Fifty Years of Conflict

MORTON DEUTSCH

Introduction

The aim of this chapter is to consider what progress, if any, has been made during the past fifty years or so in the social psychological study of conflict. Conflict, of course, was not discovered by social psychologists. It is a pervasive fact of human experience which has been discussed throughout recorded history by social philosophers and others who have reflected on social life. I shall not review here the writings about conflict of the social philosophers, limiting myself to the era of modern social psychology. However, it is my impression that a careful reading of their work would leave most of us with a sense of humility and also a feeling of pride: humility at the recognition that few of our ideas are new; pride at the realization that, unlike the social philosophers, we are part of a scientific tradition which tests its ideas through research in order to eliminate those that cannot survive a rigorous, empirical examination.

Indicators of scientific progress

What indicators can we use to assess whether or not there has been scientific progress in the study of conflict? Progress could occur in such areas as the methodological, conceptual, empirical, and technological. Some of the questions that could be asked in each of these areas are listed below:

The methodological. Have better methods of investigating the phenomena one seeks to observe, to record, to analyze, and to understand been developed? Do the methods make the phenomena more accessible and more open to experimentation? Are the techniques of observing, recording, and analyzing data more precise, objective, reliable, and valid?

The conceptual. Have new ideas been introduced which lead one to observe new phenomena which had previously been unnoticed or whose significance had been ignored? Have new ideas been developed which interrelate phenomena not previously seen as connected? Have ideas which were previously regarded as untestable been reformulated in a way which makes them testable or, if not, shown to have no empirical content? Have the existing ideas in the field been systematically integrated into a more coherent, consistent, aesthetically pleasing theory? Do we understand the phenomena of interest more fully, more deeply?

The empirical. Have new, surprising facts or phenomena been discovered? Have ideas which were once widely believed to be true been demonstrated to be false? Have regularities between phenomena been newly established so that reliable predictions or postdictions can be made?

The technological. Have methodological, conceptual, or empirical advances led to or stimulated the development of new or modified technologies, social institutions, social practices, educational procedures, and so on which affect individual, group, organizational, and/or societal well-being?

It is evident that any thorough attempt to assess progress in the social psychological study of conflict would necessarily be book length. I shall not attempt to answer all of the questions that have been detailed above. My focus will be primarily on the conceptual and the empirical and secondarily on the methodological or technological. The study of conflict informs and is informed by research on power, social influence, group formation, distributive justice, and many other related topics. Thus, it will be difficult to isolate the progress or lack of progress in the study of conflict from the associated progress or lack of it in other areas.

The meaning of the social psychology of conflict

There are various definitions of the term “conflict.” A simple one, which I prefer (Deutsch, 1973, p. 10) is that: “A conflict exists whenever incom-
patible activities occur"; a conflict is potential to the extent that incompatible activities are likely to occur. An action that is incompatible with another action prevents, obstructs, interferes, injures, or in some way makes the latter less likely or less effective. Incompatible actions may originate in one person, group, or nation; such conflicts are called intrapersonal, intragroup, or international. Or they may reflect incompatible actions of two or more persons, groups, or nations; such conflicts are called interpersonal, intergroup, or international.

The social psychological study of conflict is not characterized so much by the nature of the conflicting units it studies (although interpersonal and intergroup conflict are investigated most commonly) as by its approach to conflict. Its approach is distinguished by its focus on the interplay between psychological and social processes. It is concerned with the perceptions, beliefs, and values of the conflicting parties as well as their actualities; these may or may not correspond. It is concerned with how the social realities of the parties in conflict affect their perceived and experienced realities and how the psychological realities of the conflicting parties affect the development of their social realities.

The social psychological perspective on conflict highlights the possibility of discrepancy between the objective and the perceived state of affairs. Recognition of this possibility suggests a typology of conflicts (Deutsch, 1973, Ch. 1) which emphasizes the relationship between the two. Such an emphasis leads to specification of the types of distortion which can occur, including the nonrecognition of real conflicts of interest as well as their displacement and misattribution. This emphasis, in turn, leads to a consideration of what activates the sense of injustice and what turns a latent into a veridical conflict (Deutsch, 1974). This focus also suggests examination of the social and psychological determinants of the readiness to cope with real conflicts in an undistorted way. The study of the power, internal cohesion, and structure of the parties as they affect and are affected by the course of conflict between them are inherent concerns in this perspective.

Although intrapsychic, interpersonal, and social conflict are interrelated—and it is my view (Deutsch, 1973) that similar concepts and theories may be applicable to all levels of conflict—I shall not be able to consider the voluminous work that has been done on intrapsychic conflict here. Thus, it is beyond the scope of this chapter to consider the many valuable contributions arising from the research and theorizing on intrapsychic

My personal bias

In writing this chapter, I have not attempted to present a well-rounded survey of progress in the study of conflict. I have not taken the perspective of an objective "outsider"; I have been too much of an "insider" to present an overview which is not strongly colored by my personal orientation and work. From early in my career, I have thought of conflict in the context of competition and cooperation. I have viewed these latter as idealized psychological processes which are rarely found in their "pure" form in nature but, instead, are found more typically mixed together. I have also thought that most forms of conflict could be viewed as mixtures of competitive and cooperative processes and, further, that the course of a conflict and its consequences would be heavily dependent upon the nature of the cooperative-competitive mix. These views of conflict lead me to emphasize the link between the social psychological studies of cooperation and competition and the studies of conflict in my assessment of this latter area.

At the beginning...

Although its ancestry in social philosophy can be traced back to ancient times, modern social psychology was born in the first decades of the twentieth century. It is a child of psychology and sociology, having been conceived in the ambivalent mood of optimism and despair which has characterized the Scientific Age. The rapidly expanding knowledge, the increasing confidence in scientific methods, the ever quickening technological change with its resulting opportunities and social problems, the development of new social organizations and of social planning, the social turmoil, the repeated disruption of communities and social traditions—all of these helped to create both the need for social psychology and the awareness of the possibility that scientific methods might be applied to the understanding of social behavior.

The writings of three intellectual giants—Darwin, Marx, and Freud—dominated the intellectual atmosphere during social psychology's infancy. Each of these major theorists significantly influenced the writings of the early social psychologists on conflict as well as in many other areas. All
three theorists developed broad, encompassing theories, and this stimulated early social psychological theorists such as McDougall (1908) to make programmatic statements which were grandly ambitious in scope but meager in their detail. In addition, all three theorists appeared—on a superficial reading—to emphasize the competitive, destructive aspects of conflict. Darwin stressed “the competitive struggle for existence” and “the survival of the fittest.” He wrote (quoted in Hyman, 1966, p. 39): “...all nature is at war, one organism with another, or with external nature. Seeing the contented face of nature, this may at first be well doubted; but reflection will inevitably prove it is too true.” Marx emphasized “class struggle,” and as the struggle proceeds, “the whole society breaks up more and more into two great hostile camps, two great, directly antagonistic classes: bourgeoisie and proletariat.” He ends The Communist Manifesto with a ringing call to class struggle: “The proletarians have nothing to lose but their chains. They have a world to win. Working men of all countries, unite.” Freud’s view of psychosexual development was largely that of constant struggle between the biologically rooted infantile id and the socially determined, internalized parental surrogate, the super ego. As Schachetel (1959, p. 10) has noted:

The concepts and language used by Freud to describe the great metamorphosis from life in the womb to life in the world abound with images of war, coercion, reluctant compromise, unwelcome necessity, imposed sacrifices, uneasy truce under pressure, enforced detours and roundabout ways to return to the original peaceful state of absence of consciousness and stimulation.

