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Preface to Original Release -- 1954

In the chapters to follow the main points of a large-scale experiment on intergroup relations are reported. It was carried out as a part of the research program of the Intergroup Relations Project at the University of Oklahoma. In this first presentation, sufficient time and facilities were not available to make use of data contained in recorded tapes and half a dozen short moving picture reels. Nor was it found feasible to include introductory chapters surveying major theories on intergroup relations and elaborating on theoretical outlines of the present approach, which determined the formulation of the hypotheses advanced and the design of the study in successive stages. These are presented more fully in our <u>Groups</u> <u>in</u> <u>Harmony</u> <u>and</u> <u>Tension</u> (Harper, 1953), which constituted the initial work unit in the present intergroup relations project.

Therefore, a brief statement of the cardinal considerations that shaped the conception of this approach to the study of intergroup relations is in order. It is not unfair to say that the major existing theories fall within two broad categories in terms of the emphasis placed in formulation of the problem and methods involved.

In one broad category of theories, the problems are expressed in terms of actualities of events in group relations as they exist in everyday life. On the whole, theories advanced by many social scientists fall in this broad category. In this concern over actualities the problem is frequently not stated and discussion not developed in a way that can be tested rigorously. In the second broad category of theories, problems are stated and analysis carried out in terms of more rigorous-appearing concepts and units of analysis. Theories coming from psychologists and social scientists heavily influenced by them fall within this broad category. In this line of approach, theories are advanced without due regard to actualities, and consequently they are plagued with serious questions of validity.

The present approach starts with a serious concern over the rise and functioning of actual small groups in social life. The hypotheses advanced are formulated on the basis of recurrent events reported in sociological accounts of small groups. Testing these hypotheses under conditions that appear natural to the subjects has been a theoretical and methodological consideration of prime importance. Therefore, a great point was made of carrying on observations without the awareness of subjects that they were being observed and of giving priority to the uninterrupted and uncluttered flow of interaction under experimentally introduced stimulus conditions. The techniques of data collection were adapted to the flow of interaction, rather than cluttering or chopping off interaction for the convenience of the experimenter. This imposed the task of securing an experimental site which is isolated from outside influences so that results could not be accounted for primarily in terms of influences other than the experimentally introduced ones and the interaction on that basis.

In such a natural, life-like interaction situation, there are so many items that can be observed at a given time that it becomes impossible to observe and report all behavioral events. Therefore, there is the possibility of being selective in the choice of events to be observed. In testing vital hypotheses related to intergroup relations, restricting the number of subjects to just a few is not the proper remedy. Circumscribing the number of reactions of the subjects is no remedy. Asking the subjects to remain within optimal distance of a microphone and asking them please to speak one at a time will destroy the very properties of the interaction process in which we are interested. The dining hall adjacent to the kitchen is not the place conducive to getting the subjects to cooperate in preparing a meal of their own accord. By trying to eliminate selectivity through such resorts we would have eliminated at the same time the essential properties of the very things we set out to study.

(1) One remedy lies in unmistakable recurrences of behavioral trends so that the observer cannot help observing them even if he tried to ignore them. If these trends are independently reported by the observers of two different groups, then they serve as a check against each other. We have secured such checks time and again in this study.

(2) The danger of selectivity can be avoided (without disrupting the flow of interaction) by having outside observers in crucial problem situations and by having them make, for example, their own independent status ratings in terms of effective initiative in getting things started and

done.

(3) The most effective way of checking selectivity is the use of a combination of techniques. This consists in introducing at a few choice points laboratory-type experiments and sociometric questions. If the trends obtained through laboratory-type and sociometric checks are in line with trends obtained through observations, then selectivity of observation need not worry us as far as the relevant hypotheses and generalizations are concerned. The actual use of observational, experimental and sociometric techniques in a combined way, whenever feasible without cluttering the main flow of interaction, has been a major point of emphasis in our study. In our previous work, the feasibility of using judgmental indices to tap norm formation and intra- and intergroup attitudes was established in various studies. This series of experiments, whose logic and techniques were made part-and-parcel of this large-scale experiment, are summarized in a paper "Toward integrating field work and laboratory in small group research" (to appear in Small Group Research Issue, <u>American</u> <u>Sociological</u> <u>Review</u>, December, 1954).

The present study has for its background the invaluable experience of the 1949 and 1953 experiments, both carried out under my direction. In 1949 the design (in three stages) went as far as the end of Stage 2 of this 1954 study, namely in-groups were formed and intergroup friction was produced experimentally. The 1949 study was jointly sponsored by the Attitude Change Project of Yale University and the Department of Scientific Research of the American Jewish Committee, to both of whom grateful acknowledgment is extended. Without the effective help of Professor Carl I. Hovland this start could not have materialized. The second study was attempted in 1953 in four successive stages. We succeeded in completing only two stages in this attempt, which covered the experimental formation of in-groups. The experiment reported here, as well as other units during the last two years, were carried out with a grant from the Rockefeller Foundation to the University of Oklahoma, for which we are grateful.

It is a pleasure to note here the active participation of O. J. Harvey during the last four years in the development of this program of research. Especially his doctoral thesis, entitled, "An Experimental Investigation of Negative and Positive Relationships between Small Informal Groups Through Judgmental Indices," constitutes a distinct contribution in demonstrating the feasibility of using laboratory-type judgmental indices in the study of intergroup attitudes. Without the untiring and selfless participation of O. J. Harvey, Jack White, William R. Hood, and Carolyn Sherif the realization of this experiment and the writing of this report would have been impossible.

This program of research in group relations owes a special debt to the dedication of the University of Oklahoma and its administrative agencies to making development of social science one of its distinctive features. The close interest of President George L. Cross in social science has been a constant source of encouragement and effective support. Professor Lloyd E. Swearingen, Director of the Research Institute, has cleared our way for smooth sailing whenever occasion arose. We have turned again and again to the encouragement and unfailing support of Professor Laurence H. Snyder, Dean of the Graduate College.

