

The SAGE Handbook of Conflict Resolution

Problem-Solving Approaches

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INTRODUCTION AND DEFINITIONS

Problem solving, when referring to conflict resolution approaches, has come to have more than one meaning as a term of art. These meanings are not unrelated conceptually, but as the term is used differently in different subsets of the field, it will be reviewed separately here also. In both cases, *problem-solving approaches* refer to specific intervention methodologies, with their own strategies, tactics, and assumptions.

First, in the work of intergroup and international conflict resolution, *problem-solving approaches* have come to mean offthe-record, face-to-face meetings between members of adversarial groups, where a third party facilitates participants working through a structured agenda that asks participants to consider the concerns of all parties participating, the shape of possible solutions, and the constraints faced by all parties participating to accepting the varying possible solutions. Underlying this approach is a goal of addressing basic human needs, with the assumption that frustrated basic human needs is the source of serious conflicts. The confidential nature of such meetings is meant to allow for more candid discussions and more creativity in the generation of new options and makes it more politically possible for influentials to attend. Joint action steps are often devised. Such an approach is typically, but not always, used specifically with influentials in order to maximize the impact of new insights and solutions.

By contrast, in the area of mediation more generally, *problem-solving approaches* have come to be applied to the style and school of mediation that stresses a focus on identifying underlying interests and reaching integrative agreements. This is contrasted by authors such as Bush and Folger (1994/2004) with other mediation approaches such as *transformative approaches*, where the emphasis is not on reaching an agreement, but rather on changing the participants and their way of relating. Though the notion of problem solving in mediation is very old, applying this term to refer to a certain school of mediation is relatively recent.

The use of problem solving as a frame for the task in a negotiation has an even longer history, and thus will be useful for setting the context for these approaches. Across the spectrum of human cultures, one finds multiple means for conflict management (Gulliver, 1979; Moore, 2003; Nader & Todd, 1978). Within this spectrum, two methods are of particular usefulness to contrast: adjudication and negotiation. These two forms of conflict management may be more or less formal, and more or less institutionalized, but the primary difference between them is the locus of the decision making (or problem solving, in this context), which in turn influences both the nature of the relationship and the interaction between the parties (Gulliver, 1979). In adjudication, the parties are supplicants to an authority figure who makes the decision; in some variants such as arbitration, the parties choose to give this authority over to a third party. However, in negotiation, or its variant of mediated negotiations (mediation), the parties retain the role of decision maker. Though one party may have more power or influence than the other party, a negotiation still requires mutual influence and the accession of both parties, thus each party must attempt to influence the other. The negotiation process requires parties to communicate, to learn how to influence each other, and to develop some level of collusion and coordination.

Negotiation assumes interdependence, thus parties must influence the other to achieve their own goals. Influencing the other in a negotiation can run the spectrum from persuasion to coercion. Problem solving in negotiation, whether in interpersonal or international, suggests a framing of the task from one where one forces

one's solution or decision, to a task where "two heads are better than one" and the parties solve the problem together. The dynamic of the struggle for dominance, of the need to "win," may still play a role; however, the joint responsibility for solving a problem becomes the primary focus.

PROBLEM SOLVING AS STRATEGY

Problem solving is a strategy for achieving a goal. When that goal is to resolve conflict, a "problem-solving approach" operates in several ways: to change the focus of the disputants (e.g. "separate the people from the problem," Fisher & Ury, 1981), to change the framing of the problem and the associated incentives and goals (cooperation vs. competition, Deutsch, 1973), and to change the interaction from escalatory to de-escalatory (Burton, 1969; Kelman, 1986). Problem solving has been investigated in several ways, with complementary results: it can be explored as an individual task, as a group task, and as an alternative frame for a task initially seen as competitive.

Individual problem solving

Interest in the problem solving of individuals goes back at least as far as Aristotle, through many subsequent philosophers, and emerging as a significant area of research in modern psychology. A *problem* is conceived of as any situation where "an organism has a goal but lacks a clear or well-learned route to the goal" (Dominowski & Bourne, 1994). *Problem solving* captures that process by which the organism arrives at behavior that is effective in achieving its goal. This process is one engaged in by many organisms besides humans, and some would argue by computers as well. In the next section, we will consider groups as problem-solving entities.

Two issues drive the consideration of problem solving: mental representation and mental computation (Dominowski & Bourne, 1994). In other words, how are the external world and its contingencies represented internally, and how are these representations changed, augmented, and acted upon? While some consider trial and error to be one form of working toward a problem solution (Van Gundy, 1988), Hunt (1994) suggests that "problem solving occurs when we understand the external world by exploring an internal mental model of that world, instead of poking around in the external world directly" (p. 216).

Many writers credit a sea change in thinking and research on problem solving to Newell, Shaw, and Simon's (1958) proposal that computer programs be used as models for human thought. With both humans and computers, reasoning involves the manipulation of the internal world, though differences in representation between humans and computers may mean that the transformations also differ (Hunt, 1994). Newell and Simon's (1972) basic model for problem solving suggested assessment of the problem space with nodes and links between them, and then the development of a strategy for moving from node to node in order to eliminate the gap between the current state and the goal state.

Subsequent research indicated that though this may characterize the process used by those who do not know clearly how to solve a problem, those with domain expertise have been found to proceed differently. Experts rely on schemata, which follow upon a sophisticated analysis of situations. "Schemata...are socially acquired ways of dealing with problems [and] provide an orderly way to shift attention from one aspect of a problem to another" (Hunt, 1994, p. 227). Experts short-circuit the search process by applying previously learned rules.

In sum, one fundamental aspect of problem solving involves gathering information to better understand the problem space, and manipulating that information so that it invokes and creatively combines already-learned solutions and strategies for action.

Group problem solving

It is not a huge leap to see how one might use a group to increase information available for problem solving. After all, schemata used to streamline or short-circuit the search process are themselves often socially constructed and transmitted.

Early work on group problem solving identified the benefits of utilizing groups to produce more efficient solutions (Brown, 1986; Burnstein, 1982; Hackman, 1990; Osborn, 1957; Paulus et al., 2001). More people meant more information available to set the problem and formulate a strategy for solving it. Differences among group members could actually promote more effective problem solving, in that more diverse information was available for creative solutions (Ghiselli & Lodahl, 1958; Hoffman, 1959; Hoffman & Maier, 1961; Maier, 1958). Since a dominant individual could interfere with the free expression of differing options (Maier & Hoffman, 1960, 1961), authority figures were encouraged to refrain from expressing their ideas in a work group, at least until subordinates had a chance to be heard (Maier, 1952). Some (Hoffman et al., 1962) even go so far as to encourage increased commitment to points of view so that conflict can be generated and thus encourage creative problem solving. Here, producing the conditions for creative problem solving to improve the quality of group solutions to a problem actually involves encouraging difference.

Influence from new insights into human problem solving more generally have led to enhanced models for problem solving in groups. As in individual problem solving, group problem solving can benefit from a structure to the approach. While routine problems can be solved via standard operating procedures, and more uncertain problems can draw on heuristics and past experience, the most complex, uncertain, and ambiguous a problem is, the more likely custom-made solutions will be needed (Van Gundy, 1988). Problem solving provides the structure needed to solve ill-structured problems. In groups, this typically involves techniques for both analyzing and refining the problem, and for generating ideas for solutions. For example, redefinition methods provide new perspective on problems, while analytic methods break down the problem into its elements in order that interrelationships can be identified.

Group problem solving has multiple stages. Simon (1977) proposed a three-stage process: *intelligence*, where a problem is recognized and then further defined through information gathering, *design*, where problem solutions are generated, and finally, *choice*, when options are selected and implemented. Similar tripartite stages exist throughout this literature. Most problem-solving conflict resolution processes have been structured to include similar stages. Wallas (1926) proposed four stages to the creative process: preparation, incubation, illumination, and verification; however, Van Gundy (1988) cautions that in group techniques that push for the quick generation of a large number of ideas, incubation is often sacrificed. Another well-known line of research (Janis, 1982) has documented the problems associated with social pressures that truncate the processes defining the problem and generating options, labeling this distortion of group problem solving, "groupthink."

Group problem solving and conflict: cooperation vs. competition

As outlined earlier, groups can provide more information and work creatively to solve problems. Whether parties actually work together or instead they work at cross purposes is primarily a function of the situation, as parties perceive it is defined. Morton Deutsch early on identified patterns of cooperative and competitive contexts that were both mutually exclusive and self-reinforcing. In other words, cooperative behavior led to further cooperation, while competitive behavior led to further competition. This reciprocity rule was captured in his process model first as his "crude law of social relations," namely that "the characteristic processes and effects elicited by a given type of social relationship...tend also to elicit that type of social relationship" (Deutsch, 1973, p. 365, italics added).

Deutsch's theories on cooperation and competition were linked to goals. Parties pursue goals through engaging in activities, and when activities of parties are incompatible, a conflict exists. According to Deutsch, conflict behavior can be predicted by the relationship that one perceives between one's own goals and those of another party. If one perceives incompatible activities (conflict) but a positive relation between one's own goals and those of another, in that the goals are only reachable if the parties work together (positive interdependence), then cooperative behavior will result. If one perceives incompatible activities and a negative relationship between the goals, in that one can only achieve one's own goals if the other party does not achieve theirs (negative interdependence), then competitive behavior will result.

