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Understanding, Modeling & Evaluating Conflict Resolution Techniques[1]

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Abstract:

For a time, in the 1960's and 70's, theories of conflict resolution were deeply rooted in economics and game theory; time has led to a peaceful separation of the parties. Since then relatively little theoretical attention has been paid while both the uses of, and the practical payoffs from, the techniques have multiplied. Moreover scant attention has been paid to the careful evaluation of these techniques. The purposes of this paper are two-fold: First, we renew the theoretical dialogue by recasting the objectives of a 'typical' conflict resolution workshop in terms directly related to theoretical arguments of economic and psychological theory. Second, we use this understanding to propose a mechanism for the rigorous evaluation of such workshops, which serves, at the same time, as a test of the theoretical construct.

JEL Classification:

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Introduction

Conflict resolution workshops are introduced into durable conflict situations as mediating devices. At the most basic level, the primary goal of such workshops is to 'solve,' or perhaps more realistically, to help resolve the conflict. The workshops are built around the notion that the problems of reaching a solution, or even of conceiving of a workable solution is, to some extent, blocked by the images and affects which the parties bring to bear when they think both of their opponents, and of the conflict itself. Hence, many conflict resolution workshop techniques aim at transforming these images and affects to facilitate a resolution of the conflict.

Around the 1960's, techniques and theories of conflict resolution were deeply rooted in economics and game theory, but time has led to a peaceful separation of the parties.[1] This is somewhat unfortunate since the divorce has meant that there has been little attention paid to understanding the theoretical[2] underpinnings of the techniques, why they work, or how they might be improved. But by now, the use of conflict resolution workshops is sufficiently widespread and established that the time may be ripe to consider evaluating them.

Recently suggestions as to how to proceed with this process have been offered by (Rothman, 1997). His emphasis is on evaluating the general goals of these workshops. We believe a more detailed evaluation might be more fruitful. That requires looking into the "black box" of the workshop and evaluating the various steps in the process. An evaluation at that level requires that we know what to measure. For that we need to know which aspects of the workshops are important in transforming the images which the parties hold of the conflict. We must also be able to operationalize those aspects as measurable variables. To that end, a theoretical understanding of the processes operating within the workshop will facilitate, not only the identification of the variables, but also their operationalization (Weiss, 1998). Identifying the potential causal links between variables in the process will help us identify exactly how to test the process, and hence, might also lead to improvement of technique.

We propose developing a theoretical understanding of some important elements of conflict resolution workshops. The model we put forward returns to the roots of conflict resolution theory. We introduce recent findings in preference theory, which operate at the interface of economics and psychology. By identifying a few simple links in the process of conflict resolution workshops and tying them to the emerging behavioral theories (economic and psychological) we arrive at a few simple techniques for evaluating the efficacy of components of the workshop and the efficacy of the workshops writ large. Given the use of these workshops for Track II Diplomacy collaborative

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1/ One can note the time honored place of the Journal of Conflict Resolution as the child of the earlier marriage. But the field of economics and game theory had a number of partners in this work, from Nash to Boulding.

2/ The word 'theory' is being used as "a set of interrelated constructs (concepts), definitions and propositions that presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena (Kerlinger, 1972, p. 11).

problem solving, the application of the evaluative techniques should permit controlled improvement in the workshops.

The Link to Preference Theory

As noted above, one of the goals of conflict resolution is to transform the preferences of the individual involved. In particular the workshops hope to change the affect towards the other parties to the conflict. This is deemed important because the conflicts to which these workshops are usually applied often involve deep-seated enmities.

While much of the literature dealing with conflict resolution workshops is phrased in the language of practical application and is not explicitly theoretical, there are several theoretical assumptions that, whether explicit or implicit, many of the authors share. The prescriptive recommendation to apply the workshop approach stems from an understanding of conflict that looks beyond interests and material resources at issue to find some of the strongest and virulent causes of conflict. As defined by Azar these deeper roots can be defined as basic human needs: items which cannot be bargained away but need to be met in some fashion if the conflict they generate are to be solved in any long lasting fashion.

> We assume that individuals strive to fill their developmental human needs through the formation of identity groups. The most basic needs are individual and communal physical survival and well being. In the world of physical scarcity, these basic needs are seldom evenly or justly met (Azar 1990, 7).

The desire to achieve these basic human needs finds expression in the creation of communal identities that often serve as foci for the protracted conflicts that are created when needs are not met. Rothman identifies the recognition and legitimization of these communal identities as the main stake in protracted conflict and the main area where second track diplomacy can make a substantive difference. Because they are based on fundamental needs, conflicts based on communal identities are often intensely destructive and the sides tend to be intransigent when it comes to recognizing the other side's rights and viewpoints. (Rothman 1997).

Implicit in this characterization of group identity is the notion that the opposing group has an identity of its own, and that there is some sort of relationship between the two group identities that needs addressing. The most developed theoretical explanation of how conflict resolution workshops work argues that what is needed is a change the perceptions, affects and hopefully the actions of parties in conflict (Rothman, 1997). While we do not disagree with this general characterization, we believe that it is important to be more explicit about the theoretical relationship between the preferences of the two groups. In particular, we argue that individuals in the two groups, as a result of protracted enmity, are likely to have preferences which place a value on doing "better" than their opposing numbers, or even making their "enemy" worse off. In other words, they come to the table with enmity. The questions to be addressed from a theoretical point of view are: "How can we characterize these preferences explicitly? And how can this characterization help us in evaluating workshops.

A Theoretical Characterization of Preferences

Although workshop practitioners have seldom explicitly on any economic or psychological theories, many have come to utilize the notion that the mental representations we have of one another, and of the situations we face, help to determine the choices we make.

The traditional economic model handled this insight (that our perceptions help determine our choices) by assuming that our images are solely a function of information. Thus, it was conjectured that any changes in choices are a result of changes in information. But psychological theories developed by such cognitivists as Kahneman and Tversky (1979) have shown that we do not need to have changing information to change our choices. Rather, choices can vary as a function of the 'representations' which we use 'to model' our realities. These can change without any substantive change in our information. And a further insight from cognitive science underlines the importance of a change in our 'representation'. All representations we hold in memory to explain the world are actually tied to affects which we hold, and thus are tied to values (Damasio). As he put it:

> ...(T)he memory of .. (an) object has been stored in a dispositional form. Dispositions are records which are dormant and implicit rather than active and explicit, as images are. Those dispositional memories of an object that was once actually perceived include not only records of the sensory aspects of the object, such as the color, shape, or sound, but also records of the motor adjustments that necessarily accompanied the gathering of the sensory signals; moreover the memories also contain records of the obligate emotional reaction to the object. As a consequence, when we recall an object, ... we recall not just sensory characteristics of an actual object but the past reactions of the organism to that object(Damasio, 1999, p. 163-64).

