

Rational Decision-Making in Problem-Solving Negotiation: Compromise, Interest-Valuation, and Cognitive Error

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The problem-solving model of negotiation, sometimes also called interest-based or integrative,¹ is the predominant model in negotiation theory and practice.² Popularized by books such as *Getting to Yes*,³ problem-solving methods form the framework of the teaching and practice of negotiation, mediation, facilitation, and consensus-building.⁴ However, as many discover when they attempt to follow the prescriptions of the model, matters are not nearly as simple as popular texts claim or imply. "Win-win" has become a kind of mantra, expressive of an attitude that if people just approach negotiation or conflict resolution with the right frame of mind, more productive or beneficial results will, of necessity, follow. But many find difficulties in applying the model, particularly in complex negotiations or conflicts. Even after negotiators focus on interests rather than positions, separate the person from the problem, generate options for mutual gain, and evaluate solutions on the basis of objective principles, many find their negotiations bogged down or slipping into a competitive struggle for gain.

The purpose of this article is to discuss several important aspects of negotiation or dispute resolution, all concerning rational decision-

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1. This form of bargaining is also referred to as *integrative* bargaining, as the parties are said to integrate their interests. RICHARD E. WALTON AND ROBERT B. MCKERSIE, *A BEHAVIORAL THEORY OF LABOR NEGOTIATIONS* 5 (1965). The meaning of "integrative," however, is less self-evident than problem-solving, and I believe that the latter better captures the processes involved in this kind of negotiation.

2. See generally, WALTON & MCKERSIE, *supra* note 1; ROGER FISHER AND WILLIAM URY, *GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN* (1981); HOWARD RAIFFA, *THE ART AND SCIENCE OF NEGOTIATION* (1982); DAVID A. LAX AND JAMES K. SEBENIUS, *THE MANAGER AS NEGOTIATOR* (1986); CHRISTOPHER W. MOORE, *THE MEDIATION PROCESS* (1986); LAWRENCE SUSSKIND AND JEFFREY CRUIKSHANK, *BREAKING THE IMPASSE* (1987); SUSAN L. CARPENTER AND W.J.D. KENNEDY, *MANAGING PUBLIC DISPUTES* (1988).

3. FISHER & URY, *supra* note 2.

4. Negotiation is the central focus of this article, but most of what is said in this article concerning negotiation is equally applicable to mediation, facilitation, and consensus-building. Although there are, of course, differences between the four terms and practices, those differences do not much affect the fundamental problem-solving model used in each of these forms of practice. For that reason, I shall not, in the remainder of the article, attempt to distinguish between negotiation, mediation, facilitation, and consensus-building.

making, that generally go untreated in discussions of the problem-solving model. The first of these aspects relates primarily to preparation and planning issues regarding the kinds of trade-offs that, in situations of any complexity, must be made to secure agreement. Specifically, such issues include questions of the role of compromise in problem-solving bargaining, how parties determine what their interests are in a particular negotiation or conflict situation, and how parties should value their interests so they can make intelligent decisions. The general issue of trade-offs in negotiation, and questions of compromise and interest-valuation are closely intertwined. Indeed, parties must have a clear understanding of these issues and their interrelationship in order to problem-solve effectively and efficiently. This applies particularly in negotiations of any significant complexity, including multi-party, multi-issue negotiations or consensus-building efforts.

Even assuming a party fully understands the subtleties of the problem-solving model and thoroughly prepares for a negotiation, the negotiation may fail because of "people" problems. These are not the personality problems addressed by the *Getting to Yes* formula of separating the people from the problem,⁵ but cognitive difficulties of the kind that all decision-makers have. Briefly stated, in decision-making situations, humans use unconscious judgmental strategies which, while often serviceable, sometimes lead to irrational choices or to critical errors of judgment. A concern for rationality in negotiation decision-making, consequently, requires an exploration of the cognitive difficulties involved in bargaining.

Part I of this article offers a review of the problem-solving model of negotiation. The aim of this section is to provide a succinct but comprehensive statement of the model, including material not otherwise available in a single source. Parts II and III examine how to conceptualize compromise and trade-offs in problem-solving negotiation and address important questions of how negotiating parties should discover what their interests are, and how they should go about valuing them. Having explored the conceptual side of planning and preparing for problem-solving negotiations, Part IV provides a discussion of human cognitive processes that impair rational decision-making in negotiation.

5. See FISHER & URY, *supra* note 2, at 17-40.

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I. PROBLEM-SOLVING NEGOTIATION

The problem-solving or interest-based negotiation model approaches negotiations quite differently than either the competitive or simple compromise negotiation models. In essence, the problem-solving strategy treats the coordination and conflict of interests as a joint problem of the parties, a problem which may create opportunities for the parties' mutual benefit. If parties approach negotiations with this attitude, their negotiation tasks are clear. They must work together to identify their common problems, undertake a search for alternative possible solutions, and decide on courses of action. It is rare, however, for parties to be so thoroughly cooperative. Even interest-based bargaining is subject to competitive moves and efforts to claim a substantial amount of the value that the parties may create.⁶

A. Problem-solving and Competitive Negotiation Compared

In competitive or distributional bargaining, parties compete or fight over presumed fixed sums or positions to get the most for themselves out of a deal -- "to win." In problem-solving bargaining, however, the negotiators seek ways of satisfying the interests of all parties. The aim is not to beat the other side in a contest for gain, but to work together for the benefit of both parties. The parties might cooperate to increase the sum or amount of gain available to them. Where the parties join efforts to increase the sum total of possible gains, they may end up dividing a larger gain between themselves. Each party may gain more in a final share allocation than competing over an assumed fixed amount. For example, assume two companies were competing over warehouse dock loading space which was so small that only one company could use it at a time. Rather than continue to compete, the companies agreed to extend the loading platform so that both could use it simultaneously. Through cooperation, the parties increased the resources they had to share and achieved greater gains than without the cooperation.

1. Common or Complementary Goals or Interests

Problem-solving negotiation assumes that parties often have common or complementary interests which they can coordinate for mutual benefit. Parties have a common interest when they share a goal and would

6. See WALTON & MCKERSIE, *supra* note 1, at 164-169; See also LAX & SEBENIUS, *supra* note 2, at 121-122.

benefit in the same way, although not necessarily to the same degree, if they could realize the goal. For example, two persons starting a business partnership have a common goal of developing business.

Parties' interests are complementary when they have different but compatible goals, and each party, in pursuing its own goal, can assist the other in reaching its goal. For example, air express delivery companies need persons to act as couriers to speed documents through customs following international flights. These companies do not wish to bear the expense of full-time courier employees. There are, however, many travelers who would like to fly internationally at a reduced rate. Courier companies often employ such people to accompany documents, *charging* them what amounts to a highly discounted airfare. The company buys a regular air fare ticket for the courier, but reduces its cost by having the courier pay some portion of the airfare. The courier gets her flight, but at a considerably reduced cost; the air express company gets its documents through customs, also at a reduced cost. The express company's efficiency goal and the courier's travel goals are complementary, and they are able to work together for their mutual benefit.

Rather than necessitating that one or both parties "give way," as is the situation in competitive bargaining, the discovery that the parties have common or complementary interests creates possibilities of mutually beneficial joint action. By contrast, competitive negotiation assumes that the parties' interests or goals are antagonistic. The two strategies thus differ in their initial definition or perception of negotiating situations. Problem-solving negotiators conceive bargaining situations as open and amenable to cooperative development. Competitive negotiators look upon bargaining situations as closed, in the sense that the amount of available gain is fixed and subject merely to division.

2. *Conflicting Goals or Interests*

Problem-solving, however, does not ignore the possibility that bargaining parties may sometimes be in conflict. Parties' goals conflict if they cannot realize them at the same time. If you and I are working in a library, and you want to open a window to get fresh air, but I want to keep it closed because I'm cold and want to avoid a draft, we cannot both have our way.⁷ Even in such circumstances where aims or desires apparently conflict, it may be possible, with effort and ingenuity, for the parties to reconcile their conflicting aims. In the library example, we

7. MARY PARKER FOLLETT, *DYNAMIC ADMINISTRATION: THE COLLECTED PAPERS OF MARY PARKER FOLLETT* 32 (Henry C. Metcalf & L. Urwick eds., 1942).

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might do this by opening a window in another room in the library, assuming the air circulation is such as to bring fresh air to you without chilling me.

Problem-solving negotiation thus recognizes that parties may have different needs and interests, but finds that such differences or conflicts do not necessarily require the parties to compete. Instead, such conflicts are often useful in crafting an agreement. Even where the parties have conflicting interests, they may nonetheless creatively devise ways to serve their respective interests, as in the loading dock and library examples. If successful, the parties may obtain results benefiting both more completely than if they had been competing to win or engaging in simple compromise.