Cooperative behaviors include readiness to be helpful; shared, open communication; trusting and friendly attitudes; perceptions of similarity; awareness and emphasis on common interests and values; confidence in one's own ideas and the value others see in them; coordination of effort and division of labor; and an emphasis on enhancing mutual power, sometimes through enhancing the other. Competitive behaviors include tactics of coercion, threat, or deception; poor or deceptive communication; suspicious and hostile attitudes; mistrust; duplication of effort; minimizing similarity; awareness and emphasis on differing interests and deemphasizing common interests and values; and an emphasis on increasing the power difference and therefore the need to accumulate power to oneself (Deutsch, 1973; 2000).

It is helpful to distinguish between cooperative and competitive behaviors on the one hand, and the context that produces them on the other. Some might call such contexts "cooperative or competitive contexts" because of the behaviors they elicit, while others prefer a cleaner conceptual separation, particularly for research purposes (Van deVliert & Janssen, 2001). Cooperative or competitive behaviors arise from cognitive and affective responses to certain perceived goal linkages (Van deVliert & Janssen, 2001). "Positive goal linkages foster the willingness to allow someone else's actions to be substituted for one's own (substitutability), the development of positive attitudes toward each other (positive cathexis), and the readiness to be influenced positively by one another (inducibility), which subsequently results in cooperative behavior" (p. 278). Contrariwise, perceived negative goal linkages result in no substitutability, negative attitudes, and an unwillingness to be influenced by the other, which produces competitive behavior.

Most situations are actually a mix of both positive and negative goal linkages: so-called mixed motive situations (Deutsch, 1973: Lax & Sebenius, 1986; Schelling, 1960). Rather than propose that either competition or cooperation will dominate depending on the relative strengths of the perceived goal linkages, most propose a mixture in the resulting process (Deutsch, 2000; Van de Vliert & Janssen, 2001). In other words, conflicts are typically mixes of cooperative and competitive processes, and "the course of the conflict will be determined by the nature of the mixture" (Deutsch, 2000, p. 14).

Problem solving in negotiation: integrative vs. distributive

Problem solving is the process of closing the gap between what exists and what is desired: the process of reaching a goal. If the task of achieving this goal is defined as a group task, then in addition to the cognitive and motivational factors of individual problem solvers, the problem solving will be influenced by group dynamics. Group problem solving can both be more creative, and subject to negative group influences such as groupthink noted above. In addition to the information processing of the individuals involved, factors such as the confluence or divergence of the goals of group members, alternative agendas, leadership, and conformity processes will all influence the capabilities and form of groups engaging in problem solving.

One of the challenges of group problem solving is for the members to perceive that they are indeed one group attempting to solve a problem together, rather than two or more groups competing for their definition of the problem and/or the solution to triumph. This challenge, of framing (or reframing) the problem as a joint problem to be solved together rather than as a competition between parties for domination of their own solution, captures the essence of problem solving in conflict resolution.

The roots to this notion of joint problem solving, joint gains, and creating value, so critical to modern processes of conflict resolution, reach back to several sources. Many within the field of alternative dispute resolution trace the notion of integrative solutions to the 1920s and the work of Mary Parker Follett (Davis, 1989; Graham, 1996; Menkel-Meadow, 2000). Though developed perhaps more prominently in the work of Walton and McKersie (1965) and others (Blake & Mouton, 1964; Fisher & Ury, 1981; Pruitt & Rubin, 1986), Follett framed three ways to handle conflict: domination, compromise, and integration. She made a point of distinguishing the last two: conflict could be constructive, and did not necessarily require parties to give up or give in on things most important to them. Parties could increase the likelihood of integrative solutions "by bringing differences"

out into the open, facing the conflicts and underlying desires, evaluating and re-valuing desires and preferences when the other parties' desires are made known, and looking for solutions in which the 'interests may fit into each other'" (Menkel-Meadow, 2000). Her examples of integration have now become classic stories for teaching and training in integrative bargaining: of the two library patrons negotiating over opening a window, where one wanted fresh air and the other wanted to avoid a draft, and of two sisters and thelastorange, where one wanted the flesh and the other needed the peel. In each case, what appears to be distributive problems where only one can be satisfied, become problems that can be solved creatively once underlying desires are known.

Trained as a political scientist, Follett applied the notions of democratic governance to improve the functioning of groups in organizations. She "was interested in how groups, using principles of democratic governance, could work together and produce better outcomes than hierarchically produced orders" (Menkel-Meadow, 2000, p. 7). In this, she foreshadows the seminal work of Kurt Lewin and colleagues (Lewin et al., 1939) on democratic vs. autocratic leadership and group functioning, as well as the work on creative group problem solving discussed above.

In sum, problem solving in a conflict resolution context, or frankly, in any context involving more than one individual, adds additional complexities. In addition to identifying or setting the problem, and then developing a plan for moving from the current state to the desired state, problem solving with more than one person layers on additional agendas and motives, concerns over leadership, perceptions about the other's goals, and norms about behavior in the perceived context. Though informationally "two heads may be better than one," the jump to more than one problem solver layers on perceptions about each others' goals that result in strategies that are either cooperative or competitive, integrative or distributive, dominating or democratic. In order to move the perceived primary task away from the "social" task of dominating or "winning" over others, to the "instrumental" task of achieving a joint goal, then these other dynamics must be managed. Problem-solving approaches attempt to harness the positive dynamics of group interaction (increased information, diversity of knowledge, creativity) while managing the negative dynamics of group interaction (inclinations toward competition and domination which reduce the group's creative and problem-solving capacities) in order to produce both efficient problem solutions and the motivation to implement them jointly.

Prescriptions resulting from research

While the research reviewed above has been descriptive and explanatory (Van de Vliert & Janssen, 2001), the following prescriptions can be inferred to inform better conflict resolution practice. Based on the research reviewed, processes should be structured so as to:

- change "concern" for the other
- change perceptions of the other's goals
- change perception of the structure of the task from fixed-sum to variable-sum
- change goal orientation from maximizing individual outcomes to maximizing joint outcomes
- improve the accuracy of perception of the other's priorities
- improve perception of the compatibility of interests.

Several works build on these strategies to outline and prescribe processes to achieve more constructive solutions to conflict (Fisher & Ury, 1981; Mnookin et al., 2000; Moore, 2003; Pruitt & Rubin, 1986).

PROBLEM-SOLVING APPROACHES IN INTERNATIONAL CONFLICT: NEGOTIATIONS

Conflict management has long been a topic in the study of international relations, arguably going back at least as far as the Greeks (Thucydides, 500 BC). Bercovitch (1996) traces mediation at least as far back as the Bible, Homer's *Illiad*, and Sophocles' *Ajax*.

To trace the exploration of problem solving in international conflict, Hopmann (1995) argues one should begin

with the first systematic theorizing about international negotiations reflected in Thomas Schelling's (1960) *Strategy of Conflict*, Anatol Rapaport's (1960) *Fights, Games, and Debates*, and Fred Charles Iklé's (1964) *How Nations Negotiate*. These authors all shared a grounding in mixed motive, or non zero sum, games, where both cooperative and competitive options are available to parties. Their work was in turn influenced by game theory as developed by von Neumann and Morgenstern, Nash, and Luce and Raiffa. Though the mixed-motive games described in the works of these authors revealed the choice of cooperative or competitive options, Hopmann (1995) maintains that these authors diverged in their emphasis, with some highlighting competitive aspects, including the need to protect oneself from exploitation (as in the prisoner's dilemma game), and others highlighting cooperative efforts where value is created through enlarging joint interests.

Hopmann (1995) notes that Rapaport went beyond game theory to point out that game theory, while encouraging new thinking about conflict, also leads to impasses where it is theoretically insufficient to deal with certain types of conflict situations. "These impasses set up tensions in the minds of people who care. They must therefore look around for other frameworks into which conflict situations can be cast" (Rapaport, 1960, p. 242). Rapaport thus added a concept he called "debate," to capture when parties aim for understanding and attempt to identify possible mutual gains.

Rapaport's expansion of game theory to include "debate" contributed to the development of an alternative paradigm of problem solving in international negotiations (Hopmann, 1995). Though parallel developments in labor negotiations such as the aforementioned work of Walton and McKersie were noted, "integrative" bargaining and problem solving did not become a distinctive area of study in international negotiations until about 1980. Hopmann credits the development of this paradigm within international negotiations to the influence of Fisher and Ury (1981) (interests rather than positions), Zartman and Berman (1982) (diagnosis, formula, detail), and the work of Burton (1987) and Kelman (Rouhana & Kelman, 1994) (who address basic needs and identity through informal interactions; discussed in more detail later).

Hopmann argues that the contrast between the bargaining and problem-solving paradigms of international negotiations parallels the contrast between realism and liberalism, the two primary paradigms of international relations (Hopmann, 1995). In particular, realism's emphasis on the importance of relative gains over adversaries contrasts with liberalism's emphasis on absolute gains even if others benefit as well or even more, and the accompanying search for joint gains and positive sum solutions.

When is problem solving used in international negotiations? When do absolute gains become the focus more than relative advantage? Hopmann indicates that, besides "purely rational calculation," negotiation behavior will depend on two factors: (1) the "orientation" and larger world view of the individual decision maker, and (2) the dynamic of the interaction process operating to produce mutual cooperation, exploitation of one by the other, or mutual competition.