<div align="right">Muzafer</div>

Sherif

Preface -- 1961

The report of this large-scale experiment dealing with factors conducive to conflict and cooperation between groups was first released in August, 1954 and was sent in multilithed form to colleagues active in small group research. Since then, it has appeared in condensed form in books and journals and has been presented in lecture form at various universities and professional associations.

In view of numerous requests from colleagues engaged in small group research, instructors in institutions of higher learning, and the interest expressed by colleagues in political science, economics and social work in the applicability of the concept of superordinate goals to intergroup problems in their own areas, the original report is being released now with very minor editorial changes.

Two new chapters have been added in the present volume. Chapter 1 presents a theoretical background related to small group research and to leads derived from the psychological laboratory. It was written originally at the request of Professor Fred Strodtbeck of the University of Chicago, editor for the special issue on small group research of the <u>American</u> <u>Sociological</u> <u>Review</u> (December, 1954). This chapter summarizes our research program since the mid-thirties, which was initiated in an attempt to integrate field and laboratory approaches to the study of social interaction. Chapter 8 was written especially for this release to serve as a convenient summary of the theoretical and methodological orientation, the plan and procedures of the experiment, and the main findings, with special emphasis on the reduction of intergroup conflict through the introduction of a series of superordinate goals.

We are especially indebted to Mrs. Betty Frensley for her alert help in typing and other tasks connected with the preparation of this volume. Thanks are due Nicholas Pollis and John Reich for proofreading several chapters.

The experiment could not have been realized without the utmost dedication and concentrated efforts, beyond the call of duty, of my associates whose names appear with mine on the title page. However, as the person responsible for the proposal prepared for the Rockefeller Foundation in 1951 and with final responsibility in the actual conduct of the experiment and material included in the report, I absolve them from any blame for omissions or commissions in this presentation.

On this occasion it is a pleasure to acknowledge the understanding support and encouragement extended by the Social Science Division of the Rockefeller Foundation to this project on intergroup relations, a research area notably lacking in systematic experimental studies in spite of its overriding import in the present scheme of human relations.

This preface is being written with a heavy heart. The research program of which this experiment was an important part lost a great friend by the death of Carl I. Hovland of Yale University in April, 1961. It was Carl Hovland who, from the very inception of the research project on intergroup relations in 1947, gave an understanding and insightful ear and an effective hand to its implementation. The give-and-take with his searching questions, wise counsel and steadfast friendship through thick and thin will be sorely missed in the continuation of our research program.

Muzafer Sherif

Institute of Group Relations
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Norman, Oklahoma
June 5, 1961

chapter 1

CHAPTER 1

Integrating Field Work and Laboratory in Small Group Research[1]

The study of small groups has become one of the most flourishing areas of research, involving men in various social sciences and psychology. The influences responsible for the increased preoccupation with small groups spring both from developments within various academic disciplines and from agencies instituted for devising practical solutions for immediate application. Brief mention of influences contributing to the flourishing state of affairs in small group research will be helpful as orientation:

1. Theoretically and empirically, works of sociologists have historical priority in showing persistent concern with the topic of small groups (Faris, 1953). Since the early 1920's a definite research development in sociology related to small groups has been carried on, as represented by the works of men like Thrasher, Anderson, Clifford Shaw, Zorbaugh, Hiller, and Whyte. In the recurrent findings reported in this line of research, which was carried out over a period of a good many years, one cannot help finding crucial leads for a realistic approach to experimentation in this area.

2. Another of the major instigators of the extraordinary volume of small group research stems from the practical concern of business and military agencies. A series of studies initiated by Elton Mayo and his associates at the Harvard Business School in the late 1920's has proliferated in various institutions, both academic and technological. Another impetus along this line came from the concern of military agencies for establishing effective techniques for the assessment of leaders.

3. Another major influence in the development of small [p. 2] group studies comes from psychological research. Regardless of the theoretical treatment, the results of psychological experiments almost always showed differential effects on behavior when individuals undertook an activity in relation to other individuals or even in their presence, as can be ascertained readily by a glance at Murphy, Murphy, and Newcomb's Experimental Social Psychology. F. H. Allport's experiments which started around 1915 are illustrative of this point. In the l930's, it became increasingly evident that social behavior (cooperation - competition, ascendance - submission, etc.) could not be properly studied when the individual is considered in isolation. Psychological "trait" theories or personality typologies fell far short in explaining social relations. Therefore, when Moreno's work appeared in this country in the mid-thirties presenting his sociometric technique for the study of interpersonal choices and reciprocities among individuals (i. e., role relations), it quickly found wide application. A few years later Kurt Lewin and his associates demonstrated the weighty determination of individual behavior by the properties of group atmosphere. This line of experimentation was the basis of other subsequent studies coming from the proponents of the Group Dynamics school. Some other major influences coming from psychology will be mentioned later.

II

Interdisciplinary Cooperation and the Concept of "Levels"

It becomes apparent even from a brief mention of the background that men from various disciplines contributed to make the study of small groups the going concern that it is today. As a consequence there is diversity of emphasis in formulating problems and hypotheses, and diversity in concepts used. This state of affairs has brought about considerable elbow-rubbing and interdisciplinary bickering among sociologists, psychologists, and anthropologists. In this process and through critical appraisal of each others' approaches, the interdisciplinary approach has become a necessity for achieving a rounded picture.

Faced with the task of dealing with both psychological and sociocultural factors in human relations problems, psychologists have too often yielded to the temptation of improvising their own "sociologies" in terms of their preferred concepts. Sociologists, on the other hand, have sometimes engaged in [p. 3] psychological improvisations. While sociological or psychological improvisation at times proves necessary on the frontiers of a discipline, it is difficult to justify on topics for which a substantial body of research exists in sociology or in psychology, as the case may be.