3. *Compromise in Problem-solving Negotiation*

Unlike simple compromise bargaining, problem-solving bargaining does not focus on compromising for the sake of agreement. Instead, parties work toward agreement by means other than compromise, searching for agreements that best serve their respective interests. The operative premise against easy compromise facilitates "constructive conflict." Where the parties resist easy solutions - and simple compromise is an easy solution - they are forced to be inventive or creative, to undertake a wide-ranging search for ways to benefit both parties. That creativity can lead to greater gains for each party than can simple compromise, which, at best, merely mitigates losses. Surprisingly often, when negotiating parties search beyond simple compromise, they discover ways to integrate their interests so that both gain. If they work at it, parties can often find creative solutions which will make them better off than a simple compromise.

Even with the best intentions and cooperative efforts, however, the parties will sometimes find that their interests apparently conflict, such that they cannot find a means to completely satisfy all their interests. Their interests may so conflict that the *only* solution to the conflict is compromise.

There are, however, different ways to compromise. In particular, trade-off compromising may present greater possible gains to the parties than simple division compromising. Redefining a bargaining situation to include a greater number of interests and issues creates trade-off possibilities, making greater overall gains available to the parties. Thus, in those cases where parties cannot create *new* gain - in the sense of creating new resources - they can nonetheless work together to expand their bargaining. In doing so, they may find a possible gain already available in the situation, one they had not initially perceived to be there, and distribute it for maximum benefit. Compromise *is* a solution to

conflict, but some kinds of compromise are better than others. More specifically, trade-off compromising may leave each party better off than simple division compromising.

The problem-solving model of negotiation, therefore, does recognize compromise as a useful and creative tool to reach agreement. Nevertheless, as too easy a resort to compromise may inhibit other, more creative and more gain-producing solutions to conflict, the problem-solving model looks to compromise as a *last*, rather than a *first*, resort in attempting to fashion agreements.

B. Basic Problem-solving Negotiation

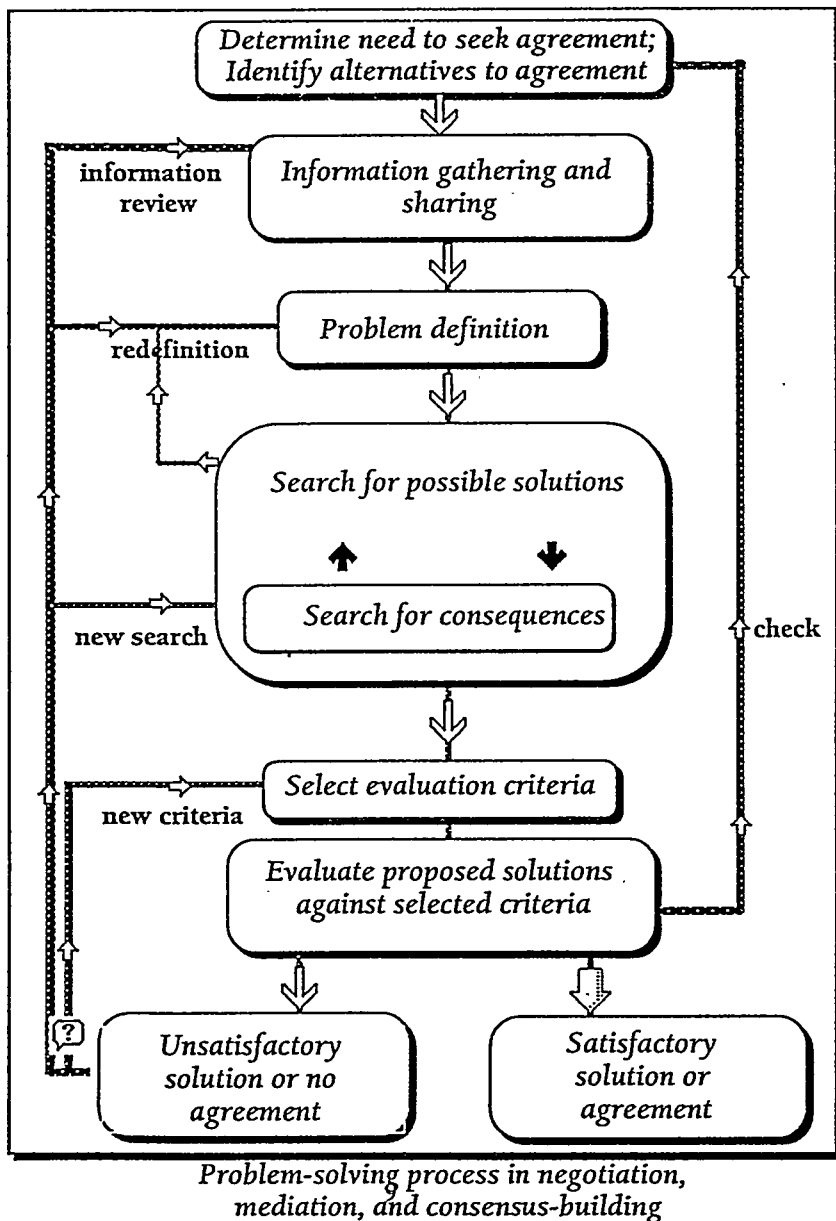
Problem-solving negotiation follows the same process involved in any sort of problem-solving. There is first a definition of the problem, a search for solutions to it, and then an evaluation of alternative solutions against some set of criteria. However, the process is dynamic, and all stages are subject to refinement based on developing information and reassessments. Thus, as a person reflects on possible solutions to a problem, she may also begin to redefine the problem, and any redefinition will lead to new possible solutions. Similarly, as she evaluates solutions and focuses on the most promising ones, she may discover that her criteria for evaluation are inappropriate, causing her to develop new criteria. New evaluative criteria might also lead to new ways of looking at the problem and a new problem definition, or to a renewed search for possible solutions to the problem.

Individual problem-solving is a dynamic learning process which can be complex. Problem-solving negotiation, while following the same process, adds potential complexity by adding parties who must work together to solve problems they share. The parties may differ in their initial definitions of the problem, in their proposed possible solutions, and in the criteria they use to evaluate possible solutions, particularly in identifying their respective best alternatives to a negotiated settlement.⁸ Not only is each party proposing its own views, interests, preferences, and values, it is also learning about the other's. Indeed, in complex problem-solving negotiation, negotiators constantly reassess their interests and preferences as they gain information; and their perceptions of problems, possible solutions and agreements, and even their sense of alternatives to agreement change. In short, they revalue their situations. Thus, problem-solving negotiation, while often complicated and difficult to manage, is a process open to novel and mutually beneficial solutions to joint problems.

8. Usually called the BATNA - Best Alternative to a Negotiated Agreement.

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Diagrammed, the process looks like this:⁹



9. For a similar, but simpler diagram, see WALTON & MCKERSIE, *supra* note 1, at 138.

This model of negotiation is, of course, rather idealistic, for it operates on the premise that the negotiating parties cooperate fully and do not seek to take advantage of one another. For example, the model calls on the parties to share information fully, to define problems mutually, and to work as allies to find solutions to their problems. One might agree that this would be a good process to resolve differences, but doubt that parties could or would act in such a trusting, possibly altruistic, manner. Thus the model seems naive.

However, the problem-solving model can incorporate conflict and recognize that parties, in their self-interest, may attempt to skew or manipulate these supposed open and mutual processes in their favor. Even where parties cooperate or collaborate to increase gains, they must still divide any value they jointly create; opportunities remain for competitive self-seeking. The problem-solving model can take such possibilities into account and find ways of dealing with them. However, one must first develop an understanding of how problem-solving bargaining works. This more general issue of competition within problem-solving negotiation will be discussed following an exploration of the basic features of the model, sketched by elements and process stages.

C. Initiating Problem-solving Negotiation

The problem-solving strategy contemplates that each side in a negotiation will seek to satisfy its own interests and that each side should collaborate with the other parties to define and solve the problems between them. For the problem-solving strategy to work, the negotiators must establish problem-solving ground rules, either implicitly or explicitly. This ensures that each party is engaged in, and is hopefully equally committed to, the same activity.

If the parties do not agree that they will bargain in a problem-solving manner, at least one of them must propose or initiate the strategy. Thus, in dealing with relatively unknown parties or parties who are inclined to negotiate competitively, one who wishes to problem-solve may need to begin the negotiation by negotiating the actual negotiation procedure. Negotiators do this expressly by openly making the negotiating process itself an initial subject of negotiation. Alternatively, a negotiator could simply use the problem-solving strategy, for example, to probe for full information, to discover the other side's interests, to reveal the negotiator's own interests, etc. This can be done quite naturally, and it is often possible to shift bargaining away from a competitive and positional focus to a more productive problem-solving focus.