Regarding decision maker's orientation, Hopmann argues that some individuals are intolerant of ambiguity, see the world as competitive, and are thus motivated to win in most contexts. Such individuals may pursue a competitive strategy even in contexts where an equally competitive opponent may mean they both fall, as in the dilemma encapsulated in the Prisoner's Dilemma game (Luce & Raiffa, 1957). To these individuals, it matters less what is gained or lost, as long as they come out ahead of their opponent. Social psychological research supports the prevalence of this behavior (Tajfel, 1978) although finding it to be produced as much or more by the situation than by individual proclivities. By contrast, other individuals may view the world differently. "They may be more tolerant of ambiguity, more cognitively complex, and more willing to cooperate with others to achieve collective benefits" (p. 36) over time. Their strategy may be to forego short-term gains in favor of long-term gains through a cooperative relationship.

How might its use be made more likely? How might dynamics be shaped to be most likely to produce stable cooperation? Can even the decision maker's initial orientations and assumptions about human nature (or at

PROBLEM-SOLVING APPROACHES IN INTERNATIONAL CONFLICT: INTERACTIVE CONFLICT RESOLUTION

Nature of protracted intergroup conflict

In addition to the fundamental reconceptualization of the problem and the task inherent to all problem-solving approaches, new thinking was occurring regarding the nature of international and intercommunal conflict that suggested what then must have seemed like radical and unorthodox approaches to intervention. John Burton, an international relations specialist and former Australian diplomat, argued against the effectiveness of traditional power approaches. In light of the emerging "pluralist" alternative to the "realist" view of the international system, he and his colleagues crafted a new forum to incubate security, with a long-term view and a problem-solving approach.

Important new work was appearing on the nature of international conflict. Azar's (1980, 1983) early quantitative work on international conflicts underlined their true nature: since World War II, most had occurred in the developing world, with most of them ethnic rather than strategic, but exacerbated by superpower rivalries played out on their stage. Azar felt that the focus of international relations was misplaced, neglecting the two-thirds of states that were small, destitute, underdeveloped, and potentially split by both ethnic alliances and by international machinations. Rather, Azar felt it critical to focus on "protracted social conflicts," which he considered to be "hostile interactions which extend over long periods of time with sporadic outbreaks of open warfare fluctuating in frequency and intensity" (Azar et al., 1978).

According to Azar and colleagues, protracted social conflicts (PSCs) are a mixture of socioethnic and interstate elements that defy traditional settlement methods, and generate escalating perceptions and behaviors. Because crises are managed to restore the status quo and keep conflict at only a moderate intensity, the conflicts take on an inertial or even "frozen" quality, lacking any resolution despite repeated attempts at settlement.

Fisher (1997, p. 80) further summarizes Azar's (Azar et al., 1978) insights:

First, strong equilibrating forces will operate to undermine attempts at settlement, partly because of vested interests, but also because the unpredictable nature of a possible termination threatens personal, social, and national identities. Because the struggles for recognition and acceptance, which are a major part of the conflict, cannot be won or lost through typical PSC behavior, the approach of gradualism in conflict resolution and peacebuilding is necessary. Meanwhile the appalling absorptive capacity of PSCs is demonstrated through the enormous human and material resources that are consumed by the conflict. Finally, the protractedness of the conflict will be reinforced by the tendency of decision makers to use the conflict as an excuse for inaction on pressing problems, such as the place of ethnic minorities, the distribution of income and services, and societal mobility. Such inaction may be excused as caution, indecision, or as cunning, but the outcome is that fundamental needs for development are ignored in the face of the conflict.

Azar and Farah (1981) added that PSCs involve deep-seated religious, racial and ethnic animosities that set these conflicts apart from those not involving group identities and the rights asserted and sought through these. Similarly, Lederach (1997) asserts that because some states do not meet the needs of all its citizens, people find security and identity in narrower groups that are more familiar, historical, and controllable, focusing on group rights rather than individual rights. The process by which identity narrows, often leading to breakdowns in central authority, is rooted in long-standing mutual distrust, hatred, fear, and often historical injury, and reinforced by recent violence (Lederach, 1997).

However, ethnicity is not the sole causative factor in these conflicts. Azar and Farah (1981) highlight the role played by structural inequalities and political power differences, particularly when these in turn result in

differential distribution of rewards among groups in the society. These differentials typically are reinforced through unequal international connections, meaning that uneven and unequal development benefits will actually further exacerbate differences. One group dominates over others, thereby linking discrimination and victimization to group identity. Group identity and hatred frames all interactions and attributions, and passes from one generation to the next through socialization.

While Azar felt the protracted nature of these conflicts stems from unintegrated social and political systems and unintegrated development, he traced causation back to basic human needs, as had Burton (earlier). "The real source of conflict is the denial of those human needs that are common to all and whose pursuit is an ontological drive in all" (Azar, 1985), especially "security, distinctive identity, social recognition of identity, and effective participation in processes that determine the conditions of security of identity" (p. 60). When these are denied, people will rise up and risk much to respond to what may be perceived as an existential threat. For a more recent treatment on the expression of the needs of identity, security, recognition of identity, and effective participation in calls for, or defense of, "voice," see d'Estrée (2005). Burton's theory development proceeded inductively, drawing on insights gained from controlled communication and problem-solving workshops, and from interaction with colleagues such as Azar and Kelman. As noted, Burton felt that what he labeled "deeprooted conflict" came from fundamental, underlying, basic human needs that were not negotiable or suppressible. However, these needs were common to all, and an appropriately facilitated analytical discussion could allow for this to be discovered by the parties themselves, as well as the means to constructively address these needs. The theoretical underpinnings for these problem-solving approaches are discussed below.

Principles of interactive problem-solving approaches in intergroup conflict resolution Goals, objectives, and assumptions

Based on the aforementioned nature of deep-rooted, protracted conflict, traditional conflict management strategies fall short of achieving stable peace. As noted above, innovators drew on diverse areas of thinking to frame a new approach. This new approach has been called by several names, including "Track Two diplomacy" (Diamond & McDonald, 1991; Montville, 1987), "problem-solving workshops" (Kelman, 1972), "problem-solving forums" (Azar, 1990), "collaborative analytical problem-solving" (Mitchell & Banks, 1996), "interactive conflict resolution" (Fisher, 1997), "third-party consultation" (Fisher, 1983), or "informal mediation" (Kelman, 1992). Though several have contributed to the general paradigm of interactive problem solving, its essence can be gleaned from the common themes across the writings of its primary framers.

The essence of interactive problem solving can be summarized as:

- Bringing the primary, interdependent parties together to solve it themselves (likely with third-party facilitation).
- A focus on addressing human needs (since their neglect has led to the conflict becoming protracted).

This is done through the intentional and skilled use of processes, facilitated by a third party, that are designed to foster the following process objectives: changing communication, "analyzing the conflict" (sometimes contrasted but paired with problem solving), changing stereotypes and enemy images, changing options available and developing new ideas for solutions, changing one's perceptions of change, both in the other and in the relationship, connecting the individual with his or her system and yet internalizing change, and finally, transforming the inter-group/intersocietal relationship.

Basic design elements

Interactive problem solving has assumptions that address both thinking processes and sociopolitical processes. Like all problem-solving models, it assumes that a problem-solving process involves moving through a systematic, constructive thinking process to reach a desired goal state. And like group problem solving models,

it assumes "two heads are better than one," that benefits come from putting together those who have divergent views, experiences, and expertise. In fact, interactive problem solving in a conflict context assumes that both heads *must* participate because the nature of conflict comes from parties that are interdependent and intertwined. Therefore, if parties are inter-dependent, the system is served by both parties benefiting to some degree and neither party losing, that is, with a "win-win" or integrative solution. This third assumption stems from problem-solving approaches in negotiation.

Two additional assumptions are added when considering the problem-solving approaches used in an intergroup conflict context. First, because the sources of protracted intergroup conflict are linked to unmet human needs, addressing human needs such as identity and security must be the focus of the problem solving. Second, because protracted intergroup conflict engages the whole society rather than just elites, problem-solving approaches operate at multiple levels to change the intersocietal relationship. Nonetheless, because they are fundamentally problem solving in approach, the central task of such a process remains achieving a humane and responsive solution.

As interactive problem solving evolved as a particular process methodology, these assumptions drove the choices that led to certain standardizing in format, participants, agenda, and process. Variations reflect perhaps differing emphases and differing interpretations of theory, yet the core of this model remains basically the same.

Topic and communication. For many of the original developers of international interactive problem-solving approaches, the impetus was to find an alternative to the way traditional international relations are conducted (Burton, 1969; Kelman & Cohen, 1976; Montville, 1987; Saunders, 2001). Rather than focus on power considerations or questions of rights, problem-solving approaches focus on underlying human needs. To focus a meeting on human needs requires conscious structuring of meeting agendas and controlling of communication. Burton (1987, 1990) proposes that without a third party and the proper setting, the traditional interaction between conflicting parties would mean that parties would see what they expect to see and likely lapse into bargaining or adversarial interaction. Kelman (1992) suggests that typical conflict norms call for defending rights, posturing for negotiations, and speaking "for the record"; third-party facilitation is necessary to produce a different kind of interaction: one where parties are encouraged to talk to each other rather than constituencies or third parties, one where they actually listen to each other, not to score debating points but to "penetrate each other's perspective," and, finally, one where an analytic focus can be sustained and understanding of the other party's concerns and constraints can be gained to allow for true problem solving of inventive solutions.