On the whole, interdisciplinary cooperation has usually turned out to mean rallying psychologists, sociologists, anthropologists, and other social scientists to toss their theories and concepts into the ring. But, mere juxtaposition of utterances made by psychologists, sociologists, etc., in the same room or between the covers of the same book does not bring interdisciplinary cooperation. Nor is interdisciplinary integration possible by laying down segments from each discipline along the same line -- one yard from psychology, one yard from sociology, then a foot each from history and economics.

The outlines of an interdisciplinary approach appear more clearly with the realization that "psychological" and "sociological" signify different levels of analysis. Men studying human relations are approaching related, similar, or even the same problems at different levels of analysis, necessitating units and concepts appropriate for dealing with events on that level. If we are working on the psychological level, our unit of analysis is the individual; hence our treatment must be in terms of his psychological functioning -- in concepts such as motives, judging, perceiving, learning, remembering, imagining, etc. If we are working on a sociological or cultural level, our concepts are in terms of social organization, institutions, value systems, language, kinship systems, art forms, technology, etc. (Note 1).

The concept of levels holds a fairly obvious but invaluable check on the validity of research findings. If it is valid, a generalization reached on a topic at one level of analysis is not contradicted and, in fact, gains support from valid generalizations reached at another level. For example, the psychologist's findings of differential behavior of an individual when participating in the activities of his group should be (and are) substantiated by findings on the sociological level, namely that collective action in a group has properties peculiar to the group. Checking and cross-checking findings obtained at one level against those obtained at another level on the same topic will make interdisciplinary cooperation the integrative meeting ground that it should [p. 4] be.

During the last century in the social sciences and more recently in psychology, the dependence of sub-units upon the setting or superordinate system of which they are parts has gained increased attention, especially in view of unrewarding attempts to account for the functioning system in an additive way. Understanding part processes is possible only through analysis of their relations within the functioning system, as well as by analysis of unique properties of the part process itself. Unless knowledge of the superordinate or larger functioning system is gained first, before tackling the part processes, there is the likelihood of unwarranted generalizations concerning the parts, and misinterpretation of the true functional significance of the processes observed.

In this connection, an illustration from Malinowski (1922) is instructive. Malinowski describes the complex exchange system of the Argonauts of the Western Pacific called the Kula. The Argonauts themselves "have no knowledge of the total outline of any of their social structure...Not even the most intelligent native has any clear idea of the Kula as a big, organized social construction, still less of its sociological functions and implications. If you were to ask him what the Kula is, he would answer by giving a few details, most likely by giving his personal experiences and subjective views on the Kula...Not even a partial coherent account could be obtained. For the integral picture does not exist in his mind; he is in it, and cannot see the whole from the outside."

This point can be illustrated in relation to small group studies. Since Lewin's experiments in the 1940's comparing lecture and group discussion methods in changing attitudes, various studies have shown that in the American setting skillfully conducted group discussion in which members participate is more effective than lecture presentation of the same material. On the basis of results obtained in the American setting, it would seem that the superiority of group discussion methods might be universal. That this is not the case is indicated by one of the studies in the UNESCO project in India (Murphy, 1953). In an attempt to modify caste attitudes among college students in India using various methods, the greatest changes arose as a result of a lecture method using emotional appeals. The [p. 5] experimenter wrote: "Contrary to our original expectation and hypothesis, these young boys do not seem to be in a position to exploit

fully the discussion technique, in bettering their social relationships. Does it indicate that our boys have got to be used to the democratic ways of discussion and at present prefer to be told what are the right attitudes rather than to be allowed to talk them out?" Within a social organization whose values clearly encourage dependence on authority and effectively discourage settling issues on a give-and-take basis in small sub-units, particular dependencies may become so much a part of the individual's ego system that group discussion techniques would be less effective than methods more in harmony with the social organization in which they take place.

Such comparative results illustrate the value of starting <u>first</u> with due consideration of the sociocultural setting with its organization and values before generalizations are made about small groups functioning as parts of that setting (cf. Whyte, 1951; Arensberg, 1951). For small groups are not closed systems, especially in highly complex and differentiated societies such as the United States.

Facts obtained concerning the group setting are in terms of concepts and units at the social or cultural level of analysis. They will not give the step-by-step analysis of the particular interaction process; they will not be adequate for the task of dealing with interpersonal relations or the behavior of particular individual members. At this point, psychological concepts are needed for a detailed analysis of reciprocal relations, for handling motives, perceptions, judgments, etc.

III

Experimental Steps toward Integration

The rest of the Chapter will be devoted to a summary statement of the prior attempts on our part toward pulling together some relevant findings in sociology and in psychology in the study of small groups. In these attempts the guiding considerations have been the following:

1. To extract some minimum generalizations from the sociological findings on small groups on the one hand; on the [p. 6] other, to extract relevant principles from the work coming from the psychological laboratory.

2. To formulate problems and hypotheses relating to one another the indications of the two sets of relevant findings, that is, from sociological and psychological research.

3. To test hypotheses thus derived with methods and techniques which are appropriate for the particular problem -- experimental, observational, sociometric, questionnaire, or combinations thereof, as the case may be.

Let us start with the term "small group" itself. The term "small group" is coming to mean all things to all people. If the concept of small groups is considered at the outset, research on small groups will gain a great deal in the way of selection of focal problems for investigation, and hence effective concentration of efforts.

"Small group" may mean simply small numbers of individuals. If this is the criterion, any small number of individuals in a <u>togetherness</u> <u>situation</u> would be considered a small group. But a conception of small groups in terms of numbers alone ignores the properties of actual small groups which have made their study such a going concern today.

