Conflict and Its Resolution*
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The other day, in the garden of a friend's house, my five year old son and his chum were struggling over a water hose. Each wanted to use it first to water the flowers. (I note quickly that this incident did not occur in an area plagued by water shortage.) Both were tugging at it in an effort to get it away from the other, and both were crying. Each was very frustrated and neither was able to use the hose to sprinkle the flowers as he had desired. After reaching a deadlock in their tug-of-war, they began to punch one another and call each other names. The escalation of the conflict to physical violence led to the intervention of a powerful third party (an adult) who suggested an interesting game to determine who would use the hose first. The boys, each somewhat frightened by the violence of the struggle, were relieved to agree to the suggestion. They got absorbed in the game of trying to find a small object I had hidden and they obediently followed the rule that the winner would have a first turn of two minutes with the hose. They soon tired of the water hose and began to pick blackberries which they threw provocatively at a ten year old boy who responded to their ineffectual sallies with an amused tolerance.

Even a simple episode of this sort suggests many questions, questions which are of pertinence to conflicts of all sorts: intrapersonal, interpersonal, intragroup, intergroup, and international. Thus one might inquire about the participants in the conflict, how their individual characteristics (their strength, their

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cognitive resources, their personalities, their emotional state, etc.) and their prior relationship with one another affected the development and course of the dispute. One might expect, for instance, that if the disputants were men rather than boys the resort to physical violence would have been less likely. If so, would this be because violence is more painful and dangerous among men than among boys and hence the social and personal restraints against adults punching one another are likely to be stronger? Or could it be that violence is less likely because of the greater intellectual resourcefulness of adults? Also, it seems reasonable to assume that girls would be less likely to punch one another than boys. If so, how is it possible to socialize or otherwise indoctrinate people so that certain forms of waging conflict are so alien to their concept of themselves that they become "unthinkable" methods of conflict?

Or one may ask about the issue in conflict, its motivational significance and its phrasing. Was there anything about the possession or non-possession of a water hose which might have been of particular emotional significance to the quarreling? A Freudian might stress the phallic symbolism and the intensity of the rivalrous and anxious feelings a boy of five years is likely to have about possessing a big and powerful water sprinkler. Also, the issue might have been phrased so that it's magnitude was large or small, so that the legitimate claims of both or of only one was recognized. Thus, the issue may be defined as all-or-none (the hose becomes one boy's exclusive possession and under his sole control) or as one in which "I use the hose for two minutes and then you can use it for two minutes."

Or one may inquire into the broader social environment within which the conflict occurs. For example, was conflict more likely because neither child had clear territorial rights (both were visitors in an unfamiliar locale)? Did the
Known presence of an interested and significant audience (parents) affect the course of conflict in particular ways? What modes of intervention by a third party are likely to be most effective in resolving a conflict of a given type? What characteristics of the third party, including his relationship to the parties in conflict, determine how acceptable his intervention will be? I doubt if the two five-year-olds would have been much influenced by a cease and desist order from a four-year-old. Yet, it is not unknown for a physically powerless third party to help prevent the conflict of more powerful parties from escalating into violent forms. What are the characteristics of third parties which aid in resolving conflict and what characteristics for its deadlock and intermenable conflict? 

**Variables affecting the course of conflict**

There are many other questions which can be raised about this episode of conflict. As I have indicated earlier, I believe such questions have relevance to conflict at different levels, from the intrapersonal to the intranational. Whether the conflict under scrutiny is between union and management or between nations or between a husband and wife or between kids, it is useful to know something about:

(a) The characteristics of the parties in conflict (their values and motivations; their aspirations and objectives; their physical, intellectual and social resources for waging or resolving conflict; their beliefs about conflict, including their conceptions of strategy and tactics; and so forth);

(b) Their prior relationship to one another (their attitudes, beliefs, and expectations about one another, including the beliefs about the other's view of oneself, and particularly the degree of polarization which has occurred on such evaluations as "good-bad", "trustworthy-untrustworthy");
(c) The nature of the issue giving rise to the conflict (its scope, its rigidity, its motivational significance, its formulation, its periodicity, etc.);

(d) The social environment within which the conflict occurs (the facilities and restraints, the encouragements and deterrents it provides with regard to the different strategies and tactics of waging or resolving conflict, including the nature of the social norms and institutional forms for regulating conflict);

(e) The interested audiences to the conflict (their relationships to the parties in conflict and to one another, their interests in the conflict and its outcomes, their characteristics);

(f) The strategy and tactics employed by the parties in the conflict (in assessing one another's utilities, disutilities and subjective probabilities; in changing one another's utilities and disutilities and subjective probabilities; in influencing the other's conceptions of one's own utilities and disutilities through tactics which vary along such dimensions as legitimacy-illegitimacy, the relative use of positive and negative incentives such as promises and rewards or threats and punishments, freedom of choice-coercion, the openness and veracity of communication and sharing of information, the degree of credibility, the degree of commitment, the types of motives appealed to, and so on);

(g) The consequences of the conflict to each of the participants and to other interested parties (the gains or losses relating to the immediate issue in conflict, the precedents established, the internal changes in the participants resulting from engaging in conflict, the long term effects on the relationship between the parties involved, the reputation that each party develops in the eyes of the various interested audiences).

I have sketched out this outline of some of the variables involved in conflicts involving different types of units -- individuals, groups, organizations,
and nations. This demonstration is not meant to imply that the mechanisms or capabilities of acquiring information, making decisions, and acting are similar in the different types of units. I shall not commit the "group mind" fallacy. Yet I will not ignore the fact that nations as well as individuals have the capacity to act even though each unit can not do the same kinds of things: a nation can declare war, a man can not; a man can hide himself, a nation can not. Having the capacity to act, individuals, groups, and nations -- each may act stupidly if it lacks relevant information before it acts.

The functions of conflict

I stress the legitimacy of employing similar concepts to discuss conflict between different types of units to justify my approach to the question which is at the heart of this paper. My inquiry is into the conditions which determine whether a conflict will be resolved with constructive or destructive consequences. My approach is to examine different levels of conflict to see whether or not there are some central notions which can throw light on varied situations of conflict and, then, to investigate these notions in laboratory experiments. I cannot claim any originality for either the inquiry or the approach; both are common to many scholars working in the field of conflict and conflict resolution. Nor, as you will see, may I assert that my investigations have as yet given any definitive answers.

The central question underlying my investigation assumes that conflict is potentially of personal and social value. Conflict is a pervasive and inevitable aspect of life. Its pervasiveness suggests that conflict is not necessarily destructive nor lacking in pleasure. Conflict has many positive functions. It prevents stagnation, it stimulates interest and curiosity, it is the medium through which problems can be aired and solutions arrived at; it is the root of
personal and social change. Moreover, conflict is often part of the process of testing and assessing oneself and, as such, may be highly enjoyable as one experiences the pleasure of the full and active use of one's capacities.

I stress the positive functions of conflict, and I have by no means provided an exhaustive listing of such functions, because many discussions of conflict cast it in the role of the villain as though conflict per se were the cause of psychopathology, social disorder, war. A superficial reading of such theories as Gestalt theory with its focus on good form, psychoanalytic theory with its emphasis on the "pleasure principle", field theory with its stress on tension reduction, and dissonance theory with its preoccupation with dissonance reduction would seem to suggest that the psychological utopia would be a conflict-free existence. Yet it is apparent that most of us seek out conflict in competitive sports and games, or by going to the theatre or reading a novel, or by attending to the news, or in the teasing interplay of intimate encounters, or in our intellectual work. Fortunately none of us have to face the prospect of a conflict-free existence. It cannot be eliminated nor even suppressed for very long.