Thus, the intellectual atmosphere prevalent during the period when social psychology began to emerge contributed to viewing conflict from the perspective of “competitive struggle.” Social conditions too—the intense competition among businesses and among nations, the devastation of World War I, the economic depression of the 1920s and 1930s, the rise of Nazism and other totalitarian systems—reinforced this perspective. Darwin’s and, to a lesser extent, Freud’s emphasis on biological determinism also helped to foster the view that the species who survived the competitive struggle had developed, through natural selection, the competitive, aggressive instincts necessary to enable them to win the struggle for survival.2

The vulgarization of Darwin’s ideas in the form of “social Darwinism” provided an intellectual rationale for racism, sexism, class superiority, and war. Such ideas as “survival of the fittest,” “hereditary determinism,” and “stages of evolution” were eagerly misapplied to the relations between different human social groups—classes and nations as well as social races—to justify existing exploitative social relations and to rationalize imperialist policies. The influence of evolutionary thinking was so strong that, as a critic suggested, it gave rise to a new imperialist sentiment: “Blessed are the strong, for they shall reap upon the weak” (Banton, 1967, p. 48). The rich and powerful were biologically superior; they had achieved their positions as a result of natural selection. It would be against nature to interfere with the inequality and suffering of the poor and weak. Imperialism was patriotism “in a race endowed with the genius for empire” or the “manifest destiny” of those superior peoples meant to lead inferior peoples. Blacks were slaves as a result of their being at a lower stage of evolution, closer to the apes than whites, who presumably were at the highest evolutionary stage. As Kamin (1974) has noted, in his description of the orientations of the early leaders of the mental test movement, some of the leading figures in American psychology during the 1910s and 1920s advocated what we would today consider to be racist views as though they were well-established scientific truths.

Social Darwinism and the mode of explaining behavior in terms of innate, evolutionary derived instincts were under challenge and in retreat by the mid-1930s. The prestige of the empirical methods in the physical sciences, the point of view of social determinism advanced by Karl Marx and various sociological theorists, and the findings of cultural anthropologists all contributed to their decline. Since the decline of the instinctual mode of explaining such conflict phenomena as war, intergroup hostility, and human exploitation, two others have been dominant: the “psychological” and the

1. I emphasize that this is a superficial reading of Darwin, Marx, and Freud but it was, I believe, the most prevalent one, especially after the destructiveness of World War I. Each of these dialectical theorists had a vision of a harmonious utopia which would be reached through the stimulus of conflict; this conflict-free utopia would result from the emergence of a new, cooperative synthesis or integration between the formerly opposed units.

2. Darwin's theory, of course, indicates that the competitive struggle is between rather than within species. Hence, his theory, if correctly interpreted, would not lead to the conclusion that humans, having successfully survived interspecies struggle, would be characterized by interspecies competitive or aggressive instincts.

3. This is a decline, not a disappearance. The explanation of social phenomena in terms of innate factors justifies the status quo by arguing for its immutability; such justification will always be sought by those who fear change.
“socio-political-economic.” The “psychological” mode attempts to explain such phenomena in terms of “what goes on in the minds of men” (Klineberg, 1934) or “tensions that cause war” (Cantril, 1950); in other words, in terms of the perceptions, beliefs, values, ideology, motivations, and other psychological states and characteristics that individual men and women have acquired as a result of their experiences and as these characteristics are activated by the particular situation and role in which people are located. The “socio-political-economic” mode, in contrast, seeks an explanation in terms of such social, economic, and political factors as levels of armaments, objective conflicts in economic and political interests, and the like. Although these modes of explanation are not mutually exclusive, there is a tendency for partisans of the psychological mode to consider that the causal arrow points from psychological conditions to socio-political-economic conditions and for partisans of the latter to believe the reverse is true. In any case, much of the social psychological writing in the 1930s, 1940s, and early 1950s on the topics of war, intergroup conflict, and industrial strife was largely nonempirical, and in one vein or the other. The psychologically trained social psychologist tended to favor the psychological mode; the Marxist-oriented or sociologically trained social psychologist more often favored the other mode.

The decline of social Darwinism and the instinctivist doctrines was hastened by the development and employment of empirical methods in social psychology. As Murphy, Murphy, and Newcomb (1937, p. 16) in their classic work, Experimental Social Psychology, pointed out, social psychology was defined as “the study of the way in which the individual becomes a member of, and functions in, a social group.” This early empirical orientation to social psychology focused on the socialization of the individual; this focus was, in part, a reaction to the instinctivist doctrine. It led to a great variety of studies, including a number investigating cooperation and competition. These latter studies are, in my view, the precursors to the empirical, social psychological study of conflict. They will be discussed briefly in the next section.

Early studies of cooperation and competition

Two outstanding summaries of the then-existing research on cooperation and competition were published in 1937. One was in the volume of Murphy, Murphy, and Newcomb referred to above; the other was in the monograph Competition and Cooperation, by May and Doob (1937). Both of these works are worth reading in the original; each contains reports of investigations which bear upon a wide range of topics in social psychology. It is not my intention here to repeat these summaries but rather to give you my sense of the state of the research and theorizing on cooperation-competition in the 1930s and 1950s. My view is based upon reading a number of the individual studies cited in May and Doob and in Murphy, Murphy, and Newcomb, as well as upon these two volumes themselves.

My impression is that practically none of the earlier research on cooperation and competition would be acceptable in current social psychological journals because of methodological flaws in the studies. Almost all of them suffer from serious deficiencies in their research designs. There are too few subjects; possible experimenter effects are abundant; systematic comparisons between major experimental conditions (such as cooperation and competition) are often nullified because there is an unwitting confounding with other variables (such as probability of reward); subjects who are nested within groups within treatments are treated statistically as though they are independent of one another; and so on. In addition, there is little conceptual clarity about some of the basic concepts—“competition,” “cooperation,” “self-orientation”—that are used in the studies. As a result, the operational definitions used to create the differing experimental conditions have no consistency from one study to another or even within a given study.

Apart from these methodological and conceptual difficulties, the early studies on cooperation and competition suffered from a narrowness of scope. They focused almost exclusively on the effects of “competition” versus “cooperation” on individual task output; individuals worked separately and had no interaction and no interdependence with one another in terms of their activities. There was no investigation of social interaction, communication processes, problem-solving methods, interpersonal attitudes, attitudes toward self, attitudes toward work, attitudes toward the group, or the like in these early investigations of cooperation-competition. In essence, there was no investigation of the intrapsychic, interpersonal, and social processes associated with cooperation and competition. The focus was narrowly limited to work output. The simplistic assumption was made that output would be an uncomplicated function of the degree of motivation induced by competition as compared with cooperation. The purposes of most of these early investigations appeared to be to support or reject a thesis inherent in the American ideology: namely, that competition fosters greater motivation to be productive than other forms of social organization.
Postulate 6. On a social level, individuals cooperate with one another when: 1. they are striving to achieve the same or complementary goals that can be shared; 2. they are required by the rules of the situation to achieve this goal in nearly equal amounts; 3. they perform better when the goal can be achieved in equal amounts; and 4. they have relatively many psychological affiliative contacts with one another.