One of the objectives of concentrating on small group research should be attainment of valid generalizations which can be applied, at least in their essentials, to any group and to the behavior of individual members. Accordingly, one of our first tasks was that of extracting some minimum essential features of actual small groups from sociological work. In this task there is a methodological advantage in concentrating on <u>informally</u> <u>organized</u> <u>groups</u>, rather than formally organized groups in which the leader or head and other positions with their respective responsibilities are appointed by a higher authority, such as a commanding officer or board. In

informally organized groups, group products and the particular individuals who occupy the various positions are determined to a much greater extent by the actual interaction of individuals. If care is taken at the beginning to refer to the general setting in which small groups form and function, their products and structure can be traced through longitudinal observation of the interaction process.

[p. 7] On the basis of an extensive survey of sociological findings, the following minimum features in the rise and functioning of small groups were abstracted:

(1) There are one or more motives shared by individuals and conducive to their interacting with one another.

(2) Differential effects on individual behavior are produced by the interaction process, that is, each individual's experience and behavior is affected in varying ways and degrees by the interaction process in the group (Note 2).

(3) If interaction continues, a group structure consisting of hierarchical status and role relationships is stabilized, and is clearly delineated as an in-group from other group structures.

(4) A set of norms regulating relations and activities within the group and with non-members and out-groups is standardized (Note 3).

Interaction is not made a separate item in these minimum features because interaction is the sine qua non of any kind of social relationships, whether interpersonal or group. Since human interaction takes place largely on a symbolic level, communication is here considered part and parcel of the interaction process.

When group structure is analyzed in terms of hierarchical status positions, the topic of power necessarily becomes an integral dimension of the hierarchy. Power relations are brought in as an afterthought only if this essential feature of group hierarchy is not made part of the conception of group. Of course, power does in many cases stem from outside of the group, and in these cases the nature of established functional relations between groups in the larger structure has to be included in the picture.

Our fourth feature relates to the standardization of a set of norms. The term "social norm" is a sociological designation referring generically to all products of group interaction which regulate members' behavior in terms of the expected or even the ideal behavior. Therefore, norm does not denote average behavior (Note 4). The existence of norms, noted by sociologists, has been experimentally tested by psychologists in terms of [p. 8] convergence of judgments of different individuals (Sherif, 1936), and in terms of reactions to deviation (Schachter, 1952). A norm denotes not only expected behavior but a range of acceptable behavior, the limits of which define deviate acts. The extent of the range of acceptable behavior varies inversely with the significance or consequence of the norm for the identity, integrity, and major goals of the group.

With these minimum essential features of small informally organized groups in mind, a group is defined as a social unit which consists of a number of individuals who, at a given time, stand in more or less definite interdependent status and role relationships with one another, and which explicitly or implicitly possesses a set of norms or values regulating the behavior of
the individual members, at least in matters of consequence to the group.

Common group attitudes or sentiments are not included in this definition because social attitudes are formed by individuals in relation to group norms as they become functioning parts in the group structure. At the psychological level, then, the individual becomes a group member to the extent that he internalizes the major norms of the group, carries on the responsibilities, meets expectations for the position he occupies. As pointed out by various authors, his very identity and self conception, his sense of security become closely tied to his status and role in the group through the formation of attitudes relating to his membership and position. These

attitudes may be termed "ego-attitudes" which function as constituent parts of his ego system.

On the basis of findings at a sociological level, hypotheses concerning the formation of small in-groups and relations between them were derived and tested in our 1949 camp experiment (Sherif and Sherif, 1953). One of the major concerns of that study was the feasibility of experimental production of in-groups among individuals with no previous role and status relations through controlling the conditions of their interaction.

The hypotheses tested were:

(1) When individuals having no established relationships are brought together to interact in group activities with common goals, they produce a group structure with hierarchical statuses [p. 9] and roles within it.

(2) If two in-groups thus formed are brought into functional relationship under conditions of competition and group frustration, attitudes and appropriate hostile actions in relation to the out-group and its members will arise and will be standardized and shared in varying degrees by group members.

As sociologists will readily recognize, testing of these hypotheses is not so much concerned with the discovery of new facts as getting a clearer picture of the formative process under experimentally controlled conditions. It aims rather at singling out the factors involved in the rise of group structure, group code or norms, and in-group---out-group delineations which will make possible their intensive study with appropriate laboratory methods on the psychological level.

To test these hypotheses, 24 boys of about 12 years of age from similar lower middle-class, Protestant backgrounds were brought to an isolated camp site wholly available for the experiment. The early phase (Stage 1) of the study consisted of a variety of activities permitting contact between all the boys and observation of budding friendship groupings. After being divided into two groups of 12 boys each, in order to split the budding friendship groupings and at the same time constitute two similar units, the two groups lived, worked and played separately (Stage 2). All activities introduced embodied a common goal (with appeal value to all), the attainment of which necessitated cooperative participation within the group.

At the end of this stage, there developed unmistakable group structures, each with a leader and hierarchical statuses within it, and also names and appropriate group norms, including sanctions for deviate behavior. Friendship preferences were shifted and reversed away from previously budding relationships toward in-group preferences. Thus our first hypothesis concerning in-group formation was substantiated.

In the final phase (Stage 3) of the 1949 experiment, the two experimentally formed in-groups were brought together in situations which were competitive and led to some mutual frustration, as a consequence of the behavior of the groups in relation to each other. The result of intergroup contact in these conditions was [p. 10] enhancement of in-group solidarity, democratic interaction within groups, and in-group friendship, on the one hand. On the other hand, out-group hostility, name calling and even fights between the groups developed, indicating that in-group democracy need not lead to democratic relations with outsiders when intergroup relations are fraught with conditions conducive to tension. The resistance which developed to post-experimental efforts at breaking down the in-groups and encouraging friendly interaction indicates the unmistakable effect of group products on individual members. Thus the results substantiated the second hypothesis concerning determination of norms toward out-groups by the nature of relations between groups and demonstrated some effects of intergroup relations upon in-group functioning.