The query

The question, I repeat, is not how to eliminate or prevent conflict but rather how to make it productive, or minimally, how to prevent it from being destructive. There are inherent ambiguities in this question because of the ambiguity of such value-laden terms as "destructive" and "productive". One may well ask can not a conflict be productive for the victor and destructive for the vanquished? And isn't it possible for a conflict to be productive in relation to certain values but destructive in relation to others? However, my concern is with conflict situations where it is possible for there to be an outcome of mutual satisfaction and mutual net gain for the participants and I am interested in the
conditions which lead to this mutually positive outcome rather than either to an outcome of mutual dissatisfaction and loss or to an outcome in which one party gains while the other party loses. It is, of course, easier to identify and measure satisfactions-dissatisfactions and gains-losses in simple laboratory conflict situations than it is in the complex conflicts of groups in everyday life. Yet even in these complex situations, it is not impossible to compare outcomes roughly in terms of their outcomes -- e.g., in some instances union-management negotiations may lead to a prolonged strike with considerable loss and ill-will resulting to both parties, in other instances it may lead to a mutually satisfying agreement where both sides obtain something they want.

I have limited my discussion to conflict situations in which positive outcomes for all the participants are possible. That is to say, I am not dealing with situations of "pure" conflict -- the zero sum game -- in which inevitably one side loses what the other gains. My interest is in "impure" conflict, where there is a mixture of cooperative and competitive interests. In other words, in situations where a variety of outcomes are possible: mutual gain, mutual loss, gain for one and loss for the other. Thus, my initial query can be restated as an investigation of the conditions under which the participants will evolve a cooperative relationship or a competitive relationship in a situation which permits either. I would stress here that my elimination of pure conflict situations is not very limiting. There are very few situations, particularly if the situation is repetitive or if the participants are involved in many different situations together, which are so rigidly structured that inevitably one's gains must come from the other's losses. It is, of course, true that the participants may define a situation which permits mutual gain as one of pure conflict and respond to one another in a purely competitive manner.
The symptoms of cooperative and competitive processes of conflict resolution.

The reformulation of my query permits me to apply my theory of cooperation and competition to characterize two processes of interrelationships in dealing with conflict: a cooperative process and a competitive process. In effect, I am stating that the development of a cooperative or competitive relationship will be manifest not only in the outcomes but also in the processes of dealing with the conflict. Elsewhere, I have described in detail the social psychological differences between a cooperative and competitive process and presented the results of experimental study of these processes.\(^{(Deutsch, 1949a, 1949b, 1962)}\) I shall not repeat this description here. However, I wish to highlight the following differences between the two processes, considering them in their strict forms:

1. **Communication**

   (a) A cooperative process is characterized by open and honest communication of relevant information between the participants. Each is interested in informing as well as being informed by the other.

   (b) A competitive process is characterized by either lack of communication or misleading communication. It also gives rise to espionage or other techniques which attempt to obtain information about the other which the other is unwilling to communicate. Each is interested in obtaining information about the other and in providing discouraging or misleading information to the other.

2. **Perception**

   (a) A cooperative process tends to increase sensitivity to similarities and common interests, while minimizing the salience of differences. It stimulates a convergence or conformity of beliefs and values.

   (b) A competitive process tends to increase sensitivity to differences and threats, while minimizing the awareness of similarities. It stimulates the
sense of complete oppositeness: "You are bad, I am good." It seems likely that competition produces a stronger bias toward misperceiving the other's neutral or conciliatory actions as malevolently motivated than the bias induced by cooperation to see the other's actions as benevolently intended.

3. **Attitudes toward one another**

   (a) A cooperative process leads to a trusting, friendly attitude and it increases the willingness to respond helpfully to the other's needs and requests.

   (b) A competitive process leads to a suspicious, hostile attitude and it increases the readiness to exploit the other's needs and to respond negatively to the other's requests.

4. **Task orientation**

   (a) A cooperative process leads to a definition of the conflicting interests as a mutual problem to be solved by collaborative effort. It facilitates the recognition of the legitimacy of each other's interests and of the necessity of searching for a solution which is responsive to the needs of each side. It tends to limit rather than expand the scope of conflicting interests. It enables the participants to approach the mutually acknowledged problem in a way which utilizes their special talents and enables them to substitute for one another in their joint work so that duplication of effort is reduced. Influence attempts tend to be limited to processes of persuasion. The enhancement of mutual power becomes an objective.

   (b) A competitive process stimulates the view that the solution of the conflict can only be of the type that is imposed by one side on the other. The enhancement of one's own power and minimization of the other's power becomes an objective. It leads to a minimization of the legitimacy of the other side's interests in the situation and tends to expand the scope of the issues in conflict.
so that the conflict becomes a matter of general principle rather than confined to a particular issue at a given time and place. The expansion of the conflict increases its motivational significance to the participants and intensifies their emotional involvement in it; these, in turn, may make a limited defeat less acceptable or more humiliating than mutual disaster. Duplication of effort, so that the competitors become mirror-images of one another, is more likely than division of effort in the competitive process. Influence attempts tend to employ coercive processes.

This sketch of some aspects of competitive and cooperative processes suggests that each process tends to be self-confirming, so that the experience of cooperation will induce a benign spiral of increasing cooperation while competition will induce a vicious spiral of intensifying competition. Indeed, this is likely to some extent but there are restraints which usually operate to limit the spiralling of both types of processes. Not the least of these restraints arise from the fact that a person or group is usually involved in many situations and relationships simultaneously and his other involvements and relationships usually restrain what might be termed an obsessive intensification of any particular relationship. A paradox?

I have now characterized the central social psychological manifestations of the cooperative and competitive approaches to the resolution of conflicting interests. I have also suggested that it may be fruitful to think of the mutually destructive consequences of conflict as resulting from a competitive process of conflict resolution while the mutually constructive consequence emerge from the cooperative process. It is now time to turn back to our basic query: in a situation of conflict, what conditions determine which process will dominate? But before I turn back to it, I must face an apparent contradiction in my presentation so far.
Earlier I indicated that conflict has positive individual and social functions and yet now I state that a competitive process of conflict resolution is likely to be destructive. There are several points to be made. First of all, conflict is not confined to competitive processes; controversy over the means to achieve a mutually desired objective is a common part of cooperation. Conflict of this sort is not competitive so long as the cooperators are motivated to select the best means to their mutual objective rather than the one which they advocated initially. There is no reason to think of this kind of conflict as not being constructive. Secondly, competition is not inevitably destructive to both sides. Often one side is more powerful, or more determined, or more resourceful than the other and it may be able to impose its initially preferred solution to the conflict. It is, of course, possible that the defeat of an individual, group, or nation in a conflict may be constructive for others beside the immediate victor and occasionally it is so even for the defeated party. In my view, for example, the legislative victories of the civil rights advocates will be of ultimate value to many who have bitterly opposed equal rights. Finally, it seems reasonable to speculate that much of the pleasure of competition arises when it occurs in a cooperative encounter: when there is a cooperative interest in having a mutually enjoyable competition rather than a primary interest in defeating the other.

I turn back now to a consideration of the conditions which give rise to one rather than another process of conflict resolution. In an attempt to arrive at some broad generalizations, I shall examine conflict at several different levels: the intrapersonal, interpersonal, and intergroup.

Intrapersonal conflict

The pervasive character of intrapsychic conflict is indicated in the distinguished roster of psychological theorists who have concerned themselves with it. A partial listing would include Freud and all the other psychoanalytically-oriented theorists, Pavlov, Lewin, Hull, Guthrie, Miller, Brown, Heider,
Festinger, and the various decision-theorists. I shall not attempt to summarize the work of these various theorists but will, nevertheless, draw freely from their contributions.

