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# Bargaining and Influence in Conflict Situations

## Abstract

[Excerpt] This chapter examines bargaining as an influence process through which actors attempt to resolve a social conflict. Conflict occurs when two or more interdependent actors have incompatible preferences and perceive or anticipate resistance from each other (Blalock 1989; Kriesberg 1982). Bargaining is a basic form of goal-directed action that involves both intentions to influence and efforts by each actor to carry out these intentions. Tactics are verbal and/or nonverbal actions designed to maneuver oneself into a favorable position vis-a-vis another or to reach some accommodation. Our treatment of bargaining subsumes the concept of "negotiation" (see Morley and Stephenson 1977).

This chapter is organized around a conceptual framework that distinguishes basic types of bargaining contexts. We begin by introducing the framework and then present an overview of and analyze theoretical and empirical work on each type of bargaining context.

## Keywords

bargaining, conflict, influence, preferences

## Disciplines

Human Resources Management | Labor Relations | Organizational Behavior and Theory

## Comments

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## CHAPTER 9

# Bargaining and Influence in Conflict Situations

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Bargaining subsumes a diverse range of phenomena approached by a variety of academic disciplines. Economists have studied how labor-management bargaining affects wage rates (Chamberlain 1955; Dunlop 1950; Young 1975; Zeuthen 1930); mathematicians and game theorists have tried to find predictive (or prescriptive) mathematical solutions to explain how actors will "split the difference" when they bargain (Harsanyi 1977; Luce and Raiffa 1957); political scientists have studied international alliances, the onset of wars, and deterrence processes (Morgan 1977; Schelling 1960); and social psychologists have examined the influence tactics of actors in conflict and bargaining (Deutsch 1969; Pruitt 1981; Rubin and Brown 1975). Sociologists, only recently interested in bargaining, bring an emphasis on structure (power) and process (tactics) in bargaining (e.g., Bacharach and Lawler 1981; Cook and Emerson 1978; Pat-chen 1988; Strauss 1978).

This chapter examines bargaining as an influence process through which actors attempt to resolve a social conflict. Conflict occurs when two or more interdependent actors have incompatible preferences and perceive or anticipate resistance from each other (Blalock 1989; Kriesberg 1982). Bargaining is a basic form of goal-directed action that involves both intentions to influence and efforts by each actor to carry out these intentions. Tactics are verbal and/or nonverbal actions designed to maneuver oneself into a favorable position vis-a-vis another or to reach some accommodation. Our treatment of bargaining subsumes the concept of "negotiation" (see Morley and Stephenson 1977).<sup>1</sup>

This chapter focuses on social psychological theory and research on bargaining and adopts a sociological perspective. We attempt a conceptual synthesis rather than a thorough review, and thus selectively emphasize fundamental theoretical ideas and classic empirical work. Our sociological perspective is captured by five basic assumptions. (1) Conflict has a social structural foundation, meaning that actors in a bargaining situation tend to occupy social positions with different interests. Conflicts are likely to emerge time and time again, regardless of who occupies these positions, as long as the social structure remains unchanged (Lawler 1992). (2) Incentives, utilities, or payoffs that stimulate bargaining are embedded in social structures allocating power and status across social positions and roles. Some structures create incentives for actors to accommodate and some create incentives to gain advantage. (3) Actors are at best "boundedly rational," because they not only face substantial ambiguity and uncertainty about each other's intentions but also have incentives to withhold information, bluff, and otherwise manipulate each other's cognitions and behavior. (4) Social interaction in the bargaining process is "tactical action." Tactics are time-bound patterns of action that can be directed at various goals, such as to punish the other, test the other's resolve, and gain information (Lawler 1992; Pruitt 1981; Strauss 1978). Actors imperfectly assemble their tactics into strategies. (5) The bargaining process consists of tactical-countertactical patterns of action that produce emergent effects on the results of bargaining (Bacharach and Lawler 1981). The social structure shapes actors' definitions of the bargaining context, but

the bargaining process takes on a "life of its own" once initiated.

Bargaining tends to occur under two conditions. First, two or more actors (individuals, groups, organizations) have a conflict of interest, manifest in expected or actual negative acts toward one another (Blalock 1989). The negative acts may range from snide comments among friends to military force among nations. Second, actors wish to influence each other, either to get their own way or, failing this, to reach a mutual accommodation. Getting their own way could involve what movie to attend on a Friday night or how member nations are to interpret a rule of the European Economic Community. Mutual accommodation could involve opting for everybody's second choice among movie options or interpreting a given rule of the European Economic Community so that all members suffer an equal decrement in national autonomy. Structurally, bargaining presupposes a relationship in which actors are at least minimally interdependent on one another. If interdependence between actors is so low that each can readily avoid the other, or if they prefer other relationships anyway, a conflict will likely trigger a breakdown of the relationship prior to any bargaining. The structure of interdependence produces sufficient incentives to bargain when the costs of continuing the conflict are greater than the costs to actors of compromise agreements involving something less than their most preferred solution (Raiffa 1982).

When bargaining occurs, the mutual efforts of actors to influence one another other results in a joint (collective) product (Bacharach and Lawler 1981; Walton and McKersie 1965). One aspect of this joint product is simply whether conflict resolution (agreement) occurs or not; another is the exact nature of the agreement reached. These are distinguishable dependent variables that receive varied emphasis in the bargaining literature. In game theoretical work, for example, the likelihood of agreement typically is assumed to be 100 percent (given rational actors) and the focus is the nature of the agreement (Luce and Raiffa 1957; Rapoport 1966). In social psychological and sociological work, conflict resolution is assumed to be more highly prob-

lematic, so greater attention is given to the structural and processual conditions likely to promote or inhibit agreements (Bacharach and Lawler 1981; Blalock 1989; Cook and Emerson 1978; Dahrendorf 1959; Lawler 1992; Rubin and Brown 1975; Strauss 1978).

This chapter is organized around a conceptual framework that distinguishes basic types of bargaining contexts. We begin by introducing the framework and then present an overview of and analyze theoretical and empirical work on each type of bargaining context.

## CONCEPTUAL FRAMEWORK

Conceptualizing the varied contexts of bargaining is useful, heuristically, to understand the structural constraints and opportunities in different bargaining settings. Two contrasts form the foundation for a fourfold typology of bargaining contexts (see Bacharach and Lawler 1980 for an earlier version): tacit versus explicit, and distributive versus integrative bargaining. The first refers to the nature and use of verbal communication between actors (Schelling 1960) and the second to the potential for actors to increase their joint benefit from conflict resolution (Pruitt 1981; Walton and McKersie 1965). Our theoretical strategy is to abstract the prototypical features of diverse bargaining contexts by sharpening and interrelating these contrasts.<sup>2</sup>

### Tacit versus Explicit Bargaining

Schelling (1960) first introduced and developed the distinction between tacit and explicit bargaining. Tacit bargaining occurs when interdependent actors perceive a conflict and anticipate each other's behavior without open communication. The moves and countermoves tend to be nonverbal and to occur at a distance, because the social structure obstructs opportunities to communicate, makes explicit bargaining normatively inappropriate, or fosters too much distrust for actors to use existing channels of communication to deal with conflict openly and constructively.

The task actors face in *tacit* bargaining depends on the priority they give to the cooperative or competitive sides of the mixed-motive dilemma. If cooperation is stressed, the dilemma is how to reach a jointly beneficial result without overtly communicating. For example, two shoppers who become separated from one another in a busy mall must tacitly coordinate their efforts to reunite (Schelling 1960). If competition is emphasized, tacit bargaining involves tactical efforts to outmaneuver the other and achieve an advantage, or at least avoid a disadvantage. Examples include a nation that preemptively occupies a strategic location in an international conflict, a motorist who swerves in front of another to be the first through an intersection, and a sales manager who proposes an organizational policy that favors sales over production.

*Explicit* bargaining differs from tacit bargaining in three primary respects (Bacharach and Lawler 1980, 108-116). First, actors acknowledge a conflict and consent to bargain. Second, lines of communication are direct, verbal, and open enough to permit a series of offers and counteroffers, that is, provisional compromises that are not fixed until both agree. Third, the actors perceive a potential for compromise—solutions that give each party benefits greater than those derived from nonagreement. The task is to converge on an explicit and often formal agreement. These three properties of explicit bargaining contexts are manifest in international peace treaties, corporate mergers, labor-management wage negotiations, prenuptial agreements, and even child custody settlements.

### Distributive versus Integrative Bargaining

The contrast between distributive and integrative bargaining concerns the nature of the issues under negotiation. An issue is defined as a single dimension with a range of possible solutions that produce payoffs for each actor. The range of possible solutions includes a subset referred to as the "contract zone," which provides each actor payoffs better than nonagreement and constitutes the incentive to bargain in the first place. The ends of the contract zone are anchored by each actor's "resistance

points," such as the highest wage an organization will pay versus the lowest wage a union will accept (Walton and McKersie 1965).

In their classic statement, Walton and McKersie (1965) define *distributive bargaining* in terms of issues that involve a *fixed* amount of benefit to divide and *integrative bargaining* in terms of *variable-sum* issues. In distributive bargaining over wages, for example, an increase in wage rates for labor entails a gain for labor and a cost to management. This zero-sum aspect of the issue exerts pressure toward competition and hostility, whereas the opportunity costs associated with nonagreement exert pressure toward cooperation and conciliation (Bacharach and Lawler 1981; Luce and Raiffa 1957; Walton and McKersie 1965). These competing pressures make the overall situation a classic mixed-motive one; that is both incentives to compete and incentives to cooperate are present. Each actor wants an agreement (the incentive to cooperate), but each also wants an agreement giving them as much of the fixed benefit as possible (the incentive to compete).