It follows directly that if we change the representation we have of a situation we face, we may change the emotions evoked and hence the choices we prefer in that situation.

Relatively recently a secondary assumption used in most economic theorizing (self interested or non separable preferences) has been subject to considerable discussion and test (see Valavanis, 1958; Frohlich, 1974; Frohlich and Oppenheimer, 1984). Individuals have been shown to have preferences which take into account the effects of their choices on others.

In what follows we draw on those two insights and characterize the preferences of individuals involved in "identity" conflicts as interdependent in a malevolent fashion and try to demonstrate how the process of conflict resolution workshops attempt to transform those preferences. This transformation may be a necessary condition to the identification of a viable solution to a problem of deep conflict. This would then show that the conflict resolution workshop process can be made sense of from the point of view of both preference theory and cognitive theory. We then propose and sketch a general evaluative technique to test this theoretical characterization of workshops and to identify the impact of the various component phases of conflict resolution workshops.

Connecting Preferences to Solutions

We have already introduced the notion that individuals have images (representations) of others, and that they have preferences. We have also noted that one of the conclusions in psychology is that all representations are bundled with affect. Obviously, one conclusion is that our images of each other: whether particular individuals, or more abstract individuals whom we do not know, are also tied to affect. Affect can be modeled in terms of our preference structures. The image we have of an abstract individual (say the vendor from whom we buy a newspaper in a strange city) may be one to which we normally relate by independence. In other words, we make our choices of whether and what to buy, in markets, independently of how our actions affect the vendor. Now just because we conceive of the other in terms of a nameless abstraction does not mean we place no value on him or her. Certainly not. Information about the welfare of the other could affect our decision

about asking for change for a $.25 newspaper when we pay with 3 dimes. And this is so, even if the other is a stranger.

Consider then what difference it might make in how we act, if the 'faceless' stranger were 'a member of the group with which we are in conflict.' In terms of preference theory, the issue is one of modeling preferences. They may be modeled as independent of the welfare of others, or as interacting with others' welfare. A member of one's opponent in conflict will often be thought of negatively: the improved welfare of such a person may be viewed as a threat to one's own welfare. Differences in affect could change our choices.

To make this effect more explicit, consider the case of a divide the dollar game. Assume two individuals, *i* and *j*, each with decreasing marginal utility of money over the range of the outcomes. In its simplest guise, self - interested individuals (i.e. those with preferences which do not interact with one anothers' welfare) will solve the game by dividing the entire dollar between themselves. In the language of economics, the predicted outcome is in the Pareto set: they would never consider "throwing away" some of the dollar by not dividing it. This is depicted in Figure 1 where we relate the value of the money to individual *i*. There the dashed straight line represents the division of money: how much of it is going to individual *i*. The smooth curve, shows the valuation of that money for *i*. It starts off steep, and reaches its peak in an ever less steep pitch, when *i* gets all the money. Regardless of the proposed split of the money, they can not achieve more highly preferred outcomes by throwing away any money. The two individuals are in a 'zero-sum game' and can agree unanimously not to throw away any of the money. But, beyond that, we can not make any further predictions about exactly how they would divide it.

But what if the game were played by non-self interested individuals? Consider, for example, two empathic individuals: those with positive valuation of the other's welfare. In that case, it could well be (depending upon the strength of the empathy) that they would agree to rule out splits which left the other with 'too little.' The peak of each of the individual's valuations would then occur prior to the allocation of all the money to only one party (see Figure 2). This would follow from decreasing marginal utility, because eventually, as one gets more of the dollar (and hence has lower valuation of still more of it) the individual can 'gain' more vicariously, (from the other's consumption of that b it of money) than she could get by consuming that additional amount herself. So if we start at either end point, both players might prefer to move, at least a little, toward the middle.[3] The Pareto set is reduced to exclude divisions which are too one-sided.

To round out the picture, consider what would happen were the game played by individuals with malevolent dispositions towards one another. In that case, as one individual gained more of the dollar, the other individual would be 'hurt' more acutely. The "'hurt" is a composite of not consuming that marginal bit and the chagrin that the other *is* consuming it. One individual's decreasing marginal valuation is accompanied by a potentially increasing marginal hurt which is imposed on the other individual and adds to the former's utility. For each individual, malevolence insures that the peak valuations are at the ends of the range: where each, respectively, gets all the money. All of the line between those two points are in the Pareto set. But, with malevolence, there

3/ Restrictions on the valuations of others' welfare are required to insure that this occurs. Here we are only concerned with showing the possibility of the restriction of the Pareto set (see, for example, Frohlich, 1971).

is more. With self-interested or benevolent individuals a 30-30 split would not be in the set. Both, for example would prefer 40-40 or perhaps even 40-30. And 50-50 would beat both of those. So the Pareto set would be restricted to the line (or a portion of it). But consider what malevolent players could agree to. Could they agree to move from some 'wasteful' split (say 30, 30 - where 40 is thrown away) to 40-30? Certainly not. For letting *i* gain more, without *j* gaining would leave *j* worse off. And it could be that they each prefer to see the other worse off than to gain more themselves and so 40-40 might be inferior to 30-30. Hence the introduction of malevolence opens the possibility that the Pareto set is enlarged to include some 'wasteful' outcomes.

The Impact of Malevolent Preferences on Conflict Resolution Possibilities

Given our characterization of the situations in which conflict resolution workshops are employed, one might expect individuals to come to a conflict resolution workshop with the sort of malevolent preferences we have sketched above. Malevolent preferences make outcomes which harm one's opposite number more attractive than would neutral or benevolent preferences. Indeed, high levels of negatively interacting preferences dispose participants even to sacrifice their own possible gains in order to harm the other. As noted above, such preferences can be absolutely inefficient inasmuch as they allow for outcomes in which both parties have fewer material goods that they could otherwise obtain. They impede progress towards better states for both parties inasmuch as progress for the other is negatively valued. It is for this reason that practitioners have intuitively, and we would argue, correctly, identified one of the main goals of workshops as transforming the individuals' images of one another. For example, Zartman (2000) suggests that the first element that needs to be analyzed in conflict resolution workshops is the "extent to which they contributed to a change of attitudes among the participants themselves …". What we add here, is a specification of "what" exactly about the individuals needs to be changed, and thereby, how we might operationalize it, and come to evaluate the success of workshops in changing individuals.