If we ask what are some of the conditions which determine whether an intrapersonal conflict will be easy or difficult to resolve, research results indicate that a conflict is harder to resolve when:

(a) the competing alternatives are negatively rather than positively valued (a choice between aversions or fears is more difficult to make than a choice between pleasures or desires);

(b) the competing alternatives are each internally conflicted so that each alternative is both desired and feared than when the alternatives are both of the same sign;

(c) the competing alternatives are strong or important rather than weak or unimportant (an intense or large conflict is more difficult to resolve than a small one);

(d) the more equal in strength and salience the competing tendencies are;

(e) the more the choice of one positively valued alternative precludes the future attainment of the competing positively valued alternatives and the less substitutable one is for the other;

These results are useful and I believe they are applicable to the conflicts between persons as well as within persons. However, they do not shed much light on the conditions under which intrapersonal conflict has pathological or fruitful consequences.

The model underlying these results is a mechanical one of impersonal forces pushing and pulling an impersonal object which is subject to stress as a result of the opposing forces. Such a model, in essence, envisages the agents in conflict as
lifeless rather than as active, purposeful systems that take one another into account as they engage in conflict and its resolution. (Paranthetically, let me note that my bias is to anthropomorphize, to use the images of life, in dealing with living processes rather than to physicomorphize and employ inanimate images of physics.)

The literature dealing with psychopathology suggests that intense psychic conflict is likely to have pathological consequences when it elicits anxiety, when it is unconscious, and when the individual in conflict lacks ego strength. Let us examine each of these notions for their core meanings.

**Anxiety.** The term "anxiety" is used in many different ways but it is commonly distinguished from fear on the basis that fear comes from without while anxiety comes from within. As Sartre (1956, p. 29) has written: "A situation provokes fear if there is a possibility of my life being changed from without; my being provokes anguish to the extent that I distrust myself and my own reactions in the situation. The artillery preparation which precedes the attack can provoke fear in the soldier who undergoes bombardment but anguish is born in him when he tries to foresee the conduct with which he will face the bombardment, when he asks himself if he is going to be able to 'hold up.'" Fear, then, is an expectation of external danger or misfortune while anxiety is an expectation of internal danger or damage to one's conception of one's self.

Psychic conflict elicits anxiety when a defeat of one or another of the competing intrapsychic tendencies would lead to a damaging change to one's self concept. Thus, consider the conflict of a deeply religious and amorous man whose wife is sexually rejecting and whose religion strictly forbids extramarital intercourse. If he "holds up" to his religious conception of himself and fails to live up to his conception of himself as a sexually desirable male, his view of
himself as a man may be impaired. On the other hand, if he conforms to his view of himself as a sexually potent male by involving himself in extramarital affairs, his conception of himself as a person of moral character may be damaged. Only if he is able to work out a solution to his conflict which preserves both images of himself -- e.g., by helping his wife to change -- would anxiety be avoided. But, of course, even this solution may be inconsistent with his view of himself as a victim of circumstance.

A "win-lose" intrapsychic conflict of this sort where victory for one of the conflicting tendencies implies defeat for the other, not only leads to anxiety because of the anticipated damage to one's self conception, but it may also lead to all of the usual manifestations of the competitive process of conflict resolution as one intrapsychic tendency tries to defeat the other: expansion/mutual suspicion, mutual derogation, accentuation of incompatibility, expansion of the scope of conflict, etc. In addition, the process of intrapsychic communication may be hampered and distorted. Making the conflict unconscious is one form of such distortion of communication.

**Unconscious conflict.** The notion of unconscious conflict contains within it the paradox of self-deception: the paradox of the deceiver and the deceived being the same person. This paradox is resolvable by assuming that the self is an organization with many subsystems and that although the subsystems may be able to communicate with one another, they do not necessarily have the power to inspect each other. Either or both sides to a conflict may attempt to deny the existence of the other side or to misrepresent the other side or to deny its own existence or to misrepresent itself. Thus, some women will pretend to experience no sexual pleasure during the sexual act to prove to themselves that they are only doing it as a self-sacrifice for the man's pleasure.
It is not surprising that the dialogue of non-recognition, concealment, distortion, and misrepresentation between conflicting aspects of the self may resemble the dialogue between people in an intense struggle. The internal dialogue is, as George Herbert Mead pointed out many years ago, often an internalization of the experienced relationship between oneself and a significant other. The tactics of self and other deception are both neatly catalogued in the so-called mechanisms of defense: denial, projection, repression, displacement, reaction, formation, undoing, isolation, regression, etc. By the reaction-formation of frigidity a woman can conceal her sexual obsession from herself or from her sexual partner; by "isolation" a person can make a hostile feeling seem insignificant and accidental to himself or to another; by repression one can conceal from oneself or from another the nature of one's intentions; and so on.

If the tactics of misleading communication are similar in intrapsychic and interpersonal conflicts, it seems likely that a study of such tactics in interpersonal conflict would provide useful insights into intrapsychic dynamics. For example, isn't "bluffing", which is a widely-used tactic in interpersonal conflict also a widely used mechanism of defense (or more appropriately a mechanism of offense)? Isn't in fact, the term "mechanism of defense" too confining? Are we not dealing with mechanisms or tactics of conflict which include both "aggressive" and "defensive" forms of deception?

The connection between self-deception (or unconsciousness) and the pathology of psychic conflict resides in the likelihood that the distortions may prevent the discovery that the original conflict is no longer present and that the expected self-disapproval for certain kinds of actions or thoughts will not occur. Self-deception may also hinder the development of a cooperative conflict resolution which would permit gratification for both of the once-opposed tendencies. For example, a woman who denies her sexual interest in men to prove her respectability
to herself may be unable to affirm her interest again even when it is respectable
to do so because she has become committed to her denial (to express interest would
be to deny her original denial).

Thus, self-deception is elicited by anxiety, a threat to a central conception
of oneself. But it seems reasonable to suppose that individual vulnerability to
such threat varies and, further, that anxiety does not inevitably kindle an
unbridled, no holds barred competitive process of conflict resolution. The
psychoanalysts have used the term "ego strength" to refer to both the
individual's invulnerability to threats to his self-esteem and to his ability to
cope with conflict-induced anxiety without resort to an inner tooth-and-nail
struggle. A "strong ego" enables the individual to cope with external difficulties
and serves to regulate and integrate diverse internal processes into a coordinated,
cooperative system.

What are the characteristics of a "strong ego"? Erik Erikson (1964) in his
paper, "Human Strength and the Cycle of Generations" has given us a useful list:
hope, will, purpose, competence, fidelity, love, care, and wisdom. Many other
theorists have made attempts to characterize the related concept of mental health
(see Jahoda, 1958). However, neither Erikson nor others have yet specified in any
detail the conditions under which these virtues develop. Perhaps the safest quick
generalization is that ego strength develops from experiences of a moderately high
degree of success in coping with a moderately difficult and demanding environment.
In other words, an individual needs the experience of coping successfully with
external difficulty and internal conflict but he also needs the experience of
coping successfully with failure. For him to have such experiences, the developing
individual needs a social environment which is responsive but not enslaved by his
needs, which can trust his capabilities and place realistic demands upon them, and
which provides a basis for identification with effective models for coping with difficulties and conflict. I would like to stress the importance of the opportunity to learn effective techniques of conflict resolution through the observation of how conflict is actually resolved in one's social environment. It seems likely that personal styles of resolution of psychic and interpersonal conflict often reflect an internalization of the techniques of conflict resolution observed and experienced in one's social environment. I suspect that styles of conflict resolution can be cultivated systematically through special techniques of training. If this is so, it may well be that many of the pathological consequences of conflict could be prevented through carefully planned educational efforts.