One of the main methodological considerations of this experiment was that subjects were kept unaware of the fact that they were participating in an experiment on group relations. The view that subjects cease to be mindful that their words and deeds are being recorded is not in harmony with what we have learned about the structuring of experience. The presence of a

personage ever observing, ever recording our words and deeds in a situation in which our status and role concerns are at stake cannot help coming in as an important factor in the total frame of reference. Therefore, in our work, the aim is to establish definite trends as they develop in natural, life-like situations and to introduce precision at choice points when this can be done without sacrificing the life-like character which gives greatest hope for validity of these trends.

The study just summarized illustrates the testing of hypotheses derived from sociological findings in experimentally designed situations. The next point relates to psychological findings, generalizations, and laboratory techniques relevant for the study of experience and behavior of individual group members. Here our task is to achieve a more refined analysis on a psychological level of individual behavior in the group setting through precise perceptual and judgmental indices. If such data obtained through precise judgmental and perceptual indices and other appropriate techniques are in line with findings concerning group relations on the sociological level, then we shall be moving toward integration of psychological and sociological approaches in the study of group relations.

[p. 11] Here only the bare essentials can be stated of the psychological principles from a major trend in experimental psychology which are utilized in designing the experiments to be reported (Note 5).

Judgments and perceptions are not merely intellectual and discrete psychological events. All judgments and perceptions take place within their appropriate frame of reference. They are jointly determined by functionally related internal and external factors operating at a given time. These interrelated factors -- external and internal -- constitute the frame of reference of the ensuing reaction. Observed behavior can be adequately understood and evaluated only when studied within its appropriate frame of reference or system of relations. The external factors are stimulus situations outside of the individual (objects, persons, groups, events, etc.). The internal factors are motives, attitudes, emotions, general state of the organism, effects of past experience, etc. The limit between the two is the skin of the individual -- the skin being on the side of the organism.

It is possible, therefore, to set up situations in which the appraisal or evaluation of a social situation will be reflected in the judgments and perceptions of the individual. In short, under appropriate and relevant conditions, the way the individual sizes up a situation in terms of the whole person he is at the time can be tapped through apparently simple perceptual and judgmental reactions.

An additional principle should be clearly stated because of certain conceptions in psychology which imply that perception is almost an altogether arbitrary, subjective affair. If external stimulus situations are well structured in definite objects, forms, persons, and groupings, perception will correspond closely to the stimulus structure on the whole. This is not to say that functionally related internal factors do not play a part in the perception of structured situations. The fact that some well-structured situations are singled out by the individual as "figure" rather than others indicates that they do. Such facts are referred to under the concept of perceptual selectivity.

If, on the other hand, the external field is vague, unstructured, in short, allows for alternatives -- to that extent the relative weight of internal factors (motives, attitudes) and social [p. 12] factors (suggestion, etc.) will increase. It is for this reason that the exhortations of the demagogue are relatively more effective in situations and circumstances of uncertainty. Since perceptions and judgments are jointly determined by external and internal factors, it is possible to vary the relative weights of these factors in differing combinations, giving rise to corresponding judgmental and perceptual variations. This has been done in various experiments. In a study carried out as part of our research program at the University of Oklahoma, James Thrasher co-varied the stimulus situation in gradations of structure and the nature of interpersonal relations of subjects (strangers and friends) to determine the reciprocal effects of these variations on judgmental reactions. It was found that as the stimulus situation becomes more unstructured,

the correspondence between stimulus values and judgment values decreases and the influence of social factors (established friendship ties in this case) increases (Thrasher, 1954).

Following the implications of the above, it is plausible to say that behavior revealing discriminations, perceptions, evaluations of individuals participating in the interaction process as group members will be determined ---

- not only by whatever motivational components and unique personality characteristics each member brings with him,

- not only by the properties of external stimulus conditions (social or otherwise),

- but as influenced, modified, and even transformed by these and by the special properties of the interaction process, in which a developing or established state of reciprocities plays no small part. Interaction processes are not voids.

The starting point in our program of research was the experimental production of group norms and their effects on perception and judgment (Sherif, 1936). This stems from our concern for experimental verification of one essential feature of any group -- a set of norms (feature 4 of small groups above). Groups are not transitory affairs. Regulation of behavior in them is not determined by the immediate social atmosphere alone.

Especially suggestive in the formulation of the problem [p. 13] was F. Thrasher's observation on small groups that behavior of individual members is regulated in a binding way (both through inner attachment and, in cases of deviation, through correctives applied) by a code or set of norms. Equally provocative in this formulation was Emile Durkheim's Elementary Forms of Religion, in which a strong point was made of the rise of representations collectives in interaction situations and their effect in regulating the experience and outlook of the individual.

After thus delineating the problem, the next step was to devise an experimental situation which lacked objective anchorages or standards (i. e., was vague or unstructured) in order to maximize the effects of the social interaction process. When individuals face such an unstructured stimulus situation they show marked variations in reaction. However, such marked individual variations will not be found if the stimulus is a definite, structured object like a circle or a human hand. There will be agreement among individuals, on the whole, when they face a circle or a normal hand even if they are five thousand miles apart and members of different cultures. The fact of objective determination of perception and judgment and the ineffectiveness of social influences (suggestion, etc.) in relation to structured stimuli was clearly noted in the original report of this experiment in several contexts. In a later publication, in order to stress cases of objective determination of psychological processes, a chapter was devoted to the effects of technology and its decisive weight in determining social norms and practices, with numerous illustrations from various parts of the world. Among them was our study conducted in the early 1940's of five Turkish villages with varying degrees of exposure to modern technology, specifically dealing with the compelling effects of such differential exposure on judgmental, perceptual, and other psychological processes (Note 6).