Depending on how competitive the other side appears to be, the problem-solving negotiator may need to be very insistent on the way she

wants to bargain. She can do this either by seeking the other side's commitment to problem-solving bargaining or by using tactics which move the other side into a reciprocal problem-solving stance. During negotiation, the problem-solving negotiator simply refuses to accept positions as a basis for bargaining. Instead, she asks hard questions about what interests justify the positions the other side takes. She works to create a free flow of information and insists on clear and accurate communication where the parties state their needs concretely. If it is safe to do so, she is explicit about her side's needs, values, and objectives. She seeks to discover the other party's as well, making a genuine attempt to understand the other side and how it perceives its interests and the situation.

1. Exploration of Interests and Differences

Two general strategies may increase the possible gain available to the parties or to "create value:" to find common and complementary interests and to exploit differences. Where parties share interests, they may be able to devise some agreement which satisfies such interests or find some way in which their different interests can mesh. Where their interests conflict, and there are also differences between the parties in goals, values, stakes, outlooks, predictions, risk-aversion, and time-preferences, it may be possible to exploit those differences in ways that satisfy all of the parties' perceptions of the situation.

Joint gains come from exploiting differences, and it is the parties' differential perception and assessment of situations that leads to trade-offs.¹⁰ For example, suppose we are negotiating a contract under which I will supply you, for a relatively long term, a rather unique article I manufacture. I depend on a foreign supplier for materials to make the product. As I am concerned about my supply and fear my supply costs may go up, I want to charge you the highest price I can. You, on the other hand, think foreign supplies are, and will continue to be stable, and, therefore, the price should be lower. Rather than compromise on a specific price for the life of the contract, we could agree to let the price depend on some formula that took into account the cost of the foreign supply. In other words, our predictions about the available foreign supply differ. If we are each willing to act on our own predictions, we can use this difference to craft an agreement satisfactory to each of us.

Because these kinds of differences between parties, if somehow reflected in a final agreement, allow each party to get what it wants, or

10. See LAX & SEBENIUS, *supra* note 2, at 92-106.

thinks it needs, it is essential for the parties to discover and thoroughly explore such differences. The parties need to examine their respective interests, values, goals, and perceptions of the situation carefully, as well as attempt to discover their differential beliefs, forecasts or predictions, risk attitudes, and time preferences.¹¹ This examination will open up possibilities for exploiting differences by matching what one party finds valuable or desirable to gain with what another party finds relatively costless to forfeit. For this process to work, of course, the parties must also depersonalize conflict by accepting differences in viewpoints, rather than seeking to impose their respective viewpoints on one another.

2. *Problem Definition*

Once there is full exploration of interests and viewpoints, the particular negotiating problems the parties have should be fairly apparent. In general, they will take the form, "How do we work together to satisfy those interests we have articulated in our discussion?" Significantly, the parties may not in fact agree in their views of what the common problem is, and this may take some negotiating. This disagreement means that the parties have not communicated well; they really have not understood one another's points of view. Consequently, problem-definition is an opportunity for the parties to determine whether they really understand one another, and they should take it seriously.

D. *Problem-solving and Value Creation*

Once the parties agree on the issues between them, the negotiation can turn to problem-solving, an actual search for solutions. However, as each party is seeking to maximize its own interests, as implicated in the negotiation, it is most useful to pose options which each thinks may advance the interests of all. The parties may use any process they wish to help devise alternative solutions or options. Brainstorming is a particularly useful process because the rules of brainstorming reduce inhibitions in idea-generation and preclude discussion of ideas as they occur.¹²

11. *Id.* at 91, 99-102.

12. Those who propose an idea often take a proprietary interest in it, and their desire to see it accepted diverts the process from idea generation which is the essential task at this point in a problem-solving negotiation.

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1. *Specific Ways of Working Toward Integrative Agreements*

Negotiators can consciously focus on four general ways to work toward integrative agreements to help generate a list of options.¹³ First, the parties can attempt to increase resources so that they parties no longer compete for them. Second, the parties can also look for bridging solutions. "Bridging" involves finding some way of advancing both parties' interests simultaneously. The air courier example discussed above is an instance of a bridging solution.¹⁴ Third, an agreement option imposes costs which might cause a party to resist it. However, it may be possible to cut or minimize the costs, or compensate the other side via side payments. Finally, the parties can pose and explore options which involve trade-offs, log-rolling, and packaging, as discussed below.¹⁵

2. *Separating Solution-generation From Evaluation*

The aim of problem-solving negotiation is to find the *best* solutions to the general problem of coordinating and reconciling the parties' interests. It is most useful for the parties to separate the processes of developing options from that of deciding which option is the best solution. Evaluating ideas as they arise tends to stifle idea development, precludes cross-fertilization between ideas, and cuts off packaging opportunities. When ideas are evaluated as they arise, there is a risk that the parties will argue about them rather than treat them as tentative and exploratory proposals. In addition, there is always the possibility that a party will advance only those ideas most likely to benefit it the most. Separating the process of evaluation from that of idea-generation somewhat weakens the force of this kind of calculated behavior.

13. See DEAN PRUITT & JEFFREY Z. RUBIN, *SOCIAL CONFLICT: ESCALATION, STALEMATE, AND SETTLEMENT* 143-148 (1986).

14. Another simple example of bridging, sometimes used as a simulated negotiation problem, involves two parties negotiating over a small shipment of rare oranges. One party wants the oranges for the pulp; the other for the skin, which is to be used to extract a rare, naturally occurring, medicinally useful chemical. If each party enters the negotiation positional and simply demands that it have the oranges, it's obvious that they will be in serious conflict. If they reveal to each other why they want the oranges, and exactly what their interest in them is, however, they will discover they have no conflict at all, but that their interests are complementary. This problem, called the Ugli Orange Exercise, can be found in *A MANUAL FOR GROUP FACILITATORS*, App. C, 81 (Center for Conflict Resolution, 1977).

15. See *infra* text accompanying notes 40-54.

3. *Evaluation: Narrowing of Options and Value Claiming*

Once the parties have a list of alternative ideas or options for solving the problem, they must evaluate these options and decide the terms of their agreement. A party should consider how well any particular option serves its interests, rejecting options which do not advance those interests or require undesirable compromise. In considering options, a party should compare the outcome any option produces with the best alternatives to a negotiated settlement. Obviously, if a proposed negotiated outcome is not better than other alternatives, a party should not agree to it.

4. *An Example of a Problem-solving Negotiation*

Assume there is a large manufacturing company which is experiencing high production costs at several of its older plants. It has examined its costs carefully and has concluded that these plants are technologically inefficient, and that the company would be better off to close these plants and build new ones, taking advantage of robotics manufacturing processes. If the company closes the plants, however, many employees will lose their jobs. The union, therefore, makes plant closures an issue in the next round of bargaining with the company.¹⁶

In these circumstances, each party could hard-bargain: the company going forward despite union objections, and the union striking if the company goes forward. The parties' alternatives to a negotiated settlement are not good. The company could close plants and suffer a strike. The union could accept plant closures with attendant job losses or it could strike. The strike script, however, would convert the situation into a contest of strength and economics which would undoubtedly be very costly to both sides.

Reducing the situation to just a few interests, the company has important interests in profitability, efficiency, and a stable, experienced, and cooperative workforce. The union has the important interests of protecting workers' jobs, but that interest must take into account the continued competitiveness and vitality of the company. Assuming that the union accepts the company's factual claims about the inefficiency and noncompetitiveness of its older plants, the parties could define their joint problem as how to increase productivity in the inefficient plants without unduly threatening worker job security. As alternative solutions, they might propose more rigorous production standards, restrictions on new

16. The example is based on a case discussed in WALTON & MCKERSIE, *supra* note 1, at 160.

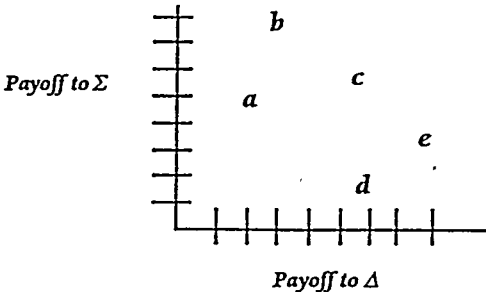
hiring following retirements, selective layoffs, and possibly even wage reductions.

However, when the company evaluates these proposals, it decides that they will not solve the productivity problem, which it deems due to plant design, location, and equipment. Assume that the company's studies convince the union that the company's conclusion is correct. The parties might then define the problem as how to close the plants with least harm to the workers. As possible solutions to this problem, they might pose training and job relocation programs; synchronizing old plant closures with new plant openings so that workers can transfer; and establishing a special worker assistance fund. Both the company and union might find these possible solutions, or some combination of them, better than their no-agreement alternatives and might likely agree to them.

5. *Evaluation Problems: Value Claiming in Problem-solving Negotiation*

In problem-solving negotiation, there are two different kinds of bargaining activities going on: value creation,¹⁷ that is, devising "increasing sum" solutions to the parties' common problems; and value claiming,¹⁸ that is, dividing up any gain the parties create. In other words, the parties collaborate to increase the possible available gain and they find some way to distribute the gain between them. How they distribute gain may be a significant problem, for while there may be more to share, the parties may also opportunistically seek to appropriate for themselves as much of that gain as possible.