More is known about the conditions which breed ego weakness than ego strength. Such conditions include: a social environment which lacks the virtues Erikson has described; the massive exposure to failure and derogation; overprotection and lack of exposure to conflict and difficulty; the loss of status; the prolonged experience of internal conflict; the prolonged experience of powerlessness and helplessness; isolation and lack of contact with social reality; fatigue, intoxication, and illness. Ego weakness, for any of these reasons, is likely to make the individual more vulnerable to threat to his self-esteem and is more likely to stimulate a competitive process of conflict resolution, self-deception, and the conditions which perpetuate the conflict.

It would be a mistake, however, to assume that only those people lacking in ego strength are vulnerable to the pathological consequences of conflict. It is well to note that there are certain kinds of conflict which have no reasonable solution and that almost any one entrapped in one will fall prey to it. Consider this horrible example from the long list of Nazi crimes. A Jewish mother is told by a Nazi guard to select which of her two children is to be killed and if she refuses to make the choice both will be killed. There is no constructive solution
to such a conflict except to outlaw it. This type of conflict involves not merely being "damned if you do and damned if you don't" but being damned by oneself. In less extreme form, this type of conflict is not uncommon in pathogenic families. Thus, a child may be confronted with the choice of believing that his perception of reality is distorted (and accepting the view of his parents) or believing that he is the child of untrustworthy parents. His choice may be limited to these alternatives by the way his parents phrase the conflict.

Bateson, (Bateson, Jackson, Haley, and Weakland, 1956 and 1963) has referred to a similar form of pathogenic conflict, the "double-bind", which he posits as underlying the genesis of schizophrenia. He indicates that this type of conflict is characterized by a primary negative injunction, a secondary negative injunction conflicting with the first (and like the first enforced by punishments which threaten survival), and a tertiary negative injunction prohibiting the victim from escaping the field. In addition, there are injunctions against recognizing the nature of the incongruity or of calling it to the attention of the parents in any way. A child is caught in a "double bind" if his mother responds negatively to his affectionate gestures and yet condemns him if he is not affectionate to her as she denies her inconsistency and punishes the child for his audacity in recognizing her inconsistency.

Let me summarize this section on intrapersonal conflict in terms of some propositions which may apply to interpersonal and intergroup conflict as well as intrapersonal conflict:

1. Conflict over negatives is more difficult to resolve cooperatively than conflict over positives.

2. Conflict over large issues is more difficult to resolve cooperatively than conflict over small issues.
3. Conflict between parties that mutually perceive themselves to be equal in power and legitimacy is more difficult to resolve cooperatively than when there is a mutual recognition of differential power and legitimacy.

4. Conflict which threaten the self-esteem of the parties involved is more difficult to resolve cooperatively than conflict which does not threaten self-esteem.

5. Self-esteem is more likely to be threatened by conflict if a party to the conflict has little rather than much basis for self-confidence or if it is plagued by existing conflict or difficulty rather than successful in coping with its problems.

6. Conflict which is resolved by a more powerful tendency suppressing or repressing a weaker one often leads to much energy being employed to maintain the repression and to the return of the repressed in disguised forms.

7. Some conflicts are inherently pathological and can best be handled by preventing their occurrence.
Intergroup conflict

I shall turn now to intergroup conflict. There are, of course, many different types of intergroup conflict: gang fights, religious conflict, race conflict, class conflict, industrial conflict, and so on. I shall focus on class conflict and industrial conflict, because of their interrelation, and because they seem to provide useful parallels with other forms of intergroup conflict.

Karl Marx presented one of the most fully developed theories of social conflict in his theory of class conflict. His theory, in effect, assumes that class conflict must inevitably give rise to a competitive process which will spiral into an increasing intensity of conflict until a revolutionary change occurs in the power relations of the conflicting classes. His theory posits that class conflict arises because there is a category of persons who possess effective private property (ownership of capital or the means of production) which is assumed to be the basis of power, and another category of persons who have no such property or power and who must, as a consequence, hire themselves out as wage laborers to those who own capital. The inherent conflict of interest with regard to the distribution of the fruits of production gives rise to classes as individuals within one category engage in a common struggle against individuals from another category. 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". The classes polarize so that they become internally more homogeneous and more and more sharply distinguished from one another in wealth and power. The initial power advantage of the ruling class is used to augment its power vis-à-vis the working class, leading to a progressive impoverishment of the working class and the swelling of its ranks by the impoverishment of groups (the petit bourgeoisie, the small industrialist, the
farmer) that were marginal between the two classes. The increasing intensity of the conflict and class homogenization leads the enlarging oppressed proletariat to unite in effective action to overthrow the ruling minority.

The Marxian theory of class conflict seems to be a perfectly reasonable description of what might have happened if class conflict were to have followed the dynamics of a strictly competitive process of conflict resolution. But class conflict did not turn into such a process. It is of interest to consider what prevented this development and, hence, reduced the possibility of violent conflict resolution.

Marx's theory of the political and economic development of capitalist society was incorrect in several major respects. The growth of capital did not occur at labor's expense nor did it lead to its pauperization as he predicted. Rather, it helped to increase the productivity of labor which resulted in a general improvement of living standards. Thus, gains by both sides have lessened the intensity of conflict. Secondly, the nature of economic and technological development in industrial society did not produce an increasing homogeneity within the so-called bourgeoisie and proletariat as Marx assumed. Rather, it led to an increasing heterogeneity within each class and some blurring of class distinctions in their common roles as "consumers" and "citizens". Within the bourgeoisie there is not only the distinction between owners or shareholders and managers, there are many different types of owners and of managers. Moreover, the meaning of "capital" itself became more differentiated: there is ownership or control of the physical means of production, of different kinds of knowledge and expertise, of the techniques of persuasion, of the techniques of violence, and so on. Similarly, there is the development of different forms of labor, requiring different skills and training, rather than the predicted levelling of
workers into an undifferentiated, unskilled uniformity. Thus, differences within and similarities between classes restrained the polarization process. Thirdly, unlike Marx's prediction that social mobility would primarily be downwards from the bourgeoisie and petit bourgeoisie to the working class, social mobility has been up as well as down. The continuous expansion of industry has required the recruitment of many workers to managerial positions. The possibility of upward mobility from class to class interfered with the development of allegiances to one's class of origin. Fourthly, for reasons which are partly economic, partly educational, partly technological and partly the outcome of struggle by various interests groups competing for the allegiances of large audiences, the status of citizenship has been endowed with a growing array of rights and this has to some extent led to the dissociation between political power and industrial power. This has also served to reduce the polarization of conflict by enabling economic gains to be obtained through the political process rather than through direct confrontation. In addition, it has led to the institutionalization of patterns of conflict regulation which serve to limit the destructiveness of conflict when it occurs. Finally, conflict within industry has been progressively institutionalized through the development of procedures for collective bargaining, mediation, and arbitration so that it is conducted under an increasingly wide area of shared norms by both sides to the conflict. This institutionalization not only reduces the likelihood of destructive conflict but gives them a common interest in maintaining the institutionalized system of rules for dealing with conflict.

This analysis of why class conflict did not develop into the intensely competitive process predicted by Marx's theory suggests some general propositions.

1. Any attempt to introduce a change in the existing mode of relationship between two parties is more likely to be accepted if each expects some net gain
from the change than if either side expects that the other side will gain at its expense. Some such proposition underlies the approach of Gandhi and of Martin Luther King to inducing social change.

2. Conflict is more likely to be resolved by a competitive process when each of the parties in conflict are internally homogeneous but distinctly different from one another in a variety of characteristics (class, race, religion, political affiliation, group memberships) than when each is internally heterogeneous and they have overlapping characteristics. One of the possible virtues of the American two-party system is that the heterogeneity within each party makes interparty warfare unlikely.