In any meeting, rules of procedure influence both process and outcome. Problem-solving processes use informal ground rules or guidelines to shape interaction. For example, privacy and confidentiality allows participants to express and explore new and sometimes controversial ideas without the stifling influence of an external audience or an official record. Meetings are consciously unofficial, for similar reasons. Other common ground rules include: a "no fault" principle, not because parties are equally at fault, but to shift the discussions from assigning blame to exploring causes (Kelman, 1992); and commitment to attend all sessions of a workshop (Babbitt & d'Estrée, 1996). Participants are consciously seated in their groups during the interaction so as not to distort or lose the intergroup nature of the interaction; this is not a classic contact effort (Pettigrew, 1998) where interpersonal interaction is stressed and friendships are the goal. Kelman felt that although it was necessary to build working trust, it "must not be allowed to turn into excessive camaraderie transcending the conflict, lest the participants lose their credibility and their potential political influence once they return to their home communities" (1992, p. 77). Burton went so far as to house the groups separately. Though others did not agree with this extreme separation, Burton felt that participants should not interact apart from across the table in front of the third-party panel, both to ensure that all concerned can share in each communication or interpretation, and to make sure that "the participants do not alter significantly their own value systems and perceptions of the nature of the conflict as a result of the group dynamics and friendships which develop during the process. When they 'reenter' their own society they will have a problem conveying any new ideas to

decision-makers in a convincing way if this happens" (p. 201). He felt that participants had to be able to sell new options, not on the basis of some changed interpersonal perception or personal relationship, but because of the merits of those options.

Burton also felt that such control of interaction was necessary to prevent parties from prematurely jumping to the preparation of proposals. Though this procedure might be standard in other conflict resolution processes — in fact, in negotiation and mediation theories, parties are encouraged to develop a "single text" to focus on (Fisher & Ury, 1981; Moore, 2003) — it must come only after participants have spent the time and hard work learning to understand each other's needs and constraints. Analysis allows goals, tactics, interests, values, and needs to be clarified first so that possible outcomes can be formed based on this analysis.

Participants. Interactive problem solving is meant to be part of a larger strategy to build a working relationship between parties severed by long-term conflict so that official negotiations might be supported and official solutions might ultimately be put into place. Therefore, the choice of who to bring together for interactive problem solving is to be made with an eye to both official impact and broad societal impact. John Burton and Christopher Mitchell both felt the highest levels of government should be involved, at least potentially in the identification of participants to attend in an unofficial capacity (Burton, 1987; Mitchell & Banks, 1996).

Others, such as Herbert Kelman, made an argument for involving influentials expressly not in government positions, on the grounds that the flexible thinking required for creative problem solving could not be done by those restricted by official policy lines. Montville (1987) labels this a "second-track" approach. In his theory of peacebuilding, Lederach (1997) proposes a multitiered approach that includes a middle level of influentials able to build cross-cutting professional networks, working out of the media glare, who are best situated to both represent broader societal concerns and to influence official leadership.

Setting. Recall above that in order to generate creative problem solving in groups, one needed both divergent views and also the norms that allowed for their expression. Establishing a forum that allows for such activity requires attention to both the topic and agenda, but also to the context of the meeting. Context should allow for free expression of ideas, and exploration of new and unusual ways of tackling problems. Many suggest that, like with other forms of activity designed to shift thinking or allow for new ways of thinking such as corporate retreats, a setting apart from daily pressures and standard roles is critical. Two primary sorts of settings have been used: an academic setting or a retreat setting.

Retreat settings are designed to remove distractions and encourage reflection. Their typical luxurious or at least idyllic quality allows participants the "space" to meet each other in a neutral context, to think differently, and to interact differently. Academic settings provide logical places to think analytically and creatively, with fairly strong norms encouraging the consideration of alternative viewpoints (Kelman, 1992). They also provide a place to which opposing groups can be brought with less resistance or suspicion, as universities play host to many divergent groups regularly.

Time frame and timing. Probably one of the more variable aspects of problem-solving approaches is the time frame set aside for interaction between the parties. Burton's original meetings lasted 7–10 days. Kelman's primary problem-solving workshop model was designed around a long weekend, about the longest amount of time influentials could get away for a chance at unofficial brainstorming and interaction. The interaction would be preceded by uninational preworkshop meetings with the third party on separate evenings to allow participants from the same group to meet each other before meeting those from the adversary group, to familiarize participants with the agenda and ground rules, and to allow for uninational venting with a third-party audience before interacting with the adversary. Rouhana and Kelman (1994) later expanded the workshops to a "continuing" format, meeting with roughly the same group of influential participants over the course of months or years. In many ways, these came to resemble Saunders' (2001) model of "sustained dialogue."

In contrast to theories of negotiation and mediation that suggest conflict can best be settled when it is "ripe" (Touval & Zartman; see Chapter 16 in this volume), work on interactive problem solving suggests such meetings can be fruitful in generating input to decision making and in changing relationships at many different points in a conflict's development. Kelman describes interactive problem solving as designed for prenegotiation, before parties are willing to engage in official settlement processes, but as useful also during negotiations to open up creative options for particularly difficult issues, or in post negotiations, to clarify implementation. Mitchell and Banks (1996) outline how problem-solving workshops are most effective if begun before conflict lines have hardened; these workshops can continue to support official negotiations.

Third party. The role of the third party is primarily to facilitate analysis (Burton, 1990). While traditional mediators can be expected to suggest reasonable compromises, this is not appropriate in problem-solving, as the issues to be focused on are not ones which can be compromised: identity, security, recognition, etc. Though goals cannot be compromised, the means to reach these goals can be modified; in fact, the third party convenes the meeting in order for participants to discover new, mutually agreeable options for meeting these needs and goals.

Mitchell and Banks (1996) argue that traditional third-party intervention adds on to the parties' goals an additional goal of stopping the violence, which may settle the conflict, though typically favoring the goals of one party over other parties. This asymmetric settlement will not endure. Mitchell and Banks consider violence as a problem where because the parties have begun it, only the parties themselves can really stop it; external efforts cannot be relied upon. They argue that what is needed is "assistance of a nonforcible kind" (p. 5).

Facilitating the analysis needed (Burton, 1990) and the interaction that will be constructive (Kelman, 1986) requires special skills. Third-party members should be "impartial, knowledgeable, and skilled scholar-practitioner[s] with the expertise to facilitate...direct discussion of contentious issues" (Fisher, 1997, p. 145). Typically, they are chosen to form a "panel" of 3–8 members that will convene the meetings and facilitate the process. Opinions vary on whether panel members are better to have little direct knowledge of the conflict in question (Burton, 1990a), or whether they should represent a "balanced" third party that reflects the identities of the parties in conflict while advocating a new and constructive joint process (Kelman, 1986).

The third party plays an essential role, providing a context in which the parties can come together, and serving as "a repository of trust" (Kelman, 1992) for parties who cannot trust each other. The third party establishes a framework and ground rules, proposes a broad agenda, and moves the discussion forward. It may contribute content observations around interpretations and implications of what has been said, process observations about parallels between workshop dynamics and larger conflict dynamics, and theoretical inputs helpful for conflict analysis (Kelman, 1992). Insights from other conflicts may be shared as well (Burton, 1990; Mitchell & Banks, 1996).

Agenda. The agenda is designed to encourage analysis, re-perception of the conflict and reality checking, increased mutual understanding of underlying needs and concerns as well as political constraints, and the generation of new options in light of this new information. In this way it parallels the classic problem-solving steps described throughout this chapter. A fairly traditional Kelman-type workshop would begin with introductions and ground rules, proceed to identification of each participant's sense of the range of views in their community and how they might situate themselves in this, a sense of the current situation, a deeper discussion of political and psychological concerns ("needs and fears" — Kelman, 1992), the shape of solutions that might address all primary parties' concerns, constraints to implementing such solutions, and ways to overcome constraints and support each other. Ideas for concrete, joint actions may also be attempted (Kelman, 1992; see Babbitt & d'Estrée, 1996, for a sample agenda).

Examples of interactive problem-solving interventions

In keeping with their original aims, interactive problem-solving workshops have been used in the most visibly

protracted conflicts of the current age: Cyprus, Sri Lanka, Northern Ireland, the Middle East, the Horn of Africa. These are contexts of high social inequality, where political participation is frustrated, identity cleavages channel energy and resources, and violence operates close to the surface when values are threatened.

Former Australian diplomat John Burton and his colleagues at University College London organized the first workshop in the mid-1960s, hoping both to influence the state of the conflict between Indonesia, Malaysia, and Singapore, and to make a point to international relations colleagues that another model of international conflict analysis could be useful and practical (Fisher, 1997). Unofficial, but officially sanctioned, delegates met for sessions in London that allowed for the examination of assumptions, the analysis of the conflict, and a consideration of new options. The exercise re-established diplomatic relations and has been credited with developing the framework and understanding that the nappeared in the 1966 Manila Peace Agreement (Fisher, 1997).

Soon thereafter, Burton's group became involved in the Cyprus conflict, hosting representatives from the Turkish and Greek communities during an impasse in official UN brokered negotiations, which then resumed after these discussions (Mitchell, 1981).