This is easy to illustrate. Suppose Delta (Δ) and Sigma (Σ) have just been involved in a problem-solving or integrative bargaining session and they have come up with five different options or ways to create value, but that each of these ways of adding value also differently allocates the value gain as between the parties. Graphed, their situation looks like this:



17. LAX & SEBENIUS, *supra* note 2, at 30.

18. *Id.* at 32.

In this payoff schedule, solution b confers the most gain on Σ and solution e the most gain on Δ . Solution c, roughly and in terms of relative share, is equally good to both parties. It is not, however, the maximum gain either party could get. The parties will likely perceive this. Therefore, there is an increased likelihood that each party will promote or argue for the particular solution which favors it most. In the example, Σ will argue for b and Δ for e.

This example clarifies the distributive problem in integrative bargaining. Although the parties may create value, they must still divide it. Often, they will divide it by agreeing to accept some particular solution as a way of satisfying their interests, but some solutions may be relatively better for one side than for the other. In dividing up the gain, or deciding which particular solution to agree to, the parties can use any of the basic bargaining strategies: they could bargain competitively, compromise bargain, or problem-solve.¹⁹ Of these, competitive bargaining is of most concern, for it may not be readily apparent that it is occurring. An innocent negotiator may fail to realize that the other side is appropriating the greatest part, or at least a disproportionate share, of the joint gain.²⁰

In the simplest case the parties would bargain integratively to increase the amount of available gain, and then bargain openly and allocate the gain between them. But negotiations do not usually divide into such neat and distinct phases. Indeed, it is difficult during the course of a negotiation for negotiators to shift from integrative to distributive bargaining because the two strategies are generally inconsistent with one another.²¹ For example, genuine integrative bargaining requires full information disclosure and a joint search for solutions to a common problem. Distributive bargaining, in contrast, requires, at best, selective information disclosure and information manipulation to insure intended effects, and seeks to control proposed solutions to insure maximal gain. Thus, in cases where the parties initially bargained integratively to

19. The idealistic, and rather simplistic, problem-solving model promoted by some proposes, in effect, that the parties seek to divide gain fairly by agreeing to use some mutually selected, objective principle, *e.g.*, fair market value. In essence, this appears to be an effort to extend the problem-solving model one step further - not only to create gain, but to search for some mutually acceptable fair way to divide the gain created. *See FISHER & URY, supra* note 2, at 84-86.

20. As basic bargaining strategies, problem-solving and hard-bargaining are inconsistent with one another. For example, where the problem-solving strategy calls for full information disclosure, hard-bargaining contemplates withholding information. It is nonetheless possible for a bargainer both to attempt to increase available gain and to appropriate most of that gain. In doing so, however, the bargainer would, to a certain degree, have to cooperate in problem-solving and also non-transparently use some hard bargaining techniques and tactics.

21. *See generally* WALTON & MCKERSIE, *supra* note 1, at 161-183.

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increase gain, they will have disclosed the very information they should have concealed in order to maximize their gain from the negotiation. For example, suppose I want to sell you an item that my company has overproduced, given the market for the product. If I disclose the overproduction to you, I cannot later, in order to get from you as high a price as possible, pretend I will have no difficulty in selling it to someone else.

E. Mixed Bargaining

Because of the inconsistency of disclosure requirements with the general approach, phase shifts from integrative to distributive bargaining are difficult to manage. As a result, parties may attempt a simultaneous complex blending of integrative and distributive moves. For example, in order to take advantage of the other side's willingness to engage in integrative bargaining, the hard-bargainer, while pretending to give full information, could instead selectively withhold information. Similarly, rather than engage in a genuine search for creative alternatives to solve the joint problem, the hard bargainer might offer and advance only those solutions which would, if accepted, confer the most gain on his side. The hard-bargainer could also dissemble about his preferences or priorities or distort the actual amount of gains or losses certain alternatives might confer or impose on him. Alternatively, a negotiator could selectively bargain integratively in good faith on some issues while merely pretending to do so on other issues. This might allow him to make clever and advantageous trade-offs later on.

In such cases, the negotiator follows a complex "mixed bargaining" strategy involving apparent integrative bargaining moves which screen actual distributive aims.²² The result is what might be called "variable sum" bargaining, as distinguished from "zero-sum" and "positive-sum" bargaining. In variable sum bargaining, the gains realized in the negotiation depend on the actual amount of genuine integrative bargaining taking place.²³ Where a party manipulates integrative bargaining in order to secure a greater share allocation of any gains, there may be less overall gain than there would have been if both parties had genuinely engaged in integrative bargaining.

The concern here, however, is not so much the bargaining efficiency, that is, whether the parties have failed to realize all potential gains, but rather exploitation of one party by the other. Negotiators engaged in

22. See WALTON & MCKERSIE, *supra* note 1, at 161-169.

23. See *id.* at 163-164.

problem-solving negotiation should be alert to this possibility. Unless justifiably trusting of the other side, they should adopt an overall strategy of working to increase gain and acting defensively to prevent the other side from getting a disproportionate share of it.²⁴

One way to limit competitive claiming is to insist on principled evaluation of the options the parties are considering incorporating into their agreement. For example, suppose a negotiation involves a factual dispute, or a dispute about the value of some item. Obviously, depending on findings of fact or value, one party may stand to gain more than the other. Consequently, in such a case, a party may seek to persuade the other that its own version of the facts or its own valuation formula is the one which they should use. To avoid this problem, which could entail a competitive conflict, the parties could agree to some "objective" determination of the facts or valuation, e.g., using a neutral factfinder or taking the average of three appraisals. In other words, rather than selecting an option just because one party prefers it, the negotiators can attempt to agree on objective criteria for choosing among the options. The negotiation may thus, for a time, shift from a discussion about various proposals to a discussion or negotiation over what principles the parties can mutually agree to accept to help them choose between the options.

Note, however, that while the parties can attempt to solve the gain distribution problem in a principled way, they can also attempt to deploy those principles that are most advantageous to them. Suppose, for example, that you and I each need a good computer and agree to share the \$3000 cost of buying one. Neither of us has enough spare money to buy the computer on our own and neither of us needs to use it full-time. Now, of the \$3000 cost, I put in \$2000 and you put in \$1000. How do we divide up use of the equipment?

Two of the obvious principles we could use to allocate our use-share are equity and equality.²⁵ I am likely to assert that we should share use of the computer in proportion to our contributions to its purchase. You could respond that we should share equally, for although I contributed more, I would have no computer but for you. If I agree with you, and we adopt the equality principle, you obtain a share beyond your contribution. This example thus illustrates the share-division problem and demonstrates that, even when parties attempt to come to principled agreements, particular principles will often favor one side more than the other in share-

24. *Id.* at 182.

25. SAMUEL B. BACHARACH & E.J. LAWLER, *BARGAINING, POWER, TACTICS, AND OUTCOMES* 175 (1981).

distribution.²⁶ It also suggests that parties are likely to advance those division principles which most advantage them.

Resort to "objective" principles is an effort to avoid share allocation through competitive claiming, but many "objective" principles in application have the effect of advantaging one claimant or another. The aim behind the idea, of course, is to keep problem-solving bargaining clean of competitive conflict and to ensure fair resolutions. This is not as easy to accomplish as it superficially appears, and negotiators must closely attend the division of gains and scrutinize preferred division principles with great care.

F. Possible Limits on Interest-based Bargaining

Interest-based bargaining opens possibilities foreclosed in position-based bargaining and can result in more creative and satisfactory agreements than is possible in position-based bargaining. It is not, however, a bargaining strategy that succeeds in all bargaining situations.²⁷ Parties' fundamental interests sometimes conflict so strongly that focusing on them might cause a breakdown in negotiations. In such circumstances, it is better for the parties to focus on concrete and pragmatic issues, involving lower-level interests, which they may be able to resolve.²⁸ Beyond this, in bargaining situations where there is a considerable power imbalance between the parties, the party with the greater power may see no benefit from interest-bargaining and resist it for that reason.

1. Fundamental Value Conflicts

The most obvious example of a case where interest-based bargaining will not work involves parties who frame issues in terms of

26. See LAX & SEBENIUS, *supra* note 2, at 137-138.

27. Some of the popular literature promoting interest-based bargaining is a bit Pollyannish, following a rhetorical strategy of trying to convince readers that interest-based bargaining is a "magical" tool for producing problem-solving results. My own experience as a facilitator and mediator, however, suggests that some problems do not have ingenious solutions, but are resolved simply by a decision. The solution, if you want to call it that, is a decision that people can live with. In such circumstances, negotiating is not so much a question of finding a "right" answer that will meet everyone's interests, but is really a matter of working through - facing the ambiguities of the situation, the conflicting feelings and values, accepting what each has to give up, and becoming comfortable with the less than optimal result.