3. More generally, the more coincidental conflicts there are in other areas between two parties the less likely a conflict in any given area will be resolved cooperatively; the more cooperative relationships there are in other areas the less likely it is that they will resolve a conflict in any given area by a competitive process. Sherif's studies (Sherif et al, 1961) of the effects of the introduction of supraordinate goals in the Robbers Cave Experiment is a good illustration.

4. A competitive process of conflict resolution is less likely the more exchange of memberships there is between the two groups.

5. The institutionalization and regulation of conflict increases the likelihood of a cooperative process of conflict resolution.

6. Conflict is more likely to be regulated effectively when the parties in conflict are each internally coherent and stable rather than disorganized or unstable.

7. Conflict is more likely to be regulated effectively when neither of the parties in conflict see the contest between them as a single contest in which defeat, if it occurs, would be total and irreversible with respect to a central value.
8. The experience or anticipation of a hopeless outcome of conflict, such that nothing of value is preserved makes the effective regulation of conflict less likely.

9. Conflict is less likely to be regulated effectively if the rules for engaging in conflict are seen to be biased and are thus, themselves, the subject of conflict.

So far my discussion has centered on unregulated conflict and the conditions under which it is likely to move in the direction of a competitive process in which the outcomes are determined by a power struggle or in the direction of a cooperative process in which the outcomes are determined by joint problem-solving. However, it is evident that conflict is often regulated by institutional forms (e.g., collective bargaining, the judicial system), social roles (mediators, conciliators, referees, judges, policemen), social norms ("fairness", "justice", "equality", "nonviolence", "integrity of communication", etc.) rules for conducting negotiations (when to initiate and terminate negotiations, how to set an agenda, how to present demands, etc.) and specific procedures ("hinting" versus "explicit" communication, public versus private sessions, etc.) These societal forms may be aimed at regulating how force may be employed (as in the code of a duel of honor or in certain rules of warfare), or it may be an attempt to ascertain the basic power relations of the disputants without resort to a power struggle (as is often the case in the negotiations of collective bargaining and international relations), or it may be oriented toward removing power as the basis for determining the outcome of conflict (as is often the case in judicial processes).

With regard to regulated conflict, it is pertinent to ask what are the conditions which make it likely that the regulations will be adhered to by the parties in conflict? In a duel of honor, when would a duelist prefer to die
rather than cheat? These questions, if pursued along relevant intellectual lines would lead to an examination of different forms of rule violation and social deviance, their genesis and control. Such an investigation is beyond the scope of this paper. However, it seems reasonable to assert that adherence to the rules is more likely when: the rules are known, unambiguous, consistent, and not biased; the other adheres to the rules; violations are quickly known by significant others; there is significant social approval for adherence and significant social disapproval for violation; adherence to the rules has been rewarding in the past; one would like to be able to employ the rules in the future.

It is also relevant to ask about the conditions under which the regulations will be effective? For example, under what conditions will the institution of collective bargaining between union and management result in industrial peace rather than industrial warfare? Let me quote from a monograph on the Causes of Industrial Peace which lists the conditions which have led to peaceful settlement of disputes under collective bargaining.

1. There is a full acceptance by management of the collective bargaining process and of unionism as an institution. The company considers a strong union an asset to management.

2. The union fully accepts private ownership and operation of the industry; it recognizes that the welfare of its members depends upon the successful operation of the business.

3. The union is strong, responsible, and democratic.

4. The company stays out of the union's internal affairs; it does not seek to alienate the workers' allegiance to their union.
5. Mutual trust and confidence exist between the parties. There have been no serious ideological incompatibilities.

6. Neither party to bargaining has adopted a legalistic approach to the solution of problems in the relationship.

7. Negotiations are "problem-centered" -- more time is spent on day-to-day problems than on defining abstract principles.

8. There is widespread union-management consultation and highly developed information-sharing.

9. Grievances are settled promptly, in the local plant whenever possible. There is flexibility and informality within the procedure.

In brief, negotiation involving conflicts of interest are more likely to have acceptable outcomes for the parties involved to the extent that they take place in a context of cooperative relations between the conflicting parties. But not all negotiating processes are so benign; negotiations may deadlock and break-off because of misunderstandings, faulty communications, the development of hostile attitudes, the inability to discover a mutually satisfying solution, and so on. How can a malignant process of this sort be aborted or undone? How can a third party intervene therapeutically?

If one examines the role of the mediator in industrial disputes, the role of the psychotherapist doing conjoint therapy with husbands and wives having marital problems, or the role of the human relations consultant in intergroup conflicts of various sorts certain common functions can be identified:

1. Helping to remove the blocks and distortions in the communication process so that mutual understanding may develop. This often entails serving as a translator as well as a stimulator of communication.
2. Helping to reduce the tension between the two sides through careful listening, blunting and narrowing the issue in conflict, reducing stereotypes and black-white conceptions, finding areas of agreement, reducing the sense of threat, and so on.

3. Helping to establish norms for rational interaction such as the desirability of mutually satisfying agreement, open communication, mutual respect, use of persuasion rather than coercion.

4. Helping to determine what kinds of solutions are possible. Thus, do the aspirations of the conflicting parties have to be changed or can the problem be redefined so that the different aspirations can both be realized?

5. Helping to make a workable agreement acceptable to the parties in conflict. This may entail efforts to change the factual or value premises of one or both parties, to establish the conditions under which retreat is possible without loss of face, to help focus discussion on a likely settlement, and so on.

6. Helping to make the negotiators and the agreement which is arrived at seem prestigious and attractive to interested audiences, especially the groups represented by the negotiators.

These are useful functions a mediator can perform to prevent strife, but how does this role get established and accepted? Elmore Jackson's (1952) survey of mediation in his book, *Meeting of Minds*, suggest that mediation is likely to develop when there are powerful third parties, such as a strong public, with an interest in preventing strife because of the damage it does to the community or because of the harm it does to the parties in conflict. The available evidence suggests that the mediation process is likely to be sought out or accepted willingly by parties in conflict when the process has become known as being impartial, non-coercive, the servant of the parties in conflict rather than other interested parties, and successful in preventing strife.
Interpersonal Conflict

I now turn to the experimental work by myself and my associates on interpersonal conflict. Since much of this work has been published, I shall not describe our methodology nor results in any detail. Our research has employed three different two-person games, in each of which it is possible for the players to have outcomes of mutual gain, mutual loss, or gain for one and loss for the other. (These games are described in the Appendix.) The question underlying our research is the question underlying this paper: namely, what determines whether people will resolve a situation of conflict in such a way so that there is mutual gain or not.

Our first answer is a self-evident one: **If people have a pre-existing cooperative orientation toward one another, they are likely to resolve a conflict of interest by a cooperative process, if they have a prior competitive orientation they are likely to resolve it by a competitive process. An individualistic orientation will lead to one or the other process as a function of other determinants.**

We have elicited the different orientation by a variety of procedures: (1) by the normative definitions of the situation that we have induced; (2) by the pay-off structures we have used; (3) by the beliefs about the other we have induced; and (4) by selecting people with given personality characteristics. We have also helped mold the course of interaction between players who were induced to have an initial individualistic orientation by: (5) the size of the problem confronting them; (6) the threat capabilities with which they were provided; (7) by the communication facilities and training they were given; (8) by the inspection procedures they were allowed; and (9) by the behavioral strategies they were exposed to from accomplices of the experimenter.