In integrative bargaining, some agreements produce more total benefit than others, and there is therefore a potential for joint problem solving. The prototypical integrative bargaining context is one in which there are multiple issues under negotiation and bargainers assign complementary priorities to them. Take the example of a union and management negotiating a wage and fringe benefits package. If the union gives higher priority to wages than fringe benefits while management gives higher priority to fringe benefits, then separate "split-the-difference" solutions on each issue produce less benefit for each party than trading off a larger wage increase for a less generous fringe benefits package. Integrative bargaining contexts contain underlying compatible interests or goals that enable actors to develop solutions that increase their joint benefit beyond what "split-difference agreements" would provide (Pruitt 1981; Walton and McKersie 1965).

Bargainers typically do not have perfect information about the other's payoffs and priorities, so they often approach integrative contexts as if the

issues were distributive (Neale and Bazerman 1991). For integrative issues to promote conflict resolution, the actors must perceive the structural conditions that create an underlying common interest. Thus, research on integrative bargaining focuses on the conditions giving rise to such perceptions (Neale and Bazerman 1991). The task in integrative bargaining is for actors to discover how to integrate their interests by, for example, exchanging information about their preferences (e.g., Pruitt 1981).

### A Typology

Cross-classifying tacit-explicit and distributive-integrative dimensions yields a two-by-two typology of bargaining contexts (Bacharach and Lawler 1980). This typology is important for a number of reasons. It captures some key differences of focus across different theoretical traditions in sociology. Symbolic interactionist theories of identity and "negotiated order" analyze the subtle ways actors develop complementary, mutually shared self-other definitions, and this implies a concern with tacit-integrative bargaining (Strauss 1978). Social exchange theories of power analyze how structural power positions affect bargaining process and outcomes, focusing primarily on explicit-distributive bargaining (Bacharach and Lawler 1981; Cook and Emerson 1978; Heckathorn 1983; Lawler 1992; Markovsky, Wilier, and Patton 1988).<sup>3</sup> Economic models also emphasize explicit-distributive contexts (e.g., Chamberlin 1955; Zeuthen 1930). Cognitive theories focus on explicit-integrative bargaining and analyze how decision heuristics and biases shape actors' definitions of and response to issues and payoff structures (Neale and Bazerman 1991; Pruitt 1981). Finally, game theories of strategic interaction in choice matrices reveal principles of special relevance to tacit-distributive bargaining (Harsanyi 1977; Luce and Raiffa 1957; Rapoport 1966).<sup>4</sup>

The typology also has implications for the type of setting—experimental or natural—appropriate to test or apply a theory. A theory directed at explicit-distributive bargaining would require a

somewhat different context than one directed at explicit-integrative or tacit-distributive bargaining. In fact, different research traditions tend to use different experimental settings tied to the particular conditions required for a theoretical approach, but little effort has been made to conceptualize these different settings abstractly. We contend that the different experimental settings found in the bargaining literature create distinct social contexts that correspond to one of the above types and that these represent unrecognized and unspecified assumptions about social context implied by various research traditions.

A similar point is made by Stryker (1977), who suggests more generally that social psychological researchers are not sensitive enough to the implicit social structures and definitions of the situation they create in the laboratory. One implication for bargaining is that a matrix game is likely to be a different social context than other experimental games, therefore creating different definitions of the situation. In research using matrix games, choices are dichotomous and made simultaneously without verbal communication, which reflects major features of a tacit-distributive context. In a buyer-seller game (bilateral monopoly), actors have a wide range of possible compromise solutions and can make offers and counteroffers across a number of bargaining rounds, which reflects major features of explicit-distributive bargaining. Such contexts are likely to foster different definitions of the situation and lead to different kinds of tactical action (Morley and Stephenson 1977; Nemeth 1970; Stryker 1977).

Of the four types of bargaining, tacit-distributive bargaining is the most conflictual: there are fundamental incompatibilities in actors' goals; there are few viable compromise solutions; and tactical options are highly constrained. Explicit-distributive bargaining conforms to most common-sense conceptions of bargaining. The bargaining is mutually recognized, the issues involve a fixed sum, and a wide range of possible solutions or compromises allow an offer-counteroffer sequence. A wider range of solutions expands the range of tactical options (e.g., concession patterns).

In tacit-integrative bargaining, actors have underlying compatible goals, a variable sum issue, and constraints on their verbal communication that limit tactical options. They coordinate their behavior without appearing to negotiate or having to acknowledge the conflict or define the relationship in bargaining terms. Much of the bargaining in organizations takes this subtle, informal, and cooperative form (Bacharach and Lawler 1980). Explicit-integrative bargaining, in contrast, combines a mutually acknowledged conflict with underlying common interests and a problem-solving approach. There are a range of possible issues and solutions from which actors overtly construct integrative solutions that enhance the joint sum of benefits. In the following sections, we subsume disparate research traditions under the four types of bargaining context.

#### TACIT-DISTRIBUTIVE BARGAINING

We argue that social psychological research on matrix games essentially involves a tacit-distributive context. The standard matrix game used in research consists of two actors, who may choose to compete or cooperate, and a payoff structure (the matrix). Each actor's payoffs are contingent on both his/her own and the other's choice (Rapoport 1966); the contingent nature of the payoffs is the source of their interdependence. In addition, communication opportunities are limited, and the meaning of concession and compromise is unclear in these settings, which gives the issue a "win-lose" appearance (Boyle and Lawler 1991; Nemeth 1972). Actors do not necessarily define their action as bargaining, and conflict resolution involves implicit coordination.

It is important to emphasize that matrix games have been used as both generalized analytic devices and concrete research settings. As analytic devices, they provide insightful, fundamental ideas about the logic of conflict underlying all four types of bargaining context (e.g., Hamburger 1979; Rapoport 1966). In this section, we deal only with their use as experimental research settings (see Pruitt 1981; Rubin and Brown 1975 for extensive reviews).

Of innumerable types of choice matrices (e.g., Hamburger 1979), two have been particularly prominent in research by social psychologists—the prisoner's dilemma and chicken games. We use these to examine the dynamics of tacit-distributive contexts.

Abstract examples of a prisoner dilemma and chicken payoff structures are shown in Figure 9.1. Assuming that each actor wants to maximize his/her own payoff and is making simultaneous choices to cooperate or compete, each matrix creates a different problem for actors. In the prisoner's dilemma, each individual has an incentive to choose the competitive choice, because he/she receives more from competition than from cooperation regardless of what the other person does—in Figure 9.1, actor A receives ten instead of three (if B cooperates) and zero instead of minus five units of payoff (if B competes). This is called a "dominant strategy," a choice that gives an actor more payoff regardless of what the other does (Rapoport 1966). As a dominant strategy, competition is the rational choice for each individual. However, if both actors adopt this choice in a prisoner's dilemma, the result is that they get less than they would if they both cooperated (see chapter 12 for further discussion of this paradox). Furthermore, once they start choosing competitive lines of behavior, it is quite difficult for them to arrive at a tacit agreement to cooperate mutually, because neither will trust the other to keep such a tacit agreement. Conflict resolution is quite difficult to accomplish in a prisoner's dilemma.

A chicken setting does not contain a dominant strategy, as the example in Figure 9.1 illustrates. Actor A gets more from competition only if the other cooperates (ten versus three units of payoff); if the other competes, A gets more from cooperating rather than competing (zero versus minus five units of payoff). In addition, if both actors adopt the competitive choice, each receives his/her *worst* payoff; therefore, the payoff structure involves stronger incentives to resolve the conflict than in a prisoner's dilemma. Note that in a prisoner dilemma structure, the payoff from mutual competition is still better than the payoff from cooperating while the other competes.

## PRISONER'S DILEMMA

		ACTOR A	
		Cooperate	Compete
ACTOR B	Cooperate	3 3	10 -5
	Compete	-5 10	0 0

## CHICKEN STRUCTURE

		ACTOR A	
		Cooperate	Compete
ACTOR B	Cooperate	3 3	10 0
	Compete	0 10	-5 -5

**FIGURE 9.1** Prisoner's dilemma and chicken game matrices. Numbers in each cell are units of payoff resulting from the conjoint choices of each actor. The numbers in the upper right positions are A's payoffs and those below are B's payoffs.

An arms race between two nations typically involves a prisoner's dilemma structure. The cooperative choice for each is to disarm; the competitive choice to arm. In the arms race, the worst result for each actor occurs if they cooperate (disarm) while the other competes (arm). Continuing to compete (arm) is better than risking unreciprocated disarmament. Given the underlying prisoner's dilemma structure, arms races are difficult to stop. However, they sometimes continue for long periods of time without producing actual hostilities, because the decision to start or not start a war is embedded in a chicken structure. This is true if the nations suffer their *worst* payoffs when both choose mutual competition (war). Overall, chicken structures should produce more cooperative action, whatever its specific form, than a prisoner's dilemma structure. Classic comparisons of prisoner's dilemma and chicken structures by Rapoport and Chamah (1965) support this general conclusion.

Competition is clearly and unequivocally the rational choice in a single-play (one choice or one trial) prisoner's dilemma. Empirical research confirms that a large proportion of persons in an experimentally created, one-trial prisoner's dilemma

choose the competitive option (Murnighan and Roth 1978). Repeated (iterative) prisoner dilemmas are more interesting, however, because most conflicts occur in continuing social relationships. Competition typically remains the "rational" choice (i.e., dominant strategy) in ongoing relations of a prisoner's dilemma form, but theorists such as Luce and Raiffa (1957) and Axelrod (1984) suggest that over time actors develop tacit agreements to cooperate, thereby avoiding the costs of continued mutual competition. In an ongoing relationship, choices at one point have as one purpose influencing the subsequent or later choices of the other.