Drawing on the work of both Burton and social psychologist Leonard Doob (Doob et al., 1969), social psychologist Herbert Kelman began to apply the approach to the Israeli–Palestinian conflict. Working with colleague Stephen Cohen, they piloted and then refined the methodology (Kelman & Cohen, 1986). Over several decades, Kelman and colleagues organized more than thirty workshops with influential Palestinian and Israeli participants (Babbitt & d'Estrée, 1996; Kelman, 1986, 1995, 2000; Kelman & Cohen, 1986; Rouhana & Kelman, 1994). Begun as prenegotiation work, attempting to create the conditions for official negotiations between Israelis and Palestinians, these meetings fed insights into the Madrid negotiations, and paved the way for both the Oslo back channel process and the official accords signed in 1993 (Kelman, 1995, 1997a, 1998; Rothman, 1993).

After early work on a Kelman workshop, political scientist Edward Azar joined with Cohen to arrange a series of problem-solving discussions on the Egypt–Israel conflict in the late 1970s. Cohen and Azar (1981) combined insights from these workshops with document analysis and detailed interviews with decision makers to inform a social– psychological description and evaluation of the peace process. Fisher (1997) points out the postnegotiation design, in that "this workshop was the first unofficial meeting between influential Egyptians and Israelis in the wake of the Camp David Accords designed to consider the full range of issues stemming from the agreement. In other words, the workshop focused on issues that had to be addressed to build a peaceful and enduring relationship between the two societies, with the peace treaty serving as the legal framework" (p. 81).

Edward Azar joined with John Burton to host several problem-solving initiatives. After the Falklands/Malvin as conflict between Argentina and England led to military confrontation in 1982, three forums were held, generating a set of principles to inform the official negotiations. Meetings were also arranged during 1984 to address the Lebanese civil war; these meetings helped establish a network that developed the 1988 National Covenant Document that was incorporated into the 1989 Taif Accords (Fisher, 1997). Problem-solving meetings on the Sri Lankan conflict were also held in 1985–1987.

Other colleagues of these innovators have used variants of the problem-solving workshop with influentials in other conflict contexts. Many of these are reviewed by Fisher (1997). These include Cyprus (Broome, 1997; Fisher, 1991, 1992), the US-Soviet relationship (Chufrin & Saunders, 1993), Tajikistan (Slim & Saunders, 1996), the Arab- Israeli conflict (Hicks et al., 1994), and the Hopi-Navajo conflict (d'Estrée, 1999). Problem-solving meetings with influentials have also occurred in conflicts in Curação (Hare et al., 1977), Cambodia (1991), and Afghanistan (1993). Many of these initiatives have used other models of interaction such as sustained dialogue (Saunders, 2001; see Chapter 19 in this volume) and decision seminars (Lasswell, 1966), and meet the core components of interactive problem solving outlined above in varying degrees. It is to be

expected that the degree to which these initiatives deviate from the core components of the interactive problem-solving model, they would be expected to produce different results. For example, not using influentials as participants may decrease the immediate policy impact, while not including a focus on basic human needs, while still constructive, may not produce insights into long-term solutions.

Theoretical/research support

Like many forms of intervention, problem-solving approaches began as an attempt by thoughtful people to improve the way that things were done, in this case, the way that representatives from nations resolved conflict. The best intervention is a pairing of thoughtful action and reflection, so that action might be continually fine-tuned. Schön (1983) called this "reflection-in-action," and considered it the hallmark of the true professional. Kelman (1992) wrote of problem-solving approaches as a form of "action research." Many of the leaders in problem solving have taken the time to reflect on the implicit and explicit theoretical base that informs their work.

Burton (1969, 1990) considered the source of persistent intergroup conflict to be the result of frustration of basic human needs. Burton felt it was critical for conflict analysis to distinguish both conceptually and practically between interests, which are negotiable, and needs, which are non-negotiable. He felt that identity needs underlay most intractable conflicts, so that until these identity needs were addressed, conflict would recur. Clarity was also needed to separate out actual needs from the tactics used to meet those needs, which themselves could be altered. The role of the third party in problem solving was to facilitate the parties in a process where they might develop insight into underlying needs and how to constructively meet them in an interdependent relationship.

Burton's Human Needs Theory suggests that human motivations (and particularly political objectives) fall into three categories: those that are universal and required for development, those tied to a particular culture, and those that are transitory and linked to aspirations. In the first category are needs. Needs had drawn interest from many quarters in the time period Burton was framing his theory. Drawing on the work of Maslow (1970), Sites (1973), and others, Burton highlighted the universal motivations for not only food and shelter, but also needs related to growth and development, such as identity, autonomy, and consistency in response. "Human needs in individuals and identity groups who are engaged in ethnic and identity struggles are of this fundamental character" (1990a, p. 36). Needs will be pursued by all means available: socially sanctioned ones first, but outside the legal norms of society if necessary. Burton takes pains to underline how meeting such needs may lead individuals or groups to "behaviors that cannot be controlled to fit the requirements of particular societies" (p. 37). Burton contrasts needs, which are primordial and universal, ² with values, which are the preferences and priorities held by particular social communities. Values are acquired, and their defense may themselves be important to the needs of personal security and identity, particularly in conditions of oppression, underprivilege, or isolation. Burton considers it to be values that have divided many multiethnic and multicommunal societies, such as Northern Ireland and Lebanon. Over generations, values can change, but only in a context of security. More typically, separate customs and lifestyles are used as reasons for discrimination, and also as ways to defend an identity from the results of discrimination.

Finally, Burton considers interests to be "the occupational, social, political and economic aspirations of the individual, and of identity groups of individuals within a social system" (1990a, p. 38). He considers interests to be more narrowly defined than a term covering all motivations; instead, he considers them to relate primarily to material gain or to role occupancy. The dynamic is typically competitive, as they are often framed as zero-sum, though this framing can be altered (see Problem Solving in Negotiation, above). An important feature of interests is that they are negotiable; they can be traded off.

Separating interests from needs and values becomes important in both conflict analysis and in considering processes of resolution. Burton asserts that too often these are conflated, leading to a lack of awareness that

needs and values are not for trading. "Great powers have not yet come to terms with their failures to control by military force, because they have as yet little understanding that there are human needs that are not for trading and cannot be suppressed" (p. 40). The insight into the distinction between these types of motivations he traces back directly to analysis occurring in facilitated conflict resolution processes (Azar & Burton, 1986; Burton, 1979, 1984). Though interests can be traded off, suggesting processes whereby effective packages can be negotiated, processes that lead to the identification of needs in turn can help to highlight the universal, shared nature of these needs. Once parties discover that they have goals in common, such as Cyprus or Lebanon as an independent state, the groundwork is laid for finding ways to satisfy parties' needs.

Another important conceptual distinction Burton draws is between needs and the satisfiers sought to meet those needs, also described by him as "goals" vs. "tactics." Often, the tactics chosen to satisfy a goal or need end up being mistaken as the goal itself. For example, an international dispute over territory may at its root be about security or autonomy or identity. He cites the example of Israel holding the Golan Heights, first occupied by Israel as a means of defense, where the holding of the Heights in turn became a goal in itself. This confusing of tactics and goals in politics leads to impasses, because tactics may erroneously become non-negotiable.

Burton's theory leads to two other essential points. First, though Burton considers traditional power theories to be correct in hypothesizing conflict over scarce resources, they fail "in assuming that human behavior was determined mainly or solely by material benefits, and that the source of conflicts was over competition for scarce resources" (1990a, p. 46). In his estimation, behavior is more often oriented toward the deeper concerns of identity and autonomy. Second, he considers valued relationships to also be a basic human need, or at least a satisfier of recognition and identity needs. Valued relationships provide a constraint on negative behaviors, and impetus for conforming behaviors. "A conflict is not resolved merely by reaching agreement between those who appear to be the parties to the dispute. There is a wider social dimension to be taken into account: the establishment of an environment that promotes and institutionalizes valued relationships" (p. 47). One could go so far as to say that needs are not satisfied apart from valued relationships, so that a long-term approach to resolution of necessity must address the intergroup relationship. This theme is further echoed in the writings of subsequent theorists (Crocker et al., 1999; Kelman, 1999, 2005; Lederach, 1997; Saunders, 2001).

According to Burton, though humans may use aggression to pursue individual development, they also have conscious and creative resources: the ability to make choices, anticipate events, and cost consequences, and also the ability to deliberately alter environments and social structures. The role of conflict resolution and a third party is then the provision of opportunities for analysis and the use of these conscious and creative resources.

The most effective conflict resolution in such contexts is problem solving, which is inherently analytical. Burton (1990a) outlines four distinctive characteristics of problem solving. First, the solution is not an end-product; it establishes another set of relationships. These relationship themselves may produce new problems. It is an ongoing process. Second, problem solving requires a change in conceptualization of a problem. Third, problem solving deals with a problem in its total environment — political, economic, and social — which is continually evolving. Fourth, sources and origins must be considered in order to be effective, rather than focusing on immediate causal factors.

Burton considers that conflict resolution must be the result of parties engaging in their own study of their own patterns of behaviors "in an intimate and analytical interaction in which there can be detailed checking." He sought a setting whereby the protagonists could check on their mutual perceptions and on the relevance of their tactics and their associated consequences, as well as to explore new options once re-perception and reassessment had begun. It was, in the classic sense of problem solving described earlier, an opportunity to gather additional new information, to reassess the problem space, and from there to generate options.