The goal of changing individual's preferences is in contrast to the premise held in economics and game theory that individuals have fixed and unique preferences which motivate their choices (Mueller, 1989; Arrow, 1963; Sen 1970). The problem with the economic view is that it is one-dimensional. Psychologists have shown that individuals have a far more complex preference structures which are subject to a variety of 'framing' and other effects (see Frohlich and Oppenheimer, 2000; Kahneman and Tversky, 1979; Rabin,1998; Quattrone and Tversky, 1988; Grether and Plott, 1979; Simon, 1986; Tversky and Kahneman, 1986; as well as Shafir and Tversky, 1994). As all spin doctors, advertising agency executives and facilitators will agree, the setting of the frame for a decision can make a great deal of difference. With the goal of re-framing the participants' preferences, Track II facilitators hope that the conflict's resolution can be facilitated by "expanding the cake" before cutting it (Fisher and Ury, 1991). From our point of view, this can be facilitated by transforming preferences and, thereby, opening, heretofore precluded, alternatives.

The existence of multiple preferences for an individual means that one might be able to elicit some preferences which may be better, both practically and normatively, for the purposes of managing the conflict. One such set of preferences may be evoked when individuals adopt a "moral point of view:" preferences which are based on a consideration of more universal consequences rather than only the consequences for one's self. Such a view has been strongly related to concepts of legitimacy by numerous philosophers (see especially Baier, 1981 and Frankena, 1983; but also note the related perspectives of Buchanan, et. al. 1999; Habermas, 1996; Nagel, 1991; or Nozick,

1981; Frohlich and Oppenheimer, forthcoming). These universalistic concerns are often seen as desirable properties of any political settlement. As will be seen in the analysis of the techniques themselves, conflict resolution facilitators often try to construct a part of the framing of the conflict which encourages impartial reasoning, and consideration of the above mentioned moral point of view which might be related to "enlightened self-interest." Since a "moral point of view" can be argued to be one which does not, at a minimum, involve malevolent preferences (Frohlich and Oppenheimer, forthcoming), the transformation of preferences can be viewed as a step in that direction.

Characterizing the Processes in Conflict Resolution Workshops

Define a conflict as a situation involving two or more parties who have been engaged with one another over time and where at least one party finds the status quo of their relationship unacceptable and seriously curtailing their basic human needs. Often past behavior has cruelly demonstrated that each party has the potential and credibility to harm the other, and there is no agreement which can improve their joint and separate situations.

While those are the dry and bare bones of a definition, many more vivid and human attributes attach to situations with these characteristics. Individuals in conflict have feelings of hate, fear, mistrust, and desire for revenge, all of which tend to obstruct the possibility of reaching any amicable accord to resolve the conflict. It is in this sort of charged atmosphere that one might expect both malevolent preferences as a function of past and ongoing experience and some level of ongoing violence. It is precisely in these so called identity-driven conflicts, (or protracted communal) disputes[4] that conflict resolution workshops have been introduced. These workshops have taken place in various settings, including third party interventions to encourage negotiations, back-track negotiations (often tacked onto official negotiations), and post-negotiation efforts of reconciliation.

In order to advance the search for common ground among the participants different tactics have been used. But the strategies behind these tactics have a sizeable overlap which we can identify. The benchmark process which we utilize for our characterization comes from Davies and Kaufman's "Innovative Problem Solving Workshop" (IPSW) process (Davies and Kaufman, forthcoming). But it is, more or less, consistent with the entire family of conflict resolution workshops. In all these settings, there are a variety of goals or objectives which can be categorized as internal and external (called by Ross & Rothman, 1999, "external" and "internal criteria"). Internal objectives focus on changes which take place during the actual workshop, and normally include personal, intra-group and inter-group transformation as well as the development of possible consensual solutions. There is a transitional stage from internal to external objectives, when the participants are trained near the end of the workshops. This involves preparing the participants for re-entry into the environment of conflict: an environment often hostile to the participants' personal transformations and shared visions of possible outcomes. External goals are those changes one hopes to induce after the workshop is over. These include sustained action through the

4/ "When people's essential identities, as expressed and maintained by their primary group affiliations, are threatened or frustrated, intransigent conflict almost inevitably follows," Rothman, Jay, *Resolving Identity-Based Conflict* (San Francisco, Jossey-Bass Publishers, 1997), pg. 5.

institutionalization of the group's activities within the environment of conflict leading to changes in public opinion as well as changes in the opinions of governmental decision-makers.

In our own framework, we are seeking to evaluate the achievement of two internal goals:[5]

- At the personal level, a transformation that results in a growing openness toward others
- At the group level, the ability of the group to reach consensus on creative solutions to the problem under discussion.

The conflict resolution workshop presumes that if participants go through the process these goals are likely be achieved.

The Phases of the Conflict Resolution Workshop to be Evaluated

Conflict resolution or Track II workshops engage individuals in sets of exercises to accomplish their transformation. These exercises are often done in clusters. For purposes of evaluation we propose to consider these clusters of exercises as consisting of four distinct phases. The phases can be described as:

1) *Trust-building:* to build bridges of familiarity between the individual participants, and particularly with those on the "Other" side.

2) *Skills building:* to improve communication and reduce prejudice.

3) *Breaking Down Stereotypes and Appreciating the Position of the Other:* to have parties reflect on the needs of the "Other," increase empathy, and thereby reduce malevolent preferences.

4) *Framing the Partners' own conflict in search of common ground:* to build consensus which involves moving away from adversarial attitudes, creating new options, and consensus-building.

The additional phase designed to achieve the external objectives takes place in the last days of the workshop. It covers techniques to increase personal and group motivation as well as concrete action plans and time lines. We do not develop a means for evaluating the achievement of the external objectives.

The specific clusters of exercises employed by the IPSW to achieve these goals are displayed in Table 1. Let us consider each of the phases in turn, so that we can develop evaluation techniques.

5/ We are not covering, the evaluation of inter-group consolidation.