However, research suggests while rates of cooperation may increase with repeated play over time, the rate of cooperation does not approach 100 percent; in fact, there is often a higher rate of competitive than cooperative behavior at the end of studies with one hundred to two hundred repeated plays of the same payoff structure (Gallo and McClintock 1965; Nemeth 1970; Rapoport and Chamah 1965). An interesting and important reason is that parties often have knowledge of when the game ends, which produces an infinite regress (Murnighan and Roth 1978; Rapoport 1966). If on the last

trial there is no chance of influencing future behavior, both realize the competitive choice is most profitable, as in a one-choice or one-trial game. As long as the outcome of this last trial is known, each actor also knows he/she cannot influence future behavior on the *next-to-last* trial, which suggests a competitive choice on that trial as well. Since the outcome of the second-to-last trial is now known, each actor anticipates that his/her choice on the *third-to-last trial* also cannot influence future trials, and so on, until both are led, theoretically, to choose competitively on each and every trial (Rapoport 1966). In support, Murnighan and Roth (1978) found that parties are more cooperative if there is a high probability the game will continue.

### The Opponent's Strategy

One of the major topics of research—the use of particular strategies to induce more cooperation by the other—results from the fact that cooperation doesn't emerge naturally in a prisoner's dilemma. A two-by-two matrix (two actors, two choice options) allows two fundamental strategies with a number of variants: (1) an unconditional strategy, involving consistent cooperation or competition, not contingent on the opponent's behavior; and (2) a conditional strategy, involving competition or cooperation contingent on the opponent's behavior. Early research on the prisoner's dilemma indicated that conditional strategies of one sort or another produce more cooperation than unconditional cooperation or competition (e.g., Oskamp 1971; Sermat 1964; Solomon 1960). A conditional strategy is relatively successful because it rewards the other for cooperating and retaliates in response to competition. Unconditional competition engenders a "lock-in" of mutual conflict, while unconditional cooperation produces exploitation of those who use it (e.g., Solomon 1960).

Applied to a chicken structure, however, unconditional competition puts the opponent in the bind of accepting mutual high costs or lower costs that allow the other to do better. In an interesting study, Sermat (1964) observed that in a chicken game a 100 percent competitive strategy (i.e., com-

petition on all trials) was more effective in eliciting cooperation than a 100 percent (unconditional) cooperative strategy. In a subsequent study, Sermat (1967) showed that a chicken structure, compared to a prisoner's dilemma, makes actors more responsive to the opponent. In one condition, subjects were told their opponent could freely play the game; in a second condition they (knowingly) faced a machine with a preprogrammed strategy. In the prisoner's dilemma, the subjects' rate of cooperation was unaffected by the kind of opponent, but in the chicken structure the type of opponent made a significant difference. When facing an opponent choosing competition 100 percent of the time, subjects knowingly interacting with the machine made more cooperative choices than those interacting with the "freely playing" opponent. One interpretation is that for reasons of face subjects became more concerned with preventing the other from gaining an advantage when interacting with a real other.

Most research indicates overall that a tit-for-tat strategy—reciprocating the choices of the other—produces the greatest cooperation by an opponent (Marinoff 1992; Oskamp 1971; Rapoport and Chammah 1965; Wilson 1971). In a highly influential analysis of strategies, Axelrod (1984) asked scholars of bargaining to submit strategies for a series of computer tournaments using a prisoner's dilemma. Many of these strategies were highly complex variants of conditional cooperation. The results showed that the best strategy was a simple tit-for-tat one involving a cooperative choice on the first trial and reciprocation of the opponent's last choice on all subsequent trials. This strategy did better than or as well as any other strategy entered in the tournaments (Axelrod 1984). Axelrod explains the success of tit for tat as due to the fact that it never provokes an opponent into competition yet cannot be taken advantage of, because it always reciprocates the opponent's last move and therefore punishes unprovoked competition. Because it is a simple strategy, tit for tat is easily recognized and adapted to by others (Axelrod 1984).

The tit-for-tat strategy also has several important limitations. First, as Axelrod himself points

out, in a multiactor setting tit for tat needs other cooperators. A completely hostile environment, where everyone chooses competitively all of the time, will not be affected by the tit-for-tat strategy. In fact, there is evidence that tit for tat is not a very robust strategy if any of Axelrod's assumptions are relaxed (Hirshleifer and Coll 1988). Second, one party may not wish to "learn" to be cooperative, or as Blalock (1989) observes, one party may detest the other and wish him/her dead. Third, tit for tat may create competitive deadlocks. If the first cooperative gesture is not reciprocated, it will produce an impasse or lock-in of mutual competition (Axelrod 1984). Overall, a tit-for-tat strategy may be useful only to prevent a lock-in at mutual competition.

Axelrod's work is directed solely at a prisoner's dilemma, but Patchen (1987) suggests two reasons why a tit-for-tat strategy should be even more effective in a chicken structure. First, B's knowledge that A will reciprocate competition effectively removes B's temptation to compete, because doing so would result in B receiving his/her lowest payoff. Second, since B does not expect A to compete, B has little incentive to try to be the first to compete. Consistent with our earlier discussion, the chicken structure has more built-in push toward mutual cooperation, and a tit-for-tat strategy should capitalize on this.<sup>5</sup>

### Conditions for Cooperation

A tit-for-tat strategy should induce an "expectation of cooperation" by the other, which can be interpreted in terms of Pruitt and Kimmel's (1977) goals/expectations theory of cooperation. They identify two conditions that foster the development of mutual cooperation: (1) each actor adopts a goal of establishing or maintaining mutual cooperation; and (2) each expects the other to engage in cooperation in response to his/her cooperation. Goals of cooperation ostensibly emerge if people take a longer-term view of the relationship, perceive that they are highly dependent on the other, and believe each other are not likely to cooperate unilaterally. In general, a chicken structure should be more likely

than a prisoner's dilemma to produce a goal of mutual cooperation, simply because mutual competition produces the worst payoffs. Mutual competition in a prisoner's dilemma may produce a goal of mutual cooperation, but acting on that goal is more difficult because to reach it actors have to risk receiving their worst possible payoffs, those from cooperating when the other competes. This is the problem Axelrod's tit-for-tat strategy addresses.

However, Axelrod's (1984) solution to the prisoner's dilemma neglects an important implication of the goal criterion—that each actor perceives the other's cooperative behavior as reflecting a goal of mutual cooperation. A pattern of mutual cooperation is likely to be unstable unless each actor comes to believe that the other also has a goal of mutual cooperation. This is important to "trust," a problem that is particularly severe when actors establish a lock-in of mutual competition.

Such an impasse might be broken by applying Osgood's (1962) idea of graduated and reciprocated initiatives in tension reduction (GRIT strategy) (Lindsfold 1978). Osgood proposes that if one actor makes a series of small, unilateral gestures without an expectation of immediate reciprocity, the other will come to reciprocate conciliatory behavior. A GRIT strategy goes beyond tit for tat by making a unilateral switch to cooperation in the context of an extended pattern of mutual competition. Along with such a switch, the strategy involves verbal affirmations of conciliatory intent. Presumably, such a strategy promotes trust, or expectations of cooperation (Pruitt 1981), and treats a problem that cannot be addressed by Axelrod's tit-for-tat strategy.

Several studies have explored the effectiveness of GRIT strategy at eliciting cooperation. Lindsfold and Collins (1978) report that GRIT elicited more cooperation than tit for tat and a 50 percent cooperation control condition. Furthermore, Lindsfold (1978) analyzed GRIT's effectiveness against opponents classified as either cooperators or competitors and found that it was equally effective with both. Overall, it appears that unilateral gestures are potentially effective to resolve an impasse in tacit-distributive bargaining, but these initiatives must

meet certain conditions or users risk exploitation (see Boyle and Lawler 1991; Lindskold 1978).

To conclude, in tacit-distributive bargaining, social structures create incompatible goals and limit the degree to which actors are able or willing to communicate with each other overtly and explicitly about the conflict. Each independently and simultaneously pursues his/her own interests and adopts cooperative or competitive lines of action. The choices of action are based on incentives created and maintained by the social structure, and individuals' choices produce collective results that are often unintended. Avoiding a mutually destructive pattern of mutual conflict and reaching mutual cooperation requires tacit coordination. As a whole: (1) chicken structures are more likely to produce such coordination than prisoner's dilemma structures; (2) tit for tat is the most promising interpersonal strategy for promoting cooperation by others; and (3) unilateral initiatives, including noncontingent cooperation, can mitigate conflict when a lock-in of mutual competition occurs.

### TACIT-INTEGRATIVE BARGAINING

In tacit-integrative bargaining, actors do not acknowledge a conflict but can coordinate their behavior because of underlying common interests. In many instances, the structure and norms of the relation or the larger group discourage or even prohibit the actors from acknowledging the conflict. A perception of common interest means that actors have a "dual concern" for self's and other's outcomes (Blake and Mouton 1979; Pruitt 1983).

Tacit-integrative, as opposed to tacit-distributive, contexts inherently satisfy one of the conditions for cooperation identified by Pruitt's goals/expectations theory—each actor already has a goal of mutual cooperation. The dilemma actors face is that they don't know whether joint benefit is a goal for the other, making trust a problem. Actors can't be certain, for example, that they define their relationship or the issues at hand similarly, and these sort of judgments require significant "cognitive work."

