

These three dimensions exist in a matrix, and they are interrelated and interacting. For example, when one group seeks discontinuance, a match of problem-solving behavioral patterns between the two opposing groups will not eliminate the conflict if the other group uses methods to continue the existing system.

Effects.—Another element of the conflict situation that is referred to by scholars and researchers is effect. The effect of conflict is discussed in terms of what happens and in terms of the evaluation of what happens.

The following observations are illustrative of what happens in conflict situations. Pao views both hate and rage as conflict between the ego and external objects. One of the distinguishing features of hate is its conflict with internalized objects and its capacity to serve both as the basis of a relationship and the core of a person's identity. Allport makes a similar observation about the authoritarian and prejudiced personality. The effect of conflict, in this case, provides both personal identity and group identification. Arlow postulates a relationship between conflict and physiological systems in which prolonged unresolved conflicts result in character traits rather than mere symptom formation. If conflict between
groups has persisted for long periods of time and if the persons have used the conflict as an ego-syntonic defense, the system for altering the alternatives of behavior will have to be more Gestalt than fragmentary.

Frankle and other existential psychiatrists view anxiety, a form of conflict, as having an opening rather than a rigidity-producing effect. Boss states the existential point of view. Anxiety opens man to the experiences of love and trust by conforming him with the "great nothingness." The conflict between meaning and meaninglessness produces activity directed toward achieving meaningfulness, and anxiety and guilt are surmounted in the discovered ability to love and trust.48

Rosen explains conflict in psychoanalytic situations as the basis on which the analyst and the patient experience an affect-charged response that leads to supplanting of the toxic ego with identifications with the analyst and then to resolution of the psychosis.49

Sociologists and psychologists refer to a similar structuring effect of conflict in these terms: "A vector is the force which provides a group both its direction and its magnitude."50 "Emotion is a 'moving and cementing' force."51 "A basic postulated aspect of a concept is a property called directionality, . . . a preference for an outcome."52
There are a number of different types of specific effects listed and analyzed in the literature; however, an essential feature, in terms of what happens, in the extent to which the conflict closes a group to "reality" and causes it to act according to rigid or pathological patterns. Open conditions and patterns of behavior are viewed as being better suited to effective conflict handling in most situations.

Researchers often include in their theories an evaluation of conflict; some writers have maintained that conflict is dysfunctional while others hold that is is functional. A third group holds that conflict can be both functional and dysfunctional. According to the third group, the basic question is how to handle conflict so that its functional aspects outweigh its dysfunctional aspects.

Parsons, Lundberg and Warner, for example, viewed conflict as dysfunctional. This was the dominant point of view among early writers on the subject. They held that conflict is dysfunctional like a disease; it results in the suspension of communication, and it destroys the stability of society.\textsuperscript{53-55}

Coser, Lewin and Simmel represent researchers who hold that conflict is functional. They point to supportive evidence such as: conflict is inherent in the social structure, it results in unity and boundaries, it is necessary for ensuring the group's existence, and it is required since sociation depends both upon harmony and upon disharmony.
Schelling and Boulding view conflict in terms of how it can be used to bring about an increase in the functional aspects and a decrease in the dysfunctional aspects. They use strategies, group decision-making procedures and prediction of outcomes to arrive at methods for using conflict.

This study views conflict from the conflict utilization point of view. Recognizing that conflict can have both functional and dysfunctional consequences, the focus is on how to use conflict for constructive, if not creative, purposes.

**Summary.**--These statements summarize the findings and observations that are relevant to the development of a general system.

1. Parties in a conflict situation can be classified into three groups: those who are direct participants in the conflict, those who may be appealed to for support or assistance, and those who are explicitly uninvolved but implicitly involved.

2. One of the essential features of conflict is the existence of aschronistic, opposing interactions, in relation to some common field experience or object.

3. Types of conflict can be analyzed in terms of three dimensions: (1) structural or issue-specific, (2) pathological or normal, and (3) method of handling.
4. Interactions during conflict situations are influenced by the pervasive and ever-present potential of conflict in either its implicit or explicit form.

5. Methods for handling conflict should be considered in terms of their purpose, their behavioral patterns, and their action sequences.

6. Conflict situations result in both structural effects and affect responses which can be evaluated as functional or dysfunctional. Since conflict results in both effect and affect responses, and can be both functional and dysfunctional, it is important to focus on conflict utilization.

7. Conflict can be distinguished from cooperation, consensus, and competition by: (1) the degree of regard for the rules, (2) the degree of concern for the other party, and (3) the degree of agreement on common purpose.

Processes and Theories

The range, functions and characteristics of human behavior during conflict situations can be better ascertained if one additional point of view is added to those gained from the review of definitions and functions. Information for this additional point of view is derived from an examination of some of the processes and theories of conflict.
Instead of categorizing all pertinent processes and theories, certain ones will be selected from different schools of thought. They will be used to identify system requirements and data.

**Processes.**—Four processes have been selected because they represent different, not necessarily contrasting, views of conflict situations. The sources are: (1) Sherif's experiment in intergroup relations, (2) Coleman's dynamics of community controversy, (3) Brown's conflict cycle, and (4) Lippitt, Watson and Westley's process of planned change.

Sherif's experiments with eleven- and twelve-year old boys in a camp setting were designed to study the processes of group formation, conflict development and conflict reduction. In three experiments, boys who had had no previous relations with each other were brought together in two camp sites in an isolated area. After the groups were formed in each camp, the two camp groups were brought together under conditions designed to produce hostility and then under conditions designed to reduce hostility. The researchers served as camp staff.

Several findings from these experiments are pertinent to this study. Sherif reports that group formation was initiated by friendship clusters (unacquainted persons meeting on the basis of personal attraction), but shifted to a definite structure as clusters became organized. Both the group organization and norms were products of the interaction among the boys in the camps. As the groups developed,
they became self-centered; this resulted in a condition in which the only requirement for conflict was that each group desired goals only one could attain. Other findings reported by Sherif included:

1. Intergroup conflict results even among normal, healthy and socially adjusted groups.

2. Cooperative actions or processes within groups are not directly transferable to intergroup relationships; i.e., cooperation within a group is often highest during severe intergroup conflict.

3. Intergroup relations effects pattern of relationships, roles and norms within each group, i.e., leadership selection, stereotypes, justification for behavior patterns.

4. Equal-status contact in a pleasant relationship does not in and of itself reduce conflict between hostile groups.

5. Contacts between hostile groups involving interdependent action toward superordinate goals is conducive to cooperation between groups if a number of such experiences can be provided.

6. Series of cooperative experiences between hostile groups begins the development of established modes for handling conflict; while remaining autonomous, the two groups begin to share psychological space and values.
7. Tools and techniques that are used for internal group problem-solving may also be used in intergroup situations.

8. Cooperative actions toward some superordinate goal alter the significance of other measures designed to reduce hostility. For example, leaders were required to help the groups find ways to cooperate, and attempts were made to design plans for pleasant exchanges.

In summary, Sherif's experiments emphasize two essential points about conflict. (1) Newly formed groups without a history of association will engage in conflict behavior when both want a goal that only one can obtain. (2) Cooperative actions in pursuit of superordinate goals, if repeated over time, can lead to improved procedures for conflict handling.56

Coleman's analysis of the process of community controversy indicates some of the changes that occur as disagreements shift into violence. Three major changes take place in the issue around which the disagreement centers. (1) Specific disagreements are enlarged to include more general ones. (2) The general issues are then elaborated into new and different disagreements. (3) Finally, there is a shift from disagreement into direct antagonism.

Changes in the social organization follow a pattern similar to changes relating to the issue. (1) The groups, on the basis of specific issue disagreements, start to polarize their relationships.
(2) As the disagreements shift from specific to general issues, the polarization results in a condition in which one side cuts off relationships with the other side and thus acquires an increased number of relationships within the group. (3) As the possibility of antagonism becomes obvious or felt, the groups form partisan organizations and new leaders emerge. (4) Attempts are then made to mobilize existing organizations to support one side or the other. (5) As the issues become more personal, word-of-mouth communication replaces more formal communication.

According to Coleman, these changes occur within a mutual and reciprocal relationship. Responses made by one group reinforce responses made by the other. The groups mutually contribute to group polarization and consequent escalation of conflict. Coleman explains this mutual, reciprocal causation in terms of Gresham's law of conflict; he says that all the forces put into effect by the initiation of conflict act to drive out the conciliatory elements, replacing them with those better equipped for combat.57

The Coleman thesis leads to several observations about conflict situations. As conflict moves from disagreement to violence, the following shifts occur within the groups: (1) Attention is shifted from issues to personalities. (2) Communications change in content, channels and form. (3) Groups become locked into a combat situation in which resources for any action other than combat become limited or restricted.
Relationships exist between styles of group interaction and group members' perceptions of people. Using a three-point scale of (1) communion-(2) cooperation-(3) conflict to define the styles of group interaction, the corresponding scale for perception of people would be (1) groups as individual persons-(2) groups as resources for obtaining goals-(3) groups as object barriers. This relationship between style of interaction and perception of the group is found in a number of studies. Sherif used the concept of super-ordinate goals and cooperative relationships, while Coleman used antagonism and polarization to indicate relationships between style of interaction and perception of the group. Communion is a concept used by philosophers and writers supporting the dialogic form of communications. Communion refers to a common identification between two or more persons that is reached through deep, open communications. It implies a "total" synchronistic relationship between the persons in the form, if not the content, of their interactions.58

Brown, Park and Bogardus have each described cycles of conflict. Although these authors were primarily concerned with racial groups, their concepts can be extended to other types of groups. Brown's cycle has six points: (1) initial symbiotic contacts with the presence of fear, (2) lead to the emergence of conflict, (3) which results in a temporary accommodations in which one group is dominant, (4) causing the inferior group to seek a change in status, (5) which requires each group to mobilize its resources, (6) in ways that create the crisis that requires another accommodation or solution.59
Park describes a cycle of four steps. "First, groups come into contact; there invariably follows competition; eventually, some kind of adjustment or accommodation is reached, and, finally, there is assimilation and amalgamation." The Park formulation, like those of Hegel and Marx, fails to point up the fact that conflict can be a "permanent" feature of the situation. Synthesis and amalgamation are difficult states to achieve for cultural groups.

Bogardus' cycle focuses on the utilitarian value of groups to each other. The groups are brought together because of mutual needs (employers needing workers), and as the conflicts develop, fair-play concepts are used to reduce antagonism. These fair-play methods and the new conflict issues result in second-generation difficulties and the process continues.

By combining the concept of cycles with learning theory and psychoanalytic observation, it is possible to view part of the conflict situation in the following terms. Due to the cyclical nature of conflict, individuals and groups tend to deal with new conflict issues on the basis of their past experience with conflict. A repeated series of such experiences, depending upon the affect and effect responses, can result in habit patterns that are normal or pathological. If the pattern tends toward the pathological at least two important conditions occur in the situation: (1) communication itself becomes a source of tension and distrust (Coleman's thesis
of antagonisms and word-of-mouth communications), and (2) people become objects, providing the rationalization for destroying the persons or group instead of dealing with the issues. 62-64

Broyles outlines the process of conflict in terms of the extent to which it is communal or noncommunal. Noncommunal conflict, he suggests, goes through these stages.

1. First, the tone of the conflict is set, as each party views the other as destroying valued legitimate methods of operation. They enter into the conflict, using methods of operation normally held to be illegitimate. The illegitimate character of the attacks confirms each group's initial perception of the other; and the resulting tone of the conflict is acrimonious.

2. In the second stage of conflict, Broyles suggests, the attention of each group is focused on outside parties. Since each sees the other as beyond the pale of legitimacy, each gives up hope that the other will ever "see the light." Consequently, the intent of the conflict becomes propagandistic, not designed to solve points of disagreement but to seek allies from the uncommitted public. Thus, each group alerts the public to the dangers of the other group.

3. This type of noncommunal conflict between parties is resolved only when it falls of its own weight. The participants are overcome by emotional strain and the complexity of the
They withdraw to recoup energy, to congratulate themselves on victory, and to prepare for a new major noncommunal conflict.

In communal conflict there is basic agreement on legitimate goals. This can be depicted best by a bell-shaped curve. In contrast, noncommunal conflict is pictured as an inverted pyramid with no top; the conflict broadens rather than narrows. Noncommunal conflict, Broyles suggests, eventually moves into the depths of irrationality. To the extent that parties to conflict are forced to engage in rational and communal conflict, their influence on society may become functional and constructive.65

Two attempts have been made to outline the structural processes of conflict, and both deserve consideration prior to the development of the Communication Ecology.

The process of planned change that was developed by Lippitt and others outlines a seven-step sequence for securing change. Instead of reviewing this process, the purpose of this section is to discuss the seven steps as applied to conflict situations.

1. The development of a need for change.

The presence of conflict is generally regarded as evidence that a need exists; however, the mere presence of conflict is not sufficient to indicate a need for change. Conflict must be combined, for example, with the perception of
alternatives and a better payoff in order for it to serve as an active motivation in a specific plan.

2. The establishment of a change relationship.
   Since conflict involves three or more parties either as active participants, appeal groups or bystanders, the possibility of change relationships are present in the form of interactions. There is a need to translate the styles of interaction into forms consistent with change relationships, for example, from one of attack to one of problem solving. This change is dependent, in part, on the perception of the groups of each other, their traditional patterns of dealing with conflict cycles, and their reciprocal influences on each other. In a sense, conflict can be viewed as establishing the bond on which other factors can establish a change-producing relationship.

3. The clarification or diagnosis of the client system's problem.
   In clarifying or diagnosing the client system's problems, it is necessary to make a distinction between specific issues and general conditions of conflict. A specific issue refers to conflicts that are amendable to methods such as: education, information, information and/or arbitration. General conditions, on the other hand, refers to conflict that requires methods such as: psychiatric treatment, institutional reorganization and/or superordinate goals.
One factor that assists in distinguishing specific issues from general conditions is the difference between the content and form of a communication. In specific issues, the content of the conflict remains paramount, and persons retain their character as people; in conflicts of the general condition type, the locus of the conflict shifts from content to form. The style of interaction (attack pattern) becomes more important than the specific issue, and people are viewed as objects rather than as persons.

4. The examination of alternative routes and goals.
Alternatives are inherent in conflict situations. The groups are faced with a win-lose-solve choice situation. Members of groups perceive that they are in a choice situation, but the freedom and resources needed to make alternative choices or to use available opportunities often are not present.

5. The transformation of intentions into actual change effort.
Conflict cannot accomplish this transformation by itself; however, it significantly influences the way in which the transformation occurs. It provides the energy or cause required for the change to take place; it attaches valency or gives directionality to a given choice, and it provides a structural relationship between and among the groups, i.e.,
openness or closedness, people as persons or people as objects, or habitual or creative interaction.

Three contrasting ways of transforming intentions (derived from conflict) into action will illustrate the range of approaches that are suggested in the literature. Logotherapy uses conflict (anxiety form) to achieve an optimum level of openness through which the persons can discover love and trust. Some researchers have described a process of "unfreezing, changing and refreezing" to account for the intention to effect transformation. Educators, leaders of movements, and persuaders often use superordinate goals as a means of achieving a similar objective.

6. The generalization and stabilization of change.

Scholars and researchers imply that the generalization and stabilization of change (improvement) in conflict situations results from a combination of insight and conditioning. The group or person achieves a new understanding or pattern of behavior; these experiences, however, must occur repeatedly over time in order for the new "habit" to become a predictable feature of the person's character traits or the group's intuitive procedures.
7. **Achieving a terminal relationship.**

The question of conflict termination is debated in the literature. Some writers hold that a terminal point can be obtained, while others hold that each conflict solution simply leads to another conflict. Part of the debate can be resolved by distinguishing conflicts of content from conflicts of form. Conflicts of content (over specific issues) can be viewed as reaching a terminal state when a decision has been reached even though the specific issue may come up again, e.g., a court decision that is subject to appeal. Conflicts of form (over general conditions) probably do not reach a terminal state but remain in some state of flux, e.g., the desire to associate versus fears requiring withdrawal or dependency versus independency needs.66

The processes reviewed indicate several factors that should be considered in a general system for conflict handling. The study by Lippitt and others of general systems for planned change notes that intentions need to be translated into action and that there needs to be some process for coordinating the various factors involved in the change. Brown's concept of cycles stressed the need for a system to be responsive to repetitive demands without adopting patterns that will be used inappropriately; this requires a process of verification of actions, past and projected. Coleman points out
the need for the system to include controls against shifts from
disagreement to violence; in a sense he recommends some means
of calibrating the perceptions before violence occurs or Gresham's
law comes into play. Sheriff adds to the list of requirements and to
the data bank for the system by indicating an identity-to-groupness
process, explicit and implicit interactions, and the use of super-
ordinate goals in conflict situations.

Theories.--Three theories have been selected for review in
this section. One, by Eissler, provides an explanation of why
groups view other groups as objects in conflict situations. Her
essential observation is that a person can release an internal con-
flict by using another group as the external symbolization of that
conflict. Schelling's theory, in contrast, is concerned with rational
types of conflict. The essential feature of his theory is strategy.
Arrow's theory seeks to explain why there is an inherent conflict
between social choice and individual values. The essential feature
of his position is that fair methods for the amalgamation of
individual choices are difficult, if not impossible, to implement.

Eissler's theory postulates that intrapsychic conflict leads
to the institutionalization of conflict between groups. Her initial
premise is that when the ego experiences unacceptable, destructive,
and highly charged impulses, a condition of unbearable inner conflict
exists. If a scapegoat can be found, the inner conflict can be
externalized, and inner tensions will be relieved. The example of
a scapegoat that Eissler uses is the criminal; she contends that conflict between society and the criminal serves to reduce the inner tension of the noncriminal population as well as, if not more than, the tension related to the need to reduce crime.

This theory suggests that both of the opposing parties in a conflict may be providing the externalized object for inner conflicts and that this general condition may perpetuate the conflict even when the specific issues have been settled.

Eissler's theory states that (1) conflicts between man's aggressive desires and social demands have to be satisfied with other objects or turned inward resulting in the need for self-punishment; (2) inner conflict can cause self-destruction if it is not externalized; and (3) the dualistic system of values (God-Devil, good-bad) provides for externalization.

To take actions against the evil, bad or devil in others is to release inner conflicts related to the evil in oneself.

Viewing the noncriminal and the criminal as two different groups, Eissler states:

One justifiable outlet for aggression, which can be rationalized on the basis of morality and which can provide the desired relief by externalizing inner conflicts without creating conscious guilt feelings is the persecution of the wicked, the criminal, that group of individuals who commit violence, who break the laws and who do not conform to the demands of society. But if this is the case, if society needs criminals as scapegoats, then what are the chances for a rational prevention of delinquency?
According to Eissler, the noncriminal group will provide for the continuation of the criminal group (similar to Kaplan's balance of power theory), because it has a need for an externalized object. This need is met, in spite of public policies and ideas to reduce crime by three attitudes: (1) an ostensible unawareness of the criminal impulses, (2) the seduction of individuals into criminal behavior by providing them the opportunity and cause, and (3) the acts of vindictiveness and annihilation which serve the inner conflict needs of the public more than the rehabilitative needs of the criminal.

In terms of specific issues, the capture of the criminal stops the conflict; however, in terms of general conditions, vindictiveness and annihilation are requirements. The existence of the possibility of vindictiveness may result in groups' withdrawing from each other and becoming more cohesive. In discussing delinquency, Eissler accounts for the vindictiveness and hostility in terms of Oedipus situations and sibling rivalry. The delinquent is unconsciously regarded as the avenger of one's own murderous impulses against one's parents, or represents a younger sibling who was the object of jealously. Whatever the reason may be for a specific person's or group's use of another group as the externalized object, there is some justification for the observation that the sacrifice of the "scapegoat" helps the group attain "redemption, forgiveness and reconciliation with their god or their own conscience."
Miller's study of interinstitutional conflict agrees with the Eissler view that delinquency serves an important latent function for adults. He states that conflict between institutions, each established to stop delinquency, is a major impediment to delinquency prevention. This impediment reflects itself in contradiction between policy and procedures, in failures to follow through on plans, in conflicts over goals and methods, in greater interest in institutional survival than in problem solving, in the failure to act on the basis of what is known, or in mutual blocking of efforts. Each of these actions help to insure that the latent needs are met.

Schelling's book, The Strategy of Conflict, is representative of a number of publications concerned with the application of game or decision theory to conflict situations. Common features among the various theories are: players, strategies, rules and payoffs. The actions of the players, strategies that are possible, rules to be employed, and the payoffs obtainable vary depending on the type of game, i.e., zero or variable-sum games.

This strategy of conflict includes consideration for many different disciplines and in this sense it is comprehensive; however, it is limited to rational, conscious and artful forms of conflict. In the latter sense, it is limited.

Schelling states that:

There is . . . a mixture of game theory, organization theory, communication theory, theory of evidence, theory of choice and theory of collective decision. It is
faithful to our definition of 'strategy.' It takes conflict for granted, but also assumes common interest between the adversaries; it assumes a "rational" value-maximizing mode of behavior; and it focuses on the fact that each participant's "best" choice of action depends on what he expects the other to do, and that "strategic behavior" is concerned with influencing another's choice by working on his expectation of how one's own behavior is related to his.72

Important rules for the strategy described by Schelling are:

(1) Common interest and mutual dependence exist among the participants. (2) Winning is not strictly conflicting since gaming is related to one's own frame of reference as well as the adversary's. The ability of one party to gain depends upon the choices the other makes; therefore, bargaining is essential for the exploitation of potential force. (4) It is rational to suspend rational capabilities and communications when it is to one's advantage. (5) Deterrence is concerned "with influencing the choices that another party will make and doing it by influencing his expectation of how we will behave. It involves confronting him with evidence for believing that our behavior will be determined by his behavior."

There have been a number of objections to game theory. The objections generally include (1) a criticism of oversimplification of the conflict situation (conflict is not principally a rational choice situation), (2) rejection of the mathematical models and formulas as too rigid for psychological events and inadequate to account for intransitives, and (3) concern about the relationships between game theory and military concepts. This concern is based
on the opinion that militaristic thinking leads to a style of interaction based on force.

In spite of the limitations and concerns about this concept of strategy, it has several advantages which deserve consideration. Insofar as the game theory focuses the attention of participants on rules and strategies, it can lead to improvement of rational processes which subsequently can be used for both specific issues and general conditions.

Strategies also provide a different perspective on boundaries in group conflicts. Most of the sociological theories view group boundaries as rather definite and fixed positions in psychological space; in contrast, game theory stressed the interrelatedness of the group's boundaries, i.e., one group's choices depends upon the choices made by the other.

One interesting concept in game theory can be noted at this point. It relates to the use of irrational behavior to achieve rational objectives and to the use of "noncommunication" to achieve objectives of communication. This is interesting because it represents what can be considered a conflict between form and purpose or method and objective. Several studies have indicated that the sharpest disagreement within groups occur over the use of different methods to achieve the same objective. For example, when students present demands to college administrators, their demands are often recognized as valid, but the conflict escalates because the
administrators do not like the method in which the demands were presented. The students, on the other hand, maintain that only irrational methods will get anyone to listen. Perhaps understanding of the concept of the rational use of the irrational will provide the conceptual bridge to conflict resolution in these cases.

Arrow's theory is concerned with the development of fair methods of amalgamating individual choices to yield social decisions. The central question is: Can majority rule be fair in its attempts to serve a social utility or social welfare function? Social welfare function is a type of concensus. Arrow answers this question negatively and shows how some persons use the intransitive relationship among preferences to achieve their own objectives.

Arrow developed several axioms or conditions that should be met to pass from the preferences of individuals to social alternatives. His conditions were stated in relation to the following formulation of the problem. Relationships between alternatives, individuals and their preferences should result in a social welfare function, an ethical standard or rule which associates each profile to a preferences ordering for society itself. The social welfare function is obtained when the profile is consistent with the ordering of the individual's preferences. This is difficult to obtain because of intransitive relationships, i.e., xPy, yPz, zPx. Although a rank order may remove this problem, it is not feasible to apply this method to major problems.
The conditions that Arrow states should exist in order for the preferences to become translated into a social welfare function are: (1) positive association of social and individual values, (2) independence of irrelevant alternatives, (3) citizen's sovereignty, and (4) nondictatorship; his impossibility theorem states that these conditions are inconsistent, that there is no welfare function which possesses properties demanded by these conditions.

In discussing the result of this mathematical model and conditions, Arrow arrives at a paradox. If members of society understand that fairness cannot be arrived at from an ordering of preferences, it will serve their purposes to lie about their true objectives. Arrow points out that it can benefit an individual to misrepresent his true feelings in a legislature which votes on successive motions by simple majority rule. He cites the following example:

Let individual 1 have ordering x, y, x; individual 2, y, x, z; and individual 3, z, y, x. Suppose that the motions come up in the order y, z, x. If all individuals voted according to their orderings, y would be chosen over z and then over x. However, individual 1 could vote for x the first time, insuring its victory; then, in the choice between z and x, x would win if individuals 2 and 3 voted according to their orderings, so that individual 1 would have a definite incentive to misrepresent. The problem treated here is similar to, though not identical with, the majority game, and the complicated analysis needed to arrive at rational solutions there suggests strongly the difficulties of this more general problem of voting.
Arrow does agree with May that simple majority rule satisfies the axiom of independence of irrelevant alternatives and has the following four properties: (1) decisiveness, (2) anonymity, (3) neutrality, and (4) positive responsiveness. May proved that simple majority rule is the only rule satisfying these four properties. While majority rule meets this one condition, it does not serve the social welfare function. This function requires the players to act naturally in their own selfish interests while the method of amalgamation provides for a socially desirable outcome, one that is fair to all participants. In the absence of some objective procedural methods to achieve this objective, conflict, and conflict-handling methods, will continue to be used. Convention, custom, superordinate concepts, voting, authority, controls, and groupness are all used by groups in attempts to achieve the social welfare function. These processes for achieving the social welfare function occur in a two-phased operation. On the one hand, changes are made in the group to serve individual needs, and changes are made by the individual to conform to group's needs.