The hypothesis that Burton puts forth, then, is that "once the relationships have been analyzed satisfactorily, once each side is accurately informed of the perceptions of the other, of alternative means of attaining values

and goals, and of costs of pursuing present policies, possible outcomes are revealed that might be acceptable to all parties" (p. 205).

When Kelman was first exposed to Burton's approach, he made the observation immediately that it was social-psychological in orientation. Social-psychological assumptions undergird the workshop structure, process, and content (Kelman, 1992).

Kelman (1997b) later linked the conceptual undergirding for interactive problem solving more explicitly to a social–psychological analysis of international conflict itself. Though many disciplines and schools of thought contribute lenses through which to analyze international conflict, a social– psychological analysis can offer additional unique and complementary insights. First, international conflict can be seen as a process driven by collective needs and fears, rather than purely by the rational calculations of national interest by decision makers. Second, as noted earlier, international conflict is not merely intergovernmental but intersocietal. Third, this intersocietal nature means that there are multiple avenues for mutual influence, and multiple forms that influence can take beyond coercion. Finally, conflict is an interactive process with an escalatory, self-perpetuating dynamic such that without determined and deliberate intervention, the natural interaction between parties will likely only increase hostility, distrust, and a sense of grievance.

According to Kelman (1997b), conflict interaction is characterized by the following social–psychological processes that produce escalation and perpetuation, particularly in deep-rooted identity conflicts. These processes are both normative (social) and perceptual (cognitive), securing the conflict and making change difficult.

First, Kelman argues that public opinion on conflict issues is influenced by collective moods, both transitory and those more pervasive, that support escalatory actions and make rapprochement difficult. Transitory collective moods such as determination or wariness linked to recent events can either support or hinder a leader's pursuit of peaceful policies. Pervasive and enduring skepticism produced by historical experiences make change seem dangerous. Second, leaders gain deeper support for policies by mobilizing group loyalties than by making rational appeals. Groups invoke loyalty because they address core psychological needs for self-protection and for self-transcendence (Kelman, 1969; Smith & Berg, 1987). Group loyalty processes such as the stifling of dissent, the influence of militant elements, and the way loyalty is measured create barriers to the search for new alternatives. Third, the nature of decision making in conflict and crisis means that decision makers limit the search for options and go with dominant responses, which are likely to be aggressive. Groupthink (Janis, 1982) means that the consensus is not questioned and members are unlikely to offer criticism or to explore alternatives thoroughly. Fourth, norms in long-standing conflicts support zero-sum framing of any negotiation, where the way to gain is to make the other lose. These perceptions and norms make thinking about the interests, needs, or fears of the other party unlikely, precluding effective negotiations. Fifth, structural and psychological commitments to maintaining the conflict — either for professional survival, psychological investment, or to avoid a less than satisfactory resolution — make changes toward conflict resolution fraught with risk. Finally, perceptual processes such as the formation of enemy images, and these images' resistance to contradictory information result in self-fulfilling prophecies and a resistance to see or consider change.

Such processes result in parties underestimating "the degree to which change has taken place and further change is possible," and also results in behaviors that make change in the relationship less likely. However, this same lens that has helped identify barriers can suggest ways to overcome them:

To overcome these barriers requires the promotion of a different kind of interaction, one that is capable of reversing this conflict dynamic. At the micro-level, problem-solving workshops...can contribute to this objective by encouraging the parties to penetrate each other's perspective, to differentiate their image of the enemy, to develop a de-escalatory language and ideas for mutual reassurance, and to engage in joint problem solving designed to generate ideas for resolving the conflict that are responsive to the fundamental needs and fears of

both sides. At the macro-level, reversal of the conflict dynamic depends on the establishment of a new discourse among the parties, characterized by a shift in emphasis from power politics and threat of coercion to mutual responsiveness, reciprocity, and openness to a new relationship. (Kelman, 1997b, p. 233)

Fisher (1972, 1997) considers problem-solving approaches to be a form of third-party consultation, and outlines the theoretical basis for this class of intervention. His model of conflict resolution as third-party consultation particularly focuses on the essential role of the third party. In Fisher's (1972) search to improve international negotiation, he found the most significant need to be not so much for more models of effective negotiation, but for better understanding of the contributing role of attitudinal and relationship challenges that hamper parties from effectively addressing the conflict themselves.

In addition to Burton, Fisher draws primarily on the work of Walton (1969), and Blake et al. (1964) to formulate his model. Walton (1969) coined the term "third-party consultation" to refer to his work with corporate executives caught in dysfunctional conflicts. His approach, now standard in organizational development, involves "productive confrontation." Such a dialogue of parties directly discussing the difficult issues between them involves strategic functions of an experienced and skilled third party, such as encouraging positive motivation to attempt to reduce the conflict, improving the communication, pacing the phases, influencing the choice of context for the interaction, etc. Blake and Mouton (1961) and colleagues (1964) also offer procedures for intervening into conflicted intergroup relations in organizations, including procedures for mutually analyzing the conflict and for engaging in joint problem solving. As described above under Problem Solving in Negotiation, the essential focus of their work was on reframing perceived zero-sum or "win-lose" approaches to integrative, "win-win" strategies. Blake and Mouton (1984) propose problem-solving methods where the parties themselves diagnose the conflict and work to restore respect and trust.

Fisher builds on these theorists to propose his model of the third party, including specifications for the third-party tactics and procedures, helping relationship, identity, role, and functions, as well as situation and objectives. Fisher is probably most known for his various writings on the role, or appropriate behaviors, for the third party in problem solving (Fisher & Keasley, 1988, 1991), where he has gone to lengths to distinguish the facilitative and diagnostic role in problem solving from other third-party roles, such as those in arbitration and mediation. He has also gone farther than most to document both the strategies — such as improving openness, increasing communication accuracy — and tactics — such as summarizing, stopping repetitive interactions — that are used by the third-party consultant.

Chataway (2004) reviewed both experimental research that informed interactive problem-solvingapproachesandalsoresearch that had been done on the workshops themselves. She reviewed the social-psychological research supporting what she considered to be the essential design features of the Kelman approach to interactive problem solving: confidential dialogue, facilitated discussion of underlying needs and fears, and joint problem solving by the parties themselves with a nonevaluative facilitator. Dialogue that is confidential rather than nonconfidential seems to permit more reevaluation of stereotypes and more openness to ideas, especially among participants who are politically accountable (Pruitt, 1995; Tetlock, 1992). During confidential dialogue, fears and aspirations that drive aggressive behavior can be clarified while information is shared (Ross & Ward, 1995). Discussing needs and fears that motivate conflict behavior leads to increased perspective-taking, as well as increased self-understanding, and results in more changes in subsequent thinking and behavior (Greenberg et al., 1993; Izard, 1993). Parties to a dispute who have engaged in joint problem solving have a higher commitment to a solution which they have had a direct hand in crafting (Petty et al., 1994; Stephenson & Wicklund, 1983) and show less favoritism toward their own group (Aronson et al., 1978).

Chataway also summarizes research supporting another key feature: using influential participants to promote the transfer of new ideas into policy and public opinion. Work on minority influence in groups (Bray et al., 1982; Tindale et al., 1990) has found that those most able to influence others when espousing alternative ideas are those who enjoy general societal respect, have reputations as competent contributors, and are articulate and

confident in presenting new positive norms.

Confidentiality requirements and a reluctance to inject research protocol requirements into workshop interaction has made direct research on workshops difficult (d'Estrée et al., 2001). Direct research on interactive problemsolving workshops has fallen into three categories (Chataway, 2004): unobtrusive research on workshop interaction, research on simulated workshops, and evaluation of workshop products.

According to Chataway, the unobtrusive research on workshop interaction, mostly unpublished, has shed light on workshop phases and reentry preparation, interaction patterns, and the process by which participants learn to shape effective gestures of reassurance. In addition, d'Estrée and Babbitt (1998) sought to examine whether or not gender had an impact on the values discussed. Upon comparing interaction during an all-female Israeli–Palestinian workshop with a mixed male and female workshop that had occurred two weeks earlier, they found the workshops to be roughly equivalent in discussion of rights, but the all-female workshop to contain significantly more discussion of responsibilities as well. Facilitators noted more frequent use of personal experience and a sense of honesty.

To determine short-term changes in attitudes and behaviors of participants after a workshop, researchers have resorted to comparative simulations, typically comparing participants in simulated interactive problem-solving workshops with simulations of other interventions into intergroup conflict such as negotiations. Cross and Rosenthal (1999) increased realism through inviting Israeli and Jewish–American students together in pairs with Arab and Arab– American students to discuss the issue of Jerusalem. Groups were assigned to one of three conditions—distributive bargaining, integrative bargaining, and interactive problem solving—and subsequent attitudinal outcomes were examined. The interactive problem-solving condition produced the most positive attitude change toward the other, as well as the largest decreases in divisiveness, pessimistic attitudes toward the conflict, and the belief that the two sides' positions, interests, and needs were incompatible. Cross and Rosenthal concluded that the focus on reaching an agreement, characterizing both distributive and integrative bargaining, may have made it more difficult to obtain other attitudinal outcomes such as understanding and acknowledging the other's perspective, recognition, and empathy.