28. See LAX & SEBENIUS, *supra* note 2, at 69.

fundamental values or ideologies which conflict.²⁹ A few years ago, it would have been impossible for the United States and the Soviet Union to negotiate over fundamental changes in their political systems and basic ideologies, but both countries were able to reach a variety of lower-level agreements ranging from cultural exchanges to arms control. Similarly, while the United States and Ayatollah Khomeini's Iran could not negotiate about the respective values of Western capitalist civilization and Islamic fundamentalism, they were able to negotiate over the American hostages and Iran's frozen assets in the United States.

In both of these cases, although the parties did engage in some kind of interest-bargaining, it is clear that they could not have bargained over their fundamental belief systems. The lesson is that where basic interests are strongly opposed - more likely when the parties are each trying to realize fundamental values or ideologies which conflict - the parties will sometimes do better to focus on intermediate, pragmatic interests.

2. Interest-bargaining and Significant Bargaining Power Imbalances

Nothing requires parties to bargain in problem-solving rather than competitive ways. Because problem-solving bargaining can lead to gains or better results for both sides than can competitive bargaining, and can also enhance relationships, it generally appears to be a better way to negotiate than competing. Why then, aside from the inveterate competitors, would a party ever choose to bargain competitively rather than integratively?

Most starkly put, when a party has the power to get what it wants from another, and is unconcerned with any potential negative consequences, it has no reason to engage in interest-bargaining. In other words, parties roughly equal in bargaining power, and parties actually dependent on one another, are most likely to interest-bargain because neither can dominate. Where a party can dominate without cost to itself, however, it has no reason to interest-bargain. Thus, there will be occasions when a party will choose not to engage in interest bargaining because it perceives that it is better served by positional bargaining on a particular issue. This situation might occur when a particular issue and its surrounding circumstances give a party enhanced power or leverage in a negotiation.³⁰ For example, an employee on whom a firm heavily relies,

29. *Id.*

30. *Id.* at 70.

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concerned *only* with negotiating a possible salary increase would probably be foolish not to use an offer of a position at another organization at a higher salary as a lever to get the desired increase. Similarly, if a real estate development company failed to prepare an adequate environmental impact report on a proposed new development project, groups seeking to block or reorient it to reduce potential adverse environmental consequences might wish to use the leverage that issue creates to exact gains.³¹

Even so, efforts to interest-bargain may, in many cases, moderate domination moves. By moving the negotiation to the level of interests, the parties expand the scope of their considerations. They may learn they are dependent on one another in ways they had not realized. The development company may have other planned projects of interest to the groups now opposing the company. It might, therefore, be willing to trade significant mitigating changes in its other projects to avoid the delay that litigation over the environmental impact report on this project would create. Even in the case where the parties do not uncover dependencies which change their perception of the power balance between them, the dominant party may, nonetheless, discover there are potential benefits from working together that, overall, outweigh the immediate gain that party can extract.³²

31. Both examples assume that the dominant party has considered the full range of its possible interests, yet has found no reason not to attempt to appropriate most of the gain for itself.

32. Here is a summary of the general steps in interest-based bargaining, generally following the models found in FISHER & URY, *supra* note 2, and LAX AND SEBENIUS, *supra* note 2:

1. Determine what your interests or the interests of your principal really are.
2. Establish your best alternative to a negotiated agreement.
3. Negotiate a cooperative, problem-solving bargaining process - that is, attempt to make the negotiation a mutual search for ways to satisfy both parties' interests.
4. Identify issues and problems between the parties by revealing interests and discovering those of the other side. Explore interests and differences of views and perceptions of the situation. In this process, do not attempt to compromise interests, or "give on them" in an effort to be reasonable. Instead, stay committed to attempting to satisfy your interests completely.
5. Focus the discussion on the parties' interests, not on their positions.
6. Clearly state the parties' interests, needs, and values, and define any conflicts or problems they create as between the parties. Avoid emotion-laden conflict by accepting the other's viewpoints and by focusing discussion on interests and problems.

G. *Alternatives to Negotiation*

Negotiating with others is not always the best way to reach one's goals, and a party should negotiate to agreement only when the negotiation brings better results than those obtainable without negotiation. Prior to undertaking any negotiation, a party should determine what its best alternatives to negotiation are -- in other words, decide what it will do if there is no negotiation or if the negotiation fails to reach results that satisfy its interests.³³ The party should be very specific and state exactly what it will do if the negotiation fails, for the only reason to negotiate is to realize a gain or benefit not obtainable without agreement. If it appears that the negotiation will not produce a better result than one realizable without negotiation, there is no point in continuing it. Alternatives to negotiation thus provide the party with a way to measure success in negotiation and to determine whether it should accept a negotiated agreement.

H. *Information Gathering in Problem-solving*

Problem-solving negotiation involves an attempt to understand one's own needs, values, and objectives, and those of the other side. Ideally, problem-solvers *share* information to discover their real conflicts,

7. Separate the process of inventing solutions from deciding what solutions to adopt. Create value or alternative possibilities for agreement by jointly devising solutions to the problems the parties perceive they are trying to solve; attempt to surface solutions satisfactory to both sides by exploiting shared interests and differences of valuation, forecasts, risk aversion, and time preferences.

8. Although the parties may collaborate to increase possible gains or to devise various possible solutions to their jointly defined problems, they must yet devise some way to decide which alternatives to select. As that decision will distribute value between the parties, they must take care to analyze how it will do so.

To avoid a competitive struggle, the parties may attempt to find "objective criteria" to help them select among proposed alternative solutions. They can do this by framing this final problem-solving issue as a mutual search for objective criteria, during which the parties ask for and seek *principled* justifications for accepting, or deciding between, proposed solutions. This is more difficult than it may seem, for few principles distribute neutrally, and it is important to examine proposed principled distributions carefully.

9. Measure possible settlements by reference to concrete non-agreement alternatives.

33. When a party does not have or cannot devise good alternatives to a negotiated settlement, circumstances effectively force it to negotiate. It may nonetheless be able to improve those alternatives it has and thereby enhance its bargaining power.

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to identify what each thinks is important, and to facilitate problem-solving efforts. By contrast, competitors *withhold* and *manipulate* information to maximize their own individual gains. Problem-solving negotiation is thus a full information perspective of bargaining that calls upon the parties to create and maintain a free, open, and rather complete flow of information.

If the parties each have full information, they will know what their actual conflicts are. They will know which interests they share and which they do not. They will also know how each of them perceives the situation and what each hopes to accomplish through negotiation. If the parties have this information and accurately perceive each other's point of view, they can turn to a collaborative search for solutions that meet the goals and objectives of both sides. When each knows what the other needs, each may see how to meet the other's needs, while getting what he needs as well.

1. *Interests and Positions*

Problem solving negotiation is *interest-based* bargaining. Competitive negotiation and simple compromise negotiation, on the other hand, involve *position-based* bargaining. *Interests*, as used here, comprise the more abstract and perhaps intangible goals parties have in a given negotiation: what the parties really care about for themselves, what they aim to achieve through the negotiation, and what general needs the parties hope to serve, whether economic, psychic, moral, relationship, short-term or long-term.³⁴ Such interests should be contrasted with particular *positions* the parties may take in a negotiation. Positions are the specific demands parties make to realize their interests, and the relationship between positions and interests is essentially a means-end relationship.

To take a simple example, suppose Noah decides to ask his boss for a raise. Noah has a good job and already has a good income, but still wants a raise. He does not really need the extra money, but would like to have more disposable income. In his negotiation with his boss, Noah asks for an additional \$2000 a year, which would give him the same salary as the highest paid employee in his department. Were Noah to examine his motives more deeply, however, he would realize that he feels undervalued and that what he really desires is recognition and a status equal to that of the highest paid employee in his department. Although he is not clear about it, when Noah takes the *position* that he needs a raise of \$2000, he is primarily trying to serve his status interest, not his financial interest. Were Noah and his boss clear about this, rather than making his salary the

34. See FISHER & URY, *supra* note 2, at 41-45.

issue in the negotiation, they could focus on ways to give him the status within the company that he desires.

This example shows that parties take *positions* in negotiation because they believe that achieving them is a way to serve their deeper purposes or *interests*. They may not have thought their position through clearly or carefully enough. Espousing a wrong position, even promoting a particular position at all, may cause a negotiation to focus on the wrong issues. If Noah's boss has a strong need to save money, Noah's position that salary is the issue will make the negotiation a difficult one. If, however, both parties focus on why Noah wants a higher salary, they may discover that the real issue is status, and that issue may be easier to resolve. Discovering the parties' real interests allows negotiators to avoid defining the issues in terms of positions which may not implicate those interests. Thus, focusing on interests rather than positions helps the parties define the real issues in the negotiation.

Interest-based negotiation opens up settlement possibilities not only because it helps parties focus on the right issues, but also because there may be many ways to satisfy the parties' actual interests. Paying Noah an extra \$2000 a year is one way to give him enhanced status. Giving him a special title, a new position, or some other form of recognition are all ways which may serve his employer's interests better than the requested raise.