Summary

This section has been concerned with the definition, functions and characteristics of conflict. Key concepts within the conflict subsystem are: energy, structuring, directing, parties, interaction, handling, utilization, projecting, synchronistic relationships and specific issues-general conditions.
Conflict, for purposes of this study, is viewed as a force capable of providing energy that results in activity, of producing structural type relationships among the various factors of the conflict situation and of influencing the direction of human behavior by attaching affect valencies to alternatives. It is a force that is explicitly or implicitly present, that is capable of having a functional and dysfunctional effect, that exists in a reciprocal interaction with cultural groups, communications and resources, and that is subject to (1) utilization and (2) management.
Communications as a Subsystem

One of the central and persistent features of cultural groups is the interaction that takes place among group members. By means of interaction among members of the same group, a particular culture for the group is developed and given an operational capability. By means of interaction between various groups, the culture of the general society is transmitted and transformed. One of the principal means of interaction is communications.

This section provides some perspectives on the role of communication in conflict situations between cultural groups by discussing four major topics: (1) the importance of communications, (2) the range of human behavior included under the term, (3) several essential elements, and (4) a review of processes and theories of communications.

Importance

Although the critical importance of communications in human interactions is axiomatic, it is helpful to review various reasons for studying communications in order to develop a conceptual scheme that can be used when cultural groups are in conflict.

Communication is an essential feature of society. "It is through communication that individuals are integrated into societies; it is through communications that the cultures of those societies are established and perpetuated," state Gray and Wise. The important role of communications as a means of solving problems in society was
stressed by Gustad in relation to the particular problems facing higher education, a cultural group within society. He took the position that the president of the university should have the skill necessary to resolve role conflicts between departments and individuals that will enable the university community to find a balance between conflict and consensus. Gustad states:

The president is the only person who is in a position to know a significant amount about all of them /the various issues and groups/ and is therefore the only one in a position to lead the necessary dialogues. It is time we recognize that the skillful leading of dialogues is education of the highest order.76

Communication can serve as the model for integrating various theories. Models of human behavior based on communication theories are capable of bringing together and integrating a wide variety and diversity of processes and events under one system. Ruesch make this observation:

We believe that communication is the only scientific model which enables us to explain physical, intrapersonal, interpersonal and cultural aspects of events within one system. By use of the one single system we eliminate the multiplicity of single universes, the multifarious vocabularies, and the controversies which arise because we, the scientists and the clinicians, cannot understand each other.77

Increasing the degree of cooperation between the scientist and the users of scientific findings is important since knowledge and action must be combined for results to be obtained. Husted views communication models as the first level of the bridge between the scientists and the practitioners.
When the first level in the bridge between the social scientists and the practitioners has been accomplished, namely, consideration for the human relations and communication problems, the second level of the bridge between the disciplines can predominate. This second level of the bridge is the scientific method itself.  

Communicative patterns make a difference in human behavior. Communication is generally evaluated in terms of its effectiveness in contributing to or obtaining a given result. The concept of effect or of making a difference is basic to most theories of communication. Leavitt's study is one of many which test the thesis that patterns of communication make a difference. His study was concerned with differences in group performance when differing patterns of communications were used. Two of his findings were that different communicative patterns did make a difference in performance and that the patterns also made a difference in the way people felt about the situation. Ewbank and Auer make a similar observation in their discussion of persuasion and government systems. Duncan relates communicative patterns to social interaction and makes a distinction between patterns which seek to discharge feelings and those which express them. He states, "The proper study of motives is not how we discharge feelings but how we express them." 

Communicative patterns both result from and result in cultural group differences. Some studies have shown that the poor and the rich use different styles and patterns of communications.
The poor reportedly use more silence and more action than the rich. Analysis of test scores on national exams has shown that inner-city students test significantly differently than students from upper-class homes. The Department of Labor, for example, has declared some employment tests invalid on the grounds that they are culturally biased. Insofar as different cultural groups use different communicative patterns, the styles of communication, in addition to the conflict issues, can serve as a cause for conflict and as a barrier to conflict utilization or transformation.

The concept of the rational use of information is based, in part, on the belief that similarities of experience and the use of information will result in compatible messages between culturally different groups. The compatibility of the messages is supposed to result in cooperative behavior. This concept does not always apply since information is often not the principal area of difference between cultural groups.

Communication can be used as an indicator of the group's functioning. Many areas of a group's behavior cannot be directly observed. In many of these areas or situations, communicative behavior will be observed to judge or to evaluate what the group members feel and will do in a given situation. Lundberg's sociological system evaluates social functioning in terms of the effectiveness of communications:
Communication is the essence of the social process and since abstinence from communication is the essence of conflict situations; conflict must be a purely dysfunctional phenomenon.  

The Lundberg thesis is both accurate and inaccurate. Communication is essential to social process; however, most conflict situations do involve communications. The differences are due to the type of communication, not the presence or absence of communications. When viewed from the point of view of communicative patterns, conflict can be either dysfunctional or functional depending upon the effects or results obtained from the communicative interactions.

Ruesch distinguishes between effective and ineffective forms of communicative patterns in his analysis of mental health states:

Psychopathology is defined in terms of disturbances of communication. ... Read about manic depressives or the schizophrenic /and you will/ find terms ... which refer specifically to disturbances of communication; they imply either that perception is distorted or that expression--that is, transmission--is unintelligible. It is obvious that people are mentally healthy only when their means of communication permit them to manage their surroundings successfully.

The reasons stated above are only a few of the reasons why a study of communication is important to an understanding of cultural groups in conflict situations. If communication serves the central function assigned to it, it is important not only as an instrument of interaction, cultural development and conflict handling but also as a form that is capable of producing both conflict or reality adjustment.
Communication is a term that has been used to refer to a wide variety of human behavior. Some writers speak of intraindividual communications between various systems of a man, e.g., cognitive and affect systems or psychological and physiological systems; in contrast, other writers go to the other end of the spectrum and use the term communications for all interactions between individuals and societies. A term that has such broad and comprehensive usage needs a more specific referent to be meaningful and useful in a general system analysis. This section will give consideration to the range of human behavior that has been classified under the term, communication, in order to arrive at a referent for the use of the term in this study.

The Problem of Definition

One of the essential problems in arriving at a definition of communication is distinguishing between the Gestalt and the specific definitions of the term, between the operational and metaphorical uses of the term and between the various perspectives from which human activities are viewed. Gerbner's criticism of the field of communication applies primarily to the Gestalt and the metaphorical uses of the term:
The field of communication study is having communication troubles. It has no clear ideas of its subject matter. It has no framework for the discussion of its technical concerns, and it has no value orientation for making sense of its findings in terms of urgently needed judgments. ... Vigorous search for a technique and value-oriented theoretical structure appears to be the major need in the progress toward a science of communications.

While the Gerbner statement may be acceptable in relation to a Gestalt concept of communication, there are a number of definitions in specific fields which have the organizing and operational quality. Examples of such definitions include:

1. Communication is the discriminatory response of an organism to a stimulus.
2. Communication means a sharing of the elements of behavior, or the mode of life within a set of rules.
3. Communications means the correction of actions based on the feedback of informational bits.
4. Communication is a two-way process between speaker and listener.
5. Communication is only one form of human interaction.
6. Communication is an event which has effects.
7. Communication is symbolic behavior.
8. Communication can occur as either a monologic and dialogic form of interaction.

Both the Gestalt and the specific definitions of communication involve a recognition of a distinction between first-order experience, the totality of human behavior and communications, i.e., experience is not communication although it can be the content of or the context for communication, and communication is a form of human behavior, but all human behavior is not communication.
The range between first-order experience and the totality of human behavior is comprehensive. Use of the term, communication, to refer to the entire range between these two points is ambiguous. This study relies upon the Knower definition of communication, a form of social achievement through symbolic behavior in which interaction occurs, in part, through processes for the transgeneration of meaning. 86

Range of Human Behavior

An overview of the literature indicates that although communication is considered to be present in most, if not all, human activities, it is not the sum of human activities. Somewhere, between the observation and reaction to nature (first-order experiences) and the sum of man's behavioral repertoire, communication has a place on the continuum. The debate implicit in the various theories and definitions is how far we can go in each direction on the continuum from a central point and still obtain agreement that what is included in the range is communication. This section discusses the range of behavior that have frequently been included under the term, communication, and indicates the range of the term as used in this study.

Cherry distinguishes between the observation of nature and communication in terms of the absence of symbolic usage and interaction. He writes that the:
experimenter is not receiving signs and symbols which are physical embodiments of messages, not words, pictures or symbols. . . . Nature as a source of information is uncooperative in the sense that she does not select the signs to suit our particular difficulties of observation at any time. 87

A distinction between first order experience, reactions to nature, and communication is valid from the general system point of view. This distinction indicates that man can experience and react without communicating. The central feature of communication, symbolism, is also used to distinguish communications from work and performance in human behavior. Communication (symbolism) facilitates getting the work done, but it is not the work itself. This is one of the reasons that communication is often a requirement of conflict handling but seldom a means, in and of itself, for conflict transformation.

In order to analyze the range of human behavior with which communication is associated, a range of eight points is suggested, going from the general to the universal. The concept of a range is used for clarity of presentation more than in an attempt to be descriptive in the scientific sense. The range should not be considered as implying that there is only one continuum between the eight points; the range only suggests that some new element is added as the movement from one to eight occurs.
Symbolic range.--Psychologists frequently take the position that the distinguishing feature of communications is symbolic usage. Symbolic responses are to be distinguished from signal ones. The signal responses are "immediate, unthinking, largely automatic" according to Brembeck and Howell. Langer, in attempting to arrive at a definition of a symbol said, "Any device whereby we make an abstraction is a symbolic element, and all abstraction involves symbolization."89

Symbolic responses are to be distinguished from interaction and relationships in that these human activities involve the actual, in addition to symbolic, behavior. There are several sources of ambiguity in symbolic usage. The same symbol has different meanings and affect attachments; inferential statements can be stated and taken as if they were objective evaluations, and the symbol may be substituted for the behavior, i.e., "your promises are never put into practice."

The perception range.--Perception includes symbolic usage and extends the range of human activities to be covered by the term, communications, to include events, both symbolic and nonsymbolic, that are or should be perceived. This view is based on the "premise that all actions and events have communicative aspects, as soon as they are perceived by a human being . . . such information . . . influences him."90 Freud's contribution to the sociology of language introduces dreams as a form of perceiving subconscious
material. Essentially, perception is a process which includes sensation, selective reception, experience interpretation, purposeful transmission, and feedback. Theories which view conflict as stemming from informational gaps often rely on the process of perception to explain how people fail to see their best interest in situations. Since each person perceives and reacts to experiences in terms of his individual senses, no two people can have the same experience. Without the same experience, different perceptions can lead to conflict when the facts of the case would not warrant conflict behavior.

The transaction range.—"A proper model (or analogy) of human communication is not one of the transmission of message" according to Oliver," but one of a transaction between speaker and listener, both in the active process of give and take."91 This range incorporates perception, and focuses the concept of communications to include relationships between two parties. The term, transaction, which in perception is a result, in this case becomes a process with behavior as a result. Transaction contributes to conflict, according to Meerloo, because people are strongly motivated to associate and at the same time driven to withdraw by fears which lead to defensive responses.92 In terms of group formation, transaction responses.92 In terms of group formation, transaction includes the basis on which people join together to secure objectives, the active process of give and take. While symbolic usage and perception, as defined here, are involved in group formation, the behavioral aspect of the
transaction concept is similar to processes of group dynamics.

**Proxemics range.**—Each of the three previous ranges was concerned with communications that are within the awareness level of people. According to Hall, "proxemics represents one of several out-of-awareness systems which fall within the general rubric of para-communications." Sherman discusses a similar concept in terms of communication by peripheral cues in situations of transference and countertransference. Singer uses the concept of a nonlinguistic range to explain, "It is precisely because we communicate and perceive so well within our own group that we feel so comfortable there. So little need be made explicit." McLuhan's theories also view proxemics as Hall outlined it:

> An extraordinarily persistent form of culturally specific behavior which is responded to with considerable effect whenever people encounter patterns which are at variances with their own. It is also apparently a rather basic form of communication.

The concept of proxemics contributes to an understanding of cultural group conflict in at least two ways. Group stability can be maintained if people encounter frustration when trying to learn the proxemic forms of communication of other groups, and conflict is more likely when the groups intuitively sense cultural differences in behavior (even when language symbols are familiar) and attribute reasons for lack of trust and credibility to these differences.
Interaction range.--This range extends the area to cover aspects of human encounters in which people encounter people as people. Communication is less a means of message transmission and more a system in which people operate as persons rather than objects. Sanders, in writing about the community as a social system, states:

Interaction and Communication. These two words are really interchangeable if communication is given the second meaning . . . the contact of mind to mind, the interchange of meaningful symbols between two or more people.97

Sanders' use of the terms, interaction and communication, as interchangeable overlooks the concept that all interactions are not communication even though all communications involve interactions, e.g., manufacturing involves communication but is not communications.

Behavior range.--One of the key concepts in psychoanalytic theory is that unconscious and infantile impulses result in acting-out behaviors. Bellak notes that "Cultural milieu and social factors often determine the manifest form which acting-out assumes."98 Rosen adds another form of communicative behavior. "Acting-in," he says, is behavior while dreaming."99 The legal system of the United States in its guarantee of the right to demonstrate under the freedom of speech amendment is viewing a form of behavior as an aspect of communication, while acting-out and demonstrations, for example, can involve symbolic usage. Other forms of behavior do not involve symbols or signs. The concept that behavior is communication over extends the term in a manner similar to the view that interaction and communication are interchangeable terms.
Community range. — Sociologists in their study of the community see it as a system with properties inclusive of but different from those of the various groups that are part of the community. Whether the view of the community stems from a Gestalt perspective or from an inductive approach, the system view of the community pertains. The terms, community, communication, communion and commonality appear frequently in the literature discussing society. This view of communication extends the concept beyond group behavior and gives it properties that are part of the "Gestalt community." This view is often criticized as magical thinking, nonoperational in definition, and based on mere intuition. Warner argues that communication is related to community in that:

people experience their community life through expressive symbols; . . . This reduces economic, political and historical events to communicative events that must be studied in terms of their communicative function and structure.99

The observation by Warner identifies part of the problem in defining communications within the community range and suggests an answer to it. Since the entities of community, communion and commonality cannot be directly observed and communicative behavior can be observed, measured and manipulated, communication is often assumed to be the total phenomenon. This substitution of a part for the whole is an inaccurate assumption, however, since better communities and improved commonality can be achieved by communicative means.
Relationships range.--This range implies the largest area of coverage. It views communication's principal function as that of establishing, maintaining and creating relationships. This function is considered mandatory for individuals, groups, communities, society and societies. Communication, according to this range, is operative whenever a relationship exists. This statement is either axiomatic or tautological depending upon one's perspective of communications.

Ruesch attempted to answer the major criticism to this point of view with the statement:

What, then, the reader may ask, is not communication? In order to answer this problem, we must investigate the questions which a scientist wishes to answer. Where the relatedness of entities is considered, we deal with problems of communication; when entities are considered in isolation from one another, problems of communication are not relevant.

The relationship range, similar to the behavioral and interaction ranges, substitutes a pervasive part of the situation for the "total," e.g., direct physical combat may involve processes of communication, but it is closer to first-order (force) than symbolic experiences.

The eight ranges just discussed are those which are frequently associated with the term, communication. Each of the ranges contains aspects of human behavior that can be classified as communication; however, several of the ranges contain aspects of human behavior that are more than communication, i.e., first-order experience and performance.
A core communication concept is social achievement through symbolic behavior. Using this concept as a base, it is possible to organize the various ranges into an understandable pattern. Perception, proxemics and relationships are processes within the symbolic usage range; on the other hand, transaction, interaction, behavior and relationships are effects that symbolic usage contributes to in a significant way.

This view of communication places it in a mediational position between first-order experience and the product of human behavior. An individual can sense, interpret and derive meaning from first-order experience; however, in order for him to share the meaning of that experience with others he will use some type of symbol or sign; the use of symbolization results in interaction relationships and behavior involving two or more persons.

Several Essential Features

The definitions and behavioral ranges indicate some of the essential features of communications such as: symbolism, instrumental nature, effects, interaction, perception, etc. In this section, several of the characteristics of communications will be discussed in terms of their relationships to cultural groups and conflict situations.
People are a mandatory, necessary and desirable part of the communicative situation. People are the basic ingredient in communication; communication always occurs between people. The question then is what type of persons can be most effective in conflict situations. A personality profile for such a person is difficult to describe; however, there are certain traits which seem desirable, i.e., (1) the person should be within the group's communication network and have an ability to use commonplace information in creative ways; (2) he should be capable of using rational means to effect the process of compliance, identification and internalization; (3) he should be able to experience affects in ways which increase empathy and interactions with others; (4) he should be capable of alternating between subjective involvement and objective detachment; (5) he should have a wide range of experiences so that he can more effectively communicate in linguistic and nonlinguistic ways with other groups; (6) he should have the capacity to maintain an optimal level of sensory input and output; (7) he should recognize that he shares many things in common with other people regardless of the intensity of the conflict; (8) he should recognize that to a large extent, "how we communicate determines how we relate as human beings," and (9) he should order the world more realistically and less stereotypically.
When discussing people in terms of the traits, it is possible to overlook the fact that the total person is involved in communication. Sometimes it is possible for a person to isolate parts of the communication and to erect defenses within himself against stress, but if the conditions persist as stress-causing factors, genuine somatic damage may occur. The fact that a conflict situation may trap a person into a field and result in tissue destruction (ulcerative colitis) opens two possibilities in the conflict situation. (1) The person may have his psychological perspective and behavior reinforced by painful physiological changes and find his personality organized around maintaining the conflict in some form, or (2) the person who has begun to experience physiological changes in response to a conflict situation and then finds a handling or resolution pattern may use the psychosomatic conditions as motivation or reinforcement for higher levels of learning achievement.

Burch, writing about the constructive use of ignorance, noted that a milestone is reached in the effectiveness of psychotherapy when a patient recognizes some "deficit in his perception and conceptualization" and considers it as a "challenge toward clarification and new learning and not as a criticism." A parallel concept for groups in conflict situation is that the groups have reached a milestone in development when they view their conflicts in terms of opportunities for change and creativity instead of in terms of threats and actions which lead to win-loss situations.
Relationships between experience and communication are both inherent and reciprocal. Four aspects of relationships between experience and communication are important to this study: (1) raw data is essential but not self-sufficient; (2) communication is a task to be achieved; (3) symbols are a form of substitute experience; and (4) communication is a means for making judgments about unobservable experiences.

Berelson and Steiner note the relationship between raw data and the organizing property of symbolization by stating:

Two basic starting points are: (1) all knowledge of the world depends on the senses and their stimulation, but (2) the facts of raw sensory data are insufficient to produce or to explain the coherent picture of the world as experienced by the normal adult.102

Duncan sees communication performing a similar organizing function in efforts to combine individuals into communities. He writes:

The forms of address which arise in dialogue are the fundamental realities of society, because it is what happens between man and man, his relatedness through communication, which constitutes society. We discover ourselves, as others, in turn, discover themselves through us. . . . there is address, and when it takes place between individuals significant to each other, such address becomes communion, which, in the deepest sense, is what we mean by community.103

The raw data of both first-order experience and human interaction acquires a meaningful influence through communicative processes. Meaningful relationship between experience and effective
communication are not automatic; they require development and skill in person-to-person interaction. One of the conclusions of the Matson and Montagu study of communication is that "genuine communication is a task to be achieved rather than an omnipresent feature of conventional behavior."104

The development of the communicative skills needed to deal with conflict experience can move in at least three directions. (1) Habitual forms may develop which have the character of being functionally autonomous, in that organisms repeat responses which in the past have brought satisfaction.105 (2) Cognitive-perceptual process may successfully structure or restructure reality in effective conflict handling ways.106 (3) The defenses against threats may assume a character that is dysfunctional, e.g., a group defends against traumatic disillusionment by discounting in advance the motives and abilities of other groups.

Symbolization can serve as substitute experience. A symbol to manipulate perception in the absence of actual experience, i.e., accidents can be explained without being directly experienced. The importance of this relationship is noted by Gerth and Mills who view modern life as "a world where primary experience has been replaced by secondary communication--the printed page, the radio and the picture screen."107 Gerth and Mills do not mean that no primary experiences exists; they were concerned with the use of
master symbols and control of mass media. Their observation is that although leaders often seek control over mass media, they are prohibited from assuming control over human behavior because master symbols rely more on primary than on symbolic experiences.

Feld, in discussing the role of communication for political leaders, describes debate as a form of substitute experience. He states that the:

effectiveness of debate as a means of resolving conflict rests on its capacity to transform a conflict of sectional interests into a comparison of verbal forms in which each sets forth its case.  

Dewey adds to the concept of substitute experience by pointing out that naming through symbols is a more manageable form of interaction. He says that when communication takes place:

all natural events are subject to reconsideration and revision; they are readapted to meet the requirements of conversation. . . . Things in acquiring meaning, thereby, acquire representatives, surrogates, signs and implicates, which are infinitely more amendable to management, more permanent and more accommodating than events in their first estate.  

The master symbol concept of Gerth and the management concept of Dewey involve more than the mere sharing of information. Information is necessary; however, the objective of conflict handling requires more than information. Where ego-involved frames exist, people may distort information to conform to their ego needs instead of using information to bring their perceptions in line with some objective definition of reality. In his study of industrial conflict, Blake states:
Rather than reducing the conflict and increasing objectivity, intergroup contact for purpose of clarification... tends to have the opposite effect. Conflict is intensified. Subjectivity is promoted. Suspicion of the "motivation of others" is increased.\textsuperscript{110}

Communication as experience is used in psychotherapy, for example, as a means of conflict resolution and skill development. Techniques such as dramatic confrontation, behavior therapy, role playing, simulation, gaming, etc., often use relationships between communication and experience. One of these processes is described by Gelder; he writes that the:

analyst presents or creates an experimental situation which resembles the original one but evokes a reduced amount of anxiety. In such situations, an adaptive normal reaction can be substituted for the original unadaptive anxiety response. A graded continuum of similar situations can then be employed, moving toward the original one so that the original unadaptive response can be eliminated.\textsuperscript{111}

There are three key concepts in this process: (1) the use of communications to "reexperience" some anxiety-creating conditions; (2) the repeated communicative encounter with the affects of situations; and (3) the gradual development of adaptive responses which eliminate unadaptive responses or effects.

While Gelder used communication as a substitute experience for past events, Fearing focuses upon the use of communication as experimental action for future events. He writes that:

in addition to its instrumental or homeostatic role, communication is essentially creative. This is partly the result of the central role and unique potentialities
of signs and symbols. . . . "Creative" as used here means . . . the resultant of the structuring process.
. . . The structuring process is creative also in the sense that it does not necessarily depend on antecedent experience (learning) or innate factors in the individual. 112

Most psycho-social theories suggest that self-awareness, inner growth and understanding precede the development of the capacity to take part in experimental action; the concept of experimental action suggests that this process can be reversed. Participation in experimental action via communicative means can lead to the development of individual and group capabilities to handle conflict.

Another way in which experience and communications are related is the use of communications to judge unobservable events. MacDonald makes the observation that:

because language is primarily a vocal actualization of the tendency to see reality symbolically, deviations in the inner mental life betray themselves in unorthodox use of language. 113

Mead believed that social scientists should use the data of symbolic interaction in order to understand society. "It is only in the experience of communication that we can observe both the self and society in action."114 Warner argues that people experience their community life through expressive symbols and that community events "must be studied in terms of their communicative function and structure."115

The central problem in relationships between communication and experience is the extent to which symbolization permits one to more effectively master his own reality and environment. Ittelson states
that "our action will be effective only in so far as the predictions
derived from our perceptions correspond to what we actually experience
when we act."116

Merton in his discussion of the role of social conflict
explains one of the reasons why conflict introduces "stress" in
experience-communication relationships. He writes that:

with increasing social conflict, differences in the values,
attitudes and modes of thought of groups develop to the
point where the orientation which these groups previously
had in common is overshadowed by incompatible differences.
Not only do they develop distinct universes of discourse,
but the existence of any one universe challenges the validity
and legitimacy of the others. The co-existence of these
conflicting perspectives and interpretations within the same
society leads to an active and reciprocal distrust between
the groups. Within a context of distrust one no longer inquires
into the content of beliefs and assertions to determine whether
they are valid or not, one no longer confronts the assertions
with relevant evidence, but introduces an entirely new question:
How does it happen that these views are maintained? Such
views are explained by or "inputed to" special interests,
unwitting motives, distorted perspectives, special position,
etc., the reciprocal distrust feeds upon and nourishes
collective insecurities.117

Communication and experience are related in several significant
ways: (1) experience is often the referent for symbols; (2) communi-
cation is a skill that must be learned; (3) under certain conditions,
communication can serve as a substitute experience; and (4) communi-
cations is a method for judging events that cannot be directly
observed. Each of these relationships is important to the formation
of groups and to the handling of conflict. For example, the symbol-
ization of experience enables members of groups to develop a concept
of common purpose and commonality and/or the symbolization of conflict enables groups to re-experience the situation in ways that can lead to more adaptive or creative adjustments.

Symbolic usage is a central feature of communications and an essential aspect of most human behavior. Definitions for symbols were discussed in the section dealing with behavioral ranges. Most of the definitions included reference to three elements that are involved in symbolization: the symbols, the referents, and the persons. In this section we are concerned with the role of symbols in human behavior. The use of symbols is considered to have a number of different effects on human interactions.