Three specific types of tacit-integrative settings can be distinguished: (1) actors are unable to

communicate either verbally or nonverbally (i.e., they are completely out of contact); (2) actors are unable to communicate verbally, but they can observe and interpret each other's behavior; (3) actors communicate verbally and nonverbally but fail to (or cannot) talk about the underlying conflict or disagreement. Structural constraints on actors' patterns or forms of communication could be due to geographical distance, cultural barriers (e.g., language), different knowledge bases (e.g., training, expertise), or divergent definitions of the situation based on positions in a larger structure (e.g., status, authority). Related constraints on their propensity to communicate about the conflict could be based on interpersonal distrust or collective norms that discourage definitions of group relations as bargaining. Tacit-integrative bargaining is particularly common in informal organizations and groups because it serves to emphasize collective purposes, keep conflict latent, and enable people with conflicting interests to "get the work done" in relative harmony.

There is no systematic, cumulative body of theory and research on tacit-integrative bargaining contexts, although instances of such bargaining are common, everyday experiences in organizations (Bacharach and Lawler 1980). One can nevertheless extrapolate from some tacit-distributive research, because the "solutions" for tacit-integrative bargaining are likely to be the most cooperatively-oriented ones in tacit-distributive bargaining. In particular, unilateral gestures or "testing the waters" (Ward 1989) should be a prime way for actors in tacit-integrative bargaining to communicate and affirm their goals of mutual accommodation. In a tacit-integrative context, unconditional (100 percent) cooperation by one actor should generate reciprocal cooperation without the safeguards against exploitation needed in tacit-distributive contexts (Axelrod 1984; Lindskold 1978; Osgood 1962).

Schelling's (1960) analysis of the role of "prominent" solutions adds to our understanding of conflict resolution in tacit-integrative contexts. A prominent solution is conspicuous in some way, so that both actors independently conclude that it is the most likely solution (Pruitt 1981; Schelling

1960). Solutions such as midpoints of issue continua or equal trades of complementary benefits often have prominence. Actors arrive at prominent solutions by taking the other's role, so familiarity with the other actor or the situation increases the success of settling on a prominent solution. Available research suggests, for example, that prominence may stem from perceptual salience (e.g., size, centrality, order), normative standards (e.g., distributive justice), or interpretation of the other's likely intentions (Murnighan 1991; Pruitt 1981). Actors also may converge on a single solution, even without much knowledge of the other or any capability to communicate.

It is important to emphasize that a prominent solution channels behavior only to the extent that it produces shared expectations perceived as shared by the actors themselves. Where actors cannot verbally or nonverbally communicate, the expectations are based solely on what each can assume about the other, and they are unable to validate their expectations until the desired outcome occurs or fails to occur at the appropriate time or place. If actors can monitor the other's behavior nonverbally, they can "test" their expectations along the way and can send signals if one gets off-track. For example, pedestrians and motorists can generally coordinate their behavior so that both get through an intersection. If one gets off-track, they can realign their actions by observing facial expressions and other nonverbal behaviors (e.g., hand gestures) (Couch 1979; Garfinkel 1964).

If actors are engaged in verbal interaction, their larger relationship expands opportunities for coordination with the other. Stein (1967) describes a "game" that takes place between doctors and nurses. The primary goal of this game is to avoid open conflict over patient treatment through a subtle negotiation process in which nurses make recommendations to doctors without appearing to do so and physicians accept these recommendations without appearing to do. This requires careful monitoring of the other's nonverbal and verbal communications. Success at this game provides rewards to both "players." The doctor can use the nurse's expertise and the nurse gains self-esteem and profes-

sional satisfaction. The "negotiated order" perspective in symbolic interaction theory (Strauss 1978) suggests the sort of social processes underlying such tacit coordination (Couch 1979; Strauss 1978).

To conclude, tacit-integrative bargaining occurs in social structures that create incentives for mutual cooperation but discourage explicit bargaining by blocking opportunities for open communication or by defining explicit bargaining as normatively inappropriate. The integrative side of a tacit-integrative context creates common interests, while the tacit side can make it difficult for the actors to accomplish their objectives. However, all things equal, tacit-integrative contexts are more likely to produce conflict resolution in the form of tacit coordination than tacit-distributive ones. While actors may misread the each other's intentions or goals, as long as each believes the other also perceives common interests and has a goal of mutual cooperation, unilateral actions are less risky and settling on prominent solutions is more feasible.

## EXPLICIT-DISTRIBUTIVE BARGAINING

A bilateral monopoly game (Siegel and Fouraker 1960) is the laboratory prototype of an explicit-distributive bargaining context. Actors are buyers or sellers negotiating the price of a commodity; they consensually define their interaction as bargaining; there is a wide range of possible solutions (prices); and they make offers and counteroffers over time to reach an agreement. Each perceives an incentive to reach an agreement—the payoffs are higher from agreement than nonagreement—but each also wants an agreement favorable to his/her own interests.

A major contribution of sociologists and social psychologists to the literature on bargaining is to pick up where economists and game theorists tend to leave off, by relaxing some highly stringent assumptions and focusing on the process of explicit bargaining (e.g., Bacharach and Lawler 1981; Cook et al. 1983; Heckathorn 1983; Hegtvedt and Cook 1987; Wilier, Markovsky, and Patton 1989). The result is that bargaining tactics (e.g., toughness), structurally based power relations, perceptions of

power, and impression management become central to explanations of bargaining process. Two classes of tactics have received substantial attention: concession tactics (Chertkoff and Esser 1976; Murnighan 1991) and coercive tactics (Deutsch and Krauss 1962; Lawler 1986; Michener and Cohen 1973). Both are tied to essential features of the explicit-distributive context, the offer-counteroffer sequence.

### Concession Tactics

Research on concession tactics is generally concerned with how various facets of a bargainer's concession behavior—the initial offer, concession magnitude, or concession frequency—are related to the opponent's concession behavior. Most of this research is organized around two somewhat divergent theoretical foci—aspiration levels (Komorita and Brenner 1968; Siegel and Fouraker 1960) and the norm of reciprocity or fairness (Chertkoff and Esser 1976; Gouldner 1960). *Level of aspiration theory* assumes that actors develop target points (aspirations) for a solution: the higher their targets (aspirations) the less they yield in the bargaining (Chertkoff and Esser 1976; Osgood 1962; Siegel and Fouraker 1960). Normative theories suggest that actors' pursuit of individual gain is constrained by norms, such as reciprocity, that they invoke in the bargaining: the stronger these norms, the more actors yield and, in particular, the more responsive they are to the other's yielding (see Hegtvedt and Cook 1987 for a recent discussion).

*Toughness versus Softness.* As tactics, concessions are important because of the impressions they give. Level of aspiration theory stresses the importance of giving an impression of toughness (or avoiding an impression of weakness), whereas normative theories stress the importance of giving an impression of fairness (or avoiding an impression of unfairness). Both theoretical traditions assume that aspirations and norms are malleable or manipulable in the bargaining process (i.e., not fixed). Further, when these sorts of processes operate,

game theory predictions for the likelihood and nature of agreement (Nash 1950) will not reliably occur, meaning that the variance around predicted (determinate) solutions should be larger and nonagreements more frequent than expected, not because actors are nonrational but because of their interpretation of the situation and the meaning they attach to the other's concession behavior (Bacharach and Lawler 1981, chap. 1, 6; Bartos 1977).

Applied to concession tactics in explicit bargaining, level of aspiration and reciprocity theories make opposite predictions. Level of aspiration theory indicates that substantial concessions by actor A raise actor B's level of aspiration and, therefore, reduce B's concessions. The tougher or firmer A's concession pattern, the lower B's aspirations and the greater B's concessions. Reciprocity theories, in contrast, suggest that significant concessions by actor A activate a reciprocity norm, which exerts subtle pressure on B to make comparable concessions, whereas toughness by A begets toughness by B. Thus, tougher concession tactics produce impassive and softer ones reciprocal concessions.

Several studies have tested one or both of these theoretical standpoints, with each receiving some empirical support. In the initial test of level of aspiration, Siegel and Fouraker (1960) found that parties with higher aspirations adopted tougher concession tactics, which yielded them more profitable agreements. Also supporting level of aspiration theory, Bartos (1970) found a negative correlation between each actor's toughness (measured by average demand), suggesting that a tougher stance produced more yielding and a soft stance less. However, while toughness produced higher payoffs from the bargaining when agreement occurred, it decreased the prospects for reaching agreement.

Like Bartos (1970), Komorita and Brenner (1968) found an inverse relationship between the concessions of one party and those of the opponent. Contrary to the reciprocity notion, they also revealed that a large initial offer at the midpoint of the issue continuum, combined with no further concessions, produced the least amount of yielding

by the opponent. Beginning negotiations with a "fair" offer that one expects to settle on was highly ineffective, presumably because it increased the other's aspirations. These findings dovetail with several other studies, indicating that tough initial offers produce better outcomes for a bargainer than soft initial offers (Benton, Kelley and Liebling 1972; Chertkoff and Conley 1976; Liebert et al. 1968; Yukl 1974). In sum, research on *initial* offers shows fairly consistent support for level of aspiration theory.

Other research indicates that beyond the initial period of bargaining, more concession making than suggested by level of aspiration theory is necessary to prevent an impasse (Chertkoff and Esser 1976; Hegtvedt and Cook 1987; Lawler and MacMurray 1980). Reciprocity theory tends to receive the strongest overall empirical support (Bacharach and Lawler 1980, 120-127; Chertkoff and Esser 1976). For example, Esser and Komorita (1975) compared a concession tactic conceding about 75 percent of what the subject concedes to complete (100 percent) reciprocity and found that complete reciprocity produced larger final offers by the subject. Hamner (1974) found that following an impasse, a 100 percent reciprocity tactic produced more concessions than did tougher tactics. The emergence or activation of the reciprocity norm is a plausible interpretation for these results because the social context implicit in explicit bargaining encourages parties to respect each other's preferences and to search for a mutually acceptable solution.