When bargaining positionally, the parties are in effect attempting to impose their own predefined, *unilateral* solutions to the issues between them. A position is really nothing more than a pre-conceived proposal for resolving a difference or dispute, and the relationship between positions and interests is a means-end relationship. Position-based bargaining inclines parties to bargain competitively, each party advancing a means designed to serve only its own interests. This frames a negotiation as an "either-or" contest: "either we do what you want or we do what I want." This framework leads to efforts by a party to dominate in order to have his way. If these efforts do not succeed, the parties usually compromise between their positions to reach agreement. Position-based bargaining thus locks the parties into pre-determined solutions, possible contests of wills over positions, and simple compromises between positions.

Interest-based bargaining by its nature expands the set of possible outcomes with which the parties can work. Working at the deeper level of interests gives parties a broader perspective on what may be involved in the negotiation. The parties can increase the set of possible trade-offs or considerations they can take into account and use to shape packages. As a simple example, if the parties focus on winning positions, they will likely ignore the implications their contest has for their future relationship. Focus on short-term gain may entail future loss because the parties are

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disinclined to deal with one another again. When they focus on interests, however, they can see whether there is value in a continuing and developing relationship and consider what that may be worth, comparatively speaking. Interest-based bargaining thus permits parties to examine their complete set of interests, and to consider ways in which potential agreements can serve multiple ends.

2. *Motivating Interests*

It is rather common for parties to lean toward positional bargaining. Positions are specific demands that are clear and direct responses to the question, "What do you want?" People also find positions useful in bargaining because positions provide reference points. In any choice situation, you will be confused and ineffective unless you know what you really want, and taking a position gives clarity of focus and permits a bargainer to marshal arguments and resources to achieve a particularized goal. Positional bargaining is, to a certain degree, natural, and even the most experienced of us may not initially frame a negotiating problem in terms of the goals to be accomplished and the motivating interests we're trying to serve.

The business deal that created the joint oil company giant, Royal Dutch/Shell, exemplifies this.³⁵ Royal Dutch was principally an oil producer and refiner with secure sources of oil. Shell was an oil trader, transporter, and distributor. Although it had also begun to produce and refine oil as well, its supply was not secure and it was in difficulty. The two companies competed for markets, in addition to competing with other strong oil companies such as Standard Oil. Royal Dutch and Shell decided to amalgamate, for their respective strengths were complementary and the combined company would be better able to compete with the other major oil companies. Under the terms of the proposed agreement the Royal Dutch management would manage Shell. However, Shell's principal owner, Marcus Samuel, objected, taking the position that Shell should continue to manage itself. His reason for taking that position was his fear that Royal Dutch would not manage Shell in Shell's best interests, but rather its own interests. To overcome this problem, Royal Dutch offered to buy one quarter of Shell's shares, creating for itself an important stake in Shell's best interests. Samuel conceded his position, but gained his apparent real objective or deeper interest. Moving away from his original position to the interest he was trying to serve made the final agreement

35. The story which follows in the text is related in DANIEL YERGIN, *THE PRIZE* 126 (1991).

possible.

What parties seek to realize in a given negotiation depends very much on the parties and the circumstances. However, it is impossible to list all motivating interests; all those things that people may value. The parties themselves may not be clear about their underlying interests, but may instead be more focused on positions. This may be true, in part, because motivating interests are background factors and often seem intangible or difficult to value concretely. Nonetheless, it is useful here to list some general interests and values that may motivate most people. Listing these interests gives a clearer sense of the bed-rock level of interests which must be reached before beginning useful problem-solving bargaining.³⁶

1. Economic interests: profit, reducing future costs, reducing inefficiencies, developing new business opportunities;
2. Moral and psychological interests: integrity, principled behavior, fairness, self-respect and esteem, freedom from anxiety and stress, adventure, excitement, peace of mind;
3. Ego or psychic interests: personal satisfaction, security, career, good performance, respect;
4. Influence interests: reputation, authority, credibility, status, good will;
5. Ideological interests: religious, political, or social beliefs;
6. Relationship interests: maintaining good relationships, developing or enhancing possibilities of future relationships, terminating detrimental relationships;
7. Freedom of action interests: preserving opportunities, avoiding constraints and imposed obligations; avoiding undesirable precedents;
8. Efficiency or security interests: protecting one's position, property, and investments; establishing a good precedent, developing a settled and reliable procedure or process for resolv-

36. LAX & SEBENIUS, *supra* note 2, at 70-74; *see also* FISHER & URY, *supra* note 2, at 49-50.

ing problems or issues.

II. PRODUCTIVE COMPROMISE AS A SOLUTION IN PROBLEM-SOLVING BARGAINING

Problem-solving bargaining aims at "win-win" solutions, usually by attempting to increase the amount of dividable gain available to the parties in a negotiation. But it is not always possible to increase the size of the pie, at least not in any simple way. In such situations, it is important to understand the role of compromise in problem-solving bargaining. Superficially, as compromise involves giving something up, it is not immediately obvious how one can use compromise to increase gain.

Compromise bargaining requires concession, but even problem-solving bargainers can find it difficult to concede on particular issues where they find their interests in direct conflict with those of the other side. Sometimes there are results one *must* obtain, otherwise there is no sense in negotiating. In such cases, the parties can still find a path to productive agreement, a hop-scotch kind of path, made of stepping stones each party lays rather than the divided lane of simple compromise. When there are multiple issues under negotiation, the parties may find a track by creating a mosaic of trade-offs between issues rather than seeking compromise on each issue. In other words, the compromise involves trading across issues rather than within issues.³⁷

A. *Trade-offs, Log-rolling and Packaging*

Multi-issue negotiations offer possibilities of trade-offs as between issues because parties with diverse perspectives may value various issues differently. When parties in a multi-issue negotiation negotiate each issue to separate conclusion, they cannot perceive how their different valuations of different issues could lead to trade-offs. Instead, their only way to reach agreement is to give way or compromise on each issue. When the parties explore all issues before striking deals, however, they may be able to see how they can gain what they want on issues of importance to them. In short, by conceding on issues of less importance to them but of greater importance to the other side, they may see ways to make trade-offs as between issues and create a final package more beneficial to each side than compromises on each issue.

When parties explore all the issues before seeking to settle any, it

37. Cf. RAIFFA, *supra* note 2, at 148.

is also possible for the parties to log-roll, that is, exchange concessions on different issues.³⁸ Log-rolling works when the parties are able to trade off items of lower priority or value for those of higher priority or value. The parties may be able to do this if they have different priorities and at least one of them is aware of their respective priorities and can therefore perceive the trade-offs.³⁹

Negotiations open up the possibility of log-rolling when the parties systematically explore the various issues between them, seeking to discover how strongly each side feels about the respective issues. This usually occurs either through express information exchanges or their substitutes, exchanges of proposals and counterproposals. In effect, in a trial and error process, the parties explore each other's limits or preferred outcomes over the full range of issues. Knowing their own priorities and preferences on the various issues, they are then in a position to propose packages.⁴⁰ That is, the parties contingently propose different combinations of concessions over the various issues, some more favorable to one side than the other, until each side concludes it has done as well as it can.⁴¹

To get a sense of how this works, take the example of two parties, Gina and Mike, negotiating over three issues. To simplify matters, assume that there are three possible outcomes on each issue,

38. PRUITT & RUBIN, *supra* note 13, at 145.

39. *Id.* at 146.

40. Log-rolling presumes some way for each side to determine the other side's priorities. This is not difficult when the parties trust one another and are equally revealing. It can be problematic when the parties may behave opportunistically, however, for disclosure of priorities can open one up to exploitation. If a party reveals that certain items are important to it, the other side could use the information, in effect, to hold those items ransom. Consequently, parties consciously attempting to log-roll need first to ascertain whether it is safe to do so.

41. Obviously, even if the parties enter negotiations knowing their priorities, information they receive in the negotiation may cause them to reassess and alter them. Indeed, there is a clear risk in too rigid pre-negotiation prioritization, for if the parties prioritize the same way, they will end in competitive conflict. In such a situation, a break in negotiation to allow each side to process the information and reassess its priorities may work wonders.

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and that Gina and Mike have prioritized or valued the possible outcomes by assigning a point-value to them, as follows:⁴²

<i>issues</i>	<i>Gina</i>			<i>Mike</i>		
	<i>outcomes</i>			<i>outcomes</i>		
	A	B	C	A	B	C
Γ	40	20	10	10	15	30
Σ	10	20	30	20	30	10
Δ	20	30	10	40	20	10

Now, as Gina and Mike bargain, they discover that on issue Γ, outcome A is very important to Gina, but not as important to Mike, who values outcome C more highly than A. On issue Σ, however, Mike values outcome B over other possible outcomes, while Gina values C over other outcomes. As they continue to work through the issues, they will progressively discover how each values the possible outcomes on the different issues -- most likely through the intensity with which they respectively bargain for various outcomes.