Table 1: Phases of Conflict Resolution Workshops		
Phases	**Change**	**Goal**
Phase 1) Trust Building	Emphasize ------ Shared Characteristics	Reduce Malevolent preferences (Increase empathy)
Phase 2) Skills building	Build Skills at Active listening and non-confrontational language	Sensitize participants to deleterious effects of confrontational language and hackneyed representations
Phase 3) Breaking Down Stereotypes and Appreciating the Position of the Other	Appreciate the position of the others. Break down stereotypes.	Reduce malevolent preferences & increase empathy.
Phase 4) Framing and Re-framing the Partners' Conflict and Seeking Common Ground	Develop and explore new solutions	Generate consensus on possible solutions

Phase 1) Trust building stage:

The facilitation starts with a set of activities designed to generate intimacy and informality among the participants. One of the questions, which stands out is the function of such warm-up exercises. After all, if the facilitators have done a good job of selecting participants, we might think that facilitation should be quite easy, and should move directly to addressing the conflict. Even if all the participants are keen to resolve their conflict, many difficulties remain. One of the difficulties is that, due to mistrust, they each may see their opposite numbers as intransigent, uncooperative and untrustworthy. They each are likely to hear the others launch into propaganda-like characterizations and to resort to stereotyped responses.

The first exercises try to address these expectation head on. How and why do they work? One of the primary functions of getting to know each other exercises (sometimes referred to as ice breakers) is for the participants to get to know each other as individuals, establishing a mode of openness and exploring new personal and often shared dimensions. Even more difficult is the task of breaking down the expectations of prejudice. The selection process, is designed to highlight the fact that there are many common attributes among participants while not necessarily negating the importance of their differences. The exercises are designed to communicate and reinforce these commonalties and overlapping identities. Identifying commonalities is a way of allaying suspicion. It opens participants to future communications inasmuch as it allows them to see the others not simply as representatives of a hostile party-line, but as real individuals with shared empathic base upon which one might be able to develop the reasoning, which is important in later stages of the process. And, of course, a shared empathic base is critical in transforming sentiments of enmity.

Phase 2) Skills building:

This phase includes exercises leading to improved communications skills. Participants are assumed to be interested in resolving the conflict but are also presumed to be relatively unacquainted with a variety of conflict resolution methods. Hence, it is important to systematically put forward the ground-rules to be followed by all during the workshop. Moving ahead, the tasks of the sessions at this stage is to orient the participants firmly in the direction of conflict transformation and to provide them with skills with which to address their conflict. The initial presentation of the program is a way of framing the task facing participants so that they are more open to receiving and using new techniques. Since participants are likely to be somewhat skeptical about the ultimate success of the sessions, facilitators begin by lowering the bar. Initial emphasis is not on solving the conflict but on developing personal skills, gaining experience, all of which is to be conducted in a learning environment. This is important as a way of reducing anxiety, and opening participants up to new ideas. It also decouples the techniques from the substantive issues. Emphasis is placed on the notion that the techniques of conflict resolution must be mastered prior to attempting to apply them to the difficult conflict, which they face. This facilitates the learning of the techniques, and provides for additional time together for participants to get to know one another better and share experience prior to broaching the issues facing them.

Participants are exposed to a number of exercises involving the development of involving the development of interpersonal communication skills, to include active listening, dealing with the interference resulting from cultural differences and, most importantly, the way we express ourselves. Techniques of "non-violent communication." These focus on how conflict is continued by the ways people talk, express themselves, use body language, and listen to each other. They also aim at sensitizing the participants to the impact of cultural differences in distorting the message being communicated. The use of certain expressions become "hot buttons" to the adversary and need to be identified. The objective of these exercises is to teach them how to state positions in a sufficiently non-aggressive fashion, that the recipient will not, immediately, react reflexively, but remain open to the content of the communication. At the same time, active listening requires expressions of understanding, empathy and even the eliciting of more readiness for the messenger to open up. The attainment of these skills are essential if the problem-solving phases to follow are to be fruitful rather than exercises in rhetoric.

The final phase of skills development involves introducing participants to various mechanisms of dispute settling, such as principled negotiation and mediation. The stage has, by then, hopefully, been set for the introduction of their own conflict.

Phase 3) Breaking Down Stereotypes and Appreciating the Position of the Other

The humanization of the "partner" can be facilitated by the use of an exercise based on a film which demonstrates the use of dehumanization techniques by both sides in the Cold War or by other means such as collecting newspapers' caricatures of the "Other" in a conflict situation. The pernicious effects of dehumanization reinforce the need to see and understand one's opposite number as a human being, with some characteristics which are different, but with others which are shared.

Over the course of these preliminary exercises some form of concrete confidence building measures may be taken. Typically this involves some sort of reward for admirable behavior such as

the exchange of flowers or complements. This can develop further empathy and mutual confidence so that subsequent exchanges will be more open and less subject to suspicious misinterpretation.

Participants must ultimately confront, head-on some of the implicit impediments to finding a solution to the conflict. As noted above, negative stereotypes both of those on the other side and of their positions are barriers to free examination and evaluation of options. A variety of skills building exercises can be used to overcome these barriers. Explicit exercises which call for participants to identify their views of the other and their perceptions of the other's view of them can be instructive in showing that each share stereotypic thinking. This is particularly effective, given their experience with the historic stereotyping they were exposed to in the "Cold War" exercise. Followed by an exercise in which both sides reveal personal experiences with discrimination, this can further help humanize the participants to each other and, potentially establish some feelings of shared experiences. Participants may be shown that failure to deal, adequately, with instances of discrimination can result in deep-seated resentment and anger.

An additional de-escalation exercise is introduced through the joint reading of a powerful children's book describing how two neighboring nations arguing about a trivial issue eventually prepare for nuclear war. At the last page, the outcome of the crisis remains unknown and participants are asked to write and then discuss their suggested "happy endings".

In getting to appreciate the other, participants are asked to dig below the surface of their opposing positions to try to uncover the underlying needs which have generated the demands and positions. Uncovering those basic needs and motives will help to legitimate demands and open the way for innovative alternatives, which address underlying needs as opposed to stereotyped and entrenched positions. As we discuss below, the identification of needs also opens the prospect of identifying minimally acceptable levels of needs satisfaction for some of the parties which can be agreed upon from an impartial point of view.

Among the exercises, we can mention "Focusing on Underlying Needs & Humanization of the 'Partner.'" Subjects are introduced to the process of looking beyond the positions and alternatives and focusing on the underlying needs of the individuals in a conflict as opposed to the "interests" as implicit in their positions. This latter insight has important implications for how participants may ultimately relate to their own conflict.

These exercises should affect participants' perceptions of available alternatives and, through understanding needs increase empathy with their opposite numbers. Phases 2 and 3 are not aimed at affecting ideological stands or self-identity awareness. They only touch upon the misperception of subjective reality as affected by an attitudinal prism towards the "Other" and the distorted reception of the message.

Phase 4: Framing and Re-framing the Partners' Conflict and Seeking Common Ground

At this point, participants are getting ready to seek solutions to the issues at stake. The process involves 5 distinct stages: 1) generating a shared vision, 2) an adversarial stage, 3) a reflexive stage, 4) an integrative stage, and 5) searching for consensus.