The theory of May and Doob is essentially centered on the social and psychological factors initiating cooperation or competition. It is not concerned with the social psychological processes which result from cooperation and competition, nor with the effects of these resulting processes upon individuals and groups. Thus, their theory has a narrow focus, but within its focus, its postulates have been supported reasonably well by subsequent research.

Field theory, conflict, and cooperation-competition

During the 1930s, 1940s, and 1950s, quite independently of the work being conducted in the United States on cooperation-competition, Kurt Lewin and his students were theorizing and conducting research which profoundly affected later work in many areas of social psychology. Lewin's field theory—with its dynamic concepts of tension systems, "driving" and "restraining" forces, "own" and "induced" forces, valences, level of aspiration, power fields, interdependence, overlapping situations, and so on—created a new vocabulary for thinking about conflict and cooperation-competition.

As early as 1931, employing his analysis of force fields, Lewin (1931, 1935) presented a penetrating discussion of three basic types of psychological conflict: approach-approach—the individual stands between two positive valences of approximately equal strength; avoidance-avoidance—the individual stands between two negative valences of approximately equal strength; and approach-avoidance—the individual is exposed to opposing forces deriving from a positive and a negative valence. Hull (1938) translated Lewin's analysis into the terminology of the goal gradient, and Miller (1937, 1944) elaborated upon it. Theoretical analysis, verified by experimental evidence, has shown (Miller, 1944) that: 1. Approach-approach conflict will be resolved quickly without vacillation unless contaminated by latent avoidance. 2. Avoidance-avoidance conflict will be characterized by compromise resolutions; the individual will escape both negatives unless restrained by physical barriers or other sources of avoidance. When escape is impossible, vacillation and blocking will occur. 3. In approach-avoidance conflict no barriers will be needed to hold the subject in the conflict situation; the approach tendency will bring him into it. As long as the goal gradients cross, the subject will remain trapped partway to the goal, unable either to achieve or leave it.

Although Lewin's contribution to the understanding of three basic types of intrapsychic conflict are well known, it is not so well recognized that Lewin's concept of tension system has led to a series of investigations having much relevance to the processes involved in cooperation and competition. Lewin postulated that a tension for which there is a cognized goal leads not only to a tendency to actual locomotion toward the goal but also to thought about this type of activity: the force toward the goal exists not only on the "reality" level of doing but also on the "irreality" level of thinking. From the foregoing assumptions, it follows that the tendency to resume or recall interrupted activities should be greater than the tendency to resume or recall completed ones. Zeigarnik (1927) and many others, including Marrow (1938a, 1938b), conducted experiments in which subjects were given a series of tasks to perform and then prevented from completing half of them. Later, the subjects were asked to recall what tasks they had performed. The results of these experiments indicate that, as Lewin's tension system theory would predict, the subjects recall more of the interrupted than the completed tasks except when task completion is viewed as a personal success and lack of completion is viewed as a personal failure.

Ovsiankina (1928) studied the resumption of task activity and, as predicted, found that interrupted tasks were almost always resumed when the subjects were left free to do as they wished. Lissner (1933), Mahler (1933), and many others have investigated the conditions under which one activity can substitute for and, hence, release the tension connected with another, interrupted activity. The substitute value is measured by the amount of decrease in resumption or recall of the interrupted original activity after a substitute activity has been completed. Elsewhere (Deutsch, 1968) I have summarized the results of this important line of research. Here, I want to point up the significant new directions initiated by Helen Block Lewis and her associate in two pioneering papers (Lewis, 1944; Lewis and Franklin, 1944).

Lewis, drawing upon Lewinian concepts, developed ideas which
started to give fundamental insights into the nature of the psychological processes involved in cooperation and competition. She wrote (Lewin, 1944, pp. 115-116):

Satisfaction in work should be obtainable from the cooperating person's activities as well as from one's own. Since the objective situation is focal, rather than the ego, the actual agent in dealing with the objective world need not necessarily be one's self. What the other person does may be as important, as satisfying as one's own activities.

In a series of experiments, Lewis and Lewis and Franklin essentially used Zeigarnik's experimental procedure of interrupting the subjects on half their assigned tasks and allowing them to complete the other half. Their research demonstrated that cooperative work which is interrupted and not completed can lead to a persisting force to recall which is not much different from the pressure to recall induced by interrupted individual work. In other words, in cooperative relations, a co-worker's activity can substitute for similarly intended activities of one's own.

My own initial theorizing on cooperation-competition (Deutsch, 1949a) was influenced by the Lewinian thinking and research on tension systems which culminated in Helen Block Lewis's work. But even more, it was indebted to the ideas which were "in the air" at the M.I.T. Research Center for Group Dynamics. Ways of characterizing and explaining group processes and group functioning, employing the language of Lewinian theorizing, were under constant discussion among the students and faculty at the M.I.T. Center for Group Dynamics. Thus, it was quite natural that when I settled on cooperation-competition as the topic of my doctoral dissertation, I should employ the Lewinian dynamic emphasis on goals and how they are interrelated as my key theoretical wedge into this topic. Even more importantly, the preoccupation with understanding group processes at the Center pressed me to formulate my ideas about cooperation and competition so that they would be relevant to the psychological and interpersonal processes occurring within and between groups. This pressure forced my theory and research (Deutsch, 1949a, 1949b) to go considerably beyond the prior social psychological work on cooperation-competition. My theorizing and research were concerned not only with the individual and group outcomes of cooperation and competition but also with the social psychological processes which would give rise to these outcomes.

My theorizing and research have been published (Deutsch, 1949a, 1949b, 1958, 1962, 1973, 1979) and widely referred to, so there is little need here for more than a brief summary. To oversimplify it somewhat, my theory has two basic ideas; one relates to the type of interdependence among goals of the people involved in a given situation and the other to the types of actions by the people involved. I identify two basic types of goal interdependence: promotive interdependence, in which the goals are positively linked in such a way that the amount of his goal a person obtains or the probability of obtaining his goal is positively correlated with the amount of their goals that others obtain or the probability of obtaining their goals; and conjoint interdependence, in which the goals are negatively linked in such a way that the amount or probability of one's own goal attainment is negatively correlated with the amount or probability of the others' goal attainment. I also characterize two basic types of actions by an individual: effective actions, which improve the actor's chances of obtaining his goal, and bungling actions, which worsen the actor's chances of obtaining his goal. (For purposes of simplicity, I use dichotomies for my basic concepts; the dichotomous types of interdependence and the dichotomous types of actions are, I assume, polar ends of continua.) I then combine types of interdependence and types of actions to posit how they jointly will affect three basic social psychological processes: substitutability, "cathexis," and "inducibility." Thus, my theory predicts that when you're in a promotively interdependent relationship with someone who bungles, his bungling will not be a substitute for effective actions you had intended, and the bungling will be cathesited negatively. In fact, when your net-playing tennis partner in a doubles game allows an easy shot to get past him, you will have to extend yourself to avoid being harmed by the error. On the other hand, if your relationship is one of conjoint interdependence and the other bungles (as when your tennis opponent double faults), your opponent's bungle will substitute for an effective action on your part and will be cathesited positively or valued. The reverse is true for effective actions: An opponent's effective actions are not substitutable for yours and are negatively cathesited or valued; a teammate's effective actions are substitutable and are positively valued. A teammate can induce you to help him make an effective action, but you are likely to try to prevent or obstruct a bungling action by your teammate. In contrast, you will be willing to help an opponent bungle, but your opponent is not likely to induce you to help him make an effective action (which, in effect, would harm your chances of obtaining your goal).