To begin to work toward agreement, each will likely propose trading-off outcomes on some issues for outcomes on others. When the parties incorporate all issues in the bargaining and proposals, they will, in effect, be proposing different possible packages. For example, Mike might propose package Γ-C, Σ-B, Δ-A. Gina would propose package Γ-A, Σ-C, Δ-B. Mike's package gives Gina 50 value points on her scale and himself 100 on his scale. Gina's package gives her 100 value points and Mike 40 value points. Neither would likely accept those packages because each would perceive the possibility of greater gain from some other package.

As a second packaging effort, Mike might then propose Γ-B, Σ-B and Δ-A. This package would give him 80 points and Gina 60 points. Gina could respond with package Γ-B, Σ-C, and Δ-B. This package would give her 80 points and Mike 60. The parties would continue to experiment with packages in this way until it became clear to each of them

42. Plainly, most people don't quantify their valuations of outcomes. Indeed, many outcomes we might value in a particular negotiation don't lend themselves to quantification although it is a useful exercise to try to do it. Then, too, quantification may introduce a false precision in valuation which really does not exist in life. Nonetheless, quantifying valuation is useful because it helps parties clarify their values, and it facilitates comparisons and judgments otherwise difficult to make.

that some particular package was the best that they could get.

B. Bargaining Efficiency

Suppose that Gina and Mike negotiate the three issues between them one at a time. Assuming that each is trying to maximize gain for each issue, the likely result is a compromise on each issue. For example, they might agree on outcome B on each issue. If we tally their total points for such an agreement, Gina ends up with 70 points and Mike with 65.

Assume now, however, that the parties consider all issues and outcomes together. They can discuss them serially, but they hold off making offers and counteroffers until they have discussed all issues, and then make offers and counteroffers as packages of preferred outcomes over all the issues. They experiment with different packages and finally settle on the following: Γ -A, Σ -B, Δ -A. If we again tally their points, we see that Gina ends up with 80 points and that Mike also ends up with 80. In other words, through the trade-offs they made across all the issues, *they are each better off* than they would have been in the first scenario. In the first scenario, each party left gains on the table, that is, the parties did not bargain efficiently.⁴³ Had they in effect shared information about the way they valued the issues -- through proposing trades and possible packages of outcomes across all issues -- they would have discovered, and could have claimed, additional value.

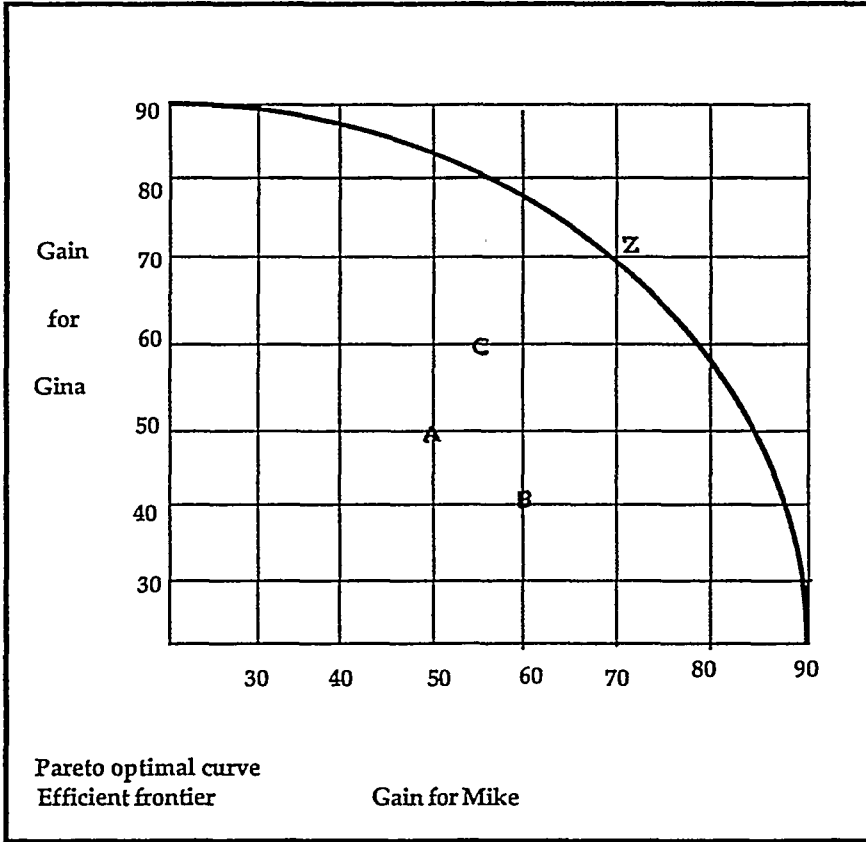
This phenomenon of inefficient bargaining or gains left on the table is a well-known and studied feature of negotiation.⁴⁴ In fact, in all multi-issue negotiations where outcomes are quantifiable, it is possible, with full information from all sides, to construct and graph the set of all possible solutions to the negotiation problem.

43. RAIFFA, *supra* note 2, at 138.

44. *See id.* at 138-142, 148-165.

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Here is an example of such a graph in a hypothetical negotiation.



The curve, which defines all the possible maximal solutions to the negotiation problem, is called the pareto optimal curve⁴⁵ or the efficient frontier. In the negotiation, no one can do better than to reach some point on this curve.

Looking at negotiation solutions that fall within the quadrant defined by the curve, for example, solution A, we see that the parties left some gains on the table. They could have reached the curve, but did not. Now compare solution C to solution A. Each party did better. Such a solution is said to be pareto superior.⁴⁶ That is, in terms of bargaining efficiency, any move which leaves at least one party better off without leaving the other party worse off is a move toward greater efficiency.

In negotiation, it is clearly desirable for the parties to attempt to bargain efficiently in this manner; indeed, the ideal is to reach solutions like Z, which are on the frontier. Parties stand only to gain, not lose, if they can find and trade all potential gains on the table between them. They are most likely to do this if they share information or if the negotiation process permits them contingently to compare possible outcomes across all issues. Those parties who assume that there is more value to be gained, which they can find if they systematically exhaust the permutations and combinations of issues and outcomes, are most likely to find it.

1. Linking Issues

Linking or adding issues to a negotiation can be either a competitive or cooperative tactic.⁴⁷ This move works cooperatively when it creates possibilities of trade-offs that otherwise would not exist.

As a linking example, take Gina and Mike's negotiation and suppose that initially they are negotiating only issue Γ , and that their

45. The curve, or frontier, is named after Vilfredo Pareto, the Italian economist and sociologist, and is defined as "the locus of the achievable joint evaluations from which no joint gains are possible." *Id.* at 139.

46. STEVEN J. BRAMS, NEGOTIATION GAMES 103-104 (1990).

47. Linking can be competitive when parties add or link issues to a negotiation not because they are implicit in or logically related to the central issues in the negotiation, but because they seek leverage in it. Successful linking will require the other side to address the linked issue, which might not occur but for the need to negotiate the other issues in the negotiation. Linkage may also enhance the linker's bargaining position and power regarding the issues central to the negotiation, and is a likely tactic for negotiation parties with less power. LAX & SEBENIUS, *supra* note 2, at 138-139, 221-226.

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payoffs for outcomes are as shown below.

	Gina				Mike		
	outcomes				outcomes		
issue	A	B	C		A	B	C
Γ	40	20	10		10	15	30

Gina will argue most strongly for outcome A, Mike for C. They might compromise on B, where they each, in effect, lose half of their maximum possible gain. If they add issue Σ, however - assuming it is a matter of concern to them - and agree on package, Γ-A, Σ-B, then Gina obtains 60 of a possible 70 points of value, or 6/7 of what she wants, and Mike gets 45 of a possible 60 points, or 3/4 of what he wants.

	Gina				Mike		
	outcomes				outcomes		
issues	A	B	C		A	B	C
Γ	40	20	10		10	15	30
Σ	10	20	30		20	30	10

2. *Unlinking Issues*

Negotiations can stymie over particular linked issues which the parties cannot reconcile. In such cases, the parties must re-examine their priorities to determine, with the benefit of information gathered in the negotiation, what is most important to them. Sometimes, by dropping or unlinking an issue holding up agreement, the parties can successfully negotiate remaining issues.

As an unlinking example, suppose that Gina and Mike are negotiating all the issues Γ, Σ, and Δ, except that the array of outcomes has the following payoff schedule for them.

	Gina				Mike		
	outcomes				outcomes		
issues	A	B	C		A	B	C
Γ	40	20	10		10	15	30
Σ	10	20	30		20	30	10
Δ	10	5	50		50	10	5

Obviously, issue Δ has much of value to each of them, but their valuation of outcomes is completely opposite. Their negotiation of this issue is likely to be highly competitive and contentious. There is just too much value riding on the issue for them not to fight over it. In fact, there is so much value riding on issue Δ , that bargaining is likely to distort or seriously complicate bargaining on issues Γ and Σ . Either Gina or Mike would have to accept their worst outcomes on the other issues to prevail on Δ . Thus, if Δ is a major impediment to agreement on other issues, they can agree not to discuss it and more productively work on issues Γ and Σ .