Shared Vision: Tversky and Kahneman, the foremost proponents of the importance of framing decisions note, at the very end of their paper in *Science*: "When framing influences the experience of consequences, the adoption of a decision frame is an ethically significant act."(1981, p. 458) The

manner in which the conflict to be resolved is introduced to the group is of critical importance. The framing of the situation can have a major impact on the trajectory of discussion and on the ultimate outcome. In framing the conflict, the facilitators at Maryland rely on a major insight of Tversky and Kahneman (ibid): namely, individuals experience losses more acutely than they do gains of the same size.

To make use of this effect facilitators ask participants to develop a "Shared Vision." This consists of their view of the best possible outcome of their conflict 20 years in the future. This device has a number of useful properties. Putting the time line far into the future frees the participants mentally from the immediate constraints of the current mired-down status quo. It allows them to see the potentially *real* gains from an agreement, without having to worry about how they can get there from here. This framing implicitly raises the stakes of finding some accommodation because it points to the potential gains, which may have been lost sight of in the short run.

This exercise is followed by another which asks participants to maintain the 20 year horizon, but this time to paint a worst case scenario. Although often unwilling to visualize a harsher picture than the current sad realities, Inevitably that scene will be grim. Subjects experience a virtual sense of loss, having gone from their previous rosy scenario to the blackest of views. This explicitly invokes the loss phenomenon and further emphasizes that the stakes in finding a resolution are huge. The distance from the worst to the best are what are at stake, not just incremental gains from the status quo. Having canvassed the best case first makes the worst case look like a bigger loss: a larger loss than it would be from the status quo and, as we have noted, this is further affected because losses look bigger than gains.

In game theoretic terms this expands the negotiation space and changes the valuations placed on possible outcomes. It increases the perceived stakes in getting progress and therefore facilitates participants' investment of time and effort in seeking an agreement. It also changes expectations about how much the others have at stake and create a negotiation space which is potentially non zero-sum. That is because when negotiations are focused on the status quo, in a deadlocked conflict movement is almost always viewed as involving concessions (losses) by one side or the other. When the negotiation space is expanded, the possibility of joint gains may become more apparent.

The next exercise is a presentation of the conflict which involves back casting, or projections backwards at 10 and 5 year intervals, to try to identify what might have happened to get to the 20 year best and worst outcomes. This parallels the game theoretic tool of backward induction. Subjects are implicitly trying to identify branches of an extensive form game tree (moves-actions) that might have got them from the status quo to their best and worst outcomes. This fills in the alternatives available in the conflict in a fresh fashion, since it does not start at the status quo, from which participants would be free to relay on the stereotyped positions. Ultimately the hope is that agreement might be reached on a course of action (strategy) which would amount to a group choice which would get to a subgame perfect equilibrium

At this point, the Partners are hopefully getting ready to work constructively in the search for common ground on issues identified more precisely on an agenda determined by themselves in the previous days. Emphasis is now put on the development of creativity and in the preference for cooperative behavior. An illustration of the skills can be give in the following short exercise: the

participants are divided into pairs and asked to take part in an arm wrestling contest where the two participants with the highest number of wins within a space of time win a monetary award. While most participants assume a zero-sum attitude to the exercise, creative thinkers may realize that a pair may collaborate to let each other 'win' repeatedly and thus both can win the monetary award. At the end of the exercise, this 'win/win' strategy is pointed out to the participants.

Participants are then given practice in finding consensus via a variety of consensus games which prepares them for addressing possible resolutions of their own conflict. Several methods of searching for common ground have evolved, but the one that has reached the highest and most effective level is the groundbreaking ARIA (Adversarial, Reflexive, Integrative framework) originated by Jay Rothman (1992, 1997) and since then brought to a more rigorous application in Kaufman's IPSW.

The Adversarial Stage: The Adversarial portion of the process is designed to identify the existing stereotyped positions, point out the futility but at the same time the necessity of an adversarial preliminary stage, putting individuals in the first round to represent their own positions and in a second round then those of their opposite numbers. This allows the venting of both their own grievances and truths as well as the developing of a minimal understanding of the intensity of feeling inherent in the other's position and so to invoke a limited form of impartial reasoning. It establishes the baseline for the Reflexive stage.

Perhaps of greatest centrality in this phase of the exercise is a confrontation which is carefully staged. In it the two parties each have teams who present the 'classic' positions of their sides. Other members of the side criticize the presentations, saying such things as "how come you didn't mention ... ." This usually leads to considerable anger, and posturing. Next, the sides must switch: putting forward the arguments of each other. But this time, the other participants are to discuss the style of the presentations: were they angry, argumentative, etc.[6] Role reversal not only ensures a better understanding of the positions of the "Other" but also softens the transition to the introspective following stage.

The Reflexive Stage: This stage is designed to uncover the underlying needs, fears and expectations that exist behind the participants' declared positions. Although they form the conscientious or undiscovered motives to be found behind the positions taken, these, are seldom articulated, and may not be actively available to participants. Nevertheless, if a satisfactory solution is to be found will these basic needs and desires must form the basis for re-valuing alternatives and finding solutions later on. Thus they must be uncovered through a productive dialogue. To create that dialogue the participants first must be coached in active listening techniques. Participants move from the blaming "you" to the expression of what "I" need. These are designed, explicitly, to uncover underlying motivations and feelings. Once learned, they are applied to discussions of the conflict in question so that the real stakes of the parties are laid bare as the basis for the next stage of conflict resolution the integrative stage.

6/ The feedback from the corrections in phase 1 of this exercise means that all the participants are able to get 'all' the major points in the arguments on the other side when they switch. Thus the criticism of this phase is able to move to aspects of the presentation other than substance.

The Integrative Stage: This stage is designed to generate new possible alternative solutions and to bring the opposing parties to team work together facing the problems and striving to reach a consensus on acceptable movement towards resolution of the conflict for "us." The first step in this stage is brainstorming in a free-wheeling and accepting environment. Ideas are to be freely suggested and not commented upon. Much of the prior confidence building, humanization and skills development are instrumental in allowing a wide range of ideas to be placed on the agenda. Individuals must be trusting enough to offer suggestions which might have the appearance of offering concessions. Emphasis is placed on generating all sorts of ideas even if they are seemingly outlandish. The recent identification of motives and desires form a backdrop from which suggestions may be generated. Training in creativity (lateral thinking, expanding the cake, disaggregating the big problem, etc.) can now have some payoffs. The earlier discussed back casting techniques which identified a best case scenario can also be used to fill in possible steps to get to an optimal outcome.