Chataway considers the third research category of workshop products to be "evidence of IPSW influence on the long-term attitudes and behaviors of participants, and on the intersocietal atmosphere and policymaking" (2004, p. 221). Various scholars have argued for a stage model of intervention, where at polarized stages of the conflict, generating concrete suggestions may be counterproductive, and energy is best spent building relationships across conflict lines that lay the basis for official negotiations. Once official negotiations have begun, unofficial diplomacy efforts such as interactive problem-solving may take a heightened task focus as well (Carnevale et al., 1989; Cross & Rosenthal, 1999; Keashley & Fisher, 1996; Lund, 1996). Outputs from these two stages may look very different.

One of the more significant revisions of the model seemed to come with the extension of the meeting to a series of meetings over months or years, particularly in the case of Kelman's Israeli–Palestinian workshops. This "continuing workshop" (Rouhana & Kelman, 1994) was better able to support and reinforce changed attitudes and relationships, and also increase direct impact on policymaking. The participants continued contact with each other and the third party outside of the workshops. Four became involved in the official negotiations; the group reconstituted with replacement members became a policy working group, wrestling in advance of the negotiations with some of the most contentious issues.

Enduring and potentially impactful products from these efforts include writings reflecting new ideas and options. In the Israeli–Palestinian workshops of Kelman and colleagues, writings by participants of continuing workshops, as well as by Kelman himself (1987) contributed to the pool of policy options and helped to disseminate better understanding. Using criteria from hermeneutic approaches to psychology, Chataway (2004) proposes that in terms of both quality of interpretation and of coherence, Kelman's writings were ahead of their time, while

noting that some (Rouhana & Korper, 1996) consider that workshop products were not adequately reflexive, noting how differences in resources, experiences, and power might play a role.

In the d'Estrée and Babbitt (1998) study noted above, follow-up interviews with participants in an all-female Israeli-Palestinian problem-solving workshop found that participants could identify new understanding, respect, and acceptance of the other's perspective, but could not point to specific changes in their political behavior as a result of one particular workshop.

d'Estrée and colleagues, using evaluation methodologies to track the impact of workshops, have highlighted the importance of the changes that take place at the level of local institutions to which participants return (d'Estrée, 2006; d'Estrée et al., 2001). Though documenting changes in the relationship between two large communities and linking it back to workshop experiences may be a daunting research task, more immediate and no less important change occurs at lower levels as participants diffuse their new learning. Participants provide leadership for change in numerous ways, including (d'Estrée, 2006): civilizing the political debate, convening new meetings or creating new organizations, adding a cross-community element to existing organizations or programs, forming new organizational linkages, initiating new projects, developing more regional and/or cross-community projects, coordinating with (and therefore influencing) existing institutions (e.g. law enforcement, education), speaking for the cause of peace with new input and enhanced authority, educating one's own community about the political impacts of actions and policies, beginning or facilitating joint administration of resources or services, exchanging models across organizations for enhanced social change, influencing those setting policy (through position papers, etc.), influencing one's own community's extremist groups and others that are creating negative "facts on the ground," linking with other organizations for advice and support, and using networks and contacts to diffuse tension in times of crisis.

Evaluation and critiques of interactive intergroup problem-solving approaches

Interactive problem-solving approaches have been controversial from the beginning. Burton developed the approach to challenge traditional ways of thinking about international conflict and its resolution, and so invited critiques from the start. Over the years, as these intervention methods have evolved, questions have been raised that have in turn stimulated responses and sometimes revisions. The primary challenges that have been raised are relevance and effectiveness.

One of the earliest critiques of the first problem-solving workshops of Burton and his colleagues at University College London was by Ronald Yalem (1971). Yalem felt Burton's "controlled communication" to be "primarily a social-psychological device for altering the attitudes and perceptions of the representatives of states in conflict, so that on the basis of reduced hostility and tension they may be able to come together for serious and productive negotiations" (p. 263). He had several criticisms. One was its supposed emphasis on the subjective aspects of conflict, to the exclusion of "objective clashes over concrete interests." He was also concerned that there were no reports of how controlled communication had actually affected the outcome of a conflict, and concerned that the reports he had seen, because of secrecy, could not reveal details of even the states involved, thus hampering social science methods. It had been done on few cases. Success was inferred from analogy, rather than by testing directly. He questioned the centrality of communication as a cause of interstate conflict, and the effectiveness of using participants that were other than the primary decision makers. He acknowledged that the method might deliver new insights and build trust, but considered it supplemental to traditional methods of conflict resolution.

Mitchell (1973), at that time one of Burton's colleagues at the Centre for the Analysis of Conflict, acknowledged the importance of several of Yalem's concerns, but countered many of the points he had raised. Their discussion in the literature foreshadowed many of the issues that continue to be raised regarding problem-solving approaches as well as related intergroup relations interventions. He divides Yalem's concerns into two categories: practical, and theoretical. One practical problem that Yalem raises that continues to make

scholarship on actual workshops difficult to this day, is the challenge to social science research methodology posed by the requisite confidentiality of the whole affair. As Mitchell summarizes it, "...had secrecy not been guaranteed no exercise would have occurred. The choice has thus been to operate within the limitations of guaranteed secrecy, as the alternative was not to operate at all." (p. 124). As with other case analysis — individuals, organizations, and the like — it is possible to draw insights from single cases for a particular class or type. Mitchell also rebuts the criticism for using "subordinate officials," arguing that while such officials may be subordinate to heads of state, they are sufficiently close and trusted to insure that new insights will be passed back to leaders. Indeed, as argued elsewhere, their presence in a nonofficial capacity is what provides leeway to explore behind and beyond officially stated positions. Mitchell reiterates that controlled communication is not meant to be a substitute for traditional negotiation, rather to supplement or prepare parties for such negotiation (Mitchell, 1973).

However, Mitchell supports Yalem's concerns on the practical problem of participants retaining new insights and changes in attitudes once they return to their normal environment, where they are likely to be pressured to return to former patterns of thinking and acting. This concern dogs all such exercises in intergroup relationship change, dubbed by some "the reentry problem." Doob (1970) found that in problem-solving groups, a shift in attitudes and positions back toward those previously held can be observed even toward the end of the exercise itself, before participants returned to their environments, as if in preparation for reentry. Mitchell adds a concern, that of the potential danger to participants once they return home with changed perceptions: "...in which types of conflict might there be a personal risk, in career terms or even (in extreme cases) to life and limb?" (p. 126). Subsequent contributors to this method have attempted to address reentry concerns by keeping the exercise focused on intergroup interaction, as well as tied in to real group constraints, which can act as brakes to unrealistic and nonpragmatic shifts (Kelman, 1986). He also acknowledges the difficulty of assessing the actual degree to which insights from workshops are input into relevant decision making processes, though stressing the visible difference in interaction patterns witnessed in workshops themselves.

Mitchell (1973) considers Yalem's theoretical critiques to be twofold: first, the degree of subjectivity of conflict, and second, the validity of utilizing findings from other fields to support the application of problem-solving techniques to situations of international conflict. On the first debate, Mitchell presents what is still one of the most eloquent arguments in the field. It is worth reading in the original, but essentially his points are that when conflict researchers argue for subjective factors, they mean "more than that violent conflict behavior occurs because individuals, human groups, or nations misperceive the situation and their adversaries" (p. 127). Though false evaluation and false impressions, such as of goals, clearly play a role, a "fuzz" of misperceptions arises also from the dynamic of all leaders having to speak to multiple audiences. Leadership groups cannot easily demonstrate to each other that their goals have modified, or were incorrectly ascribed. "As the conflict proceeds over time, and meaningful communication becomes less, it becomes progressively more difficult for the leaders of one side to assess the actual long-term goals, the fundamental fears, the existing level of hostility, and the interpretation of the situation held by their opponents" (p. 127). As Burton observed, few opportunities exist for reality-testing, an important part both of conflict de-escalation and of constructive negotiations.

Other ways in which the conflict may be subjective, and thus subject to influence through exercises in controlled communication and problem solving: (1) the conflict may be over values that are not in limited supply, such as security or increased national wealth, thatmaymoreeffectivelybeaddressedjointly, even though initially the dispute may appear to be an "objective" one over territory; (2) groups pursue multiple goals simultaneously, and no group goal has immutable value, so that preference orderings can change; (3) parties can develop greater awareness of sacrifices required to obtain goals in conflict, resulting in a reassessment of costs. Thus, "while a conflict may be objective at a particular *point* in time, changes in the parties' objectives, preferences, evaluations, and calculations that occur over a *period* of time render it a changeable and hence an intensely subjective phenomenon" (p. 128). The point is not that all goals are subjective and changeable, but that some

are more changeable than others. This supports the use of such methods even in the face of "objective" and structural conflict.

Mitchell rejects Yalem's concerns about analogical reasoning, chalking them up to differences in assumptions about to what degree one can transfer reasoning in one field or domain to another. Mitchell argues that not only is it appropriate to build on evidence from small group dynamics and social psychology regarding likely effects of meetings, such as problem-solving workshops on individual participants' perceptions, but it is also appropriate to draw from one level of human political behavior to transfer to another.

Mitchell (1973) reiterates that any discussion of the efficacy of controlled communication or problem solving must explore two quite separate sets of issues: its effectiveness in changing participants'attitudes and perceptions, and the conditions best suited for this, as well as the separate issue of the effectiveness of workshop initiatives for actually bringing about a change in the pattern of conflict interaction and the relations between parties to the conflict. These issues resurface in subsequent critiques.