Overall, the research points to deficiencies in each theoretical standpoint. Level of aspiration theory fails to account for the fact that toughness backfires if it fosters impressions of unfairness or unreasonableness, and reciprocity fails to account for observations that larger concessions often yield lower concessions in response (i.e., exploitation). Osgood's GRIT theory, however, provides a basis for integrating the theories. Temporarily adopting a soft concession tactic (i.e., greater than 100 percent reciprocity) should elicit reciprocal concessions following an impasse. Exploitation will not occur because the impasse demonstrates each actor's re-

solve, and once reciprocal concession making starts it can escalate gradually and produce quicker, more mutually satisfying agreements than otherwise (Boyle and Lawler 1991).

To test this idea, Boyle and Lawler (1991) induced an impasse by having a programmed "other" make no concessions and inflict punitive damage during the first five of twenty rounds. Following the impasse, the programmed other either made a series of unilateral concessions across five rounds or reciprocated (100 percent matching) concessions by the subject. The results indicate that unilateral initiatives increased the actor's concessions and reduced their use of punitive tactics more than reciprocal concession making (Boyle and Lawler 1991). These results support the GRIT hypothesis. Thus, if initial toughness produces an impasse, a series of small unilateral concessions can break it. More generally, *firm but fair* concession tactics are most effective with or without an impasse (Chertkoff and Esser 1976; Lawler and MacMurray 1980).

Explicit negotiations often take place among the same actors over time, yet almost all of the research on explicit bargaining involves a "one shot" negotiation session. In recent work, Lawler and Yoon (1993) show how power affects the emergence of a positive relation among actors who negotiate repeatedly with each other. They had subjects bargain with each other in ten independent negotiations. Equal power produced more frequent agreements than unequal power, and more frequent agreements in turn aroused positive emotions or feelings. These emotions lead actors to give each other gifts and to stay in their relation despite equal or better alternatives. Lawler and Yoon (1993) suggest that a subtle commitment formation process often occurs when the same two persons engage in explicit bargaining over time, and this has an emotional/affective foundation.

*Power Relations and Toughness.* Social exchange theory and research suggests the following basic conclusions about the impact of power relations on the use of toughness in explicit bargaining.

First, in an unequal power relationship, higher-power actors are likely to adopt tougher concession tactics and lower-power actors softer ones (e.g., Cook et al. 1983; Markovsky, Wilier, and Patton 1988; Michener et al. 1975). Second, unequal-power relations create more of an obstacle to concession making than equal-power relations, because actors tend to dispute the appropriate connection between their power differences and their relative yielding (Bacharach and Lawler 1981; Hegtvedt and Cook 1987; Komorita and Chertkoff 1973; Lawler 1992; Lawler and Yoon 1993). Third, in an equal-power relation, greater total power or mutual dependence softens the concession tactics of each actor and increases the likelihood of conflict resolution (Lawler 1992; Lawler and Ford 1993).<sup>6</sup> (See chapter 8 for a discussion of power in exchange networks.)

### Coercive Tactics

Coercive tactics take the form of threats and damage and presuppose a coercive capability anchored in actors' positions in a social structure (Lawler 1992). Threats express intent to do harm and implicitly or explicitly contain an "if-then" contingency (i.e., "If you do X, then I'll do Y") (Deutsch 1973; Tedeschi, Schlenker, and Bonoma 1973). These threats can be verbal or nonverbal and vary in specificity or clarity about what the target can do or not do to avoid actual damage (Schelling 1960). Damage tactics actually inflict punishment and may follow through on prior threats or constitute an implicit threat of future harm (Lawler 1986; Schelling 1960; Tedeschi, Schlenker, and Bonoma 1973). In explicit-distributive bargaining, coercive tactics are generally used to extract concessions or forestall the other's use of coercive tactics.

Two theory and research traditions—conflict spiral and deterrence—make competing predictions about when actors use coercive tactics. The conflict spiral tradition stems from Deutsch and associates' seminal work on threats (Deutsch 1973; Deutsch and Krauss 1960, 1962; Krauss and Deutsch 1966), and the deterrence tradition in social psychology can be traced to Hornstein (1965), Michener and

Cohen (1973), and a series of studies by Tedeschi and associates (Horai and Tedeschi 1969; Tedeschi, Schlenker, and Bonoma 1973).

The basic implication of the spiral tradition is that the availability of coercive capabilities leads to their use, and use by one actor begets counteruse by the other, resulting in a costly use-counteruse spiral. The theoretical rationale is that the mere presence of a coercive capability creates a temptation to use it, while at the same time actors are unlikely to yield because of costs associated with loss of face. Conflict spiral effects are reported by Deutsch and Krauss (1962), who found that bilateral power conditions (where both actors can damage the other's outcomes) produced more hostile power use than unilateral (only one party has a coercive capability) or no power conditions.

In contrast, the basic implication of the deterrence tradition is that actors are unlikely to take hostile action against someone with a larger coercive capability because of the retaliation costs the other can levy. The more powerful the other becomes, the less likely an actor is to initiate coercive tactics. This implies that if both actors have large coercive capabilities that make threats of retaliation credible, then each will use threat and damage tactics less frequently than otherwise (Schelling 1960; Tedeschi, Schlenker, and Bonoma 1973). Tests of this deterrence notion have focused on conditions of unilateral or bilateral coercive capability. Tedeschi and colleagues (Tedeschi, Schlenker, and Bonoma 1973) conducted a large number of studies in which a programmed other (with a coercive capability) could levy threats and punishments of varying magnitude against a subject without a coercive capability (unilateral condition). Larger magnitudes of coercive capability by the programmed other produced greater compliance on the part of the target (Horai and Tedeschi 1969; Schlenker et al. 1970; Tedeschi, Schlenker, and Bonoma 1973; also see Michener and Cohen 1973).

Studies of explicit bargaining find support for deterrence notions when both parties have a coercive capability. Hornstein (1965) contrasted low, medium, and high levels of equal coercive capabil-

ity and found that the lowest frequency of threat and damage tactics occurred when both parties had high levels of power. Bacharach and Lawler (1981, chap. 5) corroborate these results, showing that larger magnitudes of coercive capability for both actors (with equal power held constant) reduced the rate of damage tactics by both. The results of these studies contradict hypotheses of the conflict spiral tradition.

Lawler (1986) formulated contrasting theories designed to explicate and systematize bilateral deterrence and conflict spiral notions. The theories use slightly different intervening cognitions to explain how "total power" (the sum of each actor's coercive capability) and "relative power" (the degree of power difference between the actors) affect the use of coercive tactics in explicit-distributive bargaining (Lawler 1986, 1992). Bilateral deterrence theory predicts that given equal power, increases in power capability across both actors leads both to have higher fear of retaliation and a lower expectation of attack, which in turn reduces use of coercive tactics. In contrast, conflict spiral theory predicts that increases in power for both leads both to be more tempted to use power and to develop higher expectations of attack, which increases use of coercive tactics.

Bilateral deterrence theory stipulates further that unequal power produces more use of coercive tactics than equal power, because high- and low-power actors assess a power difference differently. Higher-power actors emphasize the higher costs of retaliation, while lower-power actors stress the greater expectation of attack. Thus, higher-power actors use more coercive tactics because they have less to fear, and lower-power actors use more coercive tactics than would be predicted from their power position because they expect higher-power actors to take coercive measures against them. Bargaining theory and research suggest that expectations of attack often produce hostile action in advance of the expectations being fulfilled (Lawler 1986; Morgan 1977; Schelling 1960; Tedeschi, Bonoma, and Novinson 1970). Conflict spiral theory predicts the opposite: higher-power actors respond primarily to reduced expectation of attack

and use fewer coercive tactics, while lower-power actors are less tempted to use coercive tactics.

Recent research pitting bilateral deterrence against conflict spiral predictions supports Lawler's (1986) bilateral deterrence formulation. Two experiments demonstrated that where both actors have greater coercive capability, they use damage tactics less frequently (e.g., administering punishments) in explicit-distributive bargaining (Lawler and Bacharach 1987; Lawler, Ford, and Blegen 1988). Also, actors used damage tactics less frequently if they had equal rather than unequal coercive capability, and higher- versus lower-power actors did not use damage tactics at different rates. Consistent with the theory, those with lower yet "significant" absolute power resisted efforts to dominate.

To conclude, explicit-distributive bargaining is most likely where social structures create positions with divergent interests involving fundamental goal incompatibilities, while also facilitating direct efforts to acknowledge and deal with social conflict. Actors who occupy such structural positions aren't able to reconcile their interests, except through a process of concession and compromise. By tactically using concession and coercive tactics, the actors attempt to maximize the other's yielding yet reach agreement. Overall, the research on explicit-distributive contexts suggests that concession tactics that combine firmness with fairness are most effective, and if each has equal or large coercive capabilities the rate of coercive tactics in the relation will be lower than otherwise, making conflict resolution somewhat easier.

## **EXPLICIT-INTEGRATIVE BARGAINING**

Integrative bargaining research assumes a distinction between "compromise solutions" involving a split-the-difference principle and "integrative solutions" based on elements of common interest (Neale and Bazerman 1991; Pruitt 1981; Walton and McKersie 1965). A compromise solution (splitting the difference) involves each actor converging on agreements that fall on a fixed contract zone bordered by their "most preferred" agreement points.