Searching for consensus on preferred alternatives:After a wide range of alternatives are gathered they are prioritized and divided into a variety of "baskets" or sub-themes such as economic, social, cultural, security, political, security and humanitarian. The group first prioritizes and then breaks up to tackle the smaller and potentially more tractable issues in small groups, in which the issues are as closely matched to the skills and experiences of the partners as possible. They end their tasks by re-drafting the preferred ideas to be amenable to the participants and to those "outside the room." The hope is that progress on smaller issues will increase the credibility of the process and induce participants to exert more effort and be more flexible as the more difficult problems are approached.

The small groups report to a plenary session and the active listening techniques learned earlier are used to try to identify the underlying needs of the parties in both the sub-issues themselves and also how proposed solutions (or new solutions which emerge) might help to satisfy those needs. Consensus remains the primary decision making mechanism. To the extent that the emphasis in finding solutions focuses on needs and uses a consensus rule, it parallels in a few important aspects the impartial reasoning exercises on issues of distributive justice in Frohlich and Oppenheimer, (1992). Since there is no explicit element of impartiality at this phase however, it is not a very close fit. The important elements that the two exercises have in common is the fact that participants may be able to identify "a floor" or a minimally acceptable level of civil, political, economic, social and cultural rights which all can agree are necessary for any fair solution. Indeed, this might have been emphasized in the earlier phase when the notion of identifying underlying needs was first introduced. Once these floors are acknowledged, our experimental findings regarding distributive justice indicate it is difficult to argue against accommodations which are designed to secure these minimal rights. In that sense the previous abstract and impartial discussion of needs and rights can act as a powerful stimulus to movement and accommodation. Indeed, a number of the moves are likely to be tied to the back casting which was done previously, since a best state can hardly be envisioned which deprives some parties of minimal rights.

Evaluation Strategies

Until recently the efforts to evaluate the impact of workshops has been fairly haphazard. As Ross and Rothman say:

> To date, however, standard means of policy evaluation have often not been very useful for communication of the full range of effects conflict resolution have achieved. What is sorely needed is a systematic, 'user-friendly'. And highly replicable research methodology which conflict resolution

> interveners and researchers can employ . . . Without such a methodology, the field of conflict resolution continues to be one in which many assertions of positive results are made, but very little systematic or empirical data is generated to support what is often no more then poorly defined, anecdotal evidence of success. 1999, p.244-245

Over the years, most of the evaluation work has focused on mediation techniques. Evaluation has been addressed in alternative dispute resolution (for example see Bercovitch in Zartman and Rammussen 1997, Sacks, Reichart, and Proffitt Jr. 1999), peer mediation in schools (Hart and Mark 1997) domestic group mediation (for example Zubek, McGillicuddy and Syna 1992) and international mediation (for example see Kleiboer 1996). Up until recently though, not much attention has been paid to rigorous evaluation in the literature on second track workshops.

Yarrow (1978) has argued that the objective measurement for "success" is difficult to establish without quantifiable criteria. Folger (1997, p. 229) notes that some argue ". . . proving effects is not a feasible goal of evaluation initiatives." We reject this and argue that careful evaluation is needed specifically to create testable hypotheses about the effects of dispute resolution techniques on which so much effort and hope has been expended. Before going into how the effects of a workshop can be addressed systematically, it is worthwhile to sort out the possible changes others suggest might be evaluated.

Mitchell and Banks (1996, p. 152) identify three possible changes: in the participants, material produced by the workshop itself and the behavior of and relationships of the parties." Ross and Rothman suggest looking at two major impacts of the workshops: 1) external criteria focusing on changes in the larger societies as a whole and 2) internal criteria focusing on changes in the peoples and groups directly involved (1999 p. 10). While recognizing the importance of external criteria we choose to focus on the more manageable and we believe measurable changes: internal objectives.

The appropriate ways and means to conduct useful evaluation are also open to debate. For instance It has been argued that a controlled environment is not probably not possible to create for the purpose of evaluation (Folger, 1997, p. 232-234). Saunders argues that "Ideal conditions for creating a social science experiment do not exist. A deep -rooted human conflict in a complex body politic exhibits so many variables that mathematical measurement will fall short of explaining it (1999 p.222)." While we agree with Saunders about the complexity of human conflict we disagree with his conclusion that this makes evaluation based on measurement impossible. Saunders advocates a process of evaluation that changes as new goals emerge creating new criteria for measuring success. For Saunders evaluation needs to start by asking what the participants value and how this changes. Evaluation needs to be based on participants' judgments, interviews and letters, the creation of a solid working group and the product such a group produces.(1999 p. 220-245). Focusing as we do on changes in the participants themselves, we feel that observable data on behavioral changes and changes in knowledge bases also needs to be collected. There is evidence that this kind of data can be collected and that conflict resolution training can have a measurable impact in how people think about problems. Johnson and Johnson conducted a study of middle schools students in the United States exposed to conflict resolution training. They found significant changes in both the knowledge base of students about productive methods of conflict resolution. More importantly they found that students who had the conflict resolution course were able to apply these methods at a much greater rate to scenarios they were given to them (1997)

Roth and Rothman point out that measurements using internal criteria should look at skill changes, or behavioral changes and they should look at multiple dimensions. They warn against questionnaires focusing on the effectiveness of the workshop because they have the danger of being self-serving. Ross and Rothman's label their evaluation approach action-evaluation. Ross and Rothman describe their recommended procedure as follows:

> Action -evaluation prescribes a process of ongoing and iterative data gathering and analysis of the goals of all principle stakeholders in various conflict initiatives. Repeatedly asks the following questions :
>
> 1- What the internal and external outcome goals do various stakeholders have for this initiative?
>
> 2- Why do the various stakeholders care about their goals so much?
>
> 3- How will stated goals be most effectively met? 1999, p. 249

They also consider that context specific issues need to drive the criteria by which workshops are measured (1997 p.10-11). This approach, while getting at changing attitudes by way of goals of the participants does not focus enough on changes in behavior or changes in knowledge base. The focus on goals also makes the results very context specific making it harder to compare results and arrive at generalizable knowledge. We believe that the approach we suggest in this paper can create a basis for criteria that will go beyond the specific context of a particular conflict.

What needs to be done is to identify changes in affect, behavior, and attitudes which come about from the workshop intervention. In order to do this one must develop measures of these changes which are generalizable beyond the specific workshop context. Further, one must measure these changes against those induced in a comparable control group.