My theory of cooperation and competition, then, goes on to make further predictions about different aspects of intrapersonal, interpersonal, in-
trargroup, and intergroup processes from the predictions about substitutability, cathexis, and indiscernibility. Assuming that the individual actions in a group are more frequently effective than bungling, among the predictions which follow from the theory are that cooperative groups (i.e., those more promotively interdependent) as compared with competitive groups will show the following characteristics:

1. More effective intermember communication. More ideas will be verbalized, and members will be more attentive to one another, more accepting of the ideas of other members, and more influenced by them. They will have fewer difficulties in communicating with or understanding others.

2. More friendliness, more helpfulness, and less obstructiveness will be expressed in the discussions. Members will also be more satisfied with the group and its solutions and more favorably impressed by the contributions of the other group members. In addition, members of the cooperative groups will rate themselves higher in desire to win the respect of their colleagues and in obligation to the other members.

3. More coordination of effort, more division of labor, more orientation to task achievement, more orderliness in discussion, and higher productivity will be manifested in the cooperative groups (if the group task requires effective communication, coordination of effort, division of labor, or the sharing of resources).

4. More feeling of agreement and similarity in ideas and more confidence in one's own ideas and in the value that other members attach to those ideas will be obtained in the cooperative groups.

The above predictions, which are described more fully in my article "A Theory of Cooperation and Competition" (Deutsch, 1949a), have been supported by my own research (Deutsch, 1949b) as well as by the studies of many other investigators (Back, 1951; Berkowitz, 1957; Gerard, 1953; Gottheil, 1955; Grossack, 1954; Levy, 1953; Margolin, 1954; Mintz, 1951; Mizuhara and Tamai, 1953; Raven and Echus, 1963; Thomas, 1957; Workie, 1967). More recently, research done in classrooms, reported by Johnson and Johnson (1979), Slavin (1977a, b, c), and Aronson, Bridge- man and Geffner (1978), have provided further support for the theory.

All these studies except Workie's, however, were confined to comparisons of competitive and cooperative relations among individuals. Workie studied intergroup as well as intragroup cooperation and competition. His research indicates that whether the units being looked at are groups or individuals, the same basic findings are obtained. The total productivity of a system of interdependent groups is smaller when the reward structure orients the groups toward intergroup competition rather than cooperation. Not surprisingly, more intergroup goal blocking and deceptiveness occur between groups that are in competition with one another than between groups that are cooperatively interdependent. Workie's results are consistent with the earlier field investigations of intergroup cooperation and competition in a summer camp, the classic "Robbers Cave" study by Muzaffar Sherif and by Blake and Mouton (Blake and Mouton 1961a, 1961b, and 1962a, 1962b; Sherif, 1966; Sherif et al., 1961). There is a marked parallel in the results of the research on both cooperation and competition within groups and between groups; the same theory appears to be applicable to the relations between individuals and the relations between groups.

Game theory and games

In 1944, Von Neumann and Morgenstern published their now-classic work, Theory of Games and Economic Behavior. Game theory has made a major contribution to social scientists by formulating in mathematical terms a problem which is central to the various social sciences: the problem of conflict of interest. However, it has not been either its mathematics or its normative prescriptions for minimizing losses when facing an intelligent adversary that have made game theory of considerable value to social psychologists. Rather, it has been its core emphasis that the parties in conflict have interdependent interests, that their fates are woven together. Although the mathematical and normative development of game theory has been most successful in connection with pure competitive conflict ("zero-sum" games), game theory has also recognized that cooperative as well as competitive interests may be intertwined in conflict (as in "coalition" games or "non-zero-sum" games).

The game theory recognition of the intertwining of cooperative and competitive interests in situations of conflict (or in Schelling's [1960] useful term, the "mixed motive" nature of conflict) has had a productive impact on the social psychological study of conflict, theoretically as well as methodologically. Theoretically, at least for me, it helped buttress a viewpoint that I had developed prior to my acquaintance with game theory—namely, that conflicts were typically mixtures of cooperative and competitive processes and that the course of conflict would be determined by the
nature of the mixture. This emphasis on the cooperative elements involved in conflict ran counter to the then dominant view of conflict as a competitive struggle—an orientation that was prevalent in the social as well as the biological sciences. Methodologically, game theory had an impact on an even larger group of psychologists. The mathematical formulations of game theory had the indirect but extremely valuable consequence of laying bare some fascinating paradoxical situations which were presented in such a way that they were highly suggestive of experimental work.

Thus, when Howard Raiffa acquainted me with the Prisoners Dilemma game early in the 1950s, I immediately realized that it would be an enormously useful tool for the study of some of the interpersonal phenomena of trust and suspicion in situations of mixed-motive conflict. I had come to believe that trust and suspicion were central to the development of cooperation or competition as a result of further theoretical analysis subsequent to my dissertation work on the effects of cooperation and competition. Similarly, as other social psychologists became aware of the rich experimental possibilities in the matrices of game theory, there was a mushrooming of experimental studies of conflict employing such matrices.

Game matrices as an experimental device are popular because they facilitate a precise definition of the reward structure encountered by the subjects, and hence of the way they are dependent upon one another. Also, as Pruitt and Kimmel (1977, p. 366) indicate:

A. They yield behavioral, as opposed to questionnaire, measures and hence appeal to the desire for objective observations shared by most experimental psychologists. a. They permit precise measurement of such elusive variables as "extent of cooperation" and "coalition composition." b. They are usually easy to employ and economical. c. Many sources of variance found in more naturalistic settings are absent to experimental games, enhancing the power of tests of significance. d. Heavy competitive or hostile behavior can be manifested without injury to people or their relationships—one might say that these games permit conflict without tears.

Partly stimulated by and partly in reaction to the research using game matrices, other research games for the study of conflict have been developed. Siegel and Fouraker (1960) developed a bilateral monopoly, "buyer-seller" negotiation game; Vinacke and Arkoff (1957) invented a three-person coalition game; Deutsch and Krauss (1960) constructed a "trucking game"; Deutsch (1973) employed an "allocation" game; and many other investigators have developed variants of these games or new ones. Pruitt and Kimmel (1977) estimate that well over 1,000 studies have been published based on experimental games. Much of this research, as is true in other areas of science, was mindless—being done because a convenient experimental format was readily available. Some of it, however, has, I believe, helped to develop more systematic understanding of conflict processes and conflict resolution. Nevertheless, it seems likely that the predominant reliance on experimental games in the social psychological study of conflict has led to a neglect and underemphasis of important aspects of conflict. The short time spans involved in most experimental games, the tendency to use individuals rather than groups as the parties involved in conflict, and the structuring of the issues in conflict for the experimental subjects have led to the neglect of the study of the processes involved in the development of conflict, to inadequate characterization of the different phases of conflict, and to insufficient investigation of the processes involved in conflict group formation and mobilization. Fortunately, in recent years, experimental gaming has been supplemented by other experimental procedures and by field studies which have overcome some of the inherent limitations of experimental gaming.