While not arguing that human society is characterized by communication alone, Duncan does argue "that human communication in society is an attempt to create symbols whose use is believed to uphold social order." Conflict, however, often results from attempts to uphold the social order; Arieti notes that opposing symbolic worlds can create conflict on that:

the symbolic property of the human mind, which is the highest cognitive function, creates worlds of symbols which dominate man. Different levels of motivation, created by opposing symbolic worlds, create conflict.  

Arieti explains that when individuals, groups or societies face threatening situations they may regress to lower levels of cognition as a means of producing correspondence between conflicting elements or values. The level of cognition may become what the
author calls paleologic thinking. A resort to this level of cognition may be due to cultural, historical and/or anxiety factors. If the symbol and its abstractions or abstractness is supplanted by projecting internal conflicts on externalized objects or by paleologic thinking, the symbolic process can become restricted in its capacity to represent experience and to be used in creative ways. Effective communication, according to this formulation, depends upon both the presence and adequate use of symbols.

Several authors view symbolic usage, in the form of language, as a basic instrument of social structuring. Burke, for example, argues that language determines society, "It orders experience as it creates forms which make possible communication of experience. The consummatory moment arises in symbolic action." Whorf modifies Burke's observation by holding that language is the manifestation of perceptions held by the group; he explains that:

language once established, further constrains the individual to perceive in certain ways, but we would insist that language is merely one of the ways in which the groups maintain and reinforce similarity of perception.

Duncan shifts the focus to future events in maintaining that:

in symbolic reconstruction we mark out and define the future field and objects which make the environment. The objective of social action, while it has not existence apart from individuals, is determined by the symbolic processes of the group.
Rapoport adds another consideration for the use of symbols in upholding the social order. He directs attention to the use of symbolization in dialogue forms of communication. According to him, a fruitful exchange may be possible between conflicting groups with incompatible approaches, depending on:

1. The ability and willingness of each participant to state the position of the opponent to the opponent's satisfaction (exchange of roles);

2. The ability and willingness of each participant to state the conditions under which the opponent's position is valid or has merit (recognition that any position whatever has some region of validity); and

3. The ability and willingness of each opponent to assume that in many respects the opponent is like himself; that is to say, that a common ground exists where opponents share common values, and each is aware of this common ground and, perhaps, of the circumstances which have led the opponent to the position he holds (empathy). 123

Bonner offers an observation which summarizes some of the relationships between symbols and social order. He was specifically concerned with groups in conflict situations when he wrote that:
communication, anticipation and role behavior reach a high level of complexity when they take place by means of significant symbolization. By virtue of communication, anticipation, role behavior and symbolic interaction people form common perceptions of one another and of the situations in which they interact. When they see the same object or event in very much the same way, they are able to work in unison toward the same goal. When they have no common perspective, they work at cross purposes, and their relationship is conflictual rather than consensual.124

The focus on symbols as a means of upholding and creating the social order should be balanced by consideration of the use of symbols in ways that are detrimental to the social order. One example of this effect is the use of language in a two-valued orientation. Brembeck and Howell note:

The two-valued orientation of language, by placing objects desired in extreme stereotyped categories, tends to introduce distortion and destroy precision of communication.125

The two-value orientation can introduce distortion into informational types of communication; however, under conditions of distrust, as described by Merton, a misvaluation of persons and groups may occur; "one may apply to a person what is implied by the label while ignoring the person himself."126 This underscores the importance of maintaining systems which keep the referent and the symbol in some meaningful form of correspondence.

Communication consists of a matrix of components and functions. Another way of discussing the essential feature of communication is to look at the various components that authors have assigned to communications. Thonssen reviewed the writing of
the rhetoricians and concluded that the communicative situation involved: subject matter, time limitations, purpose, transitory character, interaction, people and language patterns.  

Fearing's theory was concerned with the effects, production, content and field of communication as it involves communicators and interpreters.  

Schramm discusses the communicative situation in terms of source, encoder, signal, decoder and destination; Burke's concept of dramatic action views it in terms of: act, agent, agency, action and scene.  

Gerbner notes the following components: speaker, message, channel, receiver; effect, feedback, noise; Hall's proxemic focuses upon nonlinguistic system such as: sex, space, time distance, etc., and Duncan argues that the specific sociological function of communication is hierarchal address, a role-assigning component.  

This review of several essential features of communication will vary depending upon a group's skill in symbolic usage, level of conflict involvement, degree of commonality, and access to alternatives and intervention points.  

Assuming conflict to be a state of ego involvement, the communications used will have to transgenerate message content, affect conditions and experience in order to deal with the complex set of factors required for the development of adaptive behavior.  

Although most conflicts are not caused by failures in communications, the development of skills and maturity in communication is significantly corelated
with reality adjustment, mental health and functional conflict handling. (4) Communication is essentially the behavior of two or more individuals, and the development of skill and perceptions in communications between persons or groups appears to develop saccadically rather than linearly. (5) Symbolization as a representation of experience and performance can contribute to both social functioning or dysfunctions depending upon its use, for example, in experimental or stereotyped ways. (6) Communication is the essential instrument of human behavior when working-through processes are substituted for actual experience, and as such it is an economical, plastic and time-saving means of achieving conflict transgeneration or transformation.

Theories and Processes

Several theories and processes contribute to an understanding of the role and function of communications in conflict situations. This section contains a review of theories and processes such as cognitive dissonance, monologic and dialogic forms of communication, and social engineering.

Cognitive dissonance.—According to Festinger, cognitive dissonance is a psychological tension which has motivational properties. The theory postulates that when a person experiences cognitive dissonance he will take actions to bring the cognitions into a consonant relationship. The amount of dissonance is subject to change depending upon
the number and/or importance of the dissonant elements as compared to consonant or the relevant elements. Commitment plays an important role in cognitive dissonance theories. It aids in determining what is consonant and dissonant and in the specification of the person's attempts to deal with dissonance. Inconsistency in cognitions is a central concept in these theories.

In discussing the ways in which dissonance can be reduced, Brehm states that the dissonance is reduced, depending on:

- the resistance to change of relevant cognitive elements. Those cognitions with relatively low resistance tend to change first. The resistance to change of a cognitive element comes from the extent to which such changes would produce new dissonance and from some joint function of the responsiveness of the cognition to reality and the difficulty of changing reality.

Cultural groups in conflict situations require effective communications in at least three areas: cognition, affects and experience. The dissonance theories provide information about how to develop consistency between cognitions; however, cognitive consistency alone may not result in the complex sets of synchronistic relationships required for conflict transformation, i.e. a group's feelings and its irrational behavior may be more determinative than they think them to be. Cognitive dissonance concepts should be augmented by problem solving, synectics, therapy and similar processes if the full range of factors involved in conflict situations is to be considered and handled.
The cognitive dissonance model is concerned with a post-decisional behavior. The person notes a cognitive inconsistency, makes a commitment to one of several choices and experiences tension until the dissonance between the cognitions become consonance. Sociologists sometimes rely upon this concept to explain responses to legislation and fait accompli. These actions are forms of social commitment which result in conforming behavior to reduce dissonance.

Conflict theories.—In contrast to cognitive dissonance theories, conflict theories are generally based on predecisional behavior. Conflict models assume that psychological tension reduction occurs during the period leading up to a decision. Dissonance theory, on the other hand, assumes that tension reduction occurs after a commitment has been made to obtain some goal.

Theories of conflict which analyze conflict in terms of approach and avoidance patterns are similar to cognitive dissonance theories in many ways. In these conflict theories it is held that psychological tension is increased and reduced according to the following guidelines:

The tension will increase as the average magnitude of the opposing tendencies increases. This tension would thus be greatest where the opposing approach and avoidance tendencies were exactly equal in magnitude and where both tendencies were very strong. An individual may reduce this tension by changing the approach and avoidance tendencies so that they are less equal in strength or so that their average magnitude is less.
In conflict situations, both predecisional and postdecisional behavior aimed at conflict handling are necessary. One possible relationship between the two theories can be stated this way: Conflict theories apply in situations where affect is attached to alternatives in ways that result in the selection of one of several possible choices while cognitive dissonance theories explain how the group brings other aspects of their behavior into a consistent pattern after commitment to a selected alternative.

Although these theories are valuable, they are limited in most of the studies to specific issue types of conflicts. When the conflict is based on structural conditions (limited resources, cultural differences or communication patterns), the theories serve to explain only part of the conflict situation.

**Social Engineering Process.**--Bernay's concept of a social engineering process supplements dissonance and conflict theories by providing a program frame of reference. The process was developed for public relation personnel to help them carry out three broad functions: adjustment, information and persuasion.137

There are eight steps in the Bernays process: (1) define your objectives; (2) research your publics; (3) modify your objectives to reach goals that research shows are attainable; (4) decide on your strategy; (5) set up your themes, symbols and appeals; (6) blueprint an effective organization to carry on activity; (7) chart your plan for both timing and tactics; and (8) carry out your tactics.138
The Bernays process is similar to the Dewey reflective thinking steps. Both processes focus attention on causes, facts, alternatives and verification; however, Berneys seeks to organize planning and resources in a manner that can be effective in conflict situations. Conflict transformation as a means of behavioral management is a form of social engineering.

One value of viewing the conflict situation in terms of social engineering is that it focuses attention on the art of achieving the possible and on communications as both a strategy and message. The process holds that definable objectives can lead to: (1) the organization of resources capable of obtaining those objectives, and (2) the development of communicative patterns consistent with the behavioral requirements of the situation.

Communication models.—Two of the many models of communication will serve to illustrate the contribution of this approach to conflict handling. Gerbner's model of communicative events was developed to provide a means of organizing the scientific study of communications. Berlo's model of communication process was used to explain communications to practitioners.

Gerbner's model contains ten aspects which are included in the following sentence. Someone perceives an event and reacts in a situation through some means to make available materials in
some form and context conveying content of some consequence. Gerbner describes his model in the following manner:

"This communicating agent must perceive or have perceived an event of some kind in order to initiate or receive communication, and must react to the perception in some way. The nature of this reaction is influenced by the situation in which it takes place. The communicative reaction must be made through some mediating agents (channels, media), in other words through some means. It is transmitted in order to make available some communication materials. Materials must be in some form or pattern in order to carry a message. As the reaction to materials takes place in a situation, so every message is perceived in a context. All these aspects enter into the formation of content. And, finally, we can assume that some consequences always follow perceived content, whether or not it achieved a desired reaction."

The Gerbner model focuses attention on the systematic approach to communications. It provides a series of aspects and assumptions that assist in analyzing communicative events in conflict situations. The model is based on an individual (as a speaker) but is developed in terms of both scientific and normative standards.

Gerbner used the model to develop a value-conscious approach to the theory of communication. The values that he postulates are based on changes in knowledge which he views as a communicative quality of man's social relationships with his world of events. He suggests that "public knowledge is acquired through social communication and describes the state of a social communicative system." This state is achievable by a combination of three interrelated factors: freedom, truth and beliefs. Using this formulation, Gerbner views the role of government in the following way.
Government in a democracy is responsible for safeguarding the freedom of selection and the equitable availability of diverse views and evidence in matters of public concern. Otherwise there is no self-government, only manipulation of citizens or as more elegantly phrased, "engineering of consent."141

The Gerbner model focuses attention on communication as a series of processes or events and stresses the need for viewing communications in terms of the values and society to which it contributes. The model, however, does not give adequate attention to the interactional and transactional aspects of communication. Placing the emphasis on knowledge as "the key" in social relationships overlooks the observation that knowledge is often the least critical factor in social situations.

Berlo's model of communicative process is based on the Shannon and Weaver model which was developed for electronic communication. The Berlo adaption has six components: the communication source, the encoder, the message, the channel, the decoder and the communication receiver.142

While Berlo focuses attention upon important components and actions of the communicative process, his model illustrates a caution that should be considered when one applies similar concepts to different circumstances. Electronic and human communication are similar, but they are different in several important ways; for example, an electronic system is concerned with message transmission, while human systems of communications, on the other hand, are more concerned with meaning and transgeneration.
Both of the models of communication support the concept that communications can be instrumental and developmental. The models also illustrate an aspect of general systems, namely, that one should use them to organize information but should not be restricted by their organizational patterns.

Theories of dialogue.--Just as there are differences between electronic and human communication systems, there are differences in the forms of human communications. Matson discusses the differences between monologic and dialogic forms of communication.

The field of communication is today more than ever a battleground contested by two opposing conceptual forces --those of monologue and dialogue. The "monological" approach, which defines communication as essentially the transmission and reception of symbolic stimuli (messages or commands), finds its classical formulation in the art and science of rhetoric and its characteristic modern expressions in cybernetics, combative game theory, and the repertoires of mass persuasion. The "dialogical" approach, which regards communication as the path to communion and the ground of self-discovery, found its original champion in Socrates and has its spokesman today in such diverse currents of thought as religious existentialism, post-Freudian psychotherapy, and sociological interactionism.

Lippitt in his work, The Quest for Dialogue, describes the dialogic form of communication in the following terms. In dialogue, the participants are engaged in a mutual and reciprocal sharing of feelings, cognitions and experiences; interaction in this process occurs in a form which makes it difficult to label the participants as encoders-decoders or as speaker-listeners since each participant is "constantly" involved in each of these
roles. Transactional rather than transmission processes are the dominant features of the interactions. The process consists of three principal activities: confrontation, search and coping. These activities occur under conditions such as: using all appropriate resources; understanding one's self; communicating in one's own way; postponing judgments; seeking truth; sharing goals; maintaining personal autonomy; employing problem-solving energies; being experimental, flexible and spontaneous; and accepting the ambiguous and existential character of a situation.  

Dialogic forms of communication have been used to achieve conflict transformation in methods such as discussion, role playing, synectics, therapy and simulation. The major limitation to the greater use of dialogic forms of communications, as a distinct style of interaction, is the lack of know-how and experience with its processes.

Summary

In this study, communication is viewed as social achievement through symbols. Communication assists social achievement through its capabilities for sharing experiences, developing skills and distributing knowledge and meaning.

Communication always involves interaction and relationships; however, not all interactions and relations involve communications; communication can serve interactions and relationships by calibrating systems and verifying response adequacies.
The essential characteristic of communication, in terms of a general system, is the instrumental effects of symbols.
In the development of scientifically valid concepts about cultural groups for use in the Communication Ecology, it is necessary to view the term in relation to the two concepts from which it derives, culture and groups.

Culture.--Writing in the 1950s, Kroeber and Kluckhohn concluded that in spite of the great mass of available literature devoted to considerations of culture and the existence of scientific fields such as anthropology devoted to its study, there was still no "full theory of culture." They expressed the need for continuing study and definition of the content of culture and for pulling together, through diachronic and synchronic studies, a theory of "cultural structure." So much confusion about the meaning of this term exists within the social sciences, in fact, that some theoreticians and analysts such as Radcliffe-Brown have suggested that a "science of culture" may never be achieved.

Ruesch and Bateson have observed that part of the failure to reach agreement on the meaning of culture derives from the fact that:

"culture" as such cannot be observed directly. It only exists in the form of generalized statements made by social scientists about people, which include not only the specific organizational patterns of people, but also their judicial and economic problems, their language and systems of symbolization, their conventions and traditions, and all objects, buildings, and monuments which convey some message from the past.147

Culture generally refers to the "total way of life characteristic of a somewhat homogeneous society of human beings." 148 Morris
postulated in 1948, for example, that culture:

is a scheme for living by which a number of interacting persons favor certain motivations more than others and favor certain ways rather than others for satisfying these motivations.

The word to be underlined is "favor." For preference is an essential of living things. . . . To live at all is to act preferentially—to prefer some goals rather than others, and some ways of reaching preferred goals rather than other ways. A culture is such a pattern of preferences held by a group of persons and transmitted in time.149

Linton in 1945 defined culture as "the configuration of learned behavior whose component elements were shared and transmitted by the members of a particular society."150

Wissler suggested that there were nine headings under which culture could be compiled: (1) speech; (2) material traits such as utensils, tools, dress, occupations, etc.; (3) artistic endeavor; (4) myths and scientific knowledge; (5) religious practices; (6) family and social systems; (7) property; (8) government; and (9) war.152

Other methods of compiling facts about culture have been suggested. For example, Kroeber and Kluckhohn in their analysis of 164 definitions of culture, concluded that culture is (1) a product, (2) historical, (3) a selection process, (4) learned, (5) symbolic, (6) an abstraction, (7) ideas and patterns.152

Some researchers have considered culture in terms of its inner groupings and agree with Malinowski that the best description of any culture in terms of concrete reality would consist of listing and analyzing all the institutions into which culture is organized.153 Malinowski also considered culture in terms of
its functions, suggesting that functional observations should be emphasized along with the more traditional concentration on the form of culture. He viewed culture as "a vast apparatus, partly material, partly human and partly spiritual, by which man is able to cope with the concrete, specific problems that face him."\textsuperscript{154}

He contended that culture is a "system of objects, activities, and attitudes in which every part exists as a means to an end,"\textsuperscript{155} and that the elements of culture are interdependent and organized on the basis of "vital tasks" into institutions. Culture always involves people in relation to each other, he said, who are organized, handle artifacts and communicate with each other by speech or other types of symbolism. In essence, Malinowski suggested, culture is the gradual developing system of adaptations of human groups to satisfy basic and derived needs.\textsuperscript{156}

Core concepts from each of the foregoing perceptual theories will be drawn on in the theoretical development of the Communication Ecology. Consideration of them as well as others leads to the speculation that Kroeber and Kluckhohn's concept of culture has probably not been improved upon:

Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other, as conditional elements of further action.\textsuperscript{157}

Implicit in all the conceptual frames of culture reviewed is the idea that culture exists only in relation to groups of people.
In the broad anthropological sense, culture can refer to the major classifications or races of mankind, variously defined.\textsuperscript{158} Proponents of the "one-world" theory conceive of a universal human culture.\textsuperscript{159} At the other extreme are those who discuss culture in relation to groups whose dimensions are less expansive such as national or religious cultures.\textsuperscript{160}

Malinowski observed that the "essential fact of culture is the organization of human beings into permanent groups" to cooperate in order to attain access to resources. The function of group formation is cooperation to use artifacts and consume goods.\textsuperscript{161}

The essential feature of his reasoning was the concept of organization.

In order to achieve any purpose, reach any end, human beings have to organize. . . . Organization implies a very definite scheme or structure, the main factors of which are universal in that they are applicable to all organized groups, which again, in their typical form, are universal throughout mankind. I propose to call such a unit of human organization by the old but not always clearly defined or consistently used term, institution. This concept implies an agreement on a set of traditional values for which human beings come together.\textsuperscript{162}

Implicit in his concept of institutions were these ideas:

1. Human beings stand in definite relation to one another and to their environment.

2. In their position or stance, they operate on the basis of a group "charter" or mandate, which defines their purpose.
3. They obey the norms of this association as they work together to satisfy their desires and needs.

4. Working together, they have an effect or leave an impression on their environment.

5. They equip themselves materially (the process of organization is a means of equipping themselves) and adopt a number of rules of status and performance by which they carry out activities and practice dogma or moral principles.163

Human beings, Malinowski pointed out, are born as group members or enter into groups; when needed or desirable groups are not available, they form new ones, with new charters. They join groups because that is the only way they can satisfy their own interests or needs, and the groups formed are recognized by other groups. They communicate, interchange services, and mobilize themselves for common enterprise.

Malinowski said there were seven types of groups; he classified them in terms of their principles of organization:

1. **Reproduction groups** (membership based on blood bonds)--Family, extended domestic groups, groups based on genetic descent, clans, systems of regulated clans.

2. **Territorial groups** (membership based on propinquity and possibility of cooperation)—Neighborhoods, districts, tribes.

3. **Physiological groups** (membership determined by sex, age,
or body stigmata)—Primitive sex totemic groups
(originally based on sex or anatomical distinctions or sexual division of activities), age groups, groupings of the abnormal or mentally deranged.

4. **Voluntary groups**—Secret societies, clubs, benefit societies.

5. **Occupational and professional groups**—Guilds, economic interest groups, and groups composed of classifications such as teachers, researchers, defense personnel, and religious bodies.

6. **Rank and status groups**—Nobility, peasants (castes), and groups stratified by ethnic distinction.

7. **Comprehensive groups**—National tribes, small enclaves, alien minorities, ghettos, and political units including several cultural subdivisions.

Considerations of groups became part of social theory partly because they began to be clearly observed and because they could serve conveniently as isolates for cultural analysis.

Bernard points out that for many years the "American culture" was thought of as a distinctive entity, modification of an Anglo-Saxon culture which retained common law, the jury system, traditional rights guaranteed by English documents, and the like. In general, it was thought that although people from other cultures came to America, they were assimilated into and became part of our culture.
By the time of World War I, it became obvious to
social theorists that the assimilation of groups which had been
taken for granted in the United States had not really occurred.
"Instead of a melting pot, the war revealed numerous separate
cultural groups trying, not always successfully, to live together."165
Groups of many kinds began to receive consideration as isolates for
cultural analysis.166

The earliest social scientists to consider groups as
cultural units were Cooley and Weber. Cooley defined:

1. Primary groups, characterized by intimate, face-
to-face associations, by a fusion of individuals,
and by mutual identification.

2. Secondary groups, such as neighborhoods or communities.

3. Tertiary groups, such as associations, etc.167

Simmel expanded Cooley's theory to include interest
groups based on particular, shared interests of their members
and characterized by the secrecy which their members shared.
He cited needs such as strivings for inclusiveness and
exclusiveness, seclusion, aristocracy, and the agreement of
members on the danger of other groups and governments.168

Some analysts have suggested that the concept of the
group really came into social and behavioral sciences with
the study of conflict. Weber, for example, referred to the
"corporate group" as a social relationship which was either
closed or which limited the admission outsiders by rules.
He suggested also that conflict was a social relationship in which the action was oriented to carrying out a group's will against the resistance of other parties.¹⁶⁹

Some writers have made a distinction between groups and organizations. Boulding, in his work on the nature of conflict, defined the group as the "ill-defined middle ground between the person and the organization," and as:

the unorganized subpopulation of persons that exists as a social fact because of its presence in the image of the persons concerned as a significant classification of the total population. A group, in this sense, is a subpopulation within some larger population with which individual persons may be identified, either as included in it and belonging to it or as excluded from it and not belonging to it.

But, he continued,

Some groups are at the same time organizations, and many groups have some kind of organization associated with them, though not necessarily coterminous with them.¹⁷⁰

Boulding identified both involuntary groupings, which result mainly from an individual's genetic inheritance, and voluntary groups in which a person chooses to participate.

The conditions for group membership were identified in slightly different terms by Bonner in his work on the dynamics of group behavior. He placed emphases on the internal workings of a group.

A dynamic group is...a group of persons who are psychologically aware of their interindividual relationships and who are moving toward a goal that they have agreed on collectively... Their
interactions are integrated in such a way that their psychological tensions are shared. The "togetherness" of the group as a dynamic structure is due to a "circular" reaction in which there is a high degree of self-intensification in each member of his own "excitement" as he finds it reflected in others. In this process shared feelings and tensions, which in each member separately had no adequate outlet, are freely expressed. When a person's responses to others is shared by them, when these experiences become reciprocal or interactive, there exists the basic condition of group behavior.171

While groups are thought of as parts of a larger culture, they are also considered to have their individual cultures, which according to Kroeber and Kluckhohn, are:

1. **Ideological culture**—the group's official and unofficial credo, institutions, meanings, values, and norms.

2. **Behavioral culture**—dutiful and rightful actions of its government and members as these actions are defined in the group's law.

3. **Material culture**—the totality of vehicles, such as property, funds, means of subsistence.172

Singer added another dimension to group formation and concepts in his consideration of the perceptual group which he defined as a number of individuals who perceive some aspects of the external world more or less similarly, and communicate their shared perceptions to each other. He postulated that the pattern of perceptions accepted by an identity group is called a culture.
Therefore, each group may have its own culture. 173

In attempting to select core concepts about cultural groups for use in the development of a communication ecology, one other definition deserves attention since it was used in studies of group conflict and cooperation by Sherif who defined a cultural group as:

a social unit that consists of a number of individuals (1) who, at a given time, stand in status and role relationships with one another, stabilized in some degree, and (2) who possess explicitly or implicitly, a set of norms or values regulating the behavior of individual members, at least in matters of consequence to the group. 174

The concept of small groups should also be considered here since it has received much attention and is considered an effective field for study of the internal interactions that take place within groups as well as those occurring between or among groups. According to Shepherd:

The small group is utilized as an effective medium for a variety of purposes. Psychiatrists and clinical psychologists find group therapy a promising addition to individual therapy. The T-group or sensitivity-training group is a major focus of training in human relations for supervisors, managers, leaders, and others. The small class is considered essential to a good educational program. Governing boards of various organizations use committees and subcommittees to do much of their work. Social workers argue that treatment directed at the gang or the family offers hope in controlling delinquency. The success of the Chinese Communists during the Korean War in controlling American prisoners of war is partly attributed to their use of small groups as a medium for self-criticism. 175

Generally, a small group is considered to be two or more people interacting in a setting that is organized or has focus but
is less organized and enduring than a formal organization. As it increases in size it reaches some upper limits (generally less than 15 members) at which it begins to become more formalized and starts behaving as a formal, structured organization.

In addition, the small group possesses some general characteristics to which attention is directed.