Within this wider understanding of the conflict resolution workshop and its goals, as well as the theoretical links between them, a careful evaluation of conflict resolution workshops can be developed along the lines we have just sketched. IPSW have been categorized above as consisting of four phases, each one consisting of a cluster of exercises. Each phase is designed to achieve certain goals, which, cumulatively will result in the achievement of the goals of the workshop. The evaluation consists of designing and implementing measures to identify the extent to which each of the phases is successful in achieving the professed goals.

Control Groups

There are at least three major threats to the validity of an evaluation of a conflict resolution workshop.

1. History itself: the passage of external events affecting the groups in conflict such that it is hard to distinguish the impact of outside events from the effects of a workshop.
2. The Hawthorne effect: the impact on subjects from their participating in an experiment.
3. The selection effect: the possibility that the subjects are not non representative of the population as a whole as a result of the criteria used in their selection.

To deal with these threats to validity we propose that we use a test group and two control groups. The test group will experience the IPSW,. One control group (moderated) will share the same location as the test group and will be allowed to discuss matters in a mediated fashion with benefit of the IPSW exercises. The third group (survey) will simply consist of representative

individuals from the society who have never meet. Attributes of all groups will be measured in a similar fashion.

This will provide a way of distinguishing changes in attitudes and behavior associated with external events which would be experienced by all groups, from changes created as an outcome of continued exposure to members of the other side in a workshop setting, and changes associated with the ACTIVITIES done during a workshop. The changes we wish to identify are those associated with participation in the workshop. Nevertheless, it is possible that the mere participation in an "event" funded by a high profile sponsor, chaired by a credible facilitator, and conducted in amenable surroundings, could, by itself, have a positive effect on the participants' attituted affect and behavior. Hence, by select control group against which to measure the progress of participants in conflict resolution workshops, we can identify changes attributable to the workshop experience.

The controls should be drawn from a single subject pool of participants selected for the evaluation and be randomly assigned to one of the three groups.

Evaluation of Goal Achievement

The two main goals of a conflict resolution workshop are the transformation of individual preferences into a less malevolent form, and the development of feasible policy alternatives. To evaluate the efficacy of a workshop in achieving them, measures need to be taken, in all groups, at the outset, and at the end of the workshop.[7]

Regarding the transformation of preferences, we would propose, not only administering questions to identify attitudes, but also running choice experiments to identify possible changes in underlying preferences. Of course, each of these questions must also be asked prior to of the commencement of the workshop (perhaps as a part of the registration packet participants are to fill out) so that suitable comparisons can be established. Frohlich and Oppenheimer (1984) presents a series of experiments designed to measure the extent and intensity of empathy and antipathy by providing subjects the opportunity to divide sums of money between themselves and others.[8] We would administer these experiments to all groups as one measure of the transformation of preferences.

The obvious hypothesis to be tested, is the extent to which participation in a workshop increases the frequency of the benign and neutral divisions of money. Supplementary questionnaires should be employed (see Frohlich and Oppenheimer, 1999) to insure external validity and to evaluate the attainment of other aspects of the goals. Thus, for example, one could develop a baseline measure of the extent to which one's view of the other has been transformed by asking: "On a scale from 0 to 100, where 0 represents no shared characteristics, and 100 represents all characteristics are shared, the extent to which you feel that you share characteristics with your opposite number on the other side of the conflict."

7/ Indeed, one might wish to take measures at some time after the workshop to check for the staying power of any changes and particularly if one would like to assess the attainment of the pre-set external goals.

8/ In these experiments four classes of individuals were identified. Subjects' choices categorized individual, unequivocally, into altruists, difference-maximizers, egalitarians and strictly self-interested individuals. Moreover, the strength of their attitudes was variable within the four groups.

In evaluating the degree to which the exercises develop feasible policy alternatives one needs to capture two aspects of proposed solutions: first, the feasibility[9] and second, the value of the alternatives. To provide a baseline against which to measure the effect of the workshop, one must also ask questions which capture the feasibility and value of the options currently available. Regarding feasibility, one can administer a questionnaire tapping the expectations (probabilities) that alternatives could actually be implemented.

Possible questions could be: "Given the proposals currently being discussed in the media, what is your personal estimate of the probability that the conflict can be adequately resolved on those bases?"By contrast, one would administer questions on the feasibility of any alternatives that the groups unanimously agree upon as solutions to the conflict. E.g. "Given the proposals agreed to here, what is your personal estimate of the probability that the conflict can be adequately resolved on that basis?" Similar questions could be asked regarding the value attached to the various possible proposed solutions from both the participants' perspective and regarding their perceptions of their opposite members' values.

Evaluating the Impact of Individual Phases

Above we have discussed the possible evaluation of the workshop as a whole. But one can do more: the workshop's phases can be individually evaluated as to their efficacy. To do this, one must ask the same the same question of the three groups at the same time. All questions must be asked at the beginning of the treatment and then repeated at the end of the phase being evaluated. The questions must be tailored to measure the hypothesized impact of the specific exercises in the phases.

The goal of the exercises of phase one is to transform the individual's malevolent preferences from possibly malevolent to more empathetic. At the end of the phase, one would repeat the baseline question on shared characteristics, and also, possibly include a question on the importance of the shared characteristics. As an additional measure of potential growing empathy one might initially ask a question such as "How satisfactory do you consider the situation of your opposing numbers under the status quo?" By repetition of the question after phase one it might be possible to identify shifting empathy.

A more graphic representation of shared characteristics might involve using two cutout circles, representing oneself and the other, and asking subjects to place them on a page representing how close they are to one another. Were this task posed at the beginning of the workshop one would expect the circles to be placed at some distance from one another (probably with no overlap). A repetition of the task after Phase one might lead to a narrowing of the distance, and perhaps, even to overlap. Indeed, progress at various later stages would consist of closer placement (with possibly greater overlap)

One could proceed in a similar fashion for each of the phases.

It should be emphasized, and reiterated, that although specific questions might be designed to test for the anticipated effects of a given phase, the effects might be cumulative, or some effects might result from the activities of a given phase which impact one of the other desired goals. To

9/ Feasibility has to be measured in terms of the achievement of the external goals.

check for this all of the questions would be posed both at the beginning of the workshop and at the end of each phase.