Themes in contemporary social psychological research on conflict

Social psychological research on conflict during the past twenty-five years or so has largely taken the form of experimental gaming and has mostly been identified as research on bargaining and negotiation. Research in this area has been primarily addressed to three major questions: 1. What are the conditions which give rise to a constructive or destructive process of conflict resolution? In terms of bargaining and negotiation, the emphasis here is on determining the circumstances which enable the conflicting parties to arrive at a mutually satisfactory agreement which maximizes their joint outcomes. In a sense, this first question arises from a focus on the cooperative potential inherent in conflict. 2. What are the circumstances, strategies, and tactics which lead one party to do better than another in a conflict situation? The stress here is on how one can wage conflict, or bargain, so as to win or at least do better than one's adversary. This second question emerges from a focus on the competitive features of a conflict situation. 3. What determines the nature of the agreement between conflicting parties, if they are able to reach an agreement? Here the concern is with the cognitive and normative factors that lead people to
conceive a possible agreement and to perceive it as a salient possibility for reaching a stable agreement: an agreement which each of the conflicting parties will see as "just" under the circumstances. This third question is a relatively recent one and has been addressed under the heading of research on the social psychology of equity and justice. In the next three sections, I shall attempt to describe the tentative answers which social psychological research has given the foregoing three questions.

Many other important questions and topics have been investigated. These include: coalition formation (Kornorita and Moore, 1976; Sauer- mann, 1976; Stryker, 1973); the influence of third parties, such as mediators (Rubin, 1979); the effect of the personalities of the conflicting parties (Terhune, 1979); strategies for deescalating conflict (Lindskold, 1978); the nature of the issues in conflict (Morley and Stephenson, 1977; Rubin and Brown, 1975); and the nature of the bargaining setting (Druckman, 1973; Rubin and Brown, 1975). It will be impossible to discuss these topics in this chapter.

What are the conditions which give rise to a constructive or destructive process of conflict resolution?

In social psychology this question has been most directly addressed in the work of my students and of myself. My book The Resolution of Conflict: Constructive and Destructive Processes (Deutsch, 1973), summarizes much of this work. People who have worked with me in this research include, in a temporal ordering: Leonard Solomon, Robert M. Krauss, Harvey A. Hornstein, Peter Gumport, David Johnson, Barbara Bunker, Donnah Canavan, Jeffrey Rubin, Bert Brown, Roy Lewicki, Yakov Epstein, Lois Biener, Madeine Heilman, Katherine Garner, Kenneth Kresnell, Rebecca Curtis, Charles Judd, and many others. In our research, we have employed a variety of experimental games: the Prisoners Dilemma, the Acme-Bolt trucking game, the Allocation game, the Siegel-Fouraker buyer-seller game, and several intergroup situations. In addition, some exploratory field research was done on the mediation process in labor-management conflict and in divorce.

Our research started off with the assumption that if the parties involved in a conflict situation had a cooperative rather than competitive orientation toward one another, they would be more likely to engage in a constructive process of conflict resolution. In my earlier research on the effects of cooperation and competition upon group process, I had demon-

strated that a cooperative process was more productive in dealing with a problem that a group faces than a competitive process. I reasoned that the same would be true in a mixed-motive situation of conflict: A conflict could be viewed as a mutual problem facing the conflicting parties. Our initial research on trust and suspicion employing the Prisoners Dilemma game strongly supported my reasoning, as did subsequent research employing other experimental formats. I believe that this is a very important result with considerable theoretical and practical significance.

At a theoretical level, it enabled me to link my prior characterization of cooperative and competitive social processes to the nature of the processes of conflict resolution which would typically give rise to constructive or destructive outcomes. That is, I had found a way to characterize the central features of constructive and destructive processes of conflict resolution; doing so represented a major advance beyond the characterization of outcomes as constructive or destructive. This was not only important in itself but it also opened up a new possibility. At both the theoretical and practical levels, the characterization of constructive and destructive processes of conflict created the very significant possibility that we would be able to develop insight into the conditions which initiated or stimulated the development of cooperative-constructive versus competitive-destructive processes of conflict. Much of the research of my students and myself has been addressed to developing this insight.

Much of our early research on the conditions affecting the course of conflict was done on an ad hoc basis. We selected independent variables to manipulate based on our intuitive sense of what would give rise to a cooperative or competitive process. We did experiments with quite a number of variables: motivational orientation, communication facilities, perceived similarity of opinions and beliefs, size of conflict, availability of threats and weapons, power differences, third party interventions, strategies and tactics of game playing by experimental stooges, the payoff structure of the game, personality characteristics, and so on. (I shall not give the specific results of our various experiments here.) The results of all of these studies fell into a pattern which I slowly began to grasp.

All of these studies seemed explainable by the assumption, which I have labeled "Deutsch's crude law of social relations," that the characteristic processes and effects elicited by a given type of social relationship (cooperative or competitive) also tend to elicit that type of social relationship. Thus, cooperation induces and is induced by a perceived similarity in beliefs and attitudes; a readiness to be helpful; openness in communication;
trusting and friendly attitudes; sensitivity to common interests and deemphasis of opposed interests; an orientation toward enhancing mutual power rather than power differences; and so on. Similarly, competition induces and is induced by the use of tactics of coercion, threat, or deception; attempts to enhance the power differences between oneself and the other; poor communication; minimization of the awareness of similarities in values and increased sensitivity to opposed interests; suspicious and hostile attitudes; the importance, rigidity, and size of the issues in conflict; and so on.

In other words, if one has systematic knowledge of the effects of cooperative and competitive processes, one will have systematic knowledge of the conditions which typically give rise to such processes and, by extension, to the conditions which affect whether a conflict will take a constructive or destructive course. My early theory of cooperation and competition is a theory of the effects of cooperative and competitive processes. Hence, from the crude law of social relations stated earlier, it follows that this theory provides insight into the conditions which give rise to cooperative and competitive processes.

The crude law is _rudimentary_. It expresses surface similarities between "effects" and "causes"; the basic relationships are genotypical rather than phenotypical. The surface effects of cooperation and competition are due to the underlying type of interdependence ("promotive" or "contentious") and type of action ("effective" or "bungling"), the basic social psychological processes involved in the theory ("substitutability," "cathectic," and "inducibility"), and the social medium and social context through which these processes are expressed. Thus, how "positive cathectic" is expressed in an effective, promotively interdependent relationship will depend upon what is appropriate to the social medium and social context; that is, presumably one would not seek to express it in a way which is humiliating or embarrassing or likely to be experienced negatively by one's partner. Similarly, the effectiveness of any typical "effect" of cooperation or competition as an initiating or inducing condition of a cooperative or competitive process is not due to its phenotype but rather to the inferred genotype of type of interdependence and type of action. Thus, in most social media and social contexts, "perceived similarity in basic values" is highly suggestive of the possibility of a promotive linkage between oneself and the other. However, we are likely to see ourselves as contentedly linked in a context which leads each of us to recognize that similarities in values lead us to seek something which is in scarce supply and available for only one of us. Also, it is evident that while threats are mostly perceived in a way which suggests a contentious linkage, a threat that is perceived as intended to compel you to do something that is good for you or that you feel you should do is apt to be suggestive of a promotive linkage.