Integrative solutions reshape the contract zone by essentially adding net benefits to some or all of the possible agreement points via a social exchange process. This is possible mainly when an issue can be subdivided into distinct components or when two or more issues are already on the bargaining table (see Murnighan 1991; Neale and Bazerman 1991; Pruitt 1981; Thompson and Hastie 1990). Explicit-integrative bargaining implies a social context where actors have common interests or goals based on common organizational memberships but also find themselves in conflict based on the positions they occupy in the larger structure. The conflict is likely to be over means rather than fundamental goals.

To illustrate, consider Follet's (1940) example of two actors (A and B) who both want an orange, but have only one available. Each would like to have the entire orange, but given that this is not feasible the obvious compromise is to cut the orange in half. In the course of argument, however, they realize that they give priority to different parts of the orange. A wants the juice more than the peel, B wants the peel more than the juice. The integrative solution is to give A all of the juice and B all of the peel; that is, each gives up what they value least in exchange for what they value most. Notice that splitting the difference (i.e., the orange) would lead to a suboptimal solution. The actors in this example essentially decompose a distributive issue into two subissues (juice and peel) and then trade off. To accomplish this, actors have to exchange accurate information on their preferences, which those in conflict are often reluctant to do.<sup>7</sup>

In an influential analysis of integrative bargaining, Pruitt (1981, 1983) sets forth five ways for bargainers to move from distributive (compromise) to integrative (problem solving) forms of negotiation. The most basic strategy is "logrolling," defined as a trade-off or exchange across two or more issues in which each actor receives a good agreement on his/her higher-priority issue at the expense of a poor agreement on his/her lower-priority issue. Logrolling is common in negotiations involving a large number of complex issues facing actors in the same organization or group (Neale and Bazerman 1991).

Some of the other strategies overlap with logrolling. A "bridging" strategy redefines an issue, revealing a new option that satisfies actors' most valued goals. Bridging requires actors to analyze and set priorities among the interests producing their current demands and to eliminate less important ones. It can lead to the decomposition of a single issue into components, the initial step toward logrolling in the example of two persons arguing over an orange.

In "nonspecific compensation" one actor commits future compensation to another in exchange for concessions on the issues currently under negotiation. For example, in exchange for ending a prison riot, prison authorities might agree to form a joint committee of prisoners and guards to propose changes in policies and procedures. Solutions to intense public conflicts often arrange "face-saving" devices involving nonspecific compensation of various sorts, with the specifics to be worked out later. A related strategy, "cost cutting" involves specific compensation for the cost one actor incurs as a result of an agreed-upon solution. Finally, "expanding the pie" involves, for example, planting an orange tree in the above example. This is tantamount to adding a constant to the payoffs along the distributive contract zone. If workers in a subunit negotiate for more discretion over how they accomplish their tasks, the local managers can spend less time on supervision and more time on planning and other activities that raise their own prospects for promotion (Kanter 1977). In developing explicit understandings about who is responsible for what, both workers and managers might "win" by expanding the "total control" pie (Tannenbaum 1968).

In reviews of research on integrative bargaining, Pruitt (1981; Pruitt and Lewis 1977) suggests that integrative agreements are more likely if actors consider multiple issues simultaneously rather than sequentially, because package deals (trade-offs) are more salient and easier to arrange. A mutual problem-solving orientation also is important, because parties are more likely to exchange detailed information about their intentions and priorities under such conditions. Lower accountability to constituents allows representatives the flexibility and autonomy to exchange information as necessary

and to make other strategic adjustments at the bargaining table (Carnevale 1985, 1989). Pruitt (1983) also suggests that actors who adopt a firm but flexible bargaining stance are likely to come closest to reaching whatever integrative potential is available in the context.

### **Negotiator Heuristics**

Finding integrative solutions that are structured into the context may require actors to penetrate beneath the surface features of the issues under negotiation. The need for more "cognitive work" raises the question of how judgment heuristics shape or bias an individual's cognitions. Bazerman and associates recently applied ideas from the heuristics literature (Kahneman, Slovic, and Tversky 1982) to the individual negotiator as decision maker (e.g., Bazerman and Neale 1983; Neale, Huber, and Northcraft 1987; Neale and Bazerman 1991; Thompson and Hastie 1990). They focus on four cognitive heuristics: framing, anchoring, availability, and overconfidence (Neale and Bazerman 1991).

Framing refers to whether the negotiator interprets variations in payoffs in terms of losses or gains. In a labor-management dispute, negotiators could regard the other's concession as a loss from what they would like to get or as a gain, using the opponent's previous offer or the current contract as a reference point. The hypothesis is that interpreting payoff variations in terms of losses leads the negotiator to take more risks in bargaining (i.e., risk seeking), while interpreting it as a gain leads the actor to be risk-averse.

Positively framed actors should be more conciliatory and negatively framed actors more hostile and competitive. Several studies support this hypothesis. Neale and Bazerman (1985) examined the impact of framing in collective bargaining and report that actors with a positive frame made more concessions, reached more agreements, and perceived the bargaining outcomes as more fair than did those with a negative frame. Bazerman et al. (1985) found that positively framed negotiators made more profit than negatively framed negotiators. Framing clearly affects the prospects of resolving conflict.

Anchoring occurs when people use information at hand as a reference point to estimate values for other events. Neale and Bazerman (1991) indicate that goals impact bargainers in part as cognitive anchors and suggest goal difficulty as an important factor. Huber and Neale (1986) examined the connection between the difficulty of a goal set initially by a constituent and the difficulty of subsequent self-determined goals. They found that negotiators who were assigned difficult goals by constituents achieved more integrative agreements.

The availability bias refers to errors in estimating the frequency of an event and is affected by the degree to which the information is vivid or easy to recall. One implication is that negotiation outcomes are affected by the presentation of information. For example, if the costs of nonagreement are made personally relevant, negotiators are slower to settle, but if the costs of third-party intervention are made salient, negotiators are quicker to settle (see Neale and Bazerman 1991). Finally, overconfidence biases are reflected in the fact that actors tend to overestimate probabilities of good outcomes or positive performance (Bazerman and Neale 1983).

Explicit-integrative bargaining presupposes a structure that creates underlying common goals and facilitates open communication to resolve differences when they arise. In such contexts, actors mutually acknowledge a conflict and have issues that can be interrelated or reshaped. In explicit-integrative bargaining, offers and counteroffers are part of an effort to share information about priorities, but various cognitive heuristics can impede the process of conflict resolution.

### **CONCLUSION**

Bargaining and negotiation is an interdisciplinary area in which psychologists, mathematicians, economists, political scientists, and sociologists have made a mark. Each discipline approaches the phenomenon of bargaining from a distinct metatheory—a unique set of concepts, assumptions, and theoretical questions—and each generates research based in part on metatheories about the phenomenon and how to study it. One result is that the bargaining

literature contains a rich mix of theoretical approaches and research strategies; another is that it has some frustrating ambiguities, gaps, and inconsistencies.

We focused here on one part of the literature, the social psychological tradition, and have taken a sociological perspective that highlights the social-structural context of bargaining. The fourfold classification of bargaining contexts presented here is based on the distinctions between tacit versus explicit and distributive versus integrative bargaining (Bacharach and Lawler 1980; Schelling 1960; Walton and McKersie 1965). Each social context has structural and cognitive dimensions, and each is likely to develop out of the conjoint effects of the social structure, actors' definition of their relationship, and their tactical action. Explicit bargaining is possible only where the social structure allows open communication between the actors and they choose to deal directly and explicitly with a conflict. Integrative bargaining is possible only where the social structure creates sufficient overriding common interest and the actors perceive and choose to act on these common interests. The typology has the heuristic advantage of subsuming and organizing a vast range of research literature on bargaining; it pulls together disparate threads.

Different theoretical traditions (e.g., symbolic interaction, social exchange theory, cognitive theory, game theory) focus on and assume different types of bargaining contexts. For the most part, these theoretical perspectives complement each other. One way sociologists can contribute is by specifying and elaborating the structural aspects of bargaining contexts and showing how these shape bargaining processes (e.g., actors' definitions of the situation, tactical choices) and the prospects for conflict resolution. The precise nature of problems actors face is different across contexts, as are the

tactical options available and the prerequisites of conflict resolution. Future work should attempt to distinguish theoretical principles that apply across contexts from those that are context-specific.

There are several promising directions for future work. First, tacit-integrative bargaining warrants more systematic attention because it can capture how people negotiate their way through daily conflicts and tensions (see Strauss 1978). Conversational analyses will be useful here. Second, most social psychological work on explicit-distributive bargaining has been limited to isolated two-party bargaining, but recent exchange network and power dependence theories place dyads in a larger network of relations (e.g., Cook et al. 1983; Markovsky, Wilier, and Patton 1988). Such work offers a structural approach to bargaining, focusing on power relations (Lawler 1992), and there is much to be done here (see chapter 8). Third, research on explicit-integrative contexts has used principles of cognitive psychology to understand how cognitive biases affect negotiators' decisions. Future efforts should address the emotional responses of negotiators and interweave the emotional with the cognitive, because positive and negative frames, for example, should have emotional as well as cognitive effects on negotiators. Finally, research on tacit-distributive contexts, as we define it, is voluminous but also in need of new direction, because the two-party matrix game has probably outlived its usefulness as a research setting. Issues surrounding the social dilemma represent a promising new direction that ties this form of bargaining to larger sociological questions about the foundation of social order (see chapter 12). Overall, social psychological work on bargaining and negotiation offers a fertile basis for more systematic sociological theorizing about conflict and resolution.