With this understanding of the conflict resolution workshop and its goals, as well as the theoretical links between them, a careful evaluation of conflict resolution workshops can be developed. Workshops have been categorized above as consisting of four phases, each one consisting of a cluster of exercises. Each phase is designed to achieve certain goals, which, cumulatively will result in the achievement of the goals of the workshop. The evaluation consists of designing and implementing measures to identify the extent to which each of the phases is successful in achieving the professed goals. But for any measures of achievement of a workshop to be meaningful, they must be compared to measures taken of a comparable control group. Below, we sketch the outlines for a possible evaluation of conflict resolution workshops.

Conclusions

The time has come to evaluate collaborative problem solving workshops in a careful and generalizable fashion. A proper evaluation requires clear annunciation and analysis of the theory underlying the procedures. That theory serves as a guide to the questions which are to be posed to evaluate the procedures. Once it is clear that workshops are based on the modifying of individual attitudes, preferences, and behaviors, it is possible to construct measures to evaluate their effectiveness.

Here, we have taken the IPSW as a representative of the activity, theorized about the type of behavior that needs to be affected at the personal level, set up the immediate objectives in the different phases of the process and suggested some preliminary ideas as to the possible forms of measurement. We hope that in doing this, we will animate the debate on the importance and relevance of the importance and relevance of evaluation.

The priority for the next stage is to fully develop the instruments of evaluation and apply them to identify the value of the conflict resolution processes.

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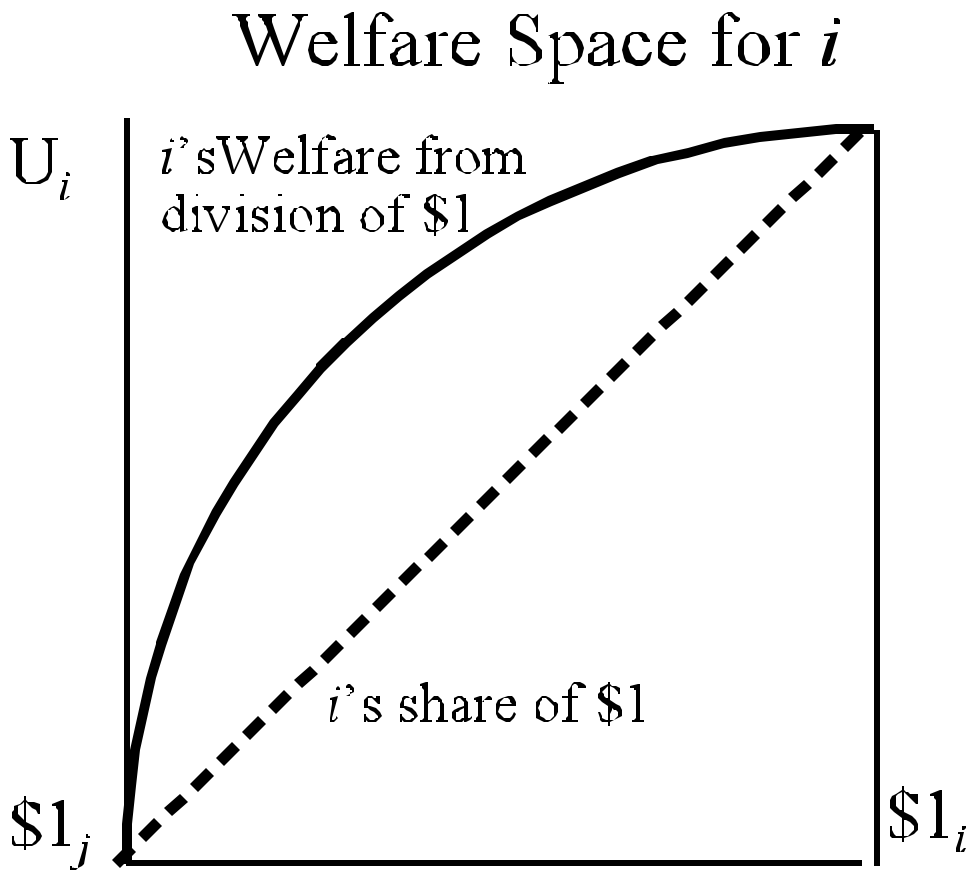

Figure 1 A self-interested individual's welfare from the division of a dollar with another person.

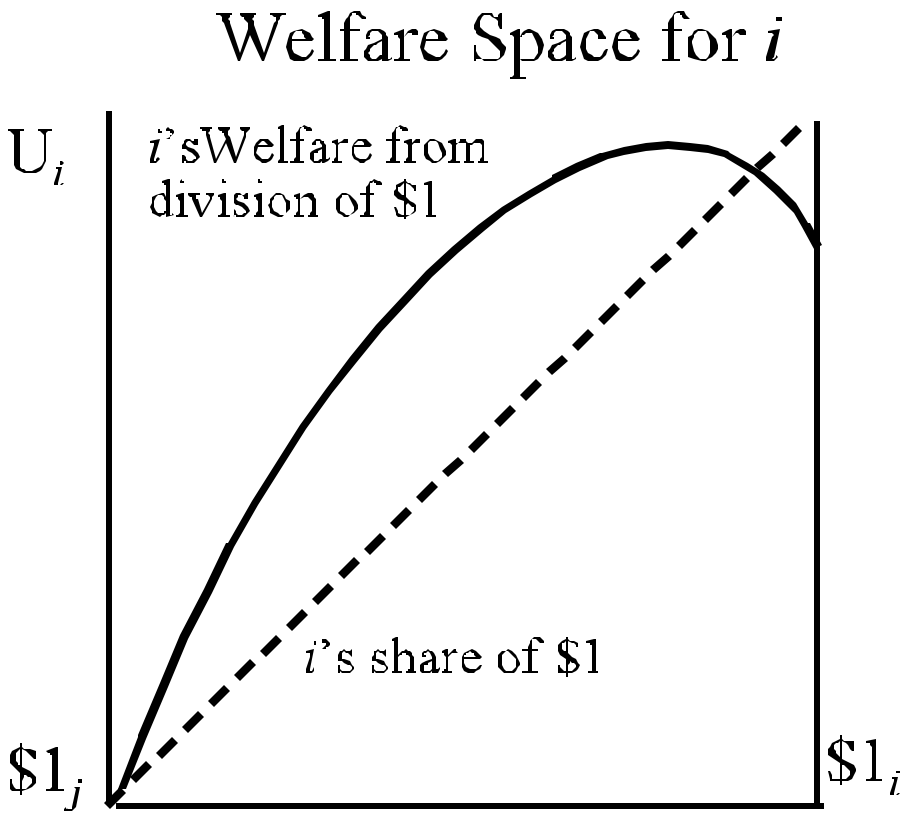

Figure 2 An other-regarding individual's payoffs from the division of a dollar with another person.