Although the crude law is crude, it is my impression that it is reasonably accurate; phenotypes are often indicative of the underlying genotypes. Moreover, it is a synthesizing principle which integrates and summarizes a wide range of social psychological phenomena. Not only do the typical effects of a given relationship tend to induce that relationship, but it also seems that any of the typical effects of a given relationship tends to induce the other typical effects. For example, among the typical effects of a cooperative relationship are positive attitudes, perception of similarities, open communication, and an orientation toward mutual enhancement. One can integrate much of the literature on the determinants of positive and negative attitudes in terms of the other associated effects of cooperation or competition. Thus, positive attitudes result from perceptions of similarity, open communication, and so on. Similarly, for "effectiveness of communication," many of its determinants can be linked to the other typical effects of cooperation or competition. And so on.

The crude law is crude, but it can be improved. Its improvement requires a linkage with other areas in social psychology, particularly social cognition and social perception. Such a linkage would enable us to view phenotypes in their social environments in such a way as to lead us to perceive correctly the underlying genotypes. We would then be able to know under what conditions "perceived similarity" or "threat" will be experienced as having an underlying genotype different from the one that is usually associated with its phenotype.

I wish to make one further brief point about the crude law: From this law, one would expect that any relationship would normally intensify—e.g., if a relationship were more cooperative than competitive, it would move increasingly in a cooperative direction and the intensity of cooperation would increase. Undoubtedly, this intensification does occur to some extent, but it tends to be limited. What are the influences restricting such a process? It seems likely that there are both external and internal constraining factors. Externally, the involvement and pull of other simultaneous relationships and overlapping situations tend to prevent or contain what might be termed an obsessive intensification of any particular relationship. Internally, there seem to be normal pathologies that develop in most types of relationships; these appear to curb the unceasing intensifica-
tion of the relationship. Elsewhere (Deutsch, 1973), I have indicated such pathologies for cooperation, and it may well be generally true.

What are the circumstances, strategies, and tactics which lead one party to do better than another in a conflict situation?

Most of the important theoretical work by social scientists in relation to this question has been done not by social psychologists but by economists, political scientists, and those concerned with collective bargaining. Some of the most notable contributions have been made by Chamberlain (1951), Schelling (1960, 1966), Stevens (1963), Walton and McKerris (1965), Kahn (1965), Jervis (1970, 1976), and Snyder and Diesing (1977). Machiavelli (1990) and Stephen Potter (1965) earlier had described useful strategies and tactics for winning conflicts: Machiavelli’s emphasis was on how to use one’s power most effectively so as to intimidate or overwhelm one’s adversary; Potter’s, on how to play upon the good will, cooperativeness, and politeness of one’s opponent so as to upset him and make him lose his “cool.” More recently, Alinsky (1971) has described a “jujitsu” strategy that the “have-nos” can employ against the “haves” and described various tactics of harassing and snaring the “haves” in their own red tape by pressuring them to live up to their own formally stated rules and procedures.

Social psychologists have just barely begun to tap the rich array of ideas about strategies and tactics for winning conflicts or for increasing one’s bargaining power and effectiveness that exist in the common folklore as well as in the social and political science literature. Summaries of the relevant social psychological research on bargaining and negotiation can be found in Deutsch (1973), Druckman (1973, 1977), Tedeschi, Schlenker, and Bonoma (1973), Krivohlav (1974), Rubin and Brown (1975), Cherrkoff and Eiser (1976), Morley and Stephenson (1977), and Magenau and Pruitt (1978). This research has provided some support and qualification of preexisting ideas about bargaining strategy and tactics. I shall briefly discuss research relating to “being ignorant,” “being tough,” “being belligerent,” and “bargaining power.”

“Being ignorant”

Common sense suggests that one is better off if one is informed rather than ignorant. Schelling (1960) has, however, advanced the interesting idea that in bargaining it is sometimes advantageous to be in a position where you are or appear to be ignorant of your opponent’s preferences; similarly, it may give you an edge to be in a situation where you could inform your opponent of your preferences but the other could not so inform you. Research (Harnett and Cummings, 1968; Harnett, Cummings and Hughes, 1968; Cummings and Harnett, 1969) provide experimental support for Schelling’s idea. In several different bargaining situations, it was demonstrated that a bargainer who did not have complete information about the bargaining schedule of his opponent began bargaining with higher initial bids, made fewer concessions, and earned higher profits than bargainers with complete information. Being ignorant of what the other wants, or appearing so, may justify to oneself and to the other a relative neglect of the other’s interests in one’s proposals; neglecting the other’s interests when they are known is a more obvious and flagrant affront.

The bargaining tactic of “ignorance,” as well as other tactics, such as “brinkmanship” and “appearing to be irrational,” can be characterized in terms of the bargaining doctrine of “the last clear chance.” The basic notion here is that a bargainer will gain an advantage if he can appear to commit himself irrevocably so that the last clear chance of avoiding mutual disaster rests with his opponent. A child who works himself up to the point that he will have a temper tantrum if his parents refuse to let him sit where he wants in the restaurant is employing this doctrine. So is the driver who cuts in front of someone on a highway while appearing to be deaf to the insistent blasts of the other’s horn. Such tactics do not always work. They seem most apt to do so when the situation is asymmetrical (you can use the tactic but your opponent cannot) and when your opponent does not have a strong need to improve or uphold his reputation for “resolve” or “toughness.”

“Being tough”

“Bargaining toughness” has been defined experimentally in terms of setting a high level of aspiration, making high demands, and offering fewer concessions or smaller concessions than one’s opponent. It is a widely held view, to quote Leo Durocher, that “nice guys finish last.” The results of many experiments (see Magenau and Pruitt, 1978) support a more complex conclusion, stated by Bartos (1970, p. 63): “toughness plays a dual role and has contradictory consequences. On the one hand, toughness decreases the likelihood of an agreement, while on the other hand, it increases the payoffs of those who survive this possibility of a failure.” A relentlessly
tough approach throughout bargaining appears to result in worse outcomes than a more conciliatory approach (Hammer and Baird, 1976; Harnett and Vincelette, 1998). There is, however, some evidence to suggest that initial toughness in terms of high opening demands, combined with a readiness to reciprocate concessions, may facilitate a fuller exploration of the alternative possibilities of agreement and lead to the discovery of an agreement which maximizes payoffs to the bargainers (Kelley and Scherzicki, 1972). premature tendencies to reach an agreement without full exploration of the possibilities may be prevented by tough, initial positions (Deutsch, 1973).