The experimental situation chosen for the study of norm formation was the autokinetic situation (the apparent movement of a point of light in a light-proof room lacking visible anchorages). The dimension chosen was the extent of movement. As this study is reported in detail in various places, I shall give only the bare essentials.

First it was established that the judgment of the extent of movement for given brief exposures varies markedly from [p. 14] individual to individual. Then individuals were brought to the situation to make their judgments together. If, during the course of their participation, their judgments converge within a certain range and toward some modal point, we can say they are converging to a common norm in their judgments of that particular situation. It is possible, however, that this convergence may be due to immediate social pressure to adjust to the judgments spoken aloud by the other participants in the situation. Therefore, going a step

further, if it is shown that this common range and modal point are maintained by the individual in a subsequent session on a different day when he is alone, then we can say that the common range and modal point have become his own.

The results substantiated these hunches. When individuals face the same unstable, unstructured situation for the first time together with other participants, a range of judgment and a norm within it are established which are peculiar to that group. After the group range and norm are established, an individual participant facing the same situation alone makes his judgments preponderantly in terms of the range and norm that he brings from the group situation. But convergence of judgments is not as marked as this when individuals first go through individual sessions and then participate in group sessions.

When the individual gives his judgments repeatedly in the alone situation, the judgments are distributed within a range and around a modal point peculiar to the individual. This finding has important theoretical implications. The underlying psychological principle, in individual and group situations, is the same, namely that there is a tendency to reach a standard in either case. Here we part company with Durkheim and other sociologists who maintained a dichotomy between individual and social psychology, restricting the appearance of emergent properties to group situations alone. In both cases, there are emergent properties. In the individual sessions they arise within the more limited frame of reference consisting of the unstructured stimulus situation and special psychological characteristics and states of the individual; whereas in togetherness situations the norm is the product of all of these within the particular interaction situation. The norm that emerges in group situations is not an average of individual norms. It is an emergent product which cannot be simply extrapolated from individual situations; the properties of the unique interaction process have to be brought into the [p. 15] picture. Therefore, the fact remains that group norms are the products of interaction process. In the last analysis, no interaction in groups, no standardized and shared norms.

In a subsequent unit, it was found that a characteristic mode of reaction in a given unstructured situation can be produced through the introduction of a prescribed range and norm (Sherif, 1937). When one subject is instructed to distribute his judgments within a prescribed range and around a modal point which vary for each naive subject, the preponderant number of judgments by the naive subjects come to fall within the prescribed range and around the modal point introduced for them, and this tendency continues in subsequent alone sessions. This tendency is accentuated if the cooperating subject has prestige in the eyes of the naive subject. These findings have been substantiated in a number of studies. For example, it has been shown that the tendency to maintain the prescribed range persists after several weeks (Bovard, 1948). In a recent experiment Rohrer, Baron, Hoffman, and Swander (1954) found that social norms established in the autokinetic situation revealed a rather high degree of stability even after a lapse of one year. This stability of an experimentally produced norm acquires particular significance in view of the facts in the study that (a) the subjects had first formed individual norms on the basis of actual movement prior to the establishment of divergent norms in a social situation and (b) the norms stabilized in the social situations were revealed after the lapse of one year in alone situations, i.e., without further social influence.

The actual presence of another person who makes judgments within a range prescribed by the experimenter is not essential. Norman Walter (1952) demonstrated that a prescribed norm can be produced through introduction of norms attributed to institutions with high prestige. A prescribed distribution of judgments given by tape recording is similarly effective (Blake and Brehm, 1954). A prescribed range can be established, without social influence, through prior experience in a more structured situation with light actually moving distances prescribed by the experimenter (Hoffman et al., 1953).

The advantages of a technique such as the autokinetic device for studying norm formation and other aspects of group relations are: (1) Compared with gross behavioral observations, [p. 16] it yields short-cut precise judgmental indices along definite dimensions reflecting an individual's own appraisal or sizing-up of the situation. (2) The judgmental or perceptual reaction is an indirect measure, that is, it is obtained in relation to performance and situations which do not

appear to the subject as directly related to his group relations, his positive or negative attitudes. The feasibility of using judgmental variations in this study constituted the basis of its use in subsequent studies dealing with various aspects of group relations.

At this point, longitudinal research will bring more concreteness to the process of norm formation. As Piaget (1932) demonstrated in his studies of rules in children's groups, the formation of new rules or norms cannot take place until the child can perceive reciprocities among individuals. Until then he abides by rules because people important in his eyes or in authority say that he shall. But when the child is able to participate in activities grasping the reciprocities involved and required of the situation, then new rules arise in the course of interaction, and these rules become his autonomous rules to which he complies with inner acceptance. Although in contrast to some still prevalent psychological theories (e. g., Freud), these longitudinal findings are in line with observations on norm formation and internalization in adolescent cliques and other informally organized groups. These are among the considerations which led us to an intensive study of ego-involvements, and to experimental units tapping ego-involvements in interpersonal relations and among members occupying differing positions in the status hierarchy of a group.

These experimental units represent extensions of the approach summarized to the assessment of positive or negative interpersonal relations, status relations prevailing among the members of in-groups, positive or negative attitudes toward given out-groups and their members.

The first units along these lines dealt with interpersonal relations. It was postulated that since estimates of future performance are one special case of judgmental activity in which motivational factors are operative, the nature of relations between individuals (positive or negative) will be a factor in determining variations in the direction of these estimates. This inference was borne out first in a study showing that estimates of [p. 17] future performance are significantly affected by strong positive personal ties between subjects (Note 7). In a later unit, the assessment of personal relations through judgments of future performance was carried to include negative interpersonal relations as well as positive (Harvey and Sherif, 1951). In line with the hypothesis, it was found that individuals tended to overestimate the performance of subjects with whom they had close positive ties and correspondingly to underestimate the future performance of those with whom they had an antagonistic relationship.