Three general theories that have been advanced for studying behavior in small groups deserve mention, both as examples of patterns for studying groups and because some of their principles may be useful in developing the Communication Ecology. Some of the variables used in studying small groups will also be useful. One of these is interaction; its use in small group theory is described by Shepherd:

As a construct, interaction may refer to the process of acting and reacting which takes place between people meeting together in a small group. It is abstract and complex because it includes what is manifestly and subliminally communicated between people, what is intended and what is expressed, how messages are interpreted, and the like. As a concept, interaction may refer to the overt expressions of persons meeting together in a small group, specifically to the words and gestures which are used and their apparent meaning both to the communicator and to the interpreter. . . . For example, the concept of interaction could be measured by averaging together the variables of number and kind of words directed at each other by two persons, number of gestures directed at each other, and subjective recall of attention paid to each other; or interaction could be measured only by one of these three variables.176

The three small group theories to be discussed are field theory developed by Lewin and two system theories developed by Homans and Bales.
Lewin's field theory approach includes these assumptions:

1. A group has a life space, which consists of what the group perceives in its environment.
2. It occupies a position relative to objects in its life space.
3. It is oriented toward goals which usually involve a change in relative positions of the group and the objects.
4. It locomotes or behaves in certain ways in pursuit of these goals.
5. It may encounter barriers in the process of locomotion.

The field theorist also uses particular concepts to explain his observations of group behavior, including:

1. Norms— the rules governing behavior of group members.
2. Roles— referring to the relative status of members.
3. Power and influence— referring to the kind and amount of control members have over each other.
4. Cohesion— the degree of attachment that members have toward the group.
5. Interaction— the type and degree of communication and interrelationships between members.
6. Consensus— the degree of agreement regarding goals, norms, roles and other aspects of the group.
A typical hypothesis of field theorists is that cohesion is directly related to productivity, satisfaction, conformity, influence and cooperative interaction patterns.

Field theory was derived originally from observations about individuals, and its major focus has been the individual and his relation to the group; in contrast, the method of interaction process analysis (IPA) developed by Bales is an observational scheme derived from the study of social systems. It deals primarily with the problems confronted by a small group including:

1. **Adaptation** to outside factors which influence the group.

2. **Instrumental control** over things relevant to performing the group's work.

3. **Expression and management of feelings** of the members (such as relieving tension).

4. **Development and maintenance of integration** of the members.

Bales conceptually analyzed each of these problems with respect to the statements made and behavior exhibited by members of small groups. This led to a classification of four major categories of communicative acts which can be used as a scheme for observing a group. The key concept for use of the observational scheme is the "act," which refers to the verbal and nonverbal behavior of a person in the group. Each act is
scored in terms of who originates it, toward whom it is directed, and its nature. The typical pattern that emerges as an observer notes the acts that occur is a portrait of a group's expression of opinion, information, agreement, disagreement, tension release or requests for information and opinion.

Briefly, Bales postulates the theory that as members of small groups communicate, they solve basic problems in a way that enables them to achieve tasks and build solidarity. Homans' system theory consists of two parts. The first includes three concepts which form the elementary aspects of social behavior:

1. **Activity**—the things people do with or to nonhuman objects or with other people when reciprocal behavior is ignored.

2. **Statements of sentiment**—the feelings, attitudes and beliefs that constitute the inner state of a person; the things he subjectively perceives.

3. **Interaction**—Behavior directed toward another person when his reaction or reciprocal behavior is taken into account.

Homans relates these hypotheses together in various ways. For example: "If the scheme of activities is changed, the scheme of interaction will, in general, change also, and vice versa." In the second part of his theory, Homans identifies a social system comprising an external and an internal system.
external system, the relations among interaction, activity, and sentiment are imposed on the group by external forces; in the internal system, they are developed by members of the group.

These three methods of studying or observing the behavior of small groups have been discussed primarily because some of the techniques they include will be useful in developing and using the Communication Ecology. They will be integrated into the overall pattern of core concepts.

It should be pointed out that many of the core concepts used in the Communication Ecology will derive from or be related to the thinking of Malinowski because of his emphasis on the functioning of groups and on principals of organization. This is appropriate since this study is concerned primarily with the behavior of groups rather than with their form of internal structure.

The use of the term, cultural groups, in the ecology is very similar to Malinowski's use of the term, institutions. His use of the latter term appears to be general enough to include the various kinds of groups considered in this study.

Four attempts at division of cultural groups into types based on organizing principles; the voluntary and involuntary grouping concepts developed by Singer; Cooley's concept of primary, secondary and tertiary groups; and Kroeber and Kluckhohn's division of groups in ideological, behavioral or material terms. Each of these classifications is useful to
social science.

For the purpose of studying conflict situations, however, it is desirable to categorize groups in terms of the origin of the conflicts in which they engage. It is proposed that this be done in the following manner.

1. Socially-defined groups, ethnic or economic, among whom conflict develops over individual or group rights or dignity.

2. Goal-oriented groups, such as labor or management, among whom conflict develops over issues of resources and security.

3. Institutionally-based groups, such as welfare or education, among whom conflict develops over questions of authority and results.
Basis for Development of the Communication Ecology

One purpose of the information presented so far in this chapter has been to illustrate:

1. That there is an interdependency between cultural groups, communication and conflict that makes it possible to consider these factors as units or subsystems within an integrated framework or system.

2. That the methods recommended for conflict handling by social and behavioral scientists have been concentrated in single-channel approaches with consideration in any given attempt focused on using just one of the three subsystems.

This section is also intended to illustrate the need for a new multichannel or multilevel approach to conflict handling which places emphasis on consideration of the three subsystems in relation to each other during conflict situations.

The Interdependencies

If the findings presented with respect to cultural groups, communication and conflict are reconsidered, it can be seen that there are major themes that recur in each category. They can be viewed as interrelationships which bind the subsystems together.
Cultural Groups ↔ Communication

Several of the frames of knowledge with respect to communication indicated that similarity of perception (i.e., communication) leads to the establishment of a common culture. Singer observed that geographical boundaries may not be nearly as formative of identity groups as shared perceptions.

It is precisely . . . shared, often unarticulated, and sometimes unarticulatable patterns of perception and behavior, which are referred to as 'a culture'. . . . There is a considerably higher degree of similarity of perception among college teachers of quantum physics—regardless of nationality—than there could possibly be between them and, let us say, uneducated sharecroppers in the same society.183

Malinowski has also theorized about the close relationship between communication and the formation of cultural groups. He contended that the most characteristic index of tribal unity was its commonality of language:

A common tradition of skills and knowledge, of customs and beliefs, can only be carried on conjointly by people who use the same tongue. Cooperative activities, in the full sense of the word, are again possible only between people who can communicate with each other by language.184

The linguist, Whorf, hypothesized a theory of relativity, i.e., that "all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar." In this sense, language can be viewed as a manifestation of a group's attempt to maintain and reinforce its perceptions, thus binding its members more closely together.185

Conversely, as Singer and others have suggested, the higher
the degree of similarity of perception among a number of individuals, the more likely that they will communicate frequently, clearly and easily. Communication permits (through feedback mechanisms) a constant reinforcement of group identify.\textsuperscript{186}

\begin{align*}
\text{Communication} & \leftrightarrow \text{Conflict} \\
\end{align*}

The formative effect of communication on conflict has also been recognized by Singer. Since communication is easiest among individuals who identify most clearly with each other, and most difficult among those who perceive more or less dissimilarly, this tends to reinforce and exacerbate awareness of group differences. In this sense, communication can be said to lead to conflict.

Communication might also be said to carry conflict from person to person or group to group. To better understand this concept, the process can be likened to the epidemiology of a disease. "Epidemics of ideas, attitudes, and fashions are not only carried by the simple contagion of face-to-face communication but are airborne by the writh dissemination of messages in newspapers, radio, television, and so on."\textsuperscript{187}

Paradoxically, communication is also recognized as a means of reducing or resolving conflict. In the majority of the methods recommended for handling conflict, communication is seen as a key to success. Most of the problem-solving attempts at conflict resolution or reduction represent attempts at improving communication. Many of them are based on the theories that state that hostility impairs communication. Therefore, if communication can be improved,
the level of hostility may be lessened.

Bonner observes that as hostility increases, communication between groups is reduced or limited. This has the effect of making the group's frame of reference more divergent. In this situation, misunderstandings and hostile reactions seem to multiply.

He contends that eliminating the hostilities requires a process of unlearning. "But unlearning attitudes," he suggests, like learning them can take place only when there is interaction of communication between members or between groups."\(^{188}\) This chain of reasoning underlies the many approaches to resolving problems within groups through attempts to ensure what is usually called "free" or "open" communication. Recognition of the deterioration of communication among groups as the conflict between them escalates has been a touchstone of group dynamics such as that espoused by Homans and Bales. Ruesch has also commented on the disintegrative nature of communication during periods of conflict.

Conflict \(\leftrightarrow\) Cultural Groups

Simmel's major work on conflict begins with the statement that "conflict is admitted to cause or modify interest groups, unifications, organizations."\(^{189}\) Coser elaborated on this theme, pointing out the "group-binding" function of conflict. Boulding indicated the dominant role that conflict plays in determining a group's behavior. In fact, he observed:

Organizations frequently organize themselves against something, and, in the absence of a perception of conflict, their reason for existence is weakened or disappears, and
they suffer from internal disorganization or even dissolution. Conversely, the perception of conflict is frequently heightened by the existence of organizations that are specialized for conflict.190

In like manner, some writers have suggested that it is cultural groups that give rise to conflict. They point to incidences of conflict between racial groups or between identity groups that have conflicting goals such as labor and management. To the extent that the goals of the management team are influenced by their cultural upbringing and environment, they will have difficulty identifying with all the needs of their employees; hence, conflict arises. Another type of conflict created by cultural influences is interdenominational conflict between religious groups. An example of the latter is the present conflict within the Catholic church over birth control methods. In general, those Catholics who have retained the strongest cultural identity with the church are opposed to birth control, while those who have been more influenced by the larger, secular culture are not opposed to and often favor the use of contraceptives.

Summary

Definitions and theoretical frames that will be used in Chapter III to develop core concepts have been discussed. In the latter part of this chapter, an attempt was also made to show the interdependencies of the theoretical frames with respect to conflict, communications and cultural groups.
CHAPTER II FOOTNOTES


7Stagner, 137.


10Boulding, 5.

11Boulding, 78.

12Boulding, 2.
13 Boulding, 3.


15 Simmel, 107.


20 Bonner, 442.


24 Frankel, p. 29.

26 Coser, 471.

27 Coser, 19-20.


29 Schelling, 15.


32 Bernard, v.

33 Simmel, 1.


35 Stagner, 133-134.


42 Lewin, 125-141.

43 Boulding, 311-312.


50 Bonner, 43.

51 Duncan, 64.


56 M. Sherif et al., Intergroup Conflict and Cooperation: The Robbers Cave Experiment (Norman, Okla.: Institute of Group Relations, 1961).


58 Duncan, 113.


62 Coleman, 100.

63 Coser, 50.

64 Boss, 200.


69 Eissler, 305.


71 Schelling, 14-15.

72 Schelling, 13.


77 Ruesch, 5.


81 Duncan, 89.


83 Lundberg, 23.

84 Ruesch, 79.

86 Franklin H. Knowler: Personal Communications.


90 Ruesch, 28.


93 Hall, 38.


95 Marshall R. Singer. The Meaning and Effect of Culture (Pittsburgh: Graduate School of Public and International Affairs, University of Pittsburgh), mimeo.
96 Hall, 504.


100 Ruesch, 6.


102 Berelson and Steiner, 87.

103 Duncan, 297.

104 Matson and Montagu, 8.


109. Duncan, 57 ff.


114. Duncan, 76.


117. Merton, 457.

118. Duncan, 391.


120. Duncan, 144.


122. Duncan, 89.


125. Brembeck and Howell, 157-158.


128 Fearing, 180-181.


130 Duncan, 433.

131 Gerbner, 171.

132 Hall, 61.

133 Duncan, 437.


136 Brehm, 136.

138 Bernays, 9-10.

139 Gerbner, 172

140 Gerbner, 195

141 Gerbner, 197


143 Matson and Montagu, vii.


147Ruesch, 40.


152Kroeber and Kluckhohn, 157.


154Malinowski, 36.

155Malinowski, 176.
156 Malinowski, 144.

157 Kroeber and Kluckhohn, 357.


161 Malinowski, 43ff.

162 Malinowski, 39.

163 Malinowski, 150.

164 Malinowski, 62-65.

165 Bernard, 239-241.

166 Malinowski, 51-54.


168 Simmel, 88-108.

170 Boulding, 105.

171 Bonner, 45.

172 Kroeber and Kluckhohn 355ff.


176 Shepherd, p. 22.


178 Shepherd, p. 25.


180 Shepherd, pp. 27-36.


Singer, 9

Malinowski, 165.


Singer, 4.

Boulding, 143.

Bonner, 43.

Simmel, 13.

Boulding, 145.
CHAPTER III

THE COMMUNICATION ECOLOGY

The theoretical frames reviewed and the core concepts selected from them in Chapter II will be used in this chapter as the basis for the development of a conceptual system or model called the Communication Ecology. The core concepts will also be used to explain and to analyze the functions and interactions occurring within the ecology.

Core concepts are constructs that are supported by theories and principles in a variety of disciplines. The symbolic use of language is an example of a core concept. This concept is recognized and used in theories from a variety of disciplines such as sociology, engineering, communication, medicine, and psychology. The symbolic use of communication, therefore, is a core concept of the Communication Ecology.

The ecology results from the synthesis of the particular core concepts borrowed from the theoretical frames discussed. It can be viewed as a system which includes subsystems whose functions and processes can be analyzed and understood in terms of the core concepts developed. The subsystems are cultural groups, communication, conflict and resources.
A System: Conceptual Scheme or Model

As a concept or model used in attempts to describe factors, their actions, and interactions as belonging to one universe, a system is useful in organizing complex data and comprehensive events.

A general system is based on four major assumptions: (1) All matter has both internal and external relationships with other objects or factors—these relationships may be regarded together as a system. (2) Matter and objects that exist in a relationship possess certain universal properties. (3) Processes and principles that operate on one level of the system are likely to operate and to have an effect on other levels of the system. (4) While the levels of the system have many aspects in common, significant differences are also present.¹

Importance of the system concept.—Persons who accept the position that structures and systems can be effective means for analyzing and changing situations usually accept the premise that systems have properties of their own. These properties, however, are not of a mystical Gestalt nature; they exist because of the differences and similarities between the individual parts and the general system.

Lewin, in dealing with the question of whether a group is something more than the sum of its parts, wrote that "any dynamical whole has properties of its own. The whole might be symmetric in spite of its parts being asymmetric, a whole might be unstable in spite of its parts being stable in themselves."²

This concept is demonstrated in many ways. For example,
the Supreme Court of the United States in its decision on the ques-
tion of segregation in the schools expressed concern for the social
effects of the dynamic whole when it ruled that separate educational
facilities are inherently unequal.

Consideration of the properties of a system as a whole is also
illustrated in the major concern of educational psychologists with the
form of education rather than with the content of the subject matter.
They have observed, for example, that administration of a school on
an authoritarian basis leads to different types of student-teacher
interactions from those that take place in a school where administra-
tion is based on democratic values. Critics of programmed instruction
also base their argument on the form of learning rather than on content.
They hold that passive learning in programmed instruction does not
lead to the development of systems of thinking-doing needed for
scholarly inquiry and self-discovery.3

Certain types of changes are not possible unless they are
approached either explicitly or implicitly from a system point of
view. Newcomb, the sociologist, points out that people are trapped
in one or more social system: family, groups, institutions, culture,
and world. Because they exist in more than one social system, many
individuals experience conflict. According to Newcomb, conflict
occurs for a variety of reasons. Each system engenders tensions;
each group may have sharply different ways of handling the same type
of conflict; changes in one system may destroy related systems; and
pressure and counter pressure are constantly being exerted to main-
tain some balance.
With respect to individuals, Newcomb used the concept of functional significance to explain that attitudes (prejudice, for example) are often deeply embedded in character structure and cannot be changed unless the entire economy of the person's life is overhauled. He suggests that "attitudes tend to be persistent when the individual continues to perceive objects in a more or less stable form of reference."^4

A similar finding was made in a study of family interaction by Snell and others. The improvement of an emotionally disturbed individual often depends upon the ability of his family to improve its functioning as a system. The authors state that "many types of socially unacceptable behavior manifestations have a situational dynamic substrate in the family. If this is shown to be so, it would open ... new approaches to therapeutic intervention through the family."^5

Persons who want to understand and deal with conflict situations need a systems view of the dynamics of conflict. Administrators, planners, and communicologists, for example, need a broad view of the conflict situation and their roles in it. Gustad makes this point in relation to the role of the college president. He states that the day has come in which the college president must play a new role as a skillful leader of dialogues between the many communities that compose a college or are related to it. He suggests that the president must be a leader rather than merely a mediator and that he must be "a specialist in administration and a generalist in education."^6 Weinberg adds:

The university must accord the specialist of broad outlook the status and prestige it now confers solely on the specialist of narrow outlook. Granted that specialization is "blessed" in the
sense that only the specialist knows what he is talking about; yet, if only the specialist knows what he is talking about, only the generalist knows why he should talk at all.  

In a paper which explores the usefulness of sociological insight for analyzing conflict between large social systems, Davis supports the system point of view. He suggests that the analyst must comprehend the internal conditions (tensions) of each group and their relation to a common situation. Only limited insight can be gained by studying particular aspects of the situation.  

Sprout and Sprout believe that viewing human systems as ecologies has three positive benefits. (1) The ecological perspective permits one to study the psychological behavior of persons individually or in groups. (2) It leads to strategies designed to achieve envisaged goals or purposes. (3) It permits outcomes to be viewed as the operational results of strategies and undertakings.  

Cautions and limitations.--As important and useful as the systems approach may seem, it has serious limitations which should be guarded against and/or corrected. Many parts of a system's model are based upon analogies; a finding that applies at one level or part of the system will be, if the relationships appear strong and reasonable, applied to a different level or part. This process of theory building by analogies often ends in a product that is descriptive but not operational. This is due, in part, to the difficulties of duplicating the larger social system in an experimental situation. More effective methods will have to be developed to operationalize general system models and to test them in practical situations.  

The systems approach is limited in two other important ways.
Its principal function is to organize data into more useful forms; it does not replace theory. A system can lead to the identification of relationships and problems that will stimulate and direct the development of theory and research. Another major function of systems is the description of problems and relationships; the system does not, in and of itself, explain causes, processes and principles. Study of systems, however, can contribute to the explanation of events by focusing research efforts on the critical issues.  

**Purpose of Chapter**

Persons in conflict situations who are interested in dealing with the situation need a conceptual frame of reference that will allow them to understand, analyze, plan, and act within the context of complex and conflicting forces.

The Director of the Cleveland, Ohio, Target City Project, sponsored by a Ford Foundation grant and administered by the Congress of Racial Equality, expressed the need for a systems approach and for programs based on systems objectives.

A report on the project stated that the director of the project wanted to apply the techniques of psychologists, sociologists, planners and programmers to the problems of the ghetto and its people in a "grass roots" manner. The idea, he said, was not only to organize people, but to give them the "sophisticated tools" they need to compete in our society.

The program will be a combination of the things the researchers and planners have come up with/including/ the suggestions from ghetto youth that more knowledge about African culture, black
pride and black unity would be helpful.\textsuperscript{11}

The systems objective of the program according to Carter was the attempt to answer affirmatively the question: "Can the legitimate hostilities and aggressions of black youth be programmed for conflict utilization for the benefit of the black community?"

A similar need to view, plan, and act on the basis of systems objectives and resources faces persons in labor-management conflicts, in inner city versus suburban conflicts, in interdenominational religious conflicts, and in any confrontations between groups with significantly different interests and cultures.

This chapter is an exploration of a system, the Communication Ecology, which may be useful as a means of conflict handling. One of the system's objectives or results is the transformation of potentially destructive conflict into constructive (not passive) action. It is important to note that conflict utilization rather than conflict resolution is the core concept. This difference will be discussed later.

There are, at least, two ways in which this conceptual scheme or system can assist persons in conflict situations. By permitting them to attain a generic view of the conflict situation, it may enable them to plan and act more effectively. It also can assist them in identifying patterns of communication used within and among conflicting groups and in designing communicative events which can be used as a means of intervention and ventilation. Of the various subsystems within the Communication Ecology, communication is the most accessible and usable subsystem.
The Communication Ecology

The Communication Ecology is organized around interactions between people. Although consideration is given to people-object relationships, the principal focus is on interaction between and among individuals and groups, particularly those with cultural differences and in conflict situations. It would be possible to construct communication ecologies for engineering, mathematical, or cybernetic systems and for nonconflict types of human interaction; however, these are not the foci of this study.

Human Systems

There are several ways of looking at human systems. Gordon Hearn in a discussion of the 1962 Berkeley Project makes two important observations. He ascribes four universal properties to human systems: (1) an energy source; (2) a process which gives direction, usually based on goals and values; (3) a structure which gives arrangement to its components; and (4) some process for communication, control, locomotion, and group maintenance. "These . . . processes the Berkeley research group characterized as actualizing secondary processes, for it is these that enable a system to act as a coordinated whole."12

One model developed during the Berkeley project resulted from the attempt to represent a system universe which included individuals, groups, organizations, and communities. The model as developed contained four regions or parts: (1) part that is known to system; (2) part that is unknown to the system; (3) part of the environment known and located close to the system; and (4) part of the environment that
is unknown and located at a distance from the system. The essential
dynamic of this particular model is viewed as a striving for corres-
pondence (in the Lippitt, Watson and Westley use of the term). The
term, correspondence, is used to suggest mutuality or symbiosis rather
than uniformity. By using this model, it was possible to discuss
healthy and pathological states within the levels and parts of the
system. A healthy state was defined as one that is open and striving
for correspondence between known and unknown parts and between close
and distant environments.

The Structure-Process-Attitude Theory of Watson is also con-
cerned with human systems, but it differs in approach from that of the
Berkeley group or of the Lippitt, Watson and Westley project. The SPA
theory integrates the experimental findings of social psychology
that are concerned with basic ways of thinking about attitudes and
behaviors.

Instead of abstracting to arrive at constructs as the Berkeley
researchers did, Watson focused on the order of events within a system.
According to the theory, change occurs first in structure, then in
processes, and finally in attitudes. The theory was developed by looking
at basic processes and at the dimensions of the situation. Basic con-
cepts include: (1) Responses to situations are different for each in-
dividual and group. (2) The importance of objects depends on their
position within the field. (3) Systems are composed of subsystems which
give rise to status, positions and roles. (4) Norms are available to
guide, if not control, behavior. (5) Interactions between role and
feeling cause shifts in role concepts. The dimensions that Watson
considered important include: (1) size, (2) spatial arrangement, (3) structures, (4) prestige hierarchy, (5) sanctions, and (6) power.¹⁵

A comparison of the two human systems just discussed indicates that different kinds of information will be made available by models designed to describe relationships and those intended to define the sequences of processes. The perspectives and purposes of different models results in the development of different concepts, directions, and information.

The Communication Ecology is closer to the Berkeley model than to the Watson theory in its purpose and pattern. It is more concerned with relationships than with process sequences; however, the Watson theory and the Communication Ecology include the basic premise that systems and structures are important (but not the most important) points of intervention.

While Harry Stack Sullivan's dynamisms are ways of interacting with other human beings, Freud's dynamisms are ways in which man interacts with himself and views others. In contrast, the Communication Ecology adds a new dimension by viewing dynamisms as interactions between systems. The Communication Ecology is concerned with both the uniqueness and interdependencies of the subsystems and the properties of the dynamic whole.

Selection of terms: Communication Ecology

Several different terms could have been used to label the conceptual scheme developed in this study. Among those that might have been selected are: conflict ecology, system for conflict resolution, structures for cultural group change, communication system, etc. The
author is not interested in debating the merits of the label as if the label had substance beyond that given it by the conceptual scheme, but discussions of the reasons for selecting the terms will assist in clarifying the concept.

Ecology.--In early writings the term, ecology, was applied to the process of competition, dominance and succession which brought about or restored communal equilibrium in the plant or animal kingdom. By means of an analogy, the term was applied to human communities.

Human ecology, according to Parks, is "an attempt to investigate biotic balance and social equilibrium processes." He points out that:

Every crisis that initiates a period of rapid change, during which competition is intensified, moves over into a period of more or less stable equilibrium and new division of labor. In this manner competition is superceded by cooperation.

It is the interaction of . . . four factors (1) opoulation, (2) artifacts (technical culture), (3) custom and beliefs (non-material culture), and (4) the natural resources . . . that maintain at once the biotic balance and the social equilibrium, when and where they exist.16

As the study of human relationships increases its emphasis on psychology and sociological processes, the factors included in the concept of a human ecology have changed. Sanders, for example, introduces communication and identification in his definition:

Ecology: A community is a territorially-organized system co-extensive with a settlement pattern in which (1) an effective communication network operates, (2) people share common facilities and services distributed within this settlement pattern, and (3) develop a psychological identification with the "locality symbol" (the name).17

Ecological studies are concerned with spatial patterns. Generally, this concern covers large areas and groups. Sommer and Hall, however, point out that ecologies exist within small groups and can be
applied to individuals in face-to-face groups. Hall uses the term, proxemics, "to describe how man structures microspace, the distance between people in their daily transactions." 18

The term moves closer to covering the various aspects of the Communication Ecology when Rossi's concept of interpersonal environment is considered as a new technique for defining spatial arrangements. From this perspective and the techniques used to investigate interpersonal environment, a person's "neighborhood," for example, consists of all the individuals with whom he is in some sort of enduring contact rather than just the persons who live on his block. 19

The term acquired another dimension or definition in the work of Sprout and Sprout who viewed the concept of an ecology in a manner that is consistent with the systems approach. They stated that:

Viewing human individuals, groups and organizations in their association with one another and with nonhuman conditions and events sets a frame of reference and a mode of analysis that have come rather generally to be called human ecology. 20

In summary, the term, ecology, was selected because if covers the range of operations that occur in a system and because its various definitions include subsystems as part of a system.