Normative definitions. In our first experimental work with the Prisoners Dilemma game many years ago, (Deutsch/1960), we induced different motivational
orientations by employing the prestige of the experimenter to define for the
subjects what the appropriate relationship would be for them to have with one
another. A cooperative relationship was induced by defining the other player
as a partner and by characterizing each player's objective as "You want to win
as much money as you can for yourself ... and you also want your partner to win
too." An individualistic orientation was elicited by instructions which stressed
mutual indifference to one another's fate as one pursued one's own objective:
"You're not out to help him and you're not out to beat him. You simply want to
win as much money as you can for yourself and you don't care what happens to him."
A competitive orientation was produced by statements such as: "Your motivation
should be to win as much money as you can for yourself and to do better than the
other person. You want to make rather than lose money but you also want to come
out ahead of the other person."

The results of this experiment are clear-cut. The mutually cooperative
orientation elicited highly predictable trusting and trustworthy behavior and
honest communication (when communication was permitted) which resulted in mutual
gain; the mutually competitive orientation led to suspicious and exploitative
behavior and no communication or hostile or misleading communication (when com-
munication was allowed) which resulted in mutual loss; the individualistic orienta-
tion generally led to results that were more or less similar to the competitive
orientation depending upon the adequacy of interpersonal communication.

This summer we have had adolescents from the New York City High Schools
play the game of "chicken" in our laboratory. We have adapted our Acme-Bolt
(Deutsch and Krauss, 1960, 1962) trucking game to this purpose. In our laboratory game of chicken, each of the two
players get paid a certain fee for taking his truck from a starting point to a
destination minus the cost of the trip, which is a function of how long the trip
takes. Both players must use the same road but they go in opposite directions and
a large section of the road is only one lane in width. The players can see the position of both trucks at all times. Each player can lock his truck into forward gear, if he so chooses, so that he can no longer stop or reverse his truck. That is, he can commit himself irreversibly to going forward. If he does so, his commitment is immediately made known to the other subject by a signalling device. If the trucks collide on the one lane section, the trial is over and each player is penalized the number of cents which is equal to the time spent since the beginning of the trial. The subjects play the game for 20 trials.

In an experiment that we have recently completed, (Deutsch and Lewicki, in preparation) the subjects played the game under either of two instructions: "chicken" instructions or "problem-solving" instructions. The "chicken" instructions identified the game as a game of "chicken" and the subjects were told that it separates people into two groups, "those who give in under pressure and those who do not." The "problem-solving" instructions identified the game as involving "social problem-solving" and the subjects were told that it separates people into two groups, "those who can arrive at a solution to a problem that will bring maximum benefits to both of the players, and those who can not work out this solution." In both conditions, the subjects were told that "it's important for you to earn as much money as you can and to lose as little as possible in the game." The subjects played for real money, in amounts which were not insignificant to them.

The results are striking. The "chicken" instructions resulted in substantial mutual loss for nine of ten pairs. The modal pair had somewhat more than ten collisions during the twenty trials. In contrast, the "problem-solving" instructions resulted in substantial mutual gain for all but three pairs, with the modal pair having less than four collisions during the twenty trials. I have
no doubt that we could intensify our instructions and produce even more marked differences.

The results of these experiments are clear: either a cooperative, problem-solving orientation to conflict resolution or a competitive struggle can be elicited by the normative context within which the conflict is placed by the experimenter. We have not investigated the normative assumptions about conflict resolution which people bring with them to the laboratory. However, although there is a bias toward a competitive orientation in games, it seems likely that they are cultural variations which may incline some people to define a conflict as a game of chicken and others as a mutual problem.

**Pay-off structure.** Robert Krauss (in press) has employed the Acme-Bolt trucking game to show that the pay-off structure of the game can lead to a cooperative process of conflict resolution. When, for example, subjects know that they will benefit economically if the other profits and suffer if the other has losses, they are more likely to develop a cooperative orientation than if they benefit from the other's losses and suffer if the other gains. His study has shown that a cooperative reward structure as compared with a competitive one produces less use of threat and aggression, more friendly attitudes, and more mutual gain. Similar results have been obtained in a study by Hornstein and myself (Hornstein and Deutsch, in preparation) using a different experimental game, called the "allocation game". In this game, subjects could allocate their effort among the production of three products: an individualistic product which was worth a certain amount no matter what the other player did; a cooperative product which was worth a small amount if the other player did not produce a matching product and a considerable larger amount if the other player did; and a competitive product which could be used to attack the other player and to obtain a certain amount of
money from him. In this experiment, we studied: the effects of having or not having
the cooperative alternative available; the effects of variations in the relative
strengths of the incentives for engaging in the different kinds of behavior; and
the effect of different inspection procedures for obtaining information about the
activities of the other person. There are many fascinating results to this study
but I shall limit myself to those that are relevant at this point.

First, it is evident that the availability of a means of cooperating not
only permits it but it also reduces the likelihood of competition. Moreover, our
results indicate that the availability of a means of cooperation reduces competitive
behavior disproportionately more than individualistic behavior. The results also
indicate that the pay-off values associated with the various forms of behavior very
much influences the likelihood of this selection: when a relatively low pay-off is
associated with competitive behavior, it is less likely to be selected. The kind
of behavior which is selected, however, is associated with other actions such as
an attack or the use of inspection procedures. Relatively high pay-offs for
cooperative behavior stimulates both cooperative behavior and the use of inspection
procedures which verifies and supports further cooperative behavior; relatively
high pay-offs for competitive behavior stimulates competitive behavior and attack
which verifies and supports further competitive behavior.

The induction of perceived similarity. In my discussion of the symptoms of
cooporative and competitive processes, I pointed out that a distinguishing symptom
is that cooperation leads to an accentuated perception of similarity in values
among cooperators while competition leads to an emphasis on differences and
oppositeness. It seems likely that the causal arrow can lead from the perception
of similarity or dissimilarity to a cooperative or competitive process as well as
vice versa. Krauss (in press), in the experiment to which I referred previously,
has demonstrated this to be the case. He had his subjects fill out an opinion inventory dealing with basic moral and political values and then, he gave them the inventory presumably filled out by the other person with whom they were to play the Acme-Bolt trucking game. However, they actually received an inventory filled out by the experimenter which was very similar or very dissimilar to the opinions the subject had expressed. It is evident that perceived similarity was more likely to evoke a cooperative process and perceived dissimilarity more likely to evoke a competitive process of conflict resolution.

In a somewhat different context, one of my former co-workers, James Farr, demonstrated that in the Prisoner's Dilemma game, two subjects were more likely to cooperate if they both had developed negative relations with a third person (a stooge who had been trained to be obnoxious). This was especially so if the disliked person could profit from the losses of either of the two players (see Deutsch, 1958). Joseph Margolin, a former student, has done a somewhat related study (see Deutsch, 1958), which indicates that a subject is likely to develop cooperative or competitive relations with another person depending upon whether or not this person has the same or opposite relationship with a third person that the subject has with that third person. Thus, if the subject is in a competitive or negative relationship with Person "A" and he sees that Person "B" is in a competitive or negative relationship with "A", the subject is likely to develop a cooperative relationship with "B".

**Personality characteristics.** In various of our studies we have found small but significant correlations between personality variables and the game playing behavior of the subjects. And like several other investigators, we have found that women are often more competitive than men. However, we have not systematically paired people with given personality characteristics in such a way as to develop any real understanding of what kinds of personality pairing are likely to lead to one or another process of conflict resolution.
In passing, I might note that Ravich, a psychiatrist, Bert Brown and myself (Ravich, Deutsch and Brown, 1965) have been investigating different forms of pathological conflict resolution processes in married couples. Married couples, who are in psychotherapy with Dr. Ravich, have been playing our Acme-Bolt bargaining game. Our experience with about 50 couples suggests that the stereotyped processes of dealing with conflict that characterize these troubled couples is reflected in the way they handle the conflict situation of the bargaining game. The various details of the game process -- whether or not they arrive at a profitable solution, how soon they arrive at it, who proposes it, how equally rewards are distributed, how the distribution is determined, how stable is the solution, who yields when there is a need to back up, and so forth -- seem to reflect their characteristic ways of dealing with marital conflict. Not only is the game of potential diagnostic value but it seems to have the therapeutic value of objectifying the process of conflict in such a way that many of the couples are enabled to view their daily conflicts in terms which have similar meaning because they are based on a similar imagery.