The study of status relations in small groups followed (Harvey, 1953). This study is related to feature 3 of the essential properties of groups discussed earlier in this chapter, namely, the rise and effects of a status structure. Observations by the sociologist, William F. Whyte, gave us valuable leads in formulating the specific problem of this study. During one period, a Street Corner clique that Whyte observed was engaged seriously in bowling. Performance in bowling became a sign of distinction in the group. At the initial stage, some low status members proved themselves on a par with high status members, including the leader. This ran counter to expectations built up in the group hierarchy. Hence, in time, level of performance was stabilized for each member in line with his relative status in the group. In the experiment, Harvey first ascertained the status positions of individual members in adolescent cliques. This was done through status ratings by adults in close contact with the subjects, through sociometric ratings from clique members, and through observations of some of the cliques by the experimenter during their natural interaction. Cliques chosen for the final experiment were those in which there was high correspondence between the status ratings obtained.

The overall finding was that the higher the status of a member, the greater his tendency and that of other group members to overestimate his future performance. The lower the status of a group member, the less is the tendency of other group members and of himself to overestimate his performance, even to the point that it is underestimated. If these results are valid, it should prove possible to predict leaders and followers in informal groups through judgmental variations exhibited in the way of over- and under-estimations of performance.

In the summer of 1953 our first attempt was made at a [p. 18] large-scale experiment starting with the experimental formation of in-groups themselves and embodying as an integral part of

the design the assessment of psychological effects of various group products ([Note 8)](#). This assessment involved laboratory-type tasks to be used in conjunction with observational and sociometric data. The overall plan of this experiment was essentially like that of the 1949 study which was summarized earlier. However, it required carrying through a stage of in-group formation, to a stage of experimentally produced intergroup tension, and finally to integration of in-groups. The scope of this experiment embodying laboratory-type procedures at crucial points in each stage proved to be too great for a single attempt. During the period of intergroup relations, the study was terminated as an experiment owing to various difficulties and unfavorable conditions, including errors of judgment in the direction of the experiment.

The work completed covered the first two stages and will be summarized here very briefly. The plan and general hypotheses for these stages are similar, on the whole, to those of the 1949 study summarized earlier.

Prior to the experiment, subjects were interviewed and given selected tests administered by a clinical psychologist. The results of these assessments are to be related to ratings made by the experimental staff along several behavioral dimensions during the experiment proper when in-group interaction had continued for some time.

At the end of the stage of group formation, two in-groups had formed as a consequence of the experimental conditions, although the rate of group formation and the degree of structure in the two groups were somewhat different.

Our hypothesis concerning experimental formation of in-groups substantiated in the 1949 study was supported. As a by-product of in-group delineation we again found shifts and reversals of friendship choices <u>away</u> from the spontaneous choices made prior to the division of groups and <u>toward</u> other members of the in-group.

At the end of this phase of in-group formation, just before the first scheduled event in a tournament between the two groups, [p. 19] psychological assessment of group members within each status structure was made through judgments obtained in a laboratory-type situations. In line with methodological concerns mentioned earlier in the chapter, the experimental situation was introduced to each group by a member of the staff with the proposal that they might like to get a little practice for the softball game scheduled later that day. When this proposal was accepted, the experimenter took each group separately and at different times to a large recreation hall where he suggested turning the practice into a game, in which everyone took turns and made estimates of each others' performance. This was accepted as a good idea. Thus each boy took a turn at throwing a ball at a target 25 times and judgments of his performance were made by all members after each trial.

It should be noted that in previous studies, judgments of future performance were used as an index. The important methodological departure here was using as the unit of measurement the difference between actual performance and judgment of that performance <u>after</u> it was executed. In order to do so, the stimulus situation had to be made as unstructured as possible so that the developing status relations would be the <u>weighty</u> <u>factor</u> in determining the direction of judgmental variations.

In line with our hypothesis in this experimental unit, the results indicate that variations in judgment of performance on the task were significantly related to status ranks in both groups (Sherif, White and Harvey, 1955). The performance of members of high status was overestimated by other group members; the performance of members of low status tended to be underestimated. The extent of over- or under- estimation was positively related to the status rankings. Variations in judgment of performance on this task were not significantly correlated with skill, or actual scores, of members. This should <u>not</u> be interpreted to mean that skill can be discarded as a factor, or that it would not be highly related to judgmental variation in a more structured task. Of the two groups, skill seemed to be of <u>relatively</u> greater importance in the group which achieved less stability and solidarity. This is one of several indications that the relationship between judgmental variation and status rankings is closer in the group of greater

solidarity and greater stability of structure. This finding of a relationship between degree of stability of the [p. 20] structure, on the one hand, and psychological response of members as revealed in their judgments, on the other, points to the necessity of systematic concern with the degree of group structure and solidarity as a variable in small group studies. In particular it should be brought systematically into the study of leadership and problems of conformity (Sherif, 1954).

We hope to gain greater understanding of the relationship between stability of group structure and psychological reactions as revealed by judgmental indices through a new study designed for this purpose. In this attempt the task will be held constant and the degree of established status relationships among subjects will be varied. At one extreme, subjects will be complete strangers; at the other extreme, subjects will be members of highly structured groups. The hypothesis to be tested is that judgments will be more a function of actual performance in the task in the case of strangers, and progressively more a function of existing status relations and less of skill with the increasing degrees of stability of group structure.