"Being belligerent"

Since the initial research of Deutsch and Krauss (1960) demonstrated the deleterious effects of threat upon bargaining, there have been a deluge of bargaining experiments bearing upon the use of weapons, threats, fines, punishments, rewards, promises, and the like. Tedeschi, Schlenker, and Bonoma (1973, p. 141) have summarized the results of this research as follows: "Threats seldom improve and almost always decrease a bargainer's outcomes if his adversary is similarly armed and the values are important to both parties. Yet when threats are available, bargainers are tempted to use them." Research (see Deutsch, 1973) also demonstrates that threats have considerable reputational costs: a "threatener" as compared to a "promiser" is viewed much more negatively and is much less likely to get compliance.

Although belligerent, coercive tactics usually impair negotiation, it is evident that one is apt to yield to an adversary when there is a gun pressed against one's head. Coercion can be successful, especially when the power of the conflicting parties is unequal. The effectiveness of a threat or promise in affecting the behavioral and attitudinal response of the person being subjected to the attempted influence, as well as the likelihood that a threat or promise will be employed, will be determined by the characteristics of the available threats and promises. Elsewhere (Deutsch, 1973) I have discussed how the following characteristics affect the use and effectiveness of threats and promises: 1. legitimacy; 2. credibility; 3. magnitude; 4. kinds of values appealed to; 5. targets of threat or promise; 6. time perspective; 7. clarity and precision of the contingencies involved; 8. style; 9. costs and benefits to user.

"Bargaining power"

Common sense would suggest that a bargainer is likely to be better off if he has more power than the adversary. The results of social psychological research indicate that the situation is more complex than it first seems. Experimentally, bargaining power is sometimes defined as the relative power of each of the bargainers to inflict harm upon one another; the relative desirability of the alternatives to bargaining that are available to each of the bargainers; the relative time pressure on each bargainer to reach an agreement; and so forth. The research evidence (Magenau and Pruitt, 1978; Rubin and Brown, 1975) indicates that when bargaining power is equal, agreement is relatively easy to reach and the outcomes to the parties are high. When bargaining power is somewhat unequal, a power struggle often ensues as the bargainer with more power tries to assert superior claims and as these are resisted by the bargainer with lesser power; the result of this struggle is that agreement is difficult to reach and the bargainers have low outcomes. When bargaining power is markedly unequal, the differences in power are more likely to be accepted as legitimate and lead to quick agreement, with the advantage going to the more powerful bargainer. However, if the differences in power are not viewed as providing a legitimatization of relatively low outcomes to the low-power bargainer, he will resist what he considers to be greed and exploitation; agreement here also will be difficult, and outcomes will be low. Differences in bargaining power may lead the bargainer with greater power to make claims which he feels are legitimate but which he cannot force the other to accept; the bargainer with lesser power may resist the claims as being exploitative and illegitimate and as a way of asserting his equal status as a person. His resistance causes the low-power bargainer to suffer relatively more than the high-power bargainer, but the high-power bargainer also suffers. In essence, the bargaining research demonstrates that having higher power than one's bargaining opponent may be less advantageous than having equal power if your fellow bargainer is apt to resist any greater claims that you might make as a result of your greater power.

From this brief and very incomplete survey of some of the experimental research bearing on the strategy and tactics of waging conflict, it is evident that social psychological research has given some support for surprising tactics ("being ignorant") and has raised some doubts about common assumptions relating to the advantages to be obtained from "tough-
ness” as a strategy, from “coercive tactics,” and from “superior bargaining power.”

Although the experimental research on bargaining has produced some interesting results, social psychologists have not yet developed a systematic theory of social influence. We have not yet developed a set of descriptive categories for classifying the various strategies and tactics that are employed in competitive bargaining that goes beyond the excellent early work of Walton and McKerrie (1965). Nor have we anything like miniature theories of seduction, coercion, blackmail, or bluffing, nor sufficient empirical knowledge of these “black arts” to provide a curriculum for a school for scoundrels. In part our deficiency in these respects results from our insular tendency to ignore related work in other areas of social psychology—e.g., Jones’ (1964) work on impression management, Freedman’s (1966) work on “the foot-in-the-door” technique, French and Raven’s (1959) work on social power, and Moscovici’s (1976) approach to social influence. In part it reflects a tendency to neglect theorizing and to favor research—a tendency which is characteristic of much of social psychology.

What determines the nature of the agreement between conflicting parties if they are able to reach an agreement? A bargain is defined in Webster’s Unabridged Dictionary as “an agreement between parties settling what shall give and receive in a transaction between them.” The definition of “bargain” fits under common social science definitions of the term “social norm.” What determines the agreement or social norm for settling the issues in conflict? Two compatible ideas have been advanced in answer to this question, one related to “perceptual prominence” and the other to “distributive justice.”

Schelling (1960) has suggested that perceptually prominent alternatives serve a key function in permitting bargainers to come to an agreement. He has pointed out (1960, p. 70): “Most bargaining situations ultimately involve some range of possible outcomes within which each party would rather make a concession than fail to reach agreement at all.

4. This question suggests a consideration of the factors influencing the creativity of group problem solving: In a cooperative context, a conflict can be viewed as a common problem requiring a mutually satisfactory solution. Elsewhere (Deutsch, 1969, 1973) I have discussed some of the factors affecting the development of creative solutions to conflict. It is evident that the social psychological literature on factors influencing group productivity is directly relevant. Here, however, I do not wish to discuss the relevant research on small group processes but instead want to focus on the normative aspects of conflict resolution and bargaining agreements.

... The final outcome must be a point from which neither expects the other to retreat; yet the main ingredient of this expectation is what one thinks the other expects the first to expect, and so on. These infinitely reflexive expectations must somehow converge on a single point, at which each expects the other not to expect to be expected to retreat. A perceptually prominent agreement—e.g., “a 50-50 split,” “equal concessions”—provides an obvious place to converge and to stop making or expecting further concessions. Research has provided some support for Schelling’s idea (see Magenau and Pruitt [1978] for a summary).

Homans (1961, 1974) has suggested that the principle of distributive justice would play a role in determining how people would decide to allocate the rewards and costs to be distributed between them. Although Homans was not primarily concerned with conflict or bargaining, it is evident that his conception of distributive justice does not exclude them. In his discussion, Homans has emphasized one particular canon or rule of distributive justice, that of “proportionality” or “equity”: In a just distribution, rewards will be distributed among individuals in proportion to their contributions. “Equity theorists” such as Adams (1963, 1965, 1976) and Walster, Walster, and Berscheid (1976) have continued Homans’ emphasis on the rule of proportionality and have elaborated a theory and stimulated much research to support the view that psychological resistance and emotional distress will be encountered if the rule of proportionality is violated. In recent years, other social psychologists—Lerner (1975), Leventhal (1976), Sampson (1969), and myself (Deutsch, 1974, 1975)—have stressed that proportionality is only one of many common canons of distributive justice. Amplifying a list of Rescher’s (1966), the moral philosopher, I (Deutsch, 1979) have recently described eleven rules of distributive justice that are widely used in different contexts.