Communication.--While the term, ecology, was selected because it would serve to classify the conceptual scheme as one in which the subsystems had to be considered simultaneously against a backdrop of nonhuman objects and events, the term, communication, was selected to emphasize the subsystem within the ecology that has the greatest instrumental value.

Ruesch regards communications as something within which something else originates and develops. 21 This core concept serves a
developmental function within the Communication Ecology. In order to secure changes in conflict situations, it is frequently necessary to intervene into ongoing processes. In making such interventions, it is necessary to have an instrument that is available, accessible, acceptable and adjustable. Of the various subsystems within the Communication Ecology (communication, cultural groups, conflict and resources), communication most effectively meets each of these requirements.

One of the central theses of this study is that communicative patterns, as used by individuals and groups, result from the nature of the interactions between and among the various subsystems (intra-ecologies) and that these patterns significantly influence the interaction between cultural groups (inter-ecologies). Communicative patterns are forms of communication that carry along with them the specific content of a given message. The communicative patterns are viewed both as interaction and intervention points within the system. The effective and instrumental use of communicative patterns can produce conflict utilization. These three reasons led to the selection of the term, communication, as the second key concept in the proposed system.
The Communication Ecology: An Overview

The Communication Ecology can be best understood in terms of its components. In this section, each component will be described and illustrated (Fig. 1 through Fig. 7). The section is concluded with a comprehensive diagram of the Communication Ecology (Fig. 8). In each diagram, the components of the ecology are keyed to the letters ascribed to each in the text and in the captions.

Major Subsystems (A)—The Communication Ecology is composed of four subsystems: conflict, cultural groups, communications, and resources. The major functions of the system (the ecology) are carried out jointly by the subsystems as a result of the interactions and processes that occur among them. Each subsystem also performs certain unique functions.
Figure 1: Subsystems of the Communication Ecology (A).
Systems and Processes Within Subsystems (B).—Each subsystem is complex and comprehensive by itself. The interactions and events that occur within each subsystem are the subject of study in major academic fields. In Chapter II, theories were reviewed and analyzed that account for or describe the subsystems' internal processes.
Figure 2: Subsystem Internal Processes and Systems (B).
Intra-CE Networks (C).—The relationships and interactions that exist between the subsystems occur via intra-communication ecology networks. These intra-CE networks permit correspondence between subsystems. The principal networks within the Communication Ecology are: (1) energy to action; (2) identity to groupness; (3) goals to program; and (4) system maintenance, growth and creativity.
Figure 3: Intra-Communication Ecology Networks (C).
CE Processes and Mechanisms (D).—These are the procedures and principles by which the functions of the system and its subsystems are carried out. Primary CE processes are: (1) relating, (2) calibrating, (3) verifying, (4) switching, and (5) projecting.

Minor processes, which facilitate but are not required for the system's operation, are referred to as mechanisms. Mechanisms can be used in place of each other to achieve, block, or change the system's effects. For example, a symbolic process can be substituted for a signal process to achieve a given behavior, a defensive process may take over for a process of openness, or a modification in the conflict field may result from different perceptual processes.
Figure 4: Communication Ecology Processes and Mechanisms (D).
CE Aspects and Characteristics (E).—Features that have a diffused impact throughout the system are termed aspects and characteristics. Some significant examples are: time, barriers, spatial allocation, situational and dispositional determinants, repetitive actions and constant change.
Figure 5: Communication Ecology Aspects and Characteristics (E).
Inter-CE Contact Bands, Explicit (F).—A Communication Ecology can interact with another Communication Ecology. This is another way of saying that cultural groups can communicate with each other or that they can be in conflict. Relationships are conducted via contact bands. The explicit contact bands are: communication (shared symbols, experiences and strivings); cultural groups (membership, identification, task achievement); and resources (power, objects, capital, and space).
Figure 6: Inter-Communication Ecology Explicit Contact Bands (F).
Inter-CE Contact Bands, Implicit (G).—This component is based on the concept that ecologies also exist in some state of unavoidable, implicit contact. Implicit contact bands include those referred to in the following examples.

Psychiatry holds, for instance, that all men have certain universal similarities because of instinctual desires and positive strivings. Gaming theory postulates a condition in which implicit communication occurs by means of coordination of expectations. Group dynamics and intergroup relations specialists use stereotypes to illustrate that people can hold opinions and take actions without knowing, seeing or being in explicit contact with persons against whom or with whom they move; contact by means of cultural and/or fantasy processes is sufficient.
Figure 7: Inter-Communication Ecology Implicit Contact Band (G).
The complete visual conception of the Communication Ecology is presented in Figure 8.
Figure 8: The Communication Ecology.
This overview of the Communication Ecology has been presented in terms of one group in one conflicting situation. No attempt has been made to discuss the Communication Ecology when more than one level of conflict, different conflicts, or other groups operate within the same system. These complexities of the conceptual scheme will be discussed later.
Major Subsystems

The purpose of this section is to describe the functions and characteristics of each subsystem in the Communication Ecology—conflict, cultural groups, communication and resources. Although the discussion is focused on the individual roles played by each of these subsystems, the reader should keep in mind that they exist and have importance as part of the larger conceptual scheme.

The functions assigned to the various subsystems are derived from two sources, core concepts and system requirements. Core concepts, as explained earlier, are the findings of scholars and researchers in a variety of different fields with regard to a given subsystem.

System requirements are those functions and activities which the Communication Ecology must execute in order to exist. Requirements are not just a matter of effective or ineffective performance; instead, the requirements define the minimum conditions needed if the system is to exist.

The presence of requirements within the conceptual scheme implies that it is possible for the system to change in significant ways or to cease operations, to "go out of business."

The CE can change. If the conflict no longer exists and some other force serves its functions, the Communication Ecology as presently described no longer exists. Or, if consensus or cooperation, for example, replace conflict, a significant reorganization of the Communication Ecology takes place.

The CE can go out of business. If the conflict reaches a level
where it introduces extreme dysfunctioning, it may result in a loss of capability that renders the Communication Ecology inoperative. This is similar to the behavior of the schizoid or of the person in a catatonic state. A similar condition may exist in which signal rather than symbolic processes control behavior.

The discussion of the subsystems will focus primarily on the system requirements of the Communication Ecology. The key question to be answered is, "What is required for the system to carry out its operations?" The clues to answers come from the core concepts.

**Conflict as a Subsystem**

**Core Concepts**

1. **Conflict serves as an energy source which produces activity;**
   the activity, when viewed in terms of its effects, can be **classified as good, bad, or usable.**

   Conflict has been viewed in at least three different ways. Parsons called it a dysfunctional, disease-like force which causes men to withdraw from each other or to attack one another. Simmel regarded it as a necessary motivation which assists men in achieving higher levels of unity. Without attempting to label conflict as good or bad, Dahrendorf views it as a force that can be used to secure group action. From these viewpoints, the first core concept about conflict was derived.

2. **Conflict requires a relationship with other subsystems in order to discharge its energies or to be utilized or to be controlled.**
Some psychiatrists look to relationships between the id, ego and superego (intraindividual systems) to explain the causes and control of conflict. Since conflict within the Communication Ecology is viewed as undesirable, therapeutic approaches often seek conflict resolution. On the other end of the continuum, sociologists concerned with large social systems design programs to control conflict since they see little chance of getting conflict out of the system. If a specific conflict is settled or resolved, another one will take its place. Under this condition, controls to manage and permit resolution are more important than attempts to eliminate conflict. Persons in intergroup relations use sensitivity training and expressive communications as a means of reducing conflict between small groups, altering perceptions and getting people from various groups to interact. In this approach, ventilation is considered to be a form of releasing conflict. Although these three approaches are different, they support the second core concept.

3. Conflict utilization is an essential system requirement.

In terms of the Communication Ecology, conflict is a force that is potentially present at all times and intermittently active most of the time. It can result in activities that have a constructive or destructive effect, depending upon the maturity and controls of the system. When it is at an operational level, conflict places the system in a two-choice situation: to be used or to use.

Functions

Within the Communication Ecology concerned with conflict utilization the functions of conflict are: energizing, structuring,
and directing. The conflict subsystem cannot carry out the full range of processes and activities associated with these functions by itself; however, it has principal responsibility for the execution of these functions. In a sense, the conflict subsystem serves as the team leader for the Communication Ecology in carrying out these functions.

The energizing function refers to the capacity of conflict to stimulate activity within the system. The presence of this function is recognized in field theory, decision theory, and cognitive dissonance theory. Conflict between choices leads to activity to make or avoid alternatives. Researchers often rely on this function for their studies, and leaders often use conflict to secure group action. For example, Martin Luther King called the nonviolent movement a creative use of conflict, while Stokely Carmichael views conflict as the essence of survival for black people.

The energy supply for conflict appears to be located at all levels of social interaction. Sullivan considered that people were placed in a conflict situation by the mere presence of others; they are drawn to associate by the need for contact with people and driven to withdraw by defensiveness. Bion applies the same concept to groups. He states:

All groups stimulate and at the same time frustrate the individuals composing them; for the individual is impelled to seek the satisfaction of his needs in his group and is at the same time inhibited in this aim by the primitive fears that the group arouses.

The question then becomes one of optimal levels. Frankl's use of the term, tension, is similar to this concept of conflict when he states, "lack of tension as it is created by the loss of meaning is as
dangerous a threat in terms of mental health as is too high tension."  
Studies of fear appeals and learning support the premise that there are
optimal energy levels for motivation and learning which tend to be be-
tween the too-high and too-low points on a scale.  

Structuring is another function of the conflict subsystem. The
literature indicates that although conflict does not form the structures,
it does influence their arrangement and associations. Conflict does
not prevent one from hearing, for example, but it can influence what one
listens to and how one interprets what is said. Viewed from this per-
spective, conflict is an affect component of the system. It provides
the emotional quality of the system. Dewey refers to emotions as the
"moving and cementing force."  

The structuring or organizing influence of conflict on the system
can be seen in the ways people perceive reality, are open or closed to
others, and select various mechanisms to handle conflict. The struc-
turing influence is evident in groups when conflict is used to provide
group unity, a higher rate of production, or justification for attacks.

The functions of providing energy and structural relationships
combine into a third function which is termed directing. The directing
function of conflict is not one that determines the goal or purpose;
instead, it leads to preference for one of the conflict choices. By
various processes, one of the choices becomes the one with the greater
affect associations.

Hirschfeld, in his study of The Accident Process, observes how
conflict and choice become combined:
Something threatening happens inside of a worker and he seeks pain or injury as a solution. Frustrated and frightened . . . the worker is in a state of conflict. Part of the man is begging people to help and to stop him; another part seems covertly to plan carefully and almost methodically to maim himself.34

It is possible for the conflict choice to become the basis for a relationship. Pao says, "It may be used as an ego-syntonic defense . . . and the core of a person's identify."35 One could consider this a valid observation about race relations in the United States and a valid criticism of the theories of Hegel and Lenin.

The directing influence of conflict is also documented in the works of sociologists and psychologists. Bonner discusses the concept of a vector,36 while Harvey and others use the term, directionality, to indicate the strength of preferences between possible choices.37

The conflict component affects the system in two principal ways. It provides energy and attaches affect to objects and persons in such a fashion as to provide some structuring of the system and some direction as to the choice of preferences. It also serves to open or close the system and in this way influences the probabilities of a given action being taken.

In terms of conflict utilization, it is important to understand that a conflict situation carries with it, as an integral part of the subsystem, a choice. At the individual level, the choice may be considered as one between positive strivings and ego-disyntonic defensive-ness; at the group level, the choice may be between attack and union; while at the community level, the choice may be between sharing and controlling resources. In any event, the presence of conflict also
represents the presence of a choice.

The case of the executive who develops ulcers, the existence of psychosomatic illnesses, and willingness to die for one's country are examples of the range of effects that conflict can have on a system. The existence of physiological changes with the individual can produce a profound reaction to conflict. The manipulation or utilization of conflict can produce both negative and positive reinforcement.

**Cultural Groups as a Subsystem**

If in popular terms we were to refer to the conflict subsystem as the energy component of the ecology, the cultural group subsystem could be called the people component. In its most fundamental sense, the Communication Ecology is a system of human interaction and communication. Terms such as systems, resources, networks and events do not focus attention directly on the human aspects of the Communication Ecology, but people are the essence of the conceptual scheme. The terms are appropriate for describing the tasks of this model, however, because they have been used for similar purposes and are understood. For semantic, if not substantive, purposes it would emphasize the human focus of the Communication Ecology if it were viewed as a system expression of "personality."

Although in explaining the Communication Ecology, attention is directed to one system (one cultural group), the conceptual scheme is designed for conflict situations between groups.
Later, the Communication Ecology will be considered in terms of the two opposing (conflicting) groups and the appeal groups that they seek to persuade to support their side. The information in this section applies to all three kinds of groups: (1) conflict group one, (2) conflict group two, and (3) appeal groups.

**Core Concepts**

There are six important core concepts about cultural groups that are relevant to the conceptual scheme. They were selected because they are essential to the system requirements and because they are "universals," in the sense that they accommodate many other group concepts. The reader may think of other core concepts that he considers critical to the conceptual scheme; the issue of whether they should be included depends upon his judgment regarding the status to be assigned to them. From an operational point of view, the model is intended to be both manageable and expandable.

1. **People must form groups**

A review of history indicates that man has always formed groups; although there is debate about whether or not this is due to instinctual properties in man that are similar to those of animals that move in herds, the fact of group formation is not questioned. Psychiatric theory supports a position which maintains that man's primitive base requires association with and fear of others. Sociologists studying group dynamics report that man finds satisfaction by forming groups and that he is born into an involuntary association, the family, which sets many of his basic patterns.
Recent social critics point out that the nature of modern society demands that people associate in order to meet the basic requirements of life. There must be an association between producers and consumers if each is to meet his needs. Since there is a conflict between the objectives of producers and consumers, the individuals in each class form groups to acquire power that they cannot exert as individuals.

2. **Culture is an important determinant of group behavior.**

Communication theory holds that while no two people can have exactly the same experiences, an increase in the similarities of their experiences will increase their ability to communicate with each other. Kapper notes the influence of culture on communications and conformity by reporting that:

> a substantial number of careful objective studies indicate that cultural milieu is one of the most important, if not the single most important determiner of an individual's pattern of communication behavior. . . . The individual apparently adopts or develops patterns of communications behavior characteristic of persons in his own cultural level. . . . Should he come into contact with a new medium of communication, his behavior in relation thereto is governed by the pattern. The new medium is in short not so likely to change the pattern of his behavior as rather to be absorbed.40

The structures, values, norms, and rules of a culture are considered to be principal factors which control group behavior. While these factors are subject to change, the rate of change is slow.

Typically, cultural groups have been defined as large groups of people, i.e., an entire nation, a religious group, an inter-
national collection of people who, for example, speak the same language. More recently, with the increased sophistication of techniques for studying groups, scholars are beginning to recognize that small groups and families may have distinct cultures. This culture contains parts of the larger society of which the group is a part; it also contains features that are unique to the members of the particular group. Bion extends the concept of cultural groups to include events that occur when three or more persons are together and behave differently from what would be expected from their individual reactions.41

If the above information is valid or acceptable, then the influence of culture on group behavior can be viewed in two ways. The larger culture defines the field and the nutrient while the specific group culture defines the boundaries, forms, and norms of behavior. Conflict can exist between the general and group cultures and between two or more group cultures.

3. Groups will have similarities and differences.

The concept of a general and group culture accounts, in part, for the similarities and differences between cultural groups. Similarities are usually related to general cultural features of the group such as: structures, values, norms, membership, processes, and purposes. The differences are particulars within these general categories, i.e., all groups have values, but particular values will differ from group to group.42
4. **Explicit and implicit communications tie groups together.**

Both individuals and groups interact and communicate with each other. This is generally supported and accepted as valid when it is applied to explicit communications. Analysis indicates, however, more attention should be given to the role played by implicit communications and interaction. Hall's "silent language," McLuhan's concept of "the medium as the message," the coordination of expectations in decision theory, the concept of universal desires in psychology and other theories emphasize the importance of implicit behavior in cultural group behavior.

5. **Groups can be changed.**

Both individual and group change have been experimentally demonstrated and documented in historical accounts. The question is not whether change will occur, but rather a series of questions. How soon? To what degree? In what direction? For which reasons? Under what conditions? There are a series of studies which attempt to answer these questions.

6. **Conflict is inherently or potentially present.**

Just as groups serve the purposes of identification and role definition, they also seek to allocate resources in ways that benefit the group. Competition for these resources combined with the needs to associate and withdraw from individuals and the need to belong and the fear of belonging to groups creates conditions in which conflict is either present or potentially available for most, if not all, of the time. In addition to conflict being present.
because it is a structural or functional component of the situation, it is often used as a means of group formation and maintenance. Although scholars have differences of opinion regarding the role of conflict, an overview of their findings and opinions would indicate that: (1) conflict can be both functional and disfunctional, and (2) conflict can be utilized, controlled and changed.

The core concepts about cultural groups can be applied to voluntary and involuntary groups and institutions, and to conflicts that are endogenous and exogenous.

**Functions**

The functions of the cultural group subsystem are related to identification, polarization and decision-making. In humanistic terms, these functions contribute to the personality of the individual group members and to the social role of the group in society.

**Identification** is related to the personal process of identity. It assists people in answering the important question, "Who am I?"

Some psycholanalytic and philosophical theories hold that this is one of the primary questions of men. The valency and potency of a group is gained, in part, from the group's effectiveness in helping people answer this question.

Through the process of identification, Jacob Chawst maintains, people "eventually assimilate the standards and ideals of their parents and groups and thus learn to behave in a socially accepted way. Thus society ultimately molds its members to function adaptively by setting up regulatory machinery or controls."
Identification is one of the processes by which a system of social organization leads to the development of a pattern of individual behavior that conforms with the standards sanctioned by the group without causing traumatic resistances and conflicts within the individual.

Polarization is a function which results in: (1) cohesiveness within the group, and (2) distinctiveness between the group and other groups. Polarization can be defined in terms of distance between groups or in terms of member agreement and disagreement on values and programs.

Polarization is one method for determining group boundaries and the possibilities of group conflict, competition, or cooperation. For example, the more there is agreement between the groups on identity factors, the greater are the possibilities that conflict and extreme polarization will be avoided.

Burke's view of communication contends that communication plays a vital role in the identification and polarization processes. In his opinion, when communication reaches the level of communion, identification occurs. If this state occurs, polarization does more to create cohesiveness than to create distance. The cohesive characteristic of this function can be used in achieving conflict utilization.

Decision-making is a complex function of the system. Within the Communication Ecology, the decision-making function is conducted within the constraints of at least three factors: (1) The conflict
situation presents several alternatives from which the choices of action are selected. (2) The conflict situation can be viewed as the need for creating alternatives that may not be known or available. (3) The conflict situation operates under conditions in which the factors limiting decision-making may not be known.

A combination of the three functions of the cultural group subsystem aids in answering three critical questions. Who am I? What group will help me or will prevent me from reaching my objectives? By what standards and how should/can I take actions?

Within the Communication Ecology, the cultural group is responsible for decisions relating to the purposes for which the system will be used. This decision is influenced by conscious and unconscious factors, by the group's values, norms and structures, by the actions (real and imagined) of other groups, and by human and nonhuman events.

In analyzing the purposes of groups and the manner in which they organize their resources during conflict situations, it is necessary to maintain two points of view simultaneously. One point of view should define the points of agreement and disagreement in relation to a specific set of issues; the other point of view should analyze the group's strivings to obtain some universal end: security, identity, association, or release from primitive fears.

The first point of view defines the conflict while the second emphasizes the fundamental cooperation that must exist even in the sharpest conflict situations.
Communications as a Subsystem

If the conflict subsystem is viewed as the energy component of the system and the cultural group subsystem is considered to be the people component, the communication subsystem can be called the instrumental component.

Although the communication subsystem is not solely responsible for the work or performance of the system, it is the principal means for mobilizing and organizing the resources of the Communication Ecology to achieve objectives of the group.

The concepts of interaction and communication overlap. The distinction according to Fearing is that communication refers to actions specifically intended to effect a response, while interaction includes perceptions of stimuli that may not be intended to communicate. Hall's concept of "the silent language" is based on forms of interaction that may have an expressive or structural purpose without the conscious intent to communicate.

This general view of communication is supported by Ruesch who states, "At the root of all man-made events stands his ability to communicate, which is the foundation upon which cooperation is built." The importance of communication as a means of cooperation is increased as a result of urbanization, population growth, technological changes and their attendant effects. Communication must carry an increasingly larger share of the trial-and-error activities of society.
In today's world, the margin of error is smaller and the consequences of mistake are more dangerous than in previous periods of history. An improvement in the communicative skill of individuals and groups is necessary.

Core Concepts

Eight core concepts have been selected to indicate the role and function of communications within the system. The core concepts focus on the ever-present existence and the instrumental nature of communications.

1. **Communications is an instrumental component insofar as it is used for interactions and intervention.**

Theories included in this core concept are: (1) Attitudes and behavior can be changed by persuasion, therapy, and education. (2) They can also be changed by participation, association, and perception. (3) Conflict release can be secured by expressive communications, rituals, and myths.

Symbol-signals, levels of communication, types of communications, and group purposes all affect the instrumental quality of the communication subsystems; however, the essential features in communication are related to the networks that are established. Networks can be considered as series of connecting relationships.

The networks exist on horizontal levels (individual, group, institution, and cultural) and on vertical levels which relate individual, group, institution, and culture into one system.

A network consists of several elements. At the society level, the network contains: a medium of communication (air waves); a
mechanical extension of the senses (radio); service areas (membership and contacts); related group resources (culture, institutions); levels of involvement; (perception and evaluation); and management capabilities (administration and decision-making).

A person can be said to belong to a given communication network under these conditions: (1) if he is within the capability range of the network; (2) if he is a user of the network; (3) if he is affected by the network, regardless of his participation; and/or (4) if the network is acceptable to him.

The communication network serves as the base upon which the psychomotor action in the conflict situation occurs. Harvey\textsuperscript{54} and Ruesch\textsuperscript{55} use networks in their theories to account for health and pathological conditions in individuals and groups.

If the network brings the proper parts of the system into a synchronistic relation, the organism is considered healthy. The degree of dysfunction (uninformed to pathological) is related to the asynchronistic states of the network and its performance capabilities.\textsuperscript{56}

2. Communication is "omnipresent" as an instrument of interaction, but it is limited in its servicability by the form and structures of the interaction.

A group that feels itself under attack during a conflict situation will use communications differently from a group that does not consider itself to be under attack. The difference in the way in which communication is used results from two factors: (1) The group may consciously decide that a given communicative behavior
is in its best interest; this use of communication is subject to change by informational means. (2) The attack situation produces certain structural changes within the group (from closedness to openness, for example); these structural changes in turn place limitations upon the use of communication. Information and education alone do not appear to be useful tools for changing this limitation on communication. Affect must be associated with information, over a given time period, in order to bring about the structural reorganizations that allow a more creative use of communication.57

In addition to the structural and purposeful limitations that are placed upon the use of communications, a distinction between communication and performance should be noted. In popular terms this concept is stated as: "Talking about something ain't the same thing as doing it." Semanticists make another kind of distinction between the work and the thing (land and map). This limitation, unlike structural-functional ones, is an integral part of communications. Communication is neither the experience object or the performance in the sense of work or production. Communications facilitates the achievement of group purposes. Its interdependence with other subsystems within the Communication Ecology is underscored by this factor.

3. **Communications serves as both a primary and meta-experience.**

A primary experience would be touching an object; a meta-experience would be talking about the experience of touching that
object.

Experience and communication are related in three ways:

1. **Similarities of experience result in similarities in the use of symbols.**
2. **Experiences serve as a source of meaning in communications.**
3. **Communications is a means for restructuring and reorganizing recollected experience and meaning.**

Disciplines differ in the way they focus upon experience-communication relationships. Decision theory, semantics, and linguistics, for example, are usually concerned with communication and meta-experiences. Therapy, role playing, and persuasion, for example, are more concerned with communications as a primary experience.

4. **Communication serves as a matrix, but it follows the purpose and structure of the system in which it operates.**

   It is generally agreed that communication can result in changes, and even more important, creativity. The creative use of communication can produce conflict transformation or utilization; however, the creative use of communication, its matrix characteristic, depends upon factors such as the defense-communion and the open-closed nature of the system.

5. **The essential processes of communication occur within individuals.**

   Those processes which are essential to communication must be carried out by individuals, singly or in groups. Although the group may engage in a variety of different behaviors, engage in many different processes, and respond to a great number of needs,
it is the individual members of the group who perceive, interpret and evaluate. In the group situation, individuals combine their knowledge and modify it, but the basic processes of speaking and listening, for example, are individually based.

This is one of the reasons why it is necessary to reach specific individuals if group formation, maintenance, or change is to be secured. The group, however, does exert pressure on the individual to perceive in terms of group sanctions. In securing conflict utilization, therefore, it is necessary for communications which seek a change to be shared with the individual on repeated occasions over a period of time. As Hovland and others note:

The long-run effectiveness of a persuasive communication depends not only upon its success in inducing a momentary shift in opinion but also upon the sustained resistance it can create with respect to subsequent competing pressures.58

6. Communications is a means of observing processes that cannot be investigated directly.

Many of the processes that are discussed in group behavior and social change cannot be directly observed. According to Hovland, attitudes are "implicit responses" and have to be inferred from a person's stated opinions and observable behavior.59

In an article which discussed compliance, identification and internalization, Kelman writes:

A crucial issue in communication research relates to the nature of changes (if any) that are brought about by a particular communication or type of communication. . . . Only if we know something about the nature and depth of changes can we make meaningful predictions about the way in which attitude changes will be reflected in subsequent actions and reactions to events.60
Freud added to the sociology of language with his concept that dreams, slips of the tongue and resistance often reveal subconscious sets or reactions that influence behavior.