In the preceding pages, I have discussed some of the determinants of whether a cooperative or competitive orientation to conflict resolution will develop. Now, I shift focus slightly and consider what determines the course of interaction in a conflict situation between people who are individualistically oriented. I consider such factors as: problem size, threat capabilities, communication facilities, and skills, inspection procedures, and behavioral strategies.

**Problem size.** Roger Fisher (Fisher, 1964) in a brilliant paper entitled, "Fractionating Conflict", has pointed out that "issue control" may be as important as "arms control" in the management of conflict. His thesis is the familiar thesis
that small conflicts are easier to resolve than large ones. However, he also points out that the participants may have a choice in defining the conflict as a large one or small one. Conflict is enlarged by dealing with it as a conflict between large units rather than small units (e.g., as a conflict between two individuals of different races or as a racial conflict), as a conflict over a large substantive issue rather than a small one (e.g., over "being treated fairly" or "being treated unfairly at a particular occasion"), as a conflict over a principle rather than the application of a principle, as a conflict whose solution establishes large rather than small substantive or procedural precedents.

We (Deutsch, Canavan, and Brown; in preparation) have conducted a simple test of the proposition that small sized conflicts are easier to resolve than large sized conflicts. In the Acme-Bolt trucking game it is possible to vary the size of the one lane path. As one increases the length of the one lane path, the size of the conflict between the players increases; it becomes more of a handicap to wait and let the other player go through first. We ran an experiment in which the size of the one lane section of the 20 unit main path was set so as to be either 4 units, 10 units, or 18 units long. The results support the proposition quite strongly. The players in the "4 unit" conflict resolve their conflict with less deadlock and struggle, with less use of threat, and with greater mutual gain than do the players in the "10 unit" conflict; the players in the "10 unit" conflict are, in turn, more efficacious than those in the "18 unit" conflict. There is, however, considerable more variability in the outcomes of different pairs in the large sized conflict than in the two smaller ones. (I note that my statements of comparisons are based on the adjusted data which correct for the relative time advantages of the players in the smaller sized conflicts.)
Threat capabilities. Some of our experiments have been concerned with the effects of threat upon conflict resolution. There are many different questions that can be asked about threat: How does the likelihood that threats will be made vary with the absolute and relative threatening power of the parties in conflict? With the kind of relationship between the parties? What determines the comprehensibility and credibility of a threat and one's willingness to carry it through? Under what conditions will a threat be effective in controlling the behavior of the other, under what conditions will it increase conflict, under what conditions will it be irrelevant? And so on. Our research has dealt with only a very limited aspect of these questions.

In one set of experiments (Deutsch and Krauss, 1960 and 1962), we were concerned with the effects of giving the subjects an instrument that each could use at his own initiative in an attempt to intimidate the other. We made two basic assumptions. First, since the instrument was, so to speak, a low-calibre weapon it was likely to be used during the course of conflict (if the subjects were not cooperatively oriented to one another). Second, its use would make the conflict more difficult to resolve cooperatively because it would enhance the competitive interests of the players by introducing a contest over the right to intimidate which would turn the conflict into a competitive struggle for self-esteem. The results of our experiments are consistent with these assumptions: the subjects did use the weapons if they were available and their use made it more difficult for them to work out a cooperative solution to the conflict of interest confronting them.

An experiment by Hornstein (1965), using a different game and a different type of threat, suggests that an available threat is less likely to be used when subjects are equal in threat-power and their threat-power is either very high or
very low than if their threat-power is of middling intensity. His results help
to qualify our findings and suggest that the threats employed in the Deutsch-Krauss
experiments were of significant but not of devastating intensity. They also quite
strongly indicate that the use of threat does hamper the development of cooperative
agreement.

Communication facilities and training. In a number of experiments, with both
the Prisoners Dilemma game (Deutsch 1958 and 1960; Loomis, 1959) and the Acme-Bolt
Game (Deutsch and Krauss, 1962; Krauss and Deutsch,) we have studied the effects of
having or not having communication facilities. A consistent finding is that
cooperatively oriented pairs of subjects don't need such facilities to work out
effective agreements in such simple games and competitively-oriented subjects
can't use them effectively or with honest intent. It is also apparent that while
individualistically-oriented subjects may benefit from the opportunity to communi-
cate with one another, many do not know how to use the opportunity effectively.
They often restrict themselves to communicating their desire or their intent, with-
out indicating the complementing relationship between the behavior one desires from
the other and the behavior one intends toward the other.

Loomis (1959), using the Prisoners Dilemma game, has demonstrated that a
communication is likely to be effective in inducing cooperation the more completely
it contains all of the following basic elements: (1) a statement of expected
behavior from the other; (2) a statement of intended behavior toward the other;
(3) a statement of the sanctions that will be employed if one's cooperative
expectations are violated; and (4) a statement of the conditions under which the
other can return to "grace" after having violated cooperative expectations.

Krauss and Deutsch (in preparation) have similarly shown that subjects who
are tutored by the experimenter to make fair proposals ("a proposal which is
reasonable and acceptable both to yourself and to the other person—which is both fair to yourself and which you would be willing to accept if you were in her shoes”) are more able to overcome the deleterious effects of possessing weapons than those who are not indoctrinated into this social norm of "fairness" or "equity" as a basis for communication. It is of interest to note that both untutored and tutored communication seemed to be utilized more effectively by the subjects if it were allowed only after they had experienced a series of deadlocked trials than if communication were initiated prior to the experience of deadlock. The experience of deadlock appeared to serve as an incentive to use the communication opportunity effectively. However, it seems clear that drawing the lessons of experience explicitly helped the subjects to use them more aptly.

The effects of inspection procedures. Hornstein and I recently finished a study in which we studied the effects of different inspection procedures upon the development of cooperation in the allocation game. We compared "no inspection" with "periodic mandatory inspection", (inspection was made by the experimenter and announced to both players), "voluntary-symmetric inspection" (inspection could be initiated by either player for a small cost at any time), and "voluntary-symmetric inspection" (inspection could be initiated by only one of the players). The inspector, in all instances, was the experimenter and he gave precise and reliable information. Our hypothesis was that inspection would facilitate cooperation and inhibit competition because it would enable the players to reveal to one another their cooperative efforts and prevent them from concealing their competitive efforts. The results support the hypothesis. There was most competition, least cooperation, and the smallest joint pay-off in the "no inspection" condition. Also, it is evident that as the relative economic value of competitive activity increased, the requests for inspections decreased. The differences among the different forms of inspection are small and yield to no simple explanation
The effects of different behavior strategies. Leonard Solomon (1960), in his doctoral dissertation, studied the effects upon the subject's behavior in the Prisoners' Dilemma of three different behavioral strategies followed by the other subject who was serving as an accomplice of the experimenter: (1) an unconditionally benevolent strategy which required the accomplice to choose cooperatively no matter what the naive subject did; (2) a conditionally benevolent strategy which required the accomplice to match the subject's behavior; and (3) an unconditionally malevolent strategy which required the accomplice to make a competitive choice no matter what the subject did. Solomon's results indicated that the conditionally benevolent strategy produced most cooperation and most favorable attitudes toward the accomplice while neither the unconditionally benevolent nor unconditionally malevolent strategy induced much cooperation.