Bercovitch (1986) considers the interactive problem-solving approach as a form of mediation and notes its shortcomings in this light. He notes that increasing communication may actually be detrimental to the progress of negotiations because it can increase areas of disagreement. He questions the problem-solving workshop approach's relevance and effectiveness, in its focus on analysis as the answer to resolution and in its interpersonal approach, and he proposes that its approach "provides no way of relating... to the actual policy making process" (p. 45).

Kelman (1992) responds to Bercovitch's critiques, by first reasserting that such approaches are not mediation, except in perhaps the broadest of senses. He argues, like Fisher and Keashley (1988), that the two differ in both objectives and methods, and thus interactive problem solving should not be evaluated as mediated negotiation. More specifically, he counters that interactive problem solving does not attempt to increase communication *per se*, but rather to foster a particular form of communication conducive to a certain kind of learning. It is also not based only on analysis: "Analysis is only one aspect of the interaction process that we try to encourage in workshops, and workshops themselves are seen as only one input into a multifaceted process of conflict resolution." (p. 68) Kelman argues that considering the use of interpersonal interaction as a weakness is puzzling, since most diplomacy is conducted through interpersonal interaction. Participants do not interact with the same official capacity, but it is this difference that allows for the generation and consideration of new options. Kelman reemphasizes that the interpersonal is important only insofar as it impacts or reflects the relationship between the communities. Kelman does take Bercovitch's point that this approach, as with many others, needs to be better tailored to differences in conflict intensity. The interaction in the literature between Bercovitch, Kelman, and Fisher and Keashley helped to clarify the particular niche and role that interactive problem-solving approaches sought to play in the larger array of conflict resolution approaches.

Rouhana and Korper (1996) raise important critiques regarding the role that asymmetries of power may play both in the dynamics of conflict and in the workshop in particular.

Fisher (1997) reviews evaluation efforts within the broader interactive conflict resolution (ICR) field. He notes that while micro processes such as individual change have been easier to assess, seeking to measure the impact of ICR workshops on the larger negotiation or political process has been more difficult. He catalogued several more well-known published examples of the application of the interactive problem-solving workshop approach to various international and intercommunal conflicts. Beyond the basic contributions of increased understanding and changed attitudes, he found that certain practitioners reported considerable contributions to peace processes, including tension reduction initiatives, principles for settlement, and plans for peacebuilding activities. However, the effects reported are rarely a result of systematic evaluation or comparative case analysis. As Fisher (1997) claims, "...very few studies assess transfer effects back to the parties, the wider relationship and the conflict, and the few that do offer only anecdotal impressions as opposed to more

systematic follow-up procedures and evidence. Although descriptive methods are useful for initially documenting the approach, they are not adequate for testing theoretical linkages or making inferences about effectiveness" (pp. 210–211). Theory development, where it exists at all, is not grounded in systematic empirical comparisons.

After reviewing earlier efforts at evaluation, d'Estrée and colleagues (2000) identified two commonly voiced concerns regarding evaluation and assessment of interactive problem-solving and peacebuilding interventions more generally: (1) uncertainty about how to link immediate or short-term micro-level changes (e.g. in participant attitudes) to long-term changes in structures — changes that often represent what are considered to be "making peace," and (2) uncertainty about which criteria to apply, that is, how "success" is defined — through a universally accepted set of criteria, or ones that vary depending on context, purpose, actors. Like many fields of intervention, the field of interactive conflict resolution had lacked a common conceptual framework for making case comparisons and documenting changes over time. Their framework provided four overarching categories of criteria, each containing goals of interactive problem solving and thus criteria for success (d'Estrée, 2006; d'Estrée et al., 2000, 2001):

- Changes in thinking (new learning, attitude change, integrative framing, problem solving, better communication, and new language)
- Changes in relations (empathy, improvements in relational climate, better communication and new language, validation reconceptualization of identity, security in coexistence)
- Foundation for transfer occurs in room, but focus is out of room (artifacts/drafts, structures for implementation, perceptions of possibility, empowerment, new leadership, problem solving, influential participants)
- Foundation for outcome/implementation out of room (networks, reforms in political structures, new political inputs and processes, increased capacity for jointly facing future challenges).

This framework has been applied in a limited number of cases in its original form (d'Estrée, 2006). Subsequent attempts to enhance research and evaluation on problem-solving approaches (Church & Shouldice, 2002, 2003; Çuhadar-Gürkaynak, 2006; Çuhadar-Gürkaynak et al., forthcoming) have built upon and modified these earlier frameworks.

In her 2004 review of research-supporting, interactive, problem-solving approaches, Chataway also outlines further revisions research would suggest. Because new attitudes gained toward others through such interventions often regress back over time (Cook & Flay, 1978), analytical interventions need to be paired with emotional and behavioral interventions (Tesser & Shaffer, 1990), as well as follow-up that reinforces exposure to the new attitudes (Petty et al., 1995). She argues that with a primary focus on rational discussion, coupled with a lack of explicit attention to behavioral and emotional realms, most interactive problem-solving workshops may reduce their impact on participants. She does not review approaches which are considered to focus more on emotion, such as those of Volkan and colleagues (1991a, 1991b).

Chataway also points out that the research on minority influence shows enhanced influence if participants work together and can support each other after a workshop (Tindale et al., 1990). Speaking out is enhanced when a minority view is spoken by more than one person. She suggests that workshops should be structured so as to enhance the likelihood that participants will be subsequently in regular contact and have the opportunity to discuss the workshop ideas, either through follow-up contact activities or because participants were chosen because of already having a structure for contact.

Remaining issues and future research

One recent discussion in the literature involves the integration of official negotiations and problem-solving approaches. One can certainly take a problem-solving approach to any negotiation, including international negotiations, and thus focus more on the joint task of reaching a solution rather than "winning" over the other. However, debate exists in the field as to whether or not problem solving in its more specific forms such as

problem-solving workshops, as framed above, should be considered as integral to international negotiations or as a parallel and complementary process.

Kelman himself seems to be of two minds on this. In earlier works, he discusses problem solving as a prenegotiation process, as supplemental to current negotiations, and as useful postnegotiation to work out implementation challenges. However, in later works (1996, 1999), he adds the notion that interactive problem solving can be seen as a metaphor for how negotiations *themselves* should be conducted. Fisher (1997; Fisher & Keashley, 1991, 1996) sees the role of these processes as complementary. By contrast, Stein (1999) takes pains to explain why she thinks that the original framing of the role of interactive problem solving should be preserved.

Other issues seem to recur across the decades of work on problem-solving approaches. These are issues of the work's relevance to the larger conflict systems, the challenges of research, and the dilemmas and risks of participant reentry back into the conflict system.

Relevance. Relevance operates at many levels. Do the workshop interactions actually produce changes (new insights, changed attitudes, alternative behaviors) that are important and reliable? Do these changes persist in people's lives long enough to potentially influence the larger society? Do these new insights then influence the larger society in some form? Is this in enough of a way that then policies and actions of states change? Though evidence exists for the first question, arguing for at least relevance to changing conflict relationships at the level of changing individuals, as one proceeds up the ladder, the evidence is less clearly identifiable. This is partly an insolvable epistemological conundrum, both because of the multidetermined nature of complex phenomena and due to the research issues outlined below. However, if changes in individuals are not in fact linked to changes in societies, the exercise as relevant to the behavior of states can be called into question.

Relevance is also determined by the method's validity. If the enterprise is not producing a realistic reflection of dynamics in the actual conflict, or subject to biases such as those outlined by Rouhana and Korper above, its usefulness may be limited.

Research. Research and evaluation are necessary components to improving the method, and for continuing to modify it to match changing environmental conditions. Research on any phenomenon still embedded in the complexity of its context is difficult. However, research on problem-solving approaches has two additional challenges. First, the promise of confidentiality made to participants that both allows them to come and protects the process from other influences makes reliable research challenging. Second, researchers in the physical and social sciences have long known about the impact the research process has on the phenomenon itself (e.g. the Hawthorne effect first documented by Mayo, 1933). Things appear differently because of the process of being watched. Scholar-practitioners using problem-solving approaches have been reluctant to risk impacting the workshop interaction in order to achieve research objectives; thus, researchers have tended to rely on noninvasive and/or interpretive methods, which in turn offer less reliable and more speculative research results.

Reentry. Once attitudes and perceptions change, and new learning takes place, participants may have trouble fitting back in with old behaviors and old social networks. The pressure to "belong" to one's group(s) may include maintaining old attitudes and approaches, threatening the integration and maintenance of changed attitudes and behaviors. Or one may find one self marginalized and outcast if one's new attitudes and behaviors are perceived as threatening to the group. This phenomenon is common to all social change interventions, whether it be drug or alcohol rehabilitation, gender sensitivity training, or ethnic conflict interventions.

Concerns about so-called reentry effects have been raised not only by critics of problem solving (Yalem, 1971), but also by its designers (Burton, 1987, 1990; Doob, 1970; Mitchell, 1973; Mitchell & Banks, 1996). Practitioners have been challenged to envision frameworks that would better support participants returning to their societies (Chataway, 2004). Only then can those with new understanding and new insights be best

positioned to bring their problem-solving gifts to their weary communities.

NOTES

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2 Avruch and Black (1993) challenge this assumed universality of basic human needs.

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