The use of communications to assess attitudes has resulted in a refusal on the part of some persons and groups to engage in communication. To be understood carries with it the danger of being controlled. The court recognized this factor in human behavior and created the category of privileged communication, a right granted by law which protects a person's confidence in a legal proceeding.

Although communication is a method for observing both what the person wants to communicate and what he does not want to communicate, the defenses against open and honest communications are pervasive. They make the interpretation of data observed difficult and at times impossible.

Functions.—The communication subsystem has primary responsibility for five types of functions: instrumental, interactional, experience-sharing, developmental and distributive. Each of these is, in a sense, a different characteristic of the networks established by communications. The instrumental and interaction functions of communication were discussed as part of the core concepts.

Experience-sharing uses the core concept that communication is both a primary and meta-experience. Experience-sharing should be distinguished from "having an experience." Having an experience refers to an encounter between the person or persons and the event; the encounter may or may not have a conscious impact and it may or
may not influence behavior. Experience-sharing is the purposeful use of communication to enlarge the number of people who experience communion in their interactions with people.

Experience-sharing is different from persuasion in the sense that it is not an expression of a speaker's plan to influence behavior; instead it is a form, a mode of interaction. Experience-sharing can be likened to understanding and persuasion can be likened to acceptance.

A comparison between role-playing and persuasive speech is one way of locating experience-sharing on the continuum of types of communications. One of the reasons role-playing is used is that it requires or produces an internal reorganization of attitudes and concepts. When performed with another person, the interaction between forms of communication in role-playing results in sharing of experience, in addition to the transmission of content or a persuasive conclusion.

The concept of experience-sharing is similar to Roger's view of the unique nature of the therapeutic relationship. He states:

The essential elements appear to be not technical knowledge or ideological sophistication but personal human qualities—something the therapist experiences, not something he knows ... attitudes of realness, genuine liking, and sensitive empathy help to create a climate that produces constructive personal growth and change.61

Following this observation, another difference between experience-sharing, as used in this study, and experience can be noted. Experience-sharing is a particular type of experience. It
is a relationship between humans as people to people, not as people to objects or as objects to objects. Lowenthal stressed the importance of this distinction by noting that:

there is more than a verbal tie between the words common, community and communication. ... To be a recipient of a communication is to have an enlarged... experience. One shares in what another thought and felt. ... Nor is the one who communicates left unaffected.62

Experience-sharing at the technical level is generally related to producing a match between two or more systems so that effective interactions and cooperation are possible. Cybernetics, cognitive dissonance and mediation are fields of study specifically interested in this aspect of experience-sharing.

The experience-sharing function of communication consists of three processes: (a) symbolic, (b) manipulative, and (c) experiential. The symbolic processes are meta-experiential ways of handling data and affect. The manipulative processes are means by which experiences are reorganized and created. The experiential process are those in which communion is experienced. Therapy, parapsychology and communications are areas with an interest in each of these processes.

Developmental functions of communication are critical in terms of the capabilities of the system to carry out its functions. If a person does not have the physical capacity to engage in communication, he is limited by the extent of his development.

One of the factors that appears to operate in conflicts between cultural groups is the difference between their developmental patterns in communications. Studies indicate, for example, that the poor use both
silence and action more than middle-class people who tend to use active and verbal forms of communications.63

When a communication pattern based on silence, action and a sense of inferiority meets one based on verbal symbols, delayed gratification and delusions of grandeur, the conflict is not a lack of commonality. The communicative patterns are asynchronistic. Since both groups have different rules by which to judge credibility and to share experience, one source of conflict is the communicative patterns. Even when the issue cannot be decided, adjustment in the communicative patterns of the two groups can be beneficial.

The developmental function serves a second purpose. In addition to the development of capabilities (physical, technical and psychological), it can be used to expand alternatives and to achieve creativity. Communications serve as a matrix, in the Reusch64 use of the term, and as the reality-restructuring process in Gordon's use of synectic as a creative interaction.65

Ashley Montagu supports the creative use of communication:

Man is what he is because of his capacity to create in his mind, by the use of symbols, an idea about something which has no existence outside his mind, and with that idea proceeds to create something according to instructions given or the pattern constituted by the idea. In this manner ideas, symbols, create realities, given them an existence outside the mind.66

Fearing accords communication a creative Gestalt which is similar to the concept that developmental functions are, in part, the result of the overall system.

"Creative" as used here means that the resultant of the structuring process—the "structure"—is not merely a summation of the existing elements, but a Gestalt possessing properties different from those of the component elements. The structuring
process is creative also in the sense that it does not necessarily depend on antecedent experience (learning) or innate factors in the individual. 67

Maslow discusses the reciprocal relationship between the developmental function and a group's external reality by stating:

The communication relationship between the person and the world is a dynamic one of mutual forming and lifting-lowering of each other, a process we may call "reciprocal isomorphism". A higher order of persons can understand a higher order of knowledge; but also a higher order of environment tends to lift the level of the person, just as a lower order of environment tends to lower it. 68

Distribution as a function includes those processes associated with locomotion, transportation, mobility and technical development. One of the functions of communication is to permit and bring about the movement of ideas and material. Activities which carry out this function are included under the concept of distribution.

Communication within the system is considered to be the primary instrumental component; the essential base upon which it carries out its functions are the various networks that it establishes. These networks, in turn, are the means by which the group brings its energies and resources to bear on group problems and objectives.
Resources as a Subsystem

Each subsystem in the cultural group's Communication Ecology serves as a resource to the group. In areas such as management, the skill of the members is a resource; when used to secure some group objective, conflict is a resource; and communication is a resource when it is used to produce group unity or an early warning about the plans and action of conflicting groups. Each of these resources is important to the effective functioning of the system.

In contrast, the resources subsystem in this conceptual scheme refers specifically to object resources—the nonhuman factors of the environment that are used by the group and that affect the group's ability to function. Examples of this type of resource are: capital, equipment, land, space, environment, and technical capabilities. A newspaper would be considered a resource within this subsystem while the newspaper's staff would be considered as part of the cultural group subsystem.

This distinction is helpful in terms of the conceptual model being developed because object resources are analyzed and manipulated in ways that are sharply different from the handling of people. Although the distinction is made for the purposes of the system, it does not necessarily follow that resources should not be defined in some other way for a different purpose.
Most studies of social conflict, like the models of human ecologies, state that there is a relationship between objects and conflict. This relationship, however, is more concerned with the value assigned to the objects than with the effect that the objects have on groups. Since values are viewed as the critical variable, objects receive little consideration in the theories. Once the writer has evaluated, for example, the supply and demand ratio for a given type of object, he concludes that competition or conflict or cooperation or "no-interest" conditions will exist depending upon whether the supply exceeds demand.

If there are enough resources for everyone, there will be no need to fight, according to the classical open-market theory. This theory accounts for conflicts which result in the hoarding or stockpiling of resources in terms of the values and priorities assigned to the objects.\(^6\)

From this point of view, the environment is considered to be inactive until some value or quality is associated with it. There is a school of thought that holds an opposite point of view. It maintains that the environment is active at all times regardless of the values assigned to an object or the preception by people of the activity.

These two points of view are represented in statements by Harvey and McLuhan. Harvey states, "not only does an object have no psychological value until it is compared to a conceptual
referent...the reciprocal is true". In contrast, McLuhan holds that, "the environment is an active process and impinging upon all of the components of the situation".

In terms of the system view of conflict situations, this is a critical debate. If objects are "inactive until assigned a value", their role and function are vastly indifferent from objects that are "actively impinging" upon the situation.

A decision on this issue is also important to the development of a theory of social conflict. If a relationship exists between possession of objects and conflict that is similar to the relationships between food and hunger (its perception and its existence), than an economy based on consumption can be a major cause for modern-day social conflicts. It may be that under this concept of conflict, a "locked-in" condition more than motivation (values) is the cause for continuing conflict, (strengthening the concept of universals and primitive urges to cover human-object relationships).

There are several studies that indicate a stronger relationship between nonhuman objects behavior than the "presence of value" theories would suggest. In addition to the works of men like E. T. Hall and M. McLuhan, there have been objective evaluations of this relationship in studies dealing with nutrition and biological clocks.

Nutrition studies, with a base in conflict over welfare premises, provisions and effects, trace needs such as dependency
in childhood to food that mothers eat during pregnancy. In many cases, the mother did not have a sense of hunger. She ate a sufficient amount of food, but she did not have a balanced diet. The fetus suffered brain damage as a result. The effect is present regardless of the presence or absence of values.

Studies on the biological clocks of animals show that animals differ in their use of time and response to time. Conflict may result from this difference. For example, although society has scheduled a work day from 9 a.m. to 5 p.m., with bedtime at midnight, some people (their biological clocks) operate on a noon to 3 a.m. day. Let's assume that a group of poor people live in a noisy, busy and hot (at least in the summer) neighborhood where the environment does not permit sleep until 2 a.m. or 3 a.m. in the morning. If a person from this environment has to make the job by 9 a.m., fatigue caused by factors in his environment may cause him to be late frequently. Repeated conflicts between the supervisor's demand for production ("be on time") and the employee's need for rest can lead to unemployment and hostility. Although values play a role in this situation, environment and biological clocks are more important factors than character. The asynronistic use of time is the basic point of adjustment.

In terms of the Communication Ecology, nonhuman objects are viewed as being part of the active environment. They undergo change when associated in human involvements and can affect human events without the need for human perception of their existence.
Core Concepts

There are five core concepts about the role of resources in conflict situations that have implications for a Communication Ecology.

1. **Since both situational and dispositional factors can cause and be used in handling conflict, resources must be considered as part of the situation.**

   The general and umbrella-like observation does not assign a specific role to resources; it does insist that any comprehensive analysis of a conflict situation will include consideration of resources and the values assigned to them.

2. **Resources often serve as the basis for the conflict.**

   Using the supply and demand analysis of economics to evaluate events within the ecology, some researchers on human ecologies view land as a resource around which conflicts occur. They suggest that groups engage in competitive, cooperative or conflict endeavors, depending upon the way in which land is allocated and controlled. The three stages of the encounter to control land according to Wilson are invasion, succession and dominance. 74

   Psychiatrists and psychologists point out that objects often become the items to which anxiety is attached. As the external manifestation of some internal state, an object serves as a conflict-producing (signal) phenomenon. In
terms of communication theory, the conflict-object relationship in this situation could be called a symbolic one if the "presence of the value" theory is accepted. It might be considered a signal if the "active environment" theory is accepted.

The relationship between objects and conflicts is noted in an article by Kaufman on the emotional uses of money.

The inappropriate use of money becomes a serious emotional threat when the person is faced with the conflict of his desires and his conscience, and with the control of his aberrant money-behavior. ... aberrant money-behavior may create many varieties of psychosomatic illness.\footnote{75}

3. \textbf{Resources are subject to change and can have a profound impact upon human activities.}

Rapoport observes that computer technology will cause severe philosophical displacements within society in the coming years. Man will have to reassess his philosophical commitment to work as a necessary condition for meaningful existence; society will have to reexamine the question of control of information and protection of privacy. The ability of computers to process information will lead to new uses and will result in forms of control that may or may not be consistent with the desires of individuals although beneficial to administrators and public officials.\footnote{76}

The knowledge or fear of what may happen and the belief that "I can do nothing about it" often serve to produce conflict
between those who wish to use the new technologies and those who fear that their security will be endangered. Labor-management conflicts over job security, shorter work week and stock ownership plans result, in part, from different views of automation and its potential effects on production and employment.

4. Meaning can be implicitly derived from resources even when they are not explicitly stated in symbols.

In man's reactions to natural events and resources, sensation can lead to behavior that results in learning or conditioning without the use of symbols, i.e., the symbols for fire are not required for a person to avoid fires once he has experienced burns.

The system view of man's interactions with resources would hold that "meaning" exists at the implicit level even when it is not explicitly understood, i.e., it influences or is felt without being symbolized or conceptualized.

Hills views this quality as one of the features of a system. The system concept includes both the identifiable entities and the "to-be-know" factors. Hills writes:

When the concept of system is used to refer to a collection of entities . . . the referent of the term, system . . . is not the entities, but the properties of the entities and the orderly relations among those properties.78

5. Resources assist in defining the capabilities of the Communication Ecology.
Resources make it possible or impossible for the group to carry out certain functions. For example, a telephone system makes communication possible over greater distances than is possible with oral communication without amplification.

Another idea that is included in this core concept is that resources cause people to take or not take certain actions. For example, if a group has funds, it is likely to be called upon for assistance and attacked if the assistance is not given. If the group does not have control over certain technological resources, organized efforts are likely to occur to obtain these resources. If a resource need exists for which there is no available solution, the group is likely to initiate activities designed to meet the need with technological inventions.

Functions

Nonhuman objects that serve as resources generally provide two services. (1) They provide reference points which define the field of sociation and base lines for evaluation. (2) They provide support services for the value and priority needs of the group. In the first instance, the resources are "an extension of man's senses". In the second, they translate man's values into a power capability to arrive at a behavioral expression of those values.
As reference points, the resources provide a "common yardstick" for comparing groups. One group is rich and another is poor. One group has weapons and another has courage. One group owns its land while another rents. These are examples of the use of resources as reference points.

Many social conflict situations have conscious and subconscious causes. As a result, it is difficult to ascertain the real or basic causes of the conflict. Attempts at clarification of anxiety in conflict situations involving large groups usually lead to an increase in the conflict. As a counter method, resources are used as a means for determining fair procedures and equitable results.

The reference point approach is seen in racial confrontations and labor-management disputes. The cost of living and profit sharing rather than the motivation and values of the participants are used in labor-management negotiations. Although motivation and values may be used to maintain group solidarity, at the conference table the mediator focuses attention upon the "measurable" factors that result from consideration of resources. Housing, employment, and educational attainment are the cost of living and profit equivalents in race relations.

The reference point function of resources that accomplishes two things for the system: (1) It assists in defining the field. (2) It serves as a base line for comparison and evaluation.

The support service functions of resources are generally related to activities which give power to the group. There is a
variety of ways in which resources support and give power to general functions of the system.

Transportation, for example, enables a group to control a larger geographical area than it could without transportation. Air patrols can more effectively control border areas than men on foot; however, the reverse is also true. The men on foot can do a better job in a specific area than the air patrol, especially if they have radio communication.

The point is that resources can be used to increase the power of a group (to control its land) and that there are different types of resources for different types of situations.

The second support service function of resources is to give power to the functions of the system by supplying the raw materials, the technological extensions of group action, and the capacity for production.
Networks of the Communication Ecology

The subsystems (communication, cultural groups, conflict and resources) provide the Communication Ecology with a broad and comprehensive range of functions and capabilities. These functions and capabilities do not work in isolation; they are combined into a system which has properties different from but inclusive of the properties of each of the subsystems. (This section discusses one of those system properties, the intra-CE networks of the Communication Ecology.)

In this discussion of networks, the performance of work is the main focus. The networks connect components of the system or those components that are required for effective operation. Recognition is given to the view that connections may be missing; this condition, according to some scholars represents an ineffective or even pathological system. This section will not treat the range of efficiency states that are possible within the system, but will seek to define those states that are the minimum requirements for the system's operation.

The networks may be defined as relationships between the subsystems which provide for interactions between individuals, group members, their cultural environment, and other parts of the intra-ecology, in such a manner that the resources (total resources not just object resources) of the Communication Ecology are organized, mobilized and created into capabilities for
performance. In an effort to indicate the dynamics of these networks, the terms by which they are described will be expressions of movement.

The four major intra-Communication Ecology networks are:
(1) energy to action, (2) identity to groupness, (3) goals to program, and (4) system maintenance, growth and creativity.

As a point of comparison, this view of the Communication Ecology agrees with the Berkeley researchers' formulation of a general system. The four universal properties that they considered necessary are accounted for in the system; however, since this system is focused on a more specific problem than Berkeley model, the four universals are placed in a different order of priority. For example, processes for direction are a first-level property in the Berkeley model while in the Communication Ecology they are classified as one of the intra-networks, a structure.

While the need to use structures as the method of group change (as stated by Watson) and the need to move from structural changes into processes which effect individual change are both recognized, the conceptual scheme presented here replaces the concept of structures with one of systems and the concept of order with one of experiences.

The intra-ecology networks are methods for organizing the form of experience and the means by which the content of experience is communicated. A further discussion of this
point will be presented in Chapter IV as part of the discussion on communicative patterns.

Although four networks are listed, there is little evidence that these are in fact separate and distinct networks; they may be separate messages on the same system or parts of the same message in one network; nevertheless, for the purposes of explanation, it is helpful to consider them individually.

Energy to Action.—Using the concept that conflict results in some form of action, it is clear that the energy generated by conflict must at some point be translated into some transitional state. In this case, the action required to do nothing is considered as an action response to the presence of conflict-produced energy.

There are three steps in the process of moving from energy to action: (1) The conflict must be created or perceived before the action potential is present. (2) Once the energy has made its presence felt within the system, conflict handling methods are initiated. These may be methods that seek to control by processes such as suppression or identification with the aggressor. The methods may seek some form of release as in the use of myths, ventilation, or rituals; or they may seek to use the energy to attack or assimilate the opposing group. (3) Conflict transformation, which is a system view of resolution or conflict termination, is generally concerned with the means by which the goal is achieved and with the results
that occur from the use or presence of the energy. If the transformation is made by rational means, the system is said to be dealing in a "healthy" way with the situation. If the translation occurs by irrational means, the system is considered to be in varying states of neurosis or pathology.

This point of view is in agreement with findings in perception that interpretation of data are as critical as the receipt of information, with the viewpoint of Rogers that communications can be used as a method of evaluating effective functioning, and with group dynamics theories that rationality is the essential base for conflict resolution.

The use of the term irrationality refers to a condition in which defensive factors within the group prevent a reasonable response to reality and result in behavior that is detrimental to the group. It does not refer to creative processes or to the use of subconscious materials or to the use of defensive behavior that contributes to the "ego-syntonic" nature of the group or the individuals.

Identity to Groupness.--Theories of conflict about the individual and the group indicate that man has a basic conflict in any situation where interaction is possible. There is the need to associate and the need to withdraw. The group presents the individual with the possibility of support and security in achieving his objectives but at the same time requires him to conform with certain norms. A third part of the conflict is
the desire to know who one is and the desire for communion with others; identity focuses upon self while communion focuses upon union with others. Persons who cannot successfully negotiate the path between these unavoidable choices are placed in both primitive and fundamental conflict situations.

One of the functions of this network is to enable individuals and groups to work out their differences, to arrive at some form of accommodation or consensus between the antagonistic positions. One of the methods applied is the transmission of culture by the parents to the child. The child through a series of group associations, finds his formula for individual uniqueness and group conformity. As a member of the group, he in turn takes actions which modify culture. The process begins again with his children. Another approach to this problem is the use of a superordinate symbols, the great idea. Such a symbol provides a compelling purpose, in the tradition of persuasive speaking that causes people to organize their lives around conformity to a cause and be willing to surrender individual idiosyncracies for the good of the group. Arrival at a form of accommodation also occurs through the creative interpretation of messages.

The identity to groupness network is responsible for organizing, mobilizing, and creating the conditions which make possible the combination of "who am I?" and "where do I belong?" with nonconflicting questions.

Goals to Programs.—In addition to translating energy into
action and helping people adjust to the requirements for
group action, the Communication Ecology has a function of
making goals realizable. The potency and valency of the
group is related to its capacity to carry out programs which
produce results.

There are two processes which appear to be operative
when groups are faced with this task. They may use a program
planning approach. This may be based on a Dewey's reflective
thinking steps or it may involve the econometric models used
in urban planning.

In contrast, other groups prefer a process of letting
a program evolve. This approach is similar to the stream
of consciousness methods that are sometimes used in writing
or drama. Many of the activities of the hippies, for example,
are based on a rejection of the programming-planning approach
and agreement with the "let it evolve" concept.

The point is that the system's networks may have to
accommodate both approaches or be adapted to one of them
or others. A system which becomes committed to one or the
other of the approaches may lose its capacity to respond to
new and unusual situations or conversely, to deal with the
difficult problems that require long-range planning.

The structural effects (rules for interrelationships
between components) of how the system connects processes
can increase or decrease the range of response that it is
System maintenance to system growth or creativity. -- One of the conditions for life is for people to have a challenge. Boulding in his theory of conflict mentions that people may create conflict in order to give themselves something to do. He uses sports as an example of the human need for challenge that is related to conflict. Studies on animal behavior have shown that the opportunity for activity is sufficient to sustain learning. Research on groups and institutions indicate that one of their principal functions is self-maintenance.

The system, as another way of looking at cultural groups, embodies this concept and function. It must have some means of creating itself, repairing itself and developing itself. If it is to serve the purposes of the group, some long-range objective serves to organize its activities. This long-range objective can be one or both of two types. The system can serve the group's desire to grow larger or more powerful and/or it can serve the group's needs to find more creative (including different) ways of dealing with reality.

The intra-ecology networks are essentially instrumental processes by which the various functions of the subsystems are coordinated to achieve group objectives and behavior. Effectiveness within the system can be defined in terms of results. The results can be viewed in terms of the forms of
interactions and the effects of the group on its members and society. The observation would hold that a system can be effective if it serves the philosophical needs of the group even though the actions taken by the group may result in failure or destructive behavior. From an evaluative or social utility point of view, the system which serves a group effectively and which results in benefits for society is more effective and more creative.

**Significant Network Processes**

Each of the components of the Communication Ecology carries out its functions by means of networks which relate parts and processes of the subsystem to each other and to the overall system.

In this section, four network processes will be discussed: connecting, calibrating, verifying, and projecting. Many processes which carry out functions of relating one part of a system to another are discussed in the literature. Some of them are specialized, applying only to a given class of connections. The processes included under the category of significant network processes are those which apply throughout the system and at each point.

General system models are built on the premise that certain features and processes which are supported by findings at one level of the system can be applied to different levels
within the same system, i.e., the intrapsychic conflicts of an individual can result in intragroup conflicts which can lead to intergroup conflicts.

While accepting this premise as a condition for conceptualizing systems, Hearn cautions against the overuse of the analogy. It may mislead one into accepting as universal processes those which are, in fact, only specialized to a given class.81

The four network processes are those which have universal, systemwide characteristics; they are essential to the system's capabilities, and they provide an organizational framework for many of the specialized processes.

Connecting.—The connecting processes, referring to the events that bring two or more parts into some form of working contact, can be viewed from three perspectives: (1) location, (2) function, and (3) characteristics.

In terms of the Communication Ecology, the connecting processes are located in the following areas: within a subsystem, between subsystems, and between cultural groups. Intrafaces are connections (networks) between two or more processes and components within one of the subsystems. Interfaces are connections between two or more processes and components within the overall system. The term, communicative ecological interfaces, refers to similar actions between different cultural groups, or, to be consistent with the conceptual scheme, between communication ecologies.
The connecting points or processes have various functions. Whether these functions are mutually exclusive cannot be determined from the literature, but it is clear that they are carried out by the system. The connecting points act in four ways—as thresholds, transitions, alternatives and controls.

Since the senses and their stimulation are involved in translating the knowledge of the world, the coherent picture of man's view of reality cannot be explained in terms of raw sensory data. Berelson defines two types of thresholds as:

the minimal stimulus values capable (1) of being sensed at all (the absolute threshold) and (2) of being told apart (the differential threshold) ... The overriding generalization with respect to absolute and differentiated thresholds is ... human sensitivity changes as it needs to.82

While thresholds refers to the level of awareness (the existence of the connections), transition refers to the capability of the networks to produce modifications. Deutsch describes a relationship between thresholds and transitions: when a psychic stimulus at a given level is seeking release, the physiological process associated with that stimulus leads to a sensory reaction. A reciprocal relationship is established between the libidinized objects and the synthetic systems. Successful therapeutic analysis in these cases depends upon the creation of new thresholds and
firmly established insight. 83

Alternatives can be considered as choice points within the network. They can exist within the system or they can be created by the system. The methods of handling conflict, which range from attack to assimilation (discussed in Chapter II), are examples of alternatives at the group level. The study of alternatives usually involves evaluating them in terms of their potential for effectiveness. For example, an attack which results in a counter attack is generally viewed as ineffective because it may escalate into destructive activities.

A fourth feature or type of connecting process is control. Brembeck and Howell indicate the need for this feature in persuasion by stating:

With learning, protection of the body from harms... becomes one of the constant concerns of every individual... Any system of persuasion must take into account the storehouse of persistent "avoidance reactions" each individual has developed. 84

Wiener and Smith in separate works stress the use of feedback as an essential control process. In cybernetics, feedback is viewed as a reciprocal interaction between two or more events, in which one activity generates a secondary action which in turn redirects the primary action. The three steps in the feedback control system are: (1) generation of movement toward a target, (2) comparison of the path and detection of error,—and (3) use of an error signal to redirect the system.

The connecting processes have four major functions.
They serve to create a level of awareness, to modify processes, to provide choice points, and to control network functions.

Characteristics of connecting processes can be considered in terms of events, activities, effects and multiple interactions. Connecting processes are frequently described in terms of continuums.

The terms--events, activities, effects, and multiple interactions--are used to refer to an action, how it takes place, its result and the use of two or more continuums to analyze the situation.

Continuums that are often applied to the events are:
(1) compartmentalized-interrelated, (2) closed-open, (3) passive-active, (4) central-peripheral, (5) transitive-intransitive. These continuums have been used to describe schizoids, group polarization and institutional fragmentation.