Following the experimental assessment of psychological effects of group structure in existing and in experimentally formed in-groups, the next step in our program of research was to extend the use of judgmental variation techniques to the level of intergroup relations among already existing groups. Such an experimental unit has recently been completed by O. J. Harvey (1954). Harvey investigated relations between existing informally organized groups and their effects on in-group functioning and on evaluations of the in-group and out-group. Organized cliques were chosen on the same basis as those in the study of status relations in existing informally organized groups already summarized. In the first experimental session, in-group members judged each others' performance on a task. In the second session, two cliques with either positive or negative relationships with each other were brought to the situation together. Here a similar procedure was followed, with in-group members judging performance both of other in-group members and performance of members of the functionally related out-group. In addition, subjects rated in-group and out-group members on 10 adjectival descriptions presented on a graphic scale. These ratings were included to yield data relevant to our hypothesis concerning the nature of group stereotypes in the 1949 study and those of [p. 21] Avigdor's study (1952) on the rise of stereotypes among members of cooperating and rival groups.

Results obtained in this experiment bear out the hypotheses. Greater solidarity was evidenced in the in-group when negatively related out-groups were present, as revealed by an increasing relationship between judgmental variation and status ranks and by greater overestimation of performance by in-group members. In-group performance was judged significantly above that of out-group members when the groups were antagonistic, which was not the case when the groups present were positively related to each other. Finally, results clearly show a much higher frequency of favorable attributes for in-group members (e. g., "extremely considerate, " "extremely cooperative") and a much higher frequency of unfavorable attributes given members of an antagonistic out-group (e. g., "extremely inconsiderate", "extremely uncooperative"). The difference between qualities attributed to in-group members and members of friendly out-groups is much smaller and not so clear-cut, as would be expected.

Thus, having demonstrated the feasibility of experimental study of norm formation, of status relations within groups, and of positive and negative attitudes between groups through laboratory-type techniques, on the one hand, and, on the other, experimental production of in-groups themselves in two previous studies, our next step is to carry through the large-scale experiment along the lines of our 1953 attempt which will pull together all of these various aspects into one design. Judgmental indices reflecting developing in-group and intergroup relations are to be obtained through laboratory-type techniques at choice points in a way that does not clutter the flow of interaction process. These judgmental indices can be checked against data obtained through more familiar observational, rating, and sociometric methods. If indications of the findings through judgmental processes are in line with the trends obtained by gross observational and other methods, then we can say the generalizations reached are valid. If this can be established, the laboratory-type experiment can be offered as a more precise and

refined method of assessing the effects of interaction processes in group relations.

This approach, which considers the behavior of individuals as an outcome of interaction processes into which factors [p. 22] enter both from the individual himself with his unique characteristics and capacities and from properties of the situation, affords a naturalistic behavioral setting against which the claims of various personality tests can be evaluated.

The successive phases of this comprehensive experimental plan are:

1. Experimental production of in-groups themselves with a hierarchical structure and set of norms (intra-group relations). In line with our 1949 and 1953 studies, this is done, not through discussion methods, but through the introduction of goals which arise in the situations, which have common appeal value, and which necessitate facing a common problem, leading to discussion, planning and execution in a mutually cooperative way.

2. Bringing into functional relations the two experimentally formed groups in situations in which the groups find themselves in competition for given goals and in conditions which imply some frustration in relation to one another (intergroup tension).

3. Introduction of goals which cannot be easily ignored by members of the two antagonistic groups, but the attainment of which is beyond the resources and efforts of one group alone. In short, <u>superordinate</u> <u>goals</u> are introduced with the aim of studying the reduction of intergroup tension to derive realistic leads for the integration of hostile groups.

* * * * *

This experimental plan was carried out during the summer of 1954 at Robbers Cave in Oklahoma. The remaining chapters of this book give an account of its planning, execution, and findings.

Footnotes

[1] This chapter was prepared for the special issue on Small Group Research of the <u>American Sociological Review</u>, Volume 19, December, 1954, No. 6. Grateful acknowledgment is made to the editors of the Review for permission to reproduce this paper here in substantially the same form.

[p. 23] **Notes**

1. "The human group is an organization of two or more individuals in a role structure adapted to the performance of a particular function. <u>As thus defined the group is the unit of sociological analysis</u>." R. Freedman, A. H. Hawley, W. S. Landecker, H. M. Miner, <u>Principles of Sociology</u>, New York: Holt, 1952, p. 143, emphasis added.

2. This feature, long noted by sociologists, has received repeated laboratory confirmation by psychologists, as mentioned earlier.

3. It is not possible here to review sociological findings on which these features are based or to discuss them more fully. They have been elaborated in our <u>Psychology of Ego-involvements</u> (with H. Cantril), New York: Wiley, 1947, Chapt. 10; <u>An Outline of Social Psychology</u>, New York: Harper, 1948; and <u>Groups in Harmony and Tension</u> (with C. W. Sherif), New York: Harper, 1953, Chapt. 8.

4. Cf., E. T. Hiller, <u>Social</u> <u>Relations</u> <u>and</u> <u>Structure</u>, New York: Harper, 1947; R. Freedman, A. H. Hawley, W. S. Landecker, H. M. Miner, <u>op.</u> <u>cit</u>.

5. Fuller accounts of these principles from the works of psychologists and their background may be found in M. Sherif, <u>The</u> <u>Psychology</u> <u>of</u> <u>Social</u> <u>Norms,</u> <u>An</u> <u>Outline</u> <u>of</u> <u>Social</u> <u>Psychology</u> M. and C. W. Sherif, <u>Groups</u> <u>in</u> <u>Harmony</u> <u>and</u> <u>Tension</u>, Chapt. 6.

6. See M. Sherif, Contact with modern technology in five Turkish villages, pp. 374-385 in Chapt. 15, <u>An</u> <u>Outline</u> <u>of</u> <u>Social</u> <u>Psychology</u>, New York: Harper, 1948.

7. Study by C. W. Sherif summarized in M.Sherif, <u>An</u> <u>Outline</u> <u>of</u> <u>Social</u> <u>Psychology</u>, pp. 289-292.

8. This experiment was carried out with a grant from the Rockefeller Foundation to the University of Oklahoma.

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