## NOTES

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1. A common theme of the definitions is that bargaining involves a process of exchanging demands, bids, or offers, while negotiation is either the broader social interaction or relationship within which such exchange takes

place (Gulliver 1979; Strauss 1978) or simply efforts to transcend the conflict and promote more cooperative decision making (Morley and Stephenson 1977; Pruitt 1981). Our definition of bargaining, taken from Schelling

(1960) and Bacharach and Lawler (1980, 1981), distinguishes it from conflict but not negotiation.

2. In Kelley and Thibaut's (1978) terms, actors in each bargaining context have significant degrees of fate control and behavioral control over each other. The former encourages them to bargain and the latter encourages them to attend to each other's behavior.
3. The line of research by Linda Molm on social exchange exemplifies a nonbargaining context (Molm 1987, 1989, 1990), although the setting contains some elements of what we call a tacit-integrative context.
4. We acknowledge that game theories provide fundamental theoretical analyses that apply to all forms of two-party bargaining (Rapoport 1966). Our point here is simply that taking the conditions assumed by game theoretical models as a whole (e.g., simultaneous choices involving two options—cooperation versus competition—and no verbal communication), the research based on these models is directed primarily at the tacit-distributive cell of our typology.
5. Compared to a chicken setting, actors in a prisoner's dilemma find it more difficult to avoid conflict spirals and require more safeguards (i.e., monitoring) to move from a pattern of mutual competition to mutual cooperation. Solutions often require sanction systems, punishing competition or rewarding cooperation to such an extent that the original prisoner's dilemma is transformed into

a "positive sum" payoff matrix (Rapoport 1966), where each actor's highest payoffs are attached to mutual cooperation. Sanction systems are important because they provide actors "mutual assurances" of cooperation (e.g., Hechter 1990).

6. Heckathorn (1983; see also Wilier, Markovsky, and Patton 1989) proposes a resistance model of the bargaining process in which each actor's resistance to a concession at each point of the bargaining process is a function of the ratio of the difference in utility attached to the actor's most preferred solution (i.e., "best hope") and the other's current offer to the difference between their "best hope" and the conflict point (i.e., their maximum net gain). The actor with the least resistance will make a concession at each point in the bargaining process; power relations are key determinants of this process (see also Wilier, Markovsky, and Patton 1989).

7. Game theorists have identified as the "best" solution those intermediate points that maximize the product of each actor's net utility from the agreement (Nash 1950; Rapoport 1966). These theoretical models would reduce the multiple issues of integrative bargaining to a single set of overall utilities. From this standpoint, each actor in this example has to give up only a little to reach a mutually beneficial result. An underlying distributive dimension remains, unless actors ascribe no value to what is given up.

## REFERENCES

- Axelrod, R. 1984. *The Evolution of Cooperation*. New York: Basic Books.
- Bacharach, S. B., and E. J. Lawler. 1980. *Power and Politics in Organizations*. San Francisco: Jossey-Bass.
- . 1981. *Bargaining: Power, Tactics, and Outcomes*. San Francisco: Jossey-Bass.
- Bartos, O. 1970. Determinants and consequences of toughness. Pp. 45-68 in *The Structure of Conflict*, ed. P. Swingle. New York: Academic.
- Bartos, O. J. 1977. A simple model of negotiation: A sociological point of view. *Journal of Conflict Resolution* 21:565-580.
- Bazerman, Max, T. Magliozzi, and M. Neale. 1985. The acquisition of an integrative response in a competitive market. *Organizational Behavior and Performance* 34:294-313.
- Bazerman, Max, and Margaret Neale. 1983. Heuristics in negotiation: Limitations to dispute resolution effectiveness. Pp. 51-67 in *Negotiating in Organizations*, ed. M. H. Bazerman and R. S. Lewicki. Beverly Hills: Sage.
- Benton, A. A., H. H. Kelley, and B. Liebling. 1972. Effects of extremity of offers and concession rate on the outcomes of bargaining. *Journal of Personality and Social Psychology* 1:73-83.
- Blake, R. R., and J. S. Mouton. 1979. Intergroup problem solving in organizations: From theory to practice. In *The Social Psychology of Intergroup Relations*, ed. W. G. Austin and S. Worchel. Monterey, CA: Brooks/Cole.
- Blalock, H. M. 1989. *Power and Conflict: Toward a General Theory*. Newbury Park, CA: Sage.
- Boyle, E. H., and E. J. Lawler. 1991. Resolving conflict through explicit bargaining. *Social Forces* 69: 1183-1204.
- Carnevale, P. J. D. 1985. Accountability and the dynamics of group representation. Pp. 227-248 in *Advances in Group Processes*, vol. 2, ed. E. J. Lawler. Greenwich, CT: JAI Press.

- . 1989. Determinants of mediator behavior: A test of the strategic choice model. *Journal of Applied Social Psychology* 19:481-498.
- Chamberlain, N. W. 1955. *A General Theory of Economic Process*. New York: Harper & Row.
- Chertkoff, J., and M. Conley. 1967. Opening offer and frequency of concession as bargaining strategies. *Journal of Personality and Social Psychology* 7: 181-185.
- Chertkoff, J., and J. K. Esser. 1976. A review of experiments in explicit bargaining. *Journal of Experimental Social Psychology* 12:487-503.
- Cook, K., and R. Emerson. 1978. Power, equity, and commitment in exchange networks. *American Sociological Review* 43:721-739.
- Cook, K. S., R. M. Emerson, M. R. Gillmore, and T. Yamagishi. 1983. The distribution of power in exchange networks: Theory and experimental results. *American Journal of Sociology* 89:275-305.
- Couch, C. 1979. Economic exchange, bargaining and civilization. Pp. 377-398 in *Studies in Symbolic Interaction*, vol. 2, ed. N. K. Denzin. Greenwich, CT: JAI Press.
- Dahrendorf, R. 1959. *Class and Class Conflict in Industrial Society*. Stanford: Stanford University Press.
- Deutsch, M. 1969. Conflicts: Productive and destructive. *Journal of Social Issues* 25:7-41.
- . 1973. *The Resolution of Conflict*. New Haven: Yale University Press.
- Deutsch, M., and R. M. Krauss. 1960. The effect of threat upon interpersonal bargaining. *Journal of Abnormal and Social Psychology* 61:181-189.
- . 1962. Studies of interpersonal bargaining. *Journal of Conflict Resolution* 6:52-76.
- Dunlop, J. T. 1950. *Wage Determination Under Trade Unions*. New York: A.M. Kelley.
- Esser, J. K., and S. S. Komorita. 1975. Reciprocity and concession making in bargaining. *Journal of Personality and Social Psychology* 31:864-872.
- Follet, M. P. 1940. Constructive conflict. Pp. 30-49 in *Dynamic Administration: The Collected Papers of Mary Parker Follet*, ed. H. C. Metcalf and L. Urwick. New York: Harper.
- Gallo, P. S., Jr., and C. G. McClintock. 1965. Cooperative and competitive behavior in mixed motive games. *Journal of Conflict Resolution* 9:68-78.
- Garfinkel, H. 1964. *Studies in Ethnomethodology*. Englewood Cliffs, NJ: Prentice Hall.
- Gouldner, A. 1960. The norm of reciprocity: A preliminary statement. *American Sociological Review* 25: 161-179.
- Gulliver, P. H. 1979. *Disputes and Negotiations: A Cross-Cultural Perspective*. New York: Academic.
- Hamburger, H. 1979. *Games as Models of Social Phenomena*. S&N Francisco: Freeman.
- Hamner, W. C. 1974. Effects of bargaining strategy and pressure to reach agreement in a stalemated negotiation. *Journal of Personality and Social Psychology* 30:458-467.
- Harsanyi, J. C. 1977. *Rational Behavior and Bargaining Equilibrium in Games and Social Situations*. New York: Cambridge University Press.
- Hechter, M. 1990. The emergence of cooperative social institutions. Pp. 13-34 in *Social Institutions: Their Emergence, Maintenance, and Effects*, ed. Michael Hechter, Karl-Dieter Opp, and Reinhard Wippler. New York: Aldine de Gruyter.
- Heckathorn, D. D. 1983. Extensions of power-dependence theory: The concept of resistance. *Social Forces* 61:1206-1231.
- Hegtvedt, K. A., and K. S. Cook. 1987. The role of justice in conflict situations. Pp. 109-136 in *Advances in Group Processes*, ed. E. J. Lawler and B. Markovsky. Greenwich, CT: JAI Press.
- Hirshleifer, J., and J. C. M. Coll. 1988. What strategies can support the evolutionary emergence of cooperation. *Journal of Conflict Resolution* 32:367-398.
- Horai, J., and J. T. Tedeschi. 1969. Effects of credibility and magnitude of punishment on compliance to threats. *Journal of Personality and Social Psychology* 12:164-169.
- Hornstein, H. A. 1965. The effects of different magnitudes of threat upon interpersonal bargaining. *Journal of Experimental Social Psychology* 1: 282-293.
- Huber, V. L., and M. A. Neale. 1986. Effects of cognitive heuristics and goals on negotiator performance and subsequent goal setting. *Organizational Behavior and Human Decision Processes* 38:342-169.
- Kahneman, D. P. Slovic, and A. Tversky, A. 1982. *Judgment Under Uncertainty: Heuristics and Biases*. Cambridge: University Press.
- Kanter, R. M. 1977. *Men and Women of the Corporation*. New York: Basic Books.
- Kelley, H. H., and J. T. Thibaut. 1978. *Interpersonal Relations: A Theory of Interdependence*. New York: Wiley.