Continuums used in relation to the activities or the nature of the processes are: (1) asynchronistic-synchronistic, (2) ambiguous-clear, (3) rigid-plastic, (4) adaptive-maladaptive, and (5) progressive-regressive. These continuums have been used in analyzing prejudice within individuals, group response to crisis, and the failure of institutions to respond to needs for change.

Continuums used in relation to effects (what happened as a result of the processes) are: (1) differentiation-
integration, (2) inconsistency-consistency, (3) for-against, and (4) cooperation-conflict. These continuums have been used to evaluate maturity and attitudes within the individual, group effectiveness, and organizational structures.

The multiple interaction view recognizes that more than one continuum is required to understand and deal with a given problem. A two-axis analysis is frequently used although in factor analysis techniques, the number of the continuums may be much greater. Applying the two-axis analysis to the subsystems, each subsystem could be described in the following manner.

A two-axis analysis of conflict could include: (1) destructive-creative and (2) ineffective-effective. Cultural groups might be considered in terms of: (1) open-closed and (2) low potency-high potency. Resources might be viewed as: (1) explicit-implicit and (2) support-barrier. In the example just given, the first continuum (1) in each series relates to how the subsystem operates within the system while the second continuum (2) refers to a quality of that operation. For example, communication can be used to treat people as objects or to seek union with them as people, and efforts in either one of these directions can be effective or ineffective.

Calibrating.—This process involves bringing parts of the system together in the combinations required for effective operation. The parts are calibrated when all conditions are operational and are noncalibrated when one or more of the conditions is asynchronistic.

A wide range of conditions is required for calibration to occur. In The Engineering of Consent, Bernays provides a list
of strategies for public relations directors to calibrate if their programs are to be successful. Most research studies of an experimental nature are concerned with some form of calibration.⁸⁷

A few comments will help to underscore the complex and comprehensive nature of this process. Harvey states:

In spearheading the development of concepts, differentiation and integration do not proceed at a steady linear rate. Instead, this process, much like visual scanning, seems to move saccadically.⁸⁸

Berelson comments:

With regard to expectation, other things being equal, people are more likely to attend to aspects of the environment they anticipate than to those they do not, and they are more likely to anticipate things they are familiar with.⁸⁹

And, according to Schelling:

Coordination of expectation, similar to coordination of behavior under conditions of noncommunication, involves intuitively perceived mutual expectation accomplished by intuition and analysis. . . . When some signal is desperately needed by both parties and both parties know it, even a poor signal and a discriminatory one may command recognition in default of any other.⁹⁰

The need for this function is clearly stated in findings and observations in the literature. From the communicative point of view, redundancy and repetition may be regarded as activities which are required to accomplish the calibration. If this is the case, then information theories which seek to increase the informational bits by reducing repetition and redundancy may be contraindicated in conflict situations where more calibration is needed than in non-conflict situations. Hovland's theory is that repeated persuasive communication is needed to guard against decay due to resistance.
Repeated persuasive communication is a form of calibration that is similar to the development of memory traces now being studied by psychobiologists. 91

**Verification.**—Verification occurs in many ways. Cybernetic concepts of feedback, psychiatric ego-syntonic processes, program planning, inventory checking, budgeting procedures, and a variety of irrational processes are parts of man's repertoire of verification processes.

Verification is often discussed in terms of the following:

1. Self-fulfilling prophecies in which actions bring about predicted conclusions;
2. Statistical probabilities in which a conclusion is assumed to be valid if it occurs at a significantly better than chance probability;
3. A defense which by its existence is assumed to indicate the presence of conflict;
4. Logical analysis in which the conclusion is valid if it meets set standards;
5. Participation in which the new patterns of behavior are supported by favorable experiences; and
6. Results in which the effects of an action are the principal means of verification.

In the conceptual scheme of concepts and personality organization developed by Harvey and others, the ideas of confirmation and refutation serve a verification function.

Confirmation and refutation of concepts are, respectively, the evaluation of a situation as being either in line with or contradictory to the directional or volitional striving (either approach or avoidant) toward the object of the concept. . . Confirmation and refutation rarely occur in relation to a single concept. More likely is the involvement of several concepts so that simultaneous confirmation and refutation occur, producing conflict and vacillation. Faced by such circumstances, the person is assumed to attempt to resolve
the conflict in a way that will maximize positive affect. If the conflict involves two or more highly central concepts, however, then the individual may resort to a more pathological resolution, which in the extreme instances may take the form of amnesia or other dissociative or disintegrative phenomena.92

In a discussion of the strategies of conflict, Schelling indicated that in group conflict, long-term surveillance is based on positive evidence, a form of verification.

A crisis agreement would have to rely on positive evidence. Instead of looking for evidence about what the other party is not doing, one demands evidence that shows what he is doing.93

Meerloo in an article about conversation and communication refers to the dual effects of verification. Verification helps man to understand, respond, and gain control. Meerloo writes:

What is the impulse for understanding each other? It is not only a loving interest, not only putting oneself in another's place to achieve more peaceful co-operation, it is also the wish to control the secrets of the other person, to obtain power over him by understanding him. Understanding gives self-assurance, but understanding is a vital component of our social compulsions. We must live together, we are involved in the same social pressures, and processes, we must learn how to react and how to respond.94

Projecting.—Connecting, calibrating, and verifying are processes which are primarily concerned with the past and the present. In order to account for the ability of the system to anticipate and organize itself for future events and to create new pathways, a process called projecting is proposed. Projecting is primarily concerned with the future. It is to be distinguished from projection, a concept which refers to attributing one's repressed motives to others. Projecting is similar to planning, but is expanded
to include imagination and adventurous activities.

Berelson notes a relationship between projection and conflict:

Conflict, and especially severe conflict, is more likely when the minority group has secured enough improvement in its situation to appreciate the benefits and want more. 95

The relationships between projecting and resource allocation are central to program, planning and budgeting (PPB) systems:

A PPB system is a unifying and comparing process. On the one hand, consequences are assessed in terms of costs, both those that are immediate and those that are implicit for subsequent periods as a result of immediate action. On the other hand, they are assessed in terms of benefits or program effectiveness. The arraying of cost and effectiveness for various program alternatives provides information required for decision. 96

The significant network processes are the principal means that enable the various subsystems and system networks to operate as one unit. The four processes discussed are considered to be present at all levels of the system and to perform functions such as: connecting parts of the system into a workable network, calibrating the system's functions to achieve maximum effectiveness and efficiency, verifying actions to "insure" adequate reality adjustments, and projecting to enable the group to meet or to create future conditions.

**Communication Ecology Extensions**

In this discussion of the Communication Ecology, attention has been focused on the components, functions and activities of the overall system. This emphasis has obscured an important feature of the system--its interaction with the systems of other groups. This
interaction is the principal focus of Chapter IV, *Implications and Applications of the Communication Ecology*.

Although the previous discussion was concerned with intra-system factors, it should be pointed out that certain features of the CE are inherently involved with interaction between two or more communication ecologies (cultural groups).

This section summarizes some of the factors that provide for inter-group interaction. The central idea is that cultural groups are both explicitly and implicitly engaged in interactions.

The diagram of the system indicates that the Communication Ecology has several extensions which contain and/or communicate with other groups and the surrounding environment. Information relating to these characteristics has been included in the discussions of the various subsystems, networks, and processes.

This section will focus attention on two aspects of interfaces between communication ecologies. They are the explicit and implicit interactions that occur between cultural groups. Explicit interactions are those that exist through established procedures and operate with some degree of conscious intent. Implicit interactions are those which may not occur within the conscious level of awareness and are unavoidable.

Examples of explicit interactions are: (1) mass media, (2) social institutions, (3) laws, (4) culture, and (5) language. Implicit interactions are: (1) actively impinging environments, (2) effects of resources upon group behavior, (3) natural events
which effect both groups, (4) defensive mechanism such as projection which operate without the need for actual contact, and (5) coordination of expectations as in game theory.

Summary

Core concepts about cultural groups, communication, conflict and resources have been used in this chapter to develop a conceptual model called the Communication Ecology.

The Communication Ecology, as defined in terms of these core concepts, was depicted as a system composed of interactions within and among four subsystems—cultural groups, communication, conflict and resources. As a system, its primary use is to provide a basis for understanding and analyzing the interactions that take place during conflict situations between cultural groups. It is the contention of this study that constructive change of a conflict situation can only take place as a result of the analysis of the entire system; analysis of a subsystem by itself does not permit an understanding that is comprehensive or inclusive enough to provide a basis for change.

The need for planning and action based on system objectives is obvious in the variety of conflicts facing our society today. The Communication Ecology is presented as an attempt to develop such a system. It is intended to provide communicologists and people in conflict situations a basis for understanding the changes required to transform potentially destructive conflict into
constructive action.

The Communication Ecology (CE) is basically a human system although some of its interactions involve objects or nonhuman factors. Interactions and processes occur within subsystems. They also occur between subsystems within the CE via Intra-CE networks. The principal Intra-CE networks are: (1) energy, (2) identification, (3) power, and (4) capability.

The procedures of the system and the subsystems are carried out by CE processes which include: (1) relating, (2) calibrating, (3) verifying, (4) switching, and (5) projecting.

Some activities that occur within the CE have a diffused impact throughout the system. They are referred to as aspects. Events and minor processes occurring within the system are referred to as mechanisms. Minor processes can be substituted for other minor processes to achieve particular types of behavior. For example, a symbolic process can be substituted for a signal process to achieve a given behavior.

When two groups are in conflict, the situation is viewed as an interaction between two Communication Ecologies. This is another way of saying that the cultural groups are communicating with each other. The interaction between CEs occurs via contact bands between subsystems of the two ecologies.

The subsystems that interact via these contact bands are communication (shared symbols, experiences and strivings); cultural groups (membership, identification, task achievement); and resources
(power, objects, capital and space). Inherent in the CE scheme is the concept that groups are in explicit or implicit contact most of the time; the condition of continuing contact is considered as unavoidable ecological contact.

If a conflict between two or more groups is replaced by some other condition, such as consensus, then this particular Communication Ecology no longer exists. If conflict reaches a level where it introduces dysfunctions into the system, the resulting loss of capability may render the CE inoperative.

System Requirements

In a functioning CE, each subsystem performs particular system requirements. The conflict subsystem is viewed as the energy component of the system; the cultural group is the human component (although the others have human properties); the communication subsystem is the instrumental component, and the resource subsystem is the supportive component.

Conflict

Concepts:
1. Conflict provides a source of energy.
2. This energy can be utilized, controlled, or discharged through contact with other subsystems.
3. Conflict utilization is an essential system requirement.

Functions:
1. Conflict stimulates activity within a system; it is an energizing force.
2. Conflict has a **structuring** influence within the CE as it affects arrangements and associations between components.

3. The restructuring and energizing functions of conflict can be considered as a **directing** force, giving an affect quality to goals and purposes.

**Cultural Groups**

**Concepts:**

1. Cultural groups always exist; people must form groups.

2. Culture is an important determinant of group behavior.

3. Groups have similarities and differences.

4. Cultural groups are tied together by explicit and implicit communication.

5. Groups can be changed.

6. Conflict is inherently or potentially present in cultural groups.

**Functions:**

1. The cultural group aids people in meeting identity and identification needs.

2. The cultural group performs a **polarizing** function by determining group boundaries and the possibilities of conflict.

3. The cultural group is the subsystem for **decision-making**. This decision-making is influenced by conscious and unconscious factors; by values, norms, and structures; by actions of other groups, and by human and nonhuman events.
Communications

Concepts:
1. Communications is an instrumental component insofar as it is used for interactions and interventions.
2. Interaction is "omnipresent" as a basis for communication, and it is limited in its serviceability by the form and structures of the interaction.
3. Communication provides both primary and meta-experiences.
4. Communication serves as a matrix, but it follows the purposes and structures of the system in which it operates.
5. The essential processes of communication occur within individuals.
6. Communication provides a means for observing processes that cannot be investigated directly.

Functions:
1. Communication is the medium for experience-sharing, (primary and meta-experiences).
2. The developmental function of communication enables the system to acquire needed and/or newer capabilities.
3. Distributive functions of communication bring about the movement of ideas and concepts (transgeneration).

Resources

Concepts:
1. Resources are nonhuman factors or objects which exist within the environment. They are used by the cultural group
and they affect the CE's ability to function.

2. Resources often serve as the basis for conflict.

3. Resources are subject to change and can have a profound effect on human activities.

4. Resources have meanings that are implicitly understood.

5. Resources help determine the capabilities of the cultural group's Communication Ecology.

Functions:

1. As a reference point, resources provide a "yardstick" for comparing groups.

2. Resources provide supports which give power to a group.

Networks of the CE

Intra-CE networks relate the parts of a CE together. They are relationships between the subsystems and they provide for interactions between individuals, group members, their cultural environment and other parts of the intra-ecology. As a result, the resources of the CE are organized, mobilized and transformed into capabilities for performance.

The dynamics of the Intra-CE networks can best be described in terms of movement or motion. These movements (used to describe the networks) are from: (1) energy to action, (2) identity to groupness, (3) goals to program, and (4) system maintenance to system growth or creativity.

Energy to action.--Energy generated by conflict is translated into
behavior via the energy to action network. This occurs in a three-step process: (1) conflict is perceived, (2) conflict handling methods are initiated, and (3) the energy of the conflict is used to achieve goals.

Identity to groupness.--This network is used by groups to resolve conflicting ideas and conditions between the individual's identity and group identification, and to organize, mobilize and create the conditions required to enable the group to deal with conflict situations.

Goals to programs.--This network is used to translate goals into programs and programs into action sequences.

System maintenance to growth and/or creativity.--This network is used by the group to recreate, repair and develop itself in terms of its present and future existence.

Intra-Ecology networks are essentially instrumental processes by which the various functions of the subsystems are coordinated to achieve group objectives and behavior. Their effectiveness within the system can be defined in terms of results. From an evaluative or social utility point of view, the system which serves a group effectively and which results in benefits for society is more effective and more creative than a system which fails to achieve these ends.

Significant Network Processes

Relationships between subsystems and networks are coordinated, monitored, and created by means of significant network processes.
Four of the major network processes are: (1) connecting, (2) calibrating, (3) verifying, and (4) projecting.

Connecting processes are the activities that bring two or more parts of the system into working contact.

Calibrating processes are those required to bring parts of a subsystem together in the synchronistic combinations required for effective operation.

Verifying processes are those that ensure the effectiveness of functions performed and provide information for decision-making.

Projecting processes are those used by the system to anticipate and organize itself for future events and to create new pathways for achieving new goals and objectives.

Inter-Ecology Relationships

The interaction of one CE with another will be discussed more fully in the next chapter. Consideration was given in this chapter, however, to the idea that cultural groups are engaged both explicitly and implicitly in interactions. The CE has several extensions which contain and/or communicate with other groups. Two aspects of interfaces between Communication Ecologies are: (1) explicit interactions that occur via established procedures and operate with some degree of conscious intent, and (2) implicit interactions which may not occur within the conscious level of awareness and are unavoidable.

Explicit interactions are: (1) mass media; (2) social
institutions, (3) laws, (4) culture, and (5) language.

Implicit interactions are: (1) actively impinging environments, (2) effects of resources on group behavior, (3) defensive mechanisms such as projection which operate without need for actual contact, and (4) coordination of expectations, as in game theory.

The conceptual scheme presented in this chapter attempts to organize the findings, observations and opinions of scholars, researchers and scientists who have been concerned with communications, or conflict or culture or cultural groups or some combination of these fields.

The Communication Ecology is a general system view of the dynamics occurring when cultural groups are in conflict situations.
CHAPTER III FOOTNOTES


7 Alvin M. Weinberg, "But is the Teacher Also a Citizen?" *Science* (April 14, 1965), p. 604.


10 Hearn, 25.

11 *Cleveland (Ohio) Plain Dealer*, December 11, 1967.

12 Hearn, 23.


14 Hearn, 21.


20. Sprout and Sprout, 27.


25. Dina Soble and Joseph J. Geller, "A Type of Group Psychotherapy in the Children's Unit of a Mental Hospital," *Psychiatry Quarterly* (38, April, 1964), 262-270.


47 Cartwright and Zander, 152.


52 Hall, 127-44.

53 Ruesch, 34 ff.

54 Harvey, Hunt and Schroeder, 58.

55 Ruesch, 87.

57Fearing, 179-194.


59Hovland, Janis and Kelley, 7.


64Ruesch, 15.


67 Fearing, 183.


69 Sherif and Sherif, 201

70 Harvey, Hunt and Schroeder, 13.

71 McLuhan, 39.


74 Henry I. Wilson, unpublished paper.


77 Kaufman, 55.
78 R. Jean Hills, *Toward A Science of Organization*, (Eugene, Oregon: Center for the Advanced Study of Educational Administra-
tion, 1968), p. 3.

79Hearn, 19-22.


81Hearn, 22-24.

82Berelson, 91.


84Brembeck and Howell, 69.


86Smith and Laltz, 296.

87Bernays, 3-26.

88Harvey, Hunt and Schroeder, 18.

89Berelson, 101.

90Schelling, 71.
91 Hovland, 17

92 Harvey, Hunt and Schroeder, 7.

93 Schelling, 250.

94 Meerloo, 141.

95 Berelson, 515.

A central question in this study has been: How can the actions of cultural groups, the energy of conflict, the instrumental effects of communication, and the impact of resources be organized into a conceptual scheme, a general system, which deals with cultural groups in conflict situations?

The study and the general system developed are designed to serve several purposes: (1) assist in understanding and explaining conflict behavior, (2) add to and organize existing information about conflict, (3) contribute to the development of models for conflict situations, (4) provide new or different perspectives from which conflict can be viewed, (5) suggest ways in which conflict can be functional, and (6) identify research directions.

Concepts and theories relating to conflict, cultural groups and communications were analyzed in Chapter II in order to develop the general system model, The Communication Ecology. In this Chapter, the implications and application of the Communication Ecology will be discussed in relation to the purposes of the study and two major questions:

1. What are new or different perspectives of the conflict situation?
2. How can constructive and/or creative behavior be obtained in conflict situations?
The concepts and information used to discuss these two questions have the character of normative values. In some cases, it is possible to formulate operational statements; however, the various statements should not be viewed as theorems since the accuracy of the assertions has not been experimentally tested. Nevertheless, in spite of the lack of direct experimental verification, the general system model provides a reasonable base for understanding and studying cultural group behavior in conflict situations.

New or Different Perspectives

A common view of groups in conflict situations can be stated in the following way. Conflict acts as a tension-producing experience which causes members of the group who perceive the conditions of conflict as a threat to act in a cohesive manner and to behave in ways that are or can be interpreted as threatening by members of the "opposing group" within a situation or field that implies a win-loss condition. The behavior of the groups can be beneficial or destructive; it may involve normal or pathological methods of conflict handling; and it will have objectives such as: control, repression, release, growth, cooperation, consensus, competition, problem-solving and/or communion. In this formulation, conflict is viewed as a state to be avoided or eliminated; when these two alternatives do not exist conflict is to be controlled, released or sublimated. This traditional view is, to a large extent, a crisis and specific problem-solving description of the conflict situation.
The system perspective of conflict differs in several important ways from the traditional view just stated. For example, the win-loss condition is viewed as a value-maximizing or solve situation and the focus is shifted from specific issues and processes to structural and systematic relationships.

These differences and others will be discussed in terms of several nuclear concepts within the system perspective of cultural groups in conflict. The nuclear concepts are perspectives from which conflict situations can be analyzed and managed. In an effort to clarify the nuclear concepts, a comparison will be made with the model of conflict stated above.

The nuclear concepts are an "oversimplification" of the system since they represent a reduction of the system to basic properties, and since "nothing is true in the behavioral sciences except under certain circumstances."¹

Berelson makes a point that is relevant to this study in his work on the major findings of the social sciences:

The forces to be dealt with are so numerous that it is best to take a few at a time, and work out a number of partial solutions as auxiliaries to our main study. . . . We reduce to inaction all other forces by the phrase "other things being equal." We do not suppose that they are inert, but for the time being we ignore their activity. This scientific device is a great deal older than science.²

The nuclear concepts provide perspectives for manipulation of the system. Ineffective use of the nucleus concepts has the effect of initiating or increasing the conflict while effective use of the concepts results in functional behavior.
Six nucleus concepts will be discussed. They are (1) conflict transformation, (2) tensor fields, (3) symbolic primary experiences, (4) experimental action, (5) people-to-people interaction, and (6) communicative patterns.

**Conflict Transformation**

A central concept in the perspective of conflict provided by the Communication Ecology is the transformation of the energy produced in conflict situations into behavior. The system perspective can be used to account for either functional or dysfunctional transformation. However, because of the social utility orientation within the social sciences, the analytical objective is establishment of functional or creative behavior. The analytical objective, therefore, is to determine ways in which conflict-produced energy can be transformed into behavior to achieve desirable social actions.

**Process.**—The translation of conflict energy into action, identity into groupness, goals into programs, and pathological behavior into normal behavior depend upon a variety of different processes. Many of these processes are discussed in the literature under rubrics such as: learning, therapy, social engineering, group dynamics, persuasion and the like. The system perspective combines these processes into three cycles, reciprocal processes, for conflict transformation; they are: utilization, transaction, and management.

The utilization cycle recognizes that conflict is "omnipresent" in the sense that it is implicitly or explicitly present in human interactions. According to this view, efforts based on elimination or
avoidance of conflict contain a bias which may restrict the search for or the creation of a wider range of alternatives, i.e., conflict elimination is a win-loss state while utilization is a value-maximizing and/or solve state.

The utilization of conflict depends upon the motivational abilities of conflict and the systematic relationships existing between other sub-systems within the Communication Ecology. Woolman refers to this condition as a Need Intensity Hierarchy; once the top need is satisfied by some action the second need assumes the priority influence. Another theory, by Festinger, rests on the proposition that inconsistency (asychronistic relationships) can cause psychological tensions which produce movement toward consistency. In Lewin's field theory, conflict is viewed as a result of decision-making in avoidance-approach situations.

Cycle one of conflict transformation, utilization, supports the position that conflict is an energy source with motivational properties that can be used to select among various alternatives. Effective utilization of conflict depends upon both the level of conflict intensity and synchonistic, systematic relationships. If the level of intensity is too low, motivation and activity may not be possible; if the intensity is too high, pathological behavior may result. Both of these conditions are detrimental to mental health and group functioning. If these observations are acceptable, conflict can serve a useful system function by maintaining a level of activity; it helps keep the system dynamic.
The relationships needed for utilization have two principal characteristics, synchronistic and systematic. The synchronistic quality assists in calibrating and verifying actions while the systematic characteristic provides for the repeated re-experiencing (either actual or symbolic) that permits the development of structural skills and adaptations. The theory of logotherapy and Bernays' social engineering process provide contrasting views about these characteristics.

Transaction is the second cycle in the process of conflict transformation. Transaction, as used here, refers to interactions between the subsystems which result in synchronistic relationships. Shifts in affects and cognitions that occur as a result of role playing, for example, are a type of transaction. Communication is important as a factor in transaction because effective symbolization represents the energy, the resource, and the group in a form which reduces threats that could be associated with the actual conflict "objects." By reducing the threat potential while maintaining the representation of the situation, communications enables trial and error transactions to occur prior to behavioral (not cognitive) commitment.

Utilization of conflict's motivational properties to stimulate activities that result in transactions leading toward more synchronistic relationships requires a third cycle, conflict management. This cycle includes those forces which result in value-oriented behavior. The goals of the groups, the clarity of common purposes, the identification of opposition, the specification of alternatives, the development of sociation and values, and the use of programmatic techniques and strate-
gies are some of the techniques used for conflict management.

Conflict transformation (the use of conflict-produced energy to achieve constructive or creative behavior) depends upon the effectiveness of three interrelated process cycles: utilization, transaction and management. A central thesis or hypothesis of this study is that communication by virtue of its representational, experimental and non-threatening character can be used in instrumental ways to avoid stalemated repression and violence. As Boulding has stated:

The object of conflict management is to see that conflicts remain on the creative and useful side of an invisible, but enormously important barrier that divides the "good" conflict from the "bad". . . . We might define the objective of a peacemaker as seeing that conflict makes sense.7

Differences.--This nuclear concept points out two ideas that are different from the traditional model of conflict. The traditional model is concerned with conflict control or resolution. Conflict, whether functional or dysfunctional, is a condition to be changed because it is undesirable. The perspective presented in this study holds that conflict is inherent in human relationships and that seeking utilization and management is more effective than seeking control and resolution. Conflict may be a system requirement that is needed to maintain a dynamic state. (Man's creation of competitive sports may be an expression of this need.)

Conflict, in the traditional model, is said to exist between groups. The system perspective holds that while groups may be in a conflicting situation, the conflict exists within the ecology of the group (person) which results in behaviors (interactions) that increase or
decrease the conflict quality within the group (persons) and result in patterns of interaction that may seek annihilation or assimilation. The system perspective makes a distinction between conflict as asynchronistic relationships (tensions) and the results of those states.

**Tensor Field**

This nucleus concept is concerned with the "totality" of the conflict situation. It focuses attention on the inter-ecological interactions. Just as communication does not occur unless two or more persons are interacting, a communication ecology requires interactions with another ecology for the organization and mobilization of its resources.

**Perspectives.**—The tensor field concept is an expansion of other field theories. It expands the theories in two directions. Instead of viewing the conflict situation as interaction between two opposing parties with the possible addition of a third party as mediator, the tensor concept includes groups that are implicitly but not directly involved. Groups that are not directly affected by the specific issue of the conflict can through a creative analysis of the situation provide alternative solutions, directly or indirectly, if their existence influences the cultural functioning of the parties that are directly involved. One of the characteristics of a system perspective is the acceptance of the (possible) relevancy of matters that may be considered irrelevant. The contingency aspects of decision strategies are a way of accounting for the possible impact of irrelevant matter.