We know very little about what makes a given rule of justice stand out as saliently appropriate in a given situation of conflict. However, a number of us (Deutsch, 1975; Lamm and Kayser, 1974a,b; Lerner, 1975; Leventhal, 1976; Mikula and Schwinger, 1978; Sampson, 1975) have begun to articulate hypotheses about factors favoring the selection of one or another rule and to do related experiments. It seems evident that if a conflict is experienced as having been resolved unjustly, it is not likely that the conflict has been adequately resolved; similarly, a bargaining agreement that is viewed as unjust is not apt to be a stable one. “Justice” and “conflict” are intimately intertwined; the sense of injustice can give rise to conflict, and conflict can produce injustice.
Social psychological research on justice and conflict is too new to have led to any definitive results. However, let me note the direction of my thinking in this area. I have applied and elaborated my crude hypothesis of social relations (the typical consequences of a given type of social relation tend to elicit that relation) so as to be relevant to the question of what rule of justice will predominate in a group or social system. I (Deutsch, 1975) have developed rationales to explain the tendency for economically orientated groups to use the principle of equity; for solidarity-orientated groups to use the principle of equality; and for caring-orientated groups to use the principle of need. I have then characterized typical effects of economically orientated relations, solidarity-orientated relations, and caring relations and have hypothesized that these different kinds of typical effects will elicit different principles of distributive justice.

Thus, among the typical consequences of an economic orientation (Diesing, 1962) are: 1. the development of a set of values which includes maximization, a means-end schema, neutrality or impartiality with regard to means, and competition; 2. the turning of man and everything associated with him into commodities—including labor, time, land, capital, personality, social relations, ideas, art, and enjoyment; 3. the development of measurement procedures which enable the value of different amounts and types of commodities to be compared; and 4. the tendency for economic activities to expand in scope and size. The crude hypothesis advanced above would imply that an economic orientation and the principle of equity are likely to be dominant in a group or social system if its situation is characterized by impersonality, competition, maximization, an emphasis on comparability rather than uniqueness, largeness in size or scope, and so on. Specific experimental hypotheses could readily be elaborated: The more competitive the people are in a group, the more likely they are to use equity rather than equality or need as the principle of distributive justice; the more impersonal the relations of the members of a group are, the more likely they are to use equity; and so forth.

Preliminary results in my laboratory, as well as in the laboratories of other investigators, are consistent with my crude hypothesis. It seems likely that the reason "equity" has been the central principle of distributive justice to social psychologists is that there has been an unwitting acceptance of the view that the dominant orientation of American society, a competitive-economic orientation, is a universally valid orientation. This is too parochial a perspective. Equity is only one of many principles of distributive justice. It is evident that questions of justice may arise in noneconomic social relations and may be decided in terms that are unrelated to input-output ratios.

Evaluation of progress in the social psychological study of conflict

I now return to the question posed at the beginning of this chapter: What progress, if any, has occurred during the past fifty years or so in the social psychological study of conflict? I have no yardstick by which to evaluate whatever progress has been made. It would be difficult to assess whether progress has been more or less rapid in this area than in other areas of social psychology or to assess whether the social resources (the personnel, funds, space, equipment, etc.) expended in support of this area of research would have been better spent elsewhere. I am a biased observer but, even taking my bias into account, I am strongly inclined to believe that significant scientific progress has been made and that important contributions to society are being derived from the scientific study of conflict. Let me briefly characterize the nature of the progress in the methodological, conceptual, empirical, and technological domains.

Methodological

As in every area of social psychological research, there have been major methodological advances during the past fifty years in the study of cooperation-competition, conflict, bargaining, and negotiation. New and better techniques for studying these phenomena in the laboratory and also in the field have emerged. The development of experimental gaming and simulations by social psychologists has helped to provide many of the other social sciences with research tools not previously available to them. Experimental economics and experimental political science owe much of their impetus to the research tools developed by social psychologists studying conflict and bargaining. These fields are now, in turn, refining social psychological methodologies and advancing them in a way which should be of value to social psychologists.

Conceptual

In the course of this chapter, I have outlined some of the conceptual developments that have taken place in my work on cooperation and competition; on understanding the nature and determinants of constructive and
destructive processes of conflict resolution; and on understanding some of the determinants and consequences of different systems of distributive justice. This represents significant theoretical progress and a more systematic integration of our knowledge of the social psychological aspects of conflict and distributive justice. I believe I have found a simple but deep answer to the question which my work has addressed over the years ("What determines whether a conflict will take a constructive or destructive course?"); an answer which proliferates into rich detail even though its basic idea is quite simple.

Conceptual progress on questions related to bargaining strategy and tactics in competitive contexts has not yet been marked. However, economists, political scientists, and sociologists appear to be developing conceptual models of conflict at the macro and micro levels which should be of great intellectual interest to social psychologists. Many of their models are employing social psychological variables such as "level of aspiration," "relative deprivation," "level of information," and "attraction" (Sauermann, 1978). Although I have not systematically reviewed recent social psychological work on coalition formation, my impression is that there has been significant conceptual progress in this area in recent years (see Sauermann, 1978).

**Empirical**

We know a great deal more, with considerable more certainty, about the empirical regularities associated with conflict. Thus, we know how such psychological processes as "autistic hostility," "self-fulfilling prophecies," "unwitting commitments," and "biased perceptions" operate to produce an escalation of conflict (Deutsch, 1973). We know the social psychological correlates of intensifying conflict and of deescalating conflict. Thus, as conflict escalates there is an increased reliance upon a strategy of power and upon the tactics of threat, coercion, and deception. Also, there is increased pressure for uniformity of opinion and for leadership and control to be taken over by those elements organized for waging conflict. Deescalation of conflict is characterized by graduated reciprocation in tension reduction (Osgood, 1959, 1962, 1966); tactics of conciliation; accentuation of similarities; and enhancement of mutual understanding and goodwill.

We are increasingly aware of the social psychological regularities associated with benign and malevolent conflict. We are reasonably sure of the typical effects of certain forms of bargaining strategies and tactics and can reliably conclude that many commonsense beliefs about bargaining are much too simple part-truths.

**Technological**

There have been many significant social consequences of the scientific study of conflict; not all of these can be attributed to the work of social psychologists. Social psychologists have been important contributors to some changes in thinking about conflict at the national level—as exemplified in Kennedy’s American University speech and in the Kerner Commission reports. Also, in recent years, many of the ideas generated in the social psychological study of conflict have been employed in training administrators and negotiators, in schools, labor unions, industry, government, and community organizations how to deal with conflict more effectively. "Conflict," "negotiation skills," and "mediation skills" workshops are now common features of training for work in organizations in the United States, Europe, and Japan. Osgood’s (1959, 1962, 1966) strategy for deescalating conflict—"graduated and reciprocated initiatives in tension reduction" (GRIT)—has received considerable experimental support (Lindskold, 1978), has been widely discussed in international and national meetings, and appears to have been the basis for the "Kennedy experiment" (Etzioni, 1967) to end the cold war.

Let me conclude by stating that although there has been significant progress in the study of conflict, the progress does not yet begin to match the social need for understanding conflict. We live in a period of history when the pervasiveness and intensity of competitive conflict over natural resources are likely to increase markedly. We also live in a period when hydrogen bombs and other weapons of mass destruction can destroy civilized life. The social need for better ways of managing conflict is urgent. In relation to this need, it is my view that too few social psychologists are working on the scientific issues which are likely to provide the knowledge that will lead to more constructive conflict resolution of the many intensive conflicts which await us all.