- Komorita, S. S., and M. Barnes. 1969. Effects of pressures to reach agreement in bargaining. *Journal of Personality and Social Psychology* 3:245-252.
- Komorita, S. S., and A. R. Brenner. 1968. Bargaining and concession making under bilateral monopoly. *Journal of Personality and Social Psychology* 9: 15-20.
- Komorita, S. S., and I. Chertkoff. 1973. A bargaining theory of coalition formation. *Psychological Review* 80:149-162.
- Krauss, R. M., and M. Deutsch. 1966. Communication in interpersonal bargaining. *Journal of Personality and Social Psychology* 4:572-577.
- Kriesberg, L. 1982. *The Sociology of Social Conflict*. Englewood Cliffs, NJ: Prentice Hall.
- Lawler, E. J. 1986. Bilateral deterrence and conflict spiral: A theoretical analysis. Pp. 107-130 in *Advances in Group Processes*, vol. 3, ed. E. J. Lawler. Greenwich, CT: JAI Press.
- . 1992. Power processes in bargaining. *Sociological Quarterly* 33:17-34.
- Lawler, E. J., and S. B. Bacharach. 1987. Comparison of dependence and punitive forms of power. *Social Forces* 66:446-462.
- Lawler, E. J., and R. Ford. In press. Metatheory and friendly competition in theory growth: The case of power processes in bargaining. Pp. 172-210 in *Theoretical Research Programs: Studies in Theory Growth*, ed. J. Berger and M. Zelditch, Jr. Stanford: Stanford University Press.
- Lawler, E. J., R. Ford, and M. Blegen. 1988. Coercive capability in conflict: A test of bilateral deterrence versus conflict spiral theory. *Social Psychology Quarterly* 51:93-107.
- Lawler, E. J., and B. MacMurray. 1980. Bargaining toughness: A qualification of level of aspiration and reciprocity hypotheses. *Journal of Applied Social Psychology* 10:416-430.
- Lawler, E. J., and J. Yoon. 1993. Power and the emergence of commitment behavior in negotiated exchange. *American Sociological Review* 58:465-481.
- Liebert, R. M., W. P. Smith, J. H. Hill, and M. Keiffer. 1968. The effects of information and magnitude of initial offer on interpersonal negotiation. *Journal of Experimental Social Psychology* 4:431-441.
- Lindskold, S. 1978. Trust development, the GRIT proposal, and the effects of conciliatory acts on conflict and cooperation. *Psychological Bulletin* 85: 772-793.
- Lindskold, S., and M. G. Collins. 1978. Inducing cooperation by groups and individuals. *Journal of Conflict Resolution* 22:679-690.
- Luce, R. D., and H. Raiffa. 1957. *Games and Decisions: Introduction and Critical Survey*. New York: Wiley.
- Marinoff, L. 1992. Maximizing expected utilities in the prisoner's dilemma. *Journal of Conflict Resolution* 36:182-216.
- Markovsky, B., D. Wilier, and T. Patton. 1988. Power relations in exchange networks. *American Sociological Review* 53:220-236.
- Michener, H. A., and E. D. Cohen. 1973. Effects of punishment magnitude in the bilateral threat situation: Evidence for the deterrence hypothesis. *Journal of Personality and Social Psychology* 26:427-438.
- Michener, H. A., J. J. Vaske, S. L. Schleifer, J. G. Plazewski, and L. J. Chapman. 1975. Factors affecting concession rate and threat usage in bilateral conflict. *Sociometry* 38:62-80.
- Molm, L. 1990. Structure, action, and outcomes: The dynamics of power in social exchange. *American Sociological Review* 55:427-447.
- . 1987. Power-dependence theory: Power processes and negative outcomes. Pp. 171-198 in *Advances in Group Processes*, vol. 4, ed. E. J. Lawler and B. Markovsky. Greenwich, CT: JAI Press.
- . 1989. Punishment power: A balancing process in power-dependence relations. *American Journal of Sociology* 94:1392-1418.
- Morgan, M. P. 1977. *Deterrence: A Conceptual Analysis*. Beverly Hills: Sage.
- Morley, I., and G. Stephenson. 1977. *The Social Psychology of Bargaining*. London: Allen & Unwin.
- Murnighan, J. K. 1991. *The Dynamics of Bargaining Games*. Englewood Cliffs, NJ: Prentice Hall.
- Murnighan, J. K., and A. Roth. 1978. Expecting continued play in prisoner's dilemma games. *Journal of Conflict Resolution* 27:279-300.
- Nash, J. F., Jr. 1950. The bargaining problem. *Econometrica* 18:155-162.
- Neale, M., and M. Bazerman. 1985. The effects of framing and negotiator overconfidence on bargainer behavior. *Academy of Management Journal* 28:34-49.
- . 1991. *Cognition and Rationality in Bargaining*. New York: Free Press.
- Neale, M. A., V. L. Huber, and G. B. Northcraft. 1987. The framing of negotiations: Context versus task frames. *Organizational Behavior and Human Decision Processes* 39:228-241.

- Nemeth, C. 1970. Bargaining and reciprocity. *Psychological Bulletin* 74:128-140.
- Osgood, C. 1962. *An Alternative to War or Surrender*. Urbana: University of Illinois Press.
- Oskamp, S. 1971. Effects of programmed strategies on cooperation in the prisoner's dilemma and other mixed motive games. *Journal of Conflict Resolution* 15:225-259.
- Patchen, M. 1987. Strategies for eliciting cooperation from an adversary. *Journal of Conflict Resolution* 31:164-185.
- . 1988. *Resolving Disputes between Nations*. Durham, NC: Duke University Press.
- Pruitt, D. G. 1981. *Negotiation Behavior*. New York: Academic.
- . 1983. Achieving integrative agreements. Pp. 35-50. in *Negotiating in Organizations*, ed. M. Bazerman and R. Lewicki. Beverly Hills: Sage.
- Pruitt, D. G., and M. J. Kimmel. 1977. Twenty years of experimental gaming: Critique, synthesis, and suggestions for the future. *Annual Review of Psychology* 28:363-392.
- Pruitt, D. G., and S. A. Lewis. 1977. The psychology of integrative bargaining. In *Negotiations: Social Psychological Perspectives*, ed. D. Druckman. Beverly Hills: Sage.
- Raiffa, H. 1982. *The Art and Science of Negotiation*. Cambridge, MA: Harvard University Press.
- Rapoport, A. 1966. *Two Person Game Theory: The Essential Ideas*. Ann Arbor: University of Michigan Press.
- Rapoport, A., and A. M. Chammah. 1965. *Prisoner's Dilemma: A Study of Conflict and Cooperation*. Ann Arbor: The University of Michigan Press.
- Rubin, J. Z., and B. R. Brown. 1975. *The Social Psychology of Bargaining and Negotiation*. New York: Academic.
- Schelling, T. C. 1960. *The Strategy of Conflict*. New York: Oxford University Press.
- Schlenker, B., T. V. Bonoma, J. Tedeschi, and W. P. Pivnik. 1970. Compliance to threats as a function of the threat and the exploitiveness of the threatener. *Sociometry* 33:394-408.
- Siegel, S., and L. Fouraker. 1960. *Bargaining and Group Decision-Making: Experiments in Bilateral Monopoly*. New York: McGraw-Hill.
- Sermat, V. 1964. Cooperative behavior in a mixed motive game. *The Journal of Social Psychology* 62: 217-239.
- . 1967. The possibility of influencing the other's behavior and cooperation: Chicken versus prisoner's dilemma. *Canadian Journal of Psychology* 21:204-219.
- Solomon, L. 1960. The influence of some types of power relationships and game strategies upon the development of interpersonal trust. *Journal of Abnormal and Social Psychology* 61:223-230.
- Stein, L. J. 1967. The doctor-nurse game. *Archives of General Psychiatry* 16:699-703.
- Strauss, A. 1978. *Negotiations: Varieties, Contexts, Processes, and Social Order*. San Francisco: Jossey-Bass.
- Stryker, S. 1977. Developments in "two social psychologies": Toward an appreciation of mutual relevance. *Sociometry* 40:145-160.
- Tannenbaum, A. S. 1968. *Control in Organizations*. New York: McGraw-Hill.
- Tedeschi, J. T., T. V. Bonoma, and N. Novinson. 1970. Behavior of a threatener: Retaliation versus fixed opportunity costs. *Journal of Conflict Resolution* 14:69-76.
- Tedeschi, J. T., B. Schlenker, and T. V. Bonoma. 1973. *Conflict, Power, and Games*. Chicago: Aldine.
- Thompson, L., and R. M. Hastie. 1990. Social perception in negotiation. *Organizational Behavior and Human Decision Processes* 47:98-123.
- Walton, R. E., and R. B. McKersie. 1965. *A Behavioral Theory of Labor Negotiations: An Analysis of a Social Interaction System*. New York: McGraw-Hill.
- Ward, H. 1989. Testing the waters: Taking risks to gain reassurance in public goods games. *Journal of Conflict Resolution* 33:274-308.
- Wilier, D., B. Markovsky, and T. Patton. 1989. Power structures: Derivations and applications of elementary theory. Pp. 313-353 in *Sociological Theories in Progress: New Formulations*, ed. J. Berger, M. Zelditch, Jr., and B. Anderson. Newbury Park, CA: Sage.
- Wilson, W. 1971. Reciprocation and other techniques for inducing cooperation in the prisoner's dilemma game. *Journal of Conflict Resolution* 15: 167-195.
- Young, O. R., ed. 1975. *Bargaining: Formal Theories of Negotiation*. Chicago: University of Illinois Press.
- Yukl, G. A. 1974. Effects of the opponent's initial offer, concession magnitude, and concession frequency on bargaining behavior. *Journal of Personality and Social Psychology* 3:323-335.
- Zeuthen, F. 1930. *Problems of Monopoly and Economic Warfare*. London: Routledge & Kegan Paul.