Recently, we used an extended form of the allocation game in which the subjects could on each trial engage in individualistic, cooperative, or altruistic behavior or they could produce aggressive weapons or defensive weapons, or they could attack or disarm. The behavior of the subjects were announced to one another after each trial. The game was played for sixty trials. We (Deutsch, Epstein and Canavan; in preparation), used this game to study the effects of a number of different behavioral strategies: (1) Turn the other cheek. The accomplice made a cooperative move on the first trial, an altruistic move on the second trial, and cooperative moves thereafter except that he would respond to attacks or threats by altruistic moves; (2) Reactive defensiveness. The accomplice made cooperative moves on the first three trials and reciprocated the subject's behavior thereafter except that he responded self-protectively rather than with counterthreats or counterattacks when the subject threatened or attacked. He also responded with cooperative moves if the other behaved defensively or disarmed; (3) Reactive hostility. The accomplice made a cooperative move on the first trial and there-
after responded threateningly to any noncooperative move and cooperatively to any cooperative or altruistic or disarm move. He counterattacked when attacked; (4) **Reformed Sinner** During the first 15 trials, the accomplice threatened or attacked on every trial; on the 16th trial, he disarmed. Thereafter he followed consistently a "turn the other cheek" strategy or a "reactive defensiveness" strategy.

Over a period of sixty trials, the results comparing the first three strategies indicate that the reactive hostility strategy produces the lowest joint outcomes and the lowest outcomes for both the subject and the accomplice; the reactive defensive strategy leads to the highest joint outcomes and the highest outcome for the accomplice; "turn the other cheek" yields the highest outcome for the subject. There is a sizeable discrepancy between the outcomes of the subject and the accomplice only in the "turn the other cheek" strategy condition.

It is of interest to note that the "turn the other cheek" strategy is considerably more effective if one has initially been a sinner. Shortly after his saintly transformation to "turn the other cheek", the accomplice does better, the joint outcomes are better, and the discrepancy in outcome between the subject and the accomplice is reduced as compared with the condition where the accomplice is a saint from start to finish. On the other hand, the sinner who reforms and adopts a reactive defensive strategy does not do so well as the other type of reformer nor does he do as well as the accomplice who follows a reactive defensive strategy all the way through.

These results suggest several conclusions: Neither a punitive nor a rewarding response to noncooperative behavior is most effective in eliciting mutually rewarding cooperation. The latter leads to exploitation unless it has been preceded by a convincing display of aggressive potential. The former makes it difficult to perceive one's cooperative intention as one is engaging in threatening
and aggressive behavior to deter noncooperation. On the other hand, a strategy which does not reciprocate hostility but nevertheless does not allow it to be rewarding seems to be effective in eliciting cooperative behavior so long as it is also generously responsive to the other's cooperative behavior.

These results bear tangentially on a problem which I have ignored so far in this paper: the problem of asymmetry in orientation between two parties in conflict. Suppose one person has a cooperative orientation and the other a competitive orientation to conflict resolution? It seems evident from our results and the results of other investigators (Solomon, 1960; Shure and Meeker, 1964) that a naive and blind good-will, which leads to an inflexible benevolence on the part of the cooperatively-oriented party, will often lead to exploitation by the competitively-oriented and will encourage the continuation of such exploitation. It is also apparent that a punitive strategy of reactive hostility is not effective.

But what do you do if you want to induce a competitor or even an enemy to cooperate? Elsewhere (Deutsch, 1964) I have outlined a strategy for producing change in an adversary. This strategy is similar to the strategy of reactive defensiveness which was so effective in inducing cooperation among our subjects. Its key notions are "firmness" and "friendliness": a firm resistance to efforts by the other to exploit and to gain an unwarranted competitive victory combined with a continuing, friendly, and generous willingness to cooperate to obtain mutual gain.
Conclusions and Implications

I started this paper with the assumption that one could not only speak in the same terms about conflict at different levels -- intrapsychic, interpersonal, intergroup, and international -- but that it is useful to do so. My hunch was that one could obtain some insights into intrapsychic conflict by studying interpersonal conflict, that the understanding of international conflict would be fostered by an examination of intergroup conflict, and so on. This hunch, which grew out of extensive readings in the different disciplines dealing with the various forms of conflict, assumes that there are some general principles which can be used to characterize conflict and the processes of conflict resolution which are applicable in a wide variety of contexts.

In the course of my discussion of different types of conflict, I have attempted to list some general propositions relating to the restricted query of this paper: namely, what are the determinants which lead to a cooperative rather than competitive process of conflict resolution? It is well to recognize that my query has been restricted and that I have not dealt with many important aspects of conflict, especially the strategy and tactics of waging conflict. My concern has been with the conditions leading to mutual agreement and mutual satisfaction rather than with the conditions leading to one-sided victory.

My major points may be summarized as follows:

1. There are two major types of conflict resolution processes: cooperative and competitive. Although neither type is found in its pure form, without the presence of the other, one type or another will usually predominate and will give rise to characteristic manifestations in communication, attitudes, perception, task orientation and outcomes. Each process tends to be self-confirming and self-perpetuating so that each tends to persist despite a change in its originating conditions. This is so because the communication patterns, attitudes, perception,
task orientation, and outcomes which are evoked by a given process tend to elicit the very same process which evokes them. Hence, one way of eliciting a cooperative process is to attempt to induce the communication patterns, attitudes, and so forth which help to support such a process.

2. There are several major, interrelated types of factors which help to determine which type of conflict resolution process will dominate:

(a) The size (scope, importance, centrality, etc.) and rigidity of the issue in conflict: the greater the size and rigidity the more difficult it will be to resolve cooperatively. Many determinants of conflict size could be listed. For example, an issue which bears upon self-esteem or change in power or status is likely to be more important than an issue which does not. Illegitimate threat or attempts to coerce are likely to increase the size of the conflict. Similarly, some determinants of issue rigidity can be identified. Thus, an issue is more rigid if it permits no substitute satisfactions and there is only enough for one party. "Victory over the other" is a rigid issue.

(b) The relative strength and salience of the existing cooperative and competitive links between the conflicting parties: the stronger and more salient the cooperative bonds are the less likely it is that they will engage in a competitive process. The total strength of the cooperative bonds would be a function of the number of bonds and the strength or importance of each bond. There are obviously many different types of bonds that could be enumerated: superordinate goals, mutually facilitating interests, common allegiances and values, linkage to a common community, etc.

It is evident that the size of conflict and relative strength of cooperative bonds must be considered jointly in making predictions. Conflict is likely to be resolved cooperatively in situations where the parties have less at stake in a
conflict than they have in the ongoing relationship between them or in the community which has generated rules and procedures for regulating conflict.

(c) The expectation that the outcome of one process or another will be more unsatisfactory or less valuable than the other. Many factor influencing such an expectation could be listed: the prior experience of success and failure with the two processes, the relative power of the parties involved, the skills the parties have in each of the two processes, etc.

(d) The internal cohesiveness of each of the parties in conflict: cooperative conflict resolution is less likely when either of the parties are characterized by internal dissension or factionalism. Internal conflict may stimulate external conflict as a tactic to increase cohesiveness, or it may lead to instability making it difficult to work out a durable agreement, or it may tempt the other side to take advantage of internal weakness.

(e) The attitudes, strength, and resources of interested and relevant third parties. For example, a conflict is more likely to be resolved cooperatively if powerful-prestigious third parties encourage such a resolution and help to provide resources (institutions, facilities, personnel, social norms and procedures) to expedite discovery of a mutually satisfactory solution.
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