Instead of viewing conflict primarily in terms of direct and measurable forces that can be applied, the tensor field concept also
focuses attention on action-at-a-distance. Action-at-a-distance phenomena are conveniently described in physics in terms of a "force field" set up by the source. Each unit (conflict component) within a force field has a definite magnitude and direction for each possible location. The totality of these forces (Bonner's vectors) is called a field of force. Movement along the vectors is referred to as a line of force used to alter or maintain direction. For example, the attitudes of one group exert force on the attitudes of other groups.

The term, tensor, was selected because it refers to many different force fields (groups and power) operating along n dimensions simultaneously on the basis of known and unknown factors with differential effects.

The tensor field perspective, similar to conflict theories, views conflict elements as moving or maintaining a position depending upon the relationships between forces. Conflicting, asynchronistic relationships are in a constant state of flux as a function of maintaining an operational system. The analogy could be made to antagonistic muscles which provide for physical movement. From this perspective, the problem in conflict situations becomes the effective coordination of the asynchronistic and synchronistic states; fluctuation between the two states, according to this perspective, is a necessary condition for growth and development.

The tensor concept implies a view of reality that is without distinct boundaries, although for analytical and administrative reasons
it may be necessary to reduce the field to some manageable size. This reduction should be considered as the nucleus rather than the boundary of the conflict situation.

**Differences.**—The system perspective focuses attention (1) on the convergency of \( n \) fields instead of two or three, (2) on conflict as a necessary condition for movement instead of as a barrier, (3) on adjustment to fluctuation rather than consistency as a security base, and (4) on the possible relevancy of what might be considered irrelevant matters.

Communications serves an important function within the tensor field concept. It is the subsystem with the capability of symbolizing the nucleus of the situation. By means of this symbolization, the group is better able to locate its position, identify lines of force, and plan moves. By serving this function, communication enables a group to discover the unknown, to estimate the consequences of its moves, and to evaluate potential moves of other groups. The combined effect of using communication for these functions facilitates movement by creating belief in possibilities and by providing reference and check points. While the symbols are not the force, they impact upon the force field in such a fashion as to cause change.

**People-to-people Interactions**

Efforts which increase the degree of group interaction taking place in the form of people-to-people rather than people-to-object contacts increase the probabilities for development of the group's capabilities to handle structural and primitive conflicts.
Perspectives. — The importance of people-to-people relationships is most clearly presented in the works of psychoanalysts. Rogers, for example, takes the position that personal interaction, more than psychoanalytic methods, results in effective treatment. Dewey viewed communication as a means by which communion was achieved between people; this condition, in his opinion, is the highest level of group unity. Cartwright states the importance of people-to-people relations in this way:

A group will be more attractive, the more it provides status and recognition, the more cooperative the relationships, the freer the interaction and the greater security it provides for members.

There are several ways the Communication Ecology can be used to foster people-to-people interactions. The concept of using communication to achieve conflict utilization is similar to Hutchings' observation that "the civilization of the dialogue is the negation of force."

He continues:

Communication . . . assumes that every man has reason and that every man can use it. It preserves to every man his independent judgement and, since it does so, it deprives any man or group of men the privilege of forcing their judgement upon any other men or group.

Communication has the capability of treating people as people when used in rational patterns of communion; because it is an action-at-a-distance, it operates without physical force and allows freedom of choice.

The Communication Ecology is also suited for the condition which Matson recommends as a replacement for the age-old cycle of "innovation, intertia, and insurrection." He recommends the doctrine of "Continuous
"Revolution," and suggests:

If all our institutions remain open to the participation and creative contribution of their members, the steady flow of adaptive innovations will render revolutionary upheavals unnecessary.

This is a noble purpose and difficult to achieve; however if progress is to be made toward this objective, a shift from programs based on homeostasis to those based on homeokinesis is required. Smith uses homeokinesis, cybernetic feedback, as a base point in his theory of learning when a multiple number of factors are involved. This feedback principle (containing both informational and creative components) is an essential requirement for system operations within the Communication Ecology.

The people-to-people interaction concept is possible when four conditions are present within the Communication Ecology. The components, effects and forces of the situation should be (1) available, (2) accessible, (3) acceptable, and (4) adjustable.

In terms of current unrest and social conflict, the people-to-people concept would require a shift from: (1) programs based on stimulus to ones based on response (educational curriculum development), (2) administrative procedures based on content to those based on form (welfare services versus citizenship participation), (3) fragmentation to unified planning (city versus metropolitan development), and (4) planner-designed projects to participant-evolved action sequences (approval of urban renewal plans versus policy making position in the development of plans).
Differences.—The concept of people-to-people transactions provides a contrast with the traditional model of conflict in several different ways. It suggests a shift from a causal analysis of conflict to one of effects with a primary focus on "personality." The concept of a continuous revolution, similar to constant fluctuations, can be compared with the view that conflict termination can be obtained. The traditional focus on process is augmented by the people-to-people concept to include nonmechanical interpretation of human behavior in conflict situations.

Communicative Patterns

Communicative patterns are forms of interrelationships between two or more ecologies. They are viewed as repetitive series of communicative actions that are capable of being predicted because they involve recurring relationships between experience, symbolization, interaction and effects. The terms used for Communicative patterns vary according to the perspective and needs of the theories. The terms selected for the Communication Ecology are based on a sociational perspective.

Since conflict, values and expectations, for example, are not directly observable, but are of critical importance to groups in conflict situations, communicative patterns serve as indicators of behavior and points of intervention.

Perspectives.—There are three categories of communicative patterns: (1) those actually used, (2) those that are available, and (3) those that are potentially available. A basic premise of the con-
ceptual scheme is that the actual, available, and potential patterns exist within the capabilities of the Communication Ecology and that the use or lack of use of a given pattern is a function of the system's operations, learning and experience.

Communicative patterns between groups have been analyzed from a variety of different perspectives: discussion, persuasion, problem-solving, mass media, etc. The rubrics used here were selected to conform with the effect orientation of the Communication Ecology and with the actions that are frequently associated with conflict. The four patterns analyzed in this section represent only a small percentage of the patterns that are commonly used; however, the four patterns do define the range of types of communicative patterns that are frequently used in conflict situations.

The four patterns selected are: (1) attack, (2) avoidance, (3) compromise and (4) synectic (problem solving). In attack patterns the group seeks physical or symbolic destruction. An increase in the distance between the conflicting groups characterizes avoidance patterns. Compromise patterns involve attempts to develop methods of conflict control that provide both issue satisfaction and social distance. In the synectic pattern the groups find mutual identification as part of a larger group and discover newer methods of solving the problem; in the process, the conflict dissipates through utilization.

A further distinction can be made between the patterns by comparing them in terms of: (1) objectives, (2) view of the other group, (3) philosophy, (4) role of communications, (5) type of solution in-
volved, (6) advantages and (7) disadvantages. Ideas relating to these items are contained in Table 1, Patterns of Communication.

The communicative patterns encompass a range of behaviors critical to conflict utilization, transaction, management and transformation. Four continuums have been used to discuss conflict situations and conflict resolution. Figure 9 attempts to place the four patterns within a model that is related to the four patterns and to the social utility function of this study.

The primary consequences of the communicative patterns are observable in terms of feedback, interaction, and results. Consequences include but are not limited to:

1. Influencing the parameters within which behavior occurs.
2. Serving as force or intervention point.
3. Producing results as either real or fantasy experiences.
4. Limiting the use of other patterns, due to habitual usage.
5. Causing changes or maintenance of patterns in other groups.
6. Providing the context for messages.
7. Institutionalization of avenues of action.
8. Being an observable indicator of values, attitudes and expectations.
9. Functioning as an effect of the system.

Of the various nucleus concepts, communicative patterns represent the concept that can be most effectively changed or used. For this reason, communicative patterns are a principle source for conflict transformation.
Figure 9. *Model of Communicative Patterns.*
<table>
<thead>
<tr>
<th>Objective</th>
<th>ATTACK</th>
<th>AVOIDANCE</th>
<th>COMPROMISE</th>
<th>SYNECTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of conflict</td>
<td>Incompatible interests</td>
<td>Competing interests</td>
<td>Cooperative interests</td>
<td>Congruent interests</td>
</tr>
<tr>
<td>View of target group</td>
<td>Enemies</td>
<td>Inferiors</td>
<td>We-they</td>
<td>Us-Ours</td>
</tr>
<tr>
<td>Philosophy of humanity</td>
<td>Man is animal</td>
<td>Groups are different</td>
<td>Groups have similarities and differences</td>
<td>Humanity</td>
</tr>
<tr>
<td>employed</td>
<td>Power over determinatives</td>
<td>Control destructive tendencies</td>
<td>Can be managed</td>
<td>Man capable of newer level development</td>
</tr>
<tr>
<td>Role of Communication</td>
<td>Weapon</td>
<td>Defensive</td>
<td>Conflict control</td>
<td>Experimental action</td>
</tr>
<tr>
<td>Type of solution involved</td>
<td>Destruction of conflict-provoking object</td>
<td>Reduction of need to deal with conflict object</td>
<td>Partial solution to conflict situation</td>
<td>Conflict transformation</td>
</tr>
<tr>
<td>Advantages</td>
<td>Simple messages</td>
<td>Simple message</td>
<td>Conflict regulation</td>
<td>New message and human effect</td>
</tr>
<tr>
<td></td>
<td>High emotional states</td>
<td>Self-justification</td>
<td>Rational appearance</td>
<td></td>
</tr>
<tr>
<td>Disadvantages</td>
<td>Counterattacks</td>
<td>Can't be avoided</td>
<td>Conflict-crisis cycle</td>
<td>Paralysis by checks-balance</td>
</tr>
<tr>
<td></td>
<td>Self-defeating reactions</td>
<td>Escalates into conflict</td>
<td>Compromise-conflict cycle</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Patterns of Communication.
Experimental Action

Essentially, the conflict situation involves experiences with highly charged affect states and cognitive dissonances within a field that is potentially or actually threatening. This situation involves and requires more than changes in semantics if conflict transformation is to occur. Although communication is not a first-order experience and is not work production, the use of symbolic (rather than actual) means of conflict management requires communications to be more than just a series of words. Communications should facilitate behavioral organization and mobilization at the experience and performance levels. The experimental action capabilities of communications can perform these functions by means of the symbolic rehearsal of affect and cognitive states in relation to an experience field.

Perspectives.--Experimental action refers to actions in which the group symbolically "plays" or "manipulates" aspects of its tensor field in an effort to find courses of action or to enjoy the experience.

Communications can be used by groups to replace actual trial and error behavior, to act out the conflicts and the consequences of plans, and to discover new solutions.

The use of communication in conflict situations has been used as the basis for studies in fields such as: decision theory, war games, simulation, role-playing, sensitivity training, and the like.

The following three views about the manner in which experimental action is achieved are typical of those that appear frequently in the literature:
Experimental action depends upon developing concepts which permit multiple alternatives (more complex and dimensionalized space) rather than bifurcated black-white categories. The individual becomes less dependent on physical properties of the object ... sees casual role of this own transactions with the environment.\textsuperscript{15}

Gordon reports that his uses of synectics have illuminated "the creative process ... and have increased markedly the creative output of both individuals and groups." His synectic theory includes these formulations:

1. Creative efficiency in people can be markedly increased if they understand the psychological processes by which they operate.

2. In creative processes, the emotional component is more important than the intellectual, the irrational more important than the rational.

3. It is these emotional, irrational elements which can and must be understood in order to increase the probability of success in a problem-solving situation.\textsuperscript{16}

A third point of view is stated by Ozbekhan in his analysis of the uses of the computer in relation to "experimental action." He observes:

As the computer interpretative interface is extended, the boundary becomes more complex; it is understood less explicitly and more implicitly. The "language" of situation representation becomes less well comprehended and the "situation" tends toward the complexity of man's universe.\textsuperscript{17}

These three views on experimental action offer recommendations about how it can be achieved. Conceptual space for the groups should be enlarged by means of additive alternatives. An understanding of
the processes can be acquired through learning activities. An openness to the use of emotionality and the irrational will assist in making the commonplace novel. Gordon's use of the concept, irrational, does not mean pathological; it means a willingness to consider what reason indicates should be rejected.

Marksberry suggested that there are four stages in the creative process which may be helpful in terms of experimental action. The stages are: (1) a period of preparation; (2) a period of incubation; (3) a period of insight, illumination or inspiration; and (4) a period of verification, elaboration, perfection and evaluation.18

Differences.--The information and concepts dealing with experimental action suggest a point of view that is in contrast with the construct that consistency and stability are the principal bases for predicting outcomes and for feelings of security. Experimental action suggests that people may be able to find a base for prediction and security in the ability to anticipate future events, to remain flexible and inconsistent and to develop the needed resources for dealing with future problems.

There are still other ways in which the experimental action concept can be contrasted with the traditional model. For example, the two-sided win or lose choice situation becomes one with many different alternatives when experimental action is used. This method recognizes the role of implicit information and irrational behavior more than the traditional conflict theories.
Symbolic Primary Experience

There are certain levels of conflict transformation which require participation in the actual situation. Sometimes groups are engaged in conflicts which require first-order experiences or work performance (behavioral results) in order to prevent escalation of the conflict's intensity or an expansion of its area of coverage. Even under these circumstances, communication between the groups is possible. The question is: Can communication in this situation be more than a substitute or a facilitator?

This concept suggests that the answer to that question can be yes. Affect-charged, symbolic abstractions which manipulate cognitive components can result in a series of synchronistic relationships between affect-cognition-experience which are closely similar to those produced by first-order experience and performance.

Perspectives.—Communications, in terms of this concept, is considered to have both representational and actual experience qualities. Its representational qualities can be called meta-experience, referring to the symbol as an abstraction of some first-order experience. Its actual experience quality is termed a symbolic primary experience, referring to the fact that the participants are engaged in an actual experience while communicating. According to this formulation, the representational quality of the communication can vary in abstractness, for example, but the quality of communication as an actual experience remains; regardless of the message or the context, for participants, communication is an actual experience, in addition to being a meta-
experience.

Gibbs, Harvey and Smith, in separate studies, were concerned with the form of communication more than with specific symbolic message effects. Gibbs derived six characteristics of symbolic primary experiences from his study of adults communicating in work situations. His six points are: (1) Description is better than evaluation; (2) Problem orientations are better than controlling behavior; (3) Spontaneity is better than strategy; (4) Empathy is better than neutrality; (5) Equality is better than superiority, and (6) Provisionalism is better than certainty.19

Harvey's study, concerned with conceptualization and personality organization, presents a series of additional characteristics such as open-closed, central-peripheral and convergent-divergent actions.20

Smith approached the problem in terms of cybernetics and learning theory. Feedback is the primary experience characteristic in his theory.21

One summary statement, not a conclusion, can be suggested; the form and effects of the communicative pattern as a primary experience may provide the basis for using communication at a level that is closer to the force potential of experience and work.

Differences.--One principal difference between this concept and the traditional model is the increase in emphasis given to communication as a primary experience. This change in emphasis, however, could result in significant differences in conflict-handling methods. For
example, if communication is considered to have only representational and substitute experience properties, the range of its force field is shorter than in a view of communication as primary (not first-order), experience. The distinctions between substitute and primary communicative experiences should not be viewed as opposite ends of one continuum; both exist simultaneously.

The nuclear concepts indicate the range of factors that should be considered in efforts to understand or deal with conflict transformation. The system perspective places an emphasis on: (1) ways of managing conflict produced energy, (2) the conflict situation as an n dimension tensor force field, (3) communications as both symbolic and actual experience, (4) the experimental action capabilities of symbolization which can assume qualities similar to first order experience and performance, (5) the essential quality of people-to-people relationships, (6) security based on adaptability instead of environmental consistency, (7) communicative patterns as the instrumental points of intervention and management, and (8) the combined use of rational and creative approaches to problem solving.

Constructive and Creative Behavior

Most of the researchers and scholars who investigate the sub-systems considered in this study include in their work a social utility criterion. In addition to adding to knowledge, they are concerned about the usefulness to society of their findings and viewpoints. They want their work to assist people in taking effective actions that benefit
society. This study follows that tradition. The Communication Ecology has been developed in an attempt to organize information that can be used to achieve constructive and/or creative behavior.

An examination of the various social utility criteria explicitly used by scholars and researchers indicates that they generally consider five principal characteristics of society to be desirable: (1) society should perform those functions which result in the development of the individual, group, institution, etc., (3) society should be capable of increasing its resources, (4) society should take actions that are required to reduce and/or eliminate aspects of conflicts which have a destructive or dysfunctional effect, and (5) society should facilitate favorable interactions between groups on both the specific issue and structural levels.

While some of the disciplines emphasize one characteristics more than another, there is general interdisciplinary agreement on the characteristics. The Communication Ecology is presented as an aid that may be useful in achieving these characteristics as a set, an interdependent group.

The five characteristics constitute a superordinate goal for democratic societies. In this discussion of the creative and constructive implications and applications of the Communication Ecology, the goals serve as standards for evaluating whether or not a given behavior is functional or dysfunctional.

**Conditions and process**

The Communication Ecology provides an explanation of relation-
ships between the subsystems in conflict situations. In attempting to clarify these relationships, it has been assumed that the reader will be seeking constructive or creative use of the perspective in the direction indicated by the five characteristics of a desirable society.

Perspectives.--The Communication Ecology points up several conditions and processes that can result in constructive or creative behavior. Some of these include: the experimental and manipulative nature of symbolization, the motivational and affect-attachment character of conflict-produced energy, the decision-making and identification activities of the groups, reference and capacity development, and support services of resources.

The above conditions apply to intra-ecological system; when the tensor field concept is used, as in the case of inter-ecological systems, the conceptual scheme identifies the following factors as constructive and creative. The interaction between different cultural groups can result in enriching experiences; the activities related to conflict handling can develop confidence in people-to-people relationships at the communion level; communications can expand the perception of the situation to include or discover a greater number of feasible alternatives and can provide for a meaningful rehearsal of the consequences of decisions. Given the three preceding conditions, resources can be organized or developed which provide the material capabilities needed to exercise power.

From the system perspective, the conditions and processes of constructive and creative behavior occur as a function of fluctuations
between states of conflict, competition and cooperation in which conflict transformation occurs through cycles of utilization, transaction and management that involve specific and structural conflict elements and individual and group capabilities in some value-oriented tensor field.

**Interactional patterns.**—Repeatable behavior between groups that are characteristic of conflict or competition or cooperation are considered to be interactional patterns; interactional patterns are to be distinguished from communication patterns in that interactional patterns involve more than symbolization. According to this view, constructive behavior is not an "all-or-none" concept; instead it is the management of fluctuations between the interactional patterns in ways that result in a desirable social end.

Four factors can be used to analyze the interactional patterns: (1) distance between groups, (2) perception of experience, (3) methods used to deal with conflict, and (4) location of goals within the tensor field.

In cooperation, the following conditions occur. The groups view each other as mutually supportive members of one system reacting in similar ways to an experience and interested in taking agreeable actions to obtain some mutually acceptable goals. This pattern has a synchronistic character.

In the competitive interactional pattern, the groups view themselves as part of one system but as opposing members within that system experiencing an event that has a win-loss character under rules which allow for another opportunity to win or lose in situations where
1. Consensus or cooperation

2. Competition

3. Communication failures

4. Conflict

Figure 10. Four Conditions of Intergroup Interaction
the goals are difficult to share. This pattern is a blend of synchronistic and asynchronous relations.

In conflict patterns, the groups perceive themselves as opposing systems (overlooking the larger system of which they are a part) responding to differently perceived events (same or different ones) with threatening methods to achieve self-serving goals that may be explicitly stated as conflicting but which, at some level, are implicitly the same. This pattern is predominated by asynchronous relationships.

Using the concepts of primitive conflict (approach desires-avoidance fears) of structural conflicts (open or close systems) of force fields, (antagonistic forces which permit functioning) and of dynamic changes (motivational, hierarchical), it is possible to view shifts between these three interactional patterns as a system requirement instead of as a choice situation in which one pattern must be selected. If this proposition is accepted, the question is one of managing the shifts between the patterns so that the overall outcome is beneficial.

Changing Patterns.—The analysis of the conflict situation from tensor field perspective leads to the observation that each of the parties involved in a conflict are part of one system, regardless of their attempts to withdraw from, avoid or deny their interrelatedness. It would hold that any movement of conflict elements or elements associated with the conflict will alter the force field; these changes may occur in several areas such as spatial relationships or action-at-a-distance phenomena.

The interactional patterns, in addition to having the quality
of locking parties into a field, provides relationships which make it difficult for groups to avoid communicating, i.e., attempts to not communicate (silence) can be given a symbolic status and used as part of the communicative patterns.

The "inseparableness" of the conflicting parties provides the relational base on which the process cycles (utilization, transaction and management) and the interactional fluctuations (conflict-competition-cooperation) occur. In addition, this feature provides a context from which inactivity can become interpreted as a communicative event.

The inseparableness concept suggests that changes in one cultural group will influence the ecologies of other groups within the system. There are two principal means for securing change in the interactional and behavioral patterns: (1) changes in the effects of relationships within the ecology, and (2) changes in the force fields which relate the ecologies.

Possible Research Directions

A general system is based on generalities and abstractions which are logically validated; however, as was stated in Chapter I, there is a need to operationalize a general system and apply it before the usefulness of its implications and applications can be verified.

The following are some propositions about ways of effecting changes in effects and forces that might be used in test situations. The propositions could be tested by role-playing situations, cognitive dissonance and conflict theory designs, historical analysis, and similar methods. Since conflict of the nature being considered in this
study is difficult to stimulate in a laboratory, a useful method of testing and improving on the conceptual scheme would be to use it as a training program for persons who will provide leadership in conflict transformation. A combination of the "academic" and the "practical" test situations could provide a bridge between the scientist and the practitioner.

The following propositions provide direction for research and planning activities:

1. In order for transformation to occur, communications should include, as a part of its message, those context and form relationships between affects-cognitions-experiences that are similar to the actual conflict-producing experience.

2. Or communications should include those factors that will result in the rehearsal and adoption of incompatible responses with the conflict behavior in order for transformation to occur.

3. Man's primitive beliefs, needs and communication systems provide a commonality between groups in approach and avoidance tendencies which causes fluctuations between associational and defensive behavior, thereby, providing a structural basis for conflict and change.

4. The ability to acquire the capabilities for dealing with structural conflict conditions results in more effective conflict handling methods than attempts that are concerned with specific issue conflicts.
5. The repeated successful handling of specific issue conflicts in terms of their structural bases will result in a sense of security based on adaptability to conflict and confidence in one's ability to handle future situations; the dissonance of inconsistency under such conditions will have less valency.

6. The assessment of other parties in the situation as part of the system of one's own group can lead to an extended concept of group boundaries and to increased alternatives.

7. The perception of being treated as an object perpetuates conflict even under conditions of fairness, equality and beneficial results.

8. The essential challenge of conflict situations is the need to engage in people-to-people interactions; the presence of this state will transform conflict into cooperation even under conditions where the specific issues are not solved.

9. The more that communications can be used to accomplish the desire effects and force of experience and performance, the more effective will be the conflict utilization, transactional and management capabilities of the group.

10. The objectives of conflict transformation and meaning trans-generation will provide a greater number of alternatives than objectives of conflict control, or elimination.

Summary

This study has used communication theory as the organizing concept.
for the development of the conceptual scheme. While little attention has been given to communication as an art or to factors typically considered in communication textbooks, the attempt has been to analyze the conflict situation in terms of the situational and dispositional dynamics that form the requirements for effective symbolic usage in conflict situations between cultural groups.

One assertion derived from this study is that communications can be more effective as a means of conflict transformation when it contains those elements (affects-cognitions-experiences) that allow for the symbolic rehearsal and adoption of alternatives in a less threatening environment than the actual conflict situation. An analysis of this "referent" situation, conflict between cultural groups, is contained in the Communication Ecology, a symbolic model of the situation.

This study has been concerned with cultural groups in conflict situations. In this study a review of the concepts and theories in the fields of conflict, communication and cultural groups provides data for the development of a general system, that deals with cultural groups in conflict situations.

The Communication Ecology has four major component parts: (1) subsystems which have specialized functions, (2) processes which coordinate or unify the subsystems into system properties, (3) networks which carry out systemwide functions, and (4) contact bands which establish explicit and implicit interactions with other ecologies.

From the system perspective, conflict handling is a matter of transformation. The energy created in the conflict-producing situations
is transformed by the process cycles into constructive and/or creative behavior. The cycles consist of processes such as: utilization, transaction, and management. Movement of the groups and changes within the ecology are accomplished by tensor field forces, action-at-a-distance, which accomplish effects and line of force changes.

Communications, in terms of the Communication Ecology, is considered to be the most plastic and instrumental of the various subsystems and, therefore, has a major intervening and mediational role in conflict transformations.
CHAPTER IV FOOTNOTES


8 Carl L. Rogers, "The Therapeutic Relationship: Recent Theory and Research," The Human Dialogue, ed. by Floyd W. Matson and Ashley.


20 Harvey, 113-158.

21 Smith, 404.
BIBLIOGRAPHY


Bennis, Warren G. Some Barriers to Teamwork in Social Research. Cambridge, Massachusetts: Massachusetts Institute of Technology Department of Economic and Social Science, 1956, Ser. 2, No. 54.


___________. "Some Social-Psychological Aspects of Community Study: Some Areas Comparatively Neglected by American Sociologists," British Journal of Sociology, Vol. 2 (1951), pp. 12-30, (Stresses need for changing emphasis from study of the community structures that result from interaction to the interaction processes themselves.)


Brown, W. O. "Culture Contact and Race Conflict," in *Race and Culture Contacts* (E.B. Reuter, edit.).