Realistic examples of linking and unlinking to facilitate compromise and agreement are not difficult to create. To take a prosaic instance of linking, suppose a company executive wants a particular employee to take on a new and difficult task. The employee, however, already feels overworked and would resist the assignment. This particular employee, however, has also complained for some time that she lacks the proper resources to do her job well, in particular, that she needs a state of the art computer work station. It is easy to see how linking these two issues may produce movement on each. Some sort of compromise would be satisfactory to both parties, whereas keeping them separate may result in a stalemate on both issues.

More dramatically, the abortion controversy illustrates the possible value of unlinking. Those who favor abortion and those who oppose it often confront one another on issues that each side feels implicates their fundamental values regarding abortion and human life, a point on which the parties are irreconcilably opposed. Suppose representatives of these two opposing groups meet to discuss a possible parental notification law concerning under-age girls seeking abortions. If these groups can agree not to discuss the abortion issue itself, they may be able to make some progress toward agreement on a parental notification statute. Otherwise, they are likely doomed to continued fighting.⁴⁸

3. *Trade-off Bargaining and Contingent Agreement*

There is good advice in the old negotiation saying, "Nothing is final until everything is settled." When there are too many issues to con-

48. Linkage is also likely to occur in negotiations on behalf of a group composed of parties having differing, but perhaps related interests. The need to maintain group cohesion means that the negotiator may not be able to unlink issues important to part of the group. When there is such group pressure to keep an issue linked, the only way to unlink it may be to otherwise address or satisfy the needs of that element of the group responsible for the linkage. *Id.* at 224, 229-230.

sider simultaneously, the parties can take up issues sequentially, but make resolution of them tentative and dependent on how other issues are resolved. This procedure opens the possibility of trade-off bargaining. The parties can do this expressly by agreeing in advance that their discussion is exploratory and tentative and that they will decide at the end of the negotiation whether to settle. As they move through the issues they can indicate the possible agreements. Alternatively, the parties can simply signal they will consider making a concession on a given issue and then move on to explore a new issue, e.g., "I think we'll be able to resolve that one without too much difficulty. Now let's talk about the next issue."

Keeping agreements tentative permits their amendment in the light of new information. Even tentative agreements create a sense of progress and give psychological impetus to work through as yet unresolved issues. This suggests that it is beneficial for bargainers to attempt to work through issues sequentially from least to most contentious.

4. Agreement Costs as Linkable and Tradable

A party can experience a direct cost from an agreement and resist agreeing for that reason. Sometimes it is possible for the party benefitting from the agreement to pay those costs and thereby induce the other to agree.⁴⁹ Airline practices on overbooking flights provide a simple example. Anticipating no-shows, airlines sometimes overbook flights, but then must deal with angry and frustrated passengers when they all show up, as the airline cannot accommodate them all. Typically, the airline will ask for volunteers to take a later flight, and may also provide a sweetener, in the form of a cash payment or voucher for free travel, to pay for the delay costs the volunteer experiences. Dealing directly with the costs that a proposed agreement may entail thus links that issue and permits the parties to create a trade-off agreement incorporating it.

This example actually demonstrates two different ways of trading-off or making compensation in order to secure an agreement, *specific* and *non-specific* compensation.⁵⁰ In making specific compensation, a party pays or alleviates exactly those costs the other side experiences. In making non-specific compensation, a party pays the other in different kind or different "coin."⁵¹ In the example, providing a later flight pays the other in the travel originally desired. The money or voucher pays or "buys" the intangible cost of delay.

49. Cf. RAIFFA, *supra* note 2, at 316.

50. PRUITT & RUBIN, *supra* note 13, at 144-145.

51. *Id.*

In any given negotiation, the specific compensation required is apparent, at least to the side experiencing the cost, for it comprises exactly that loss it has.⁵² Non-specific compensation, however, is another matter, for only the other side can determine whether it values something else, which the party can provide, sufficiently to constitute a satisfactory replacement for those costs the agreement imposes. In the airline example, if someone is trying to get home in an emergency, money may not compensate for the delay.

In other words, non-specific compensation pays or provides gain to the side experiencing the costs in some coin *that* party values, but which itself is not otherwise directly involved in the issues being negotiated. Plainly, it is a kind of trade-off introduced into the negotiation in order to secure agreement. To do this, however, the party willing to pay non-specific compensation must discover what else, other than those interests specifically involved in the negotiation, the other party values.

A recent and important example of non-specific compensation involves the alliance the United States drew together to face Iraq in the Persian Gulf. Apparently, in order to secure Egypt's agreement to send troops to Saudi Arabia, the United States agreed to forgive the \$6.7 billion military debt Egypt owed the United States.⁵³ While Egypt's direct costs in joining the Gulf forces are not clear, Egypt undoubtedly contemplated domestic problems arising from allying itself with the West against a Muslim state. In addition, Egypt had many thousands of its citizens working in Iraq, sending considerable income home and greatly assisting the Egyptian economy. Forgiving Egypt's foreign debt alleviated some of these costs and plainly was important enough to Egypt, together with perhaps other factors, to persuade it to accept the direct costs of joining the allies.

C. Future Costs and Precedent

There are other "costs of agreement" concerns parties may have which cause them to resist agreement. Two related concerns are that the agreement may be misinterpreted by other parties and that the agreement

52. Obviously, in some cases the costs of a proposed agreement may not be clear, even to the party which will experience them, for those costs may turn on contingencies. In such a case, the parties may find a compensation formula which incorporates the contingencies as variables. There will also be cases where the parties dispute what the costs of agreement may be, which would make either the existence or amount of the costs themselves an issue in the negotiation.

53. Michael Ross & Melissa Healy, *Cheney, Baker Silent on Attacking Iraq*, L.A. TIMES, Oct. 25, 1990, at A9.

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may establish a precedent for other negotiations. A party who fears either of these things is worried not so much about the present agreement, but about its future consequences.

When future consequences are an issue, there are a number of possible trade-offs. Most evident is an agreement to keep agreement terms confidential or an agreement that the parties will not treat the settlement as precedent. Similarly, if the concern is that the agreement may create a precedent for other negotiating parties or create some problem of image or face loss,⁵⁴ the currently agreeing parties may be able to devise some formula which avoids this problem, for example through the shaping of the agreement itself or an agreement about how to describe and publicize the agreement. Similarly, the parties can deny that the settlement constitutes a precedent and emphasize the special circumstances which gave rise to it.

In general, compromise and trade-off bargaining are important ways to solve the problem of satisfying conflicting interests in bargaining. To work trades successfully, however, negotiating parties need to know, hopefully in advance of negotiation, what they have to trade and how they value various possible trades. This is the subject of the next section.

III. FACILITATING EFFICIENT TRADE-OFFS IN PROBLEM-SOLVING BARGAINING

A. Interests and Issues

In order to negotiate well, one must know what issues are likely to arise in a negotiation. In simple negotiations, or in standardized negotiations such as employment contracts, the issues are usually quite predictable. For example, in employment contracts, the obvious issues are salary, length of contract, position and duties, and vacation time. In a typical negotiation concerning a lease of office space, price per square foot, building maintenance fees, common area fees, space redesign and remodeling, parking spaces, and length of lease are issues fairly certain to arise.

In other negotiations, some issues may be clear or anticipated, while others are uncertain or even unsuspected. Suppose that, seeking to take advantage of lowered interest rates, Jane seeks to refinance her house.

54. Saddam Hussein's refusal to withdraw his forces from Kuwait may have involved, in part, some issue of potential loss of face and credibility as a leader in the Muslim world. Obviously, if loss of face is a cost a party may experience, it is important for the parties to find some formula that permits the affected party to protect or maintain its image or save face.

Her current home loan is at 9% interest, and she wants to refinance it at a lower rate of 7.5%. Although there seems to be no issue other than her ability to qualify, when she talks to the bank about refinancing, she discovers she will have to pay 2 "points," or 2% of the total loan amount to the bank as its fee for making the loan. The bank also says it will reduce its fee to 1.5 points if Jane keeps a checking account at the bank and authorizes an automatic deduction for her monthly payment. The bank further tells her it will refinance her house at an even lower rate of 7.25% if she agrees to open a credit line of at least \$10,000, also secured by her house. While Jane may find these offers attractive, she did not anticipate them, and they raise issues she will need to decide.

Negotiation issues arise from the interaction of the negotiating parties' interests. If Jane is a good credit risk, the bank's interest in making a profit on money it lends, and assuring payment, explains its offer to Jane. The automatic checking account deduction gives it payment priority and security, and the line of credit offer, if accepted, makes for a larger loan, also secured by the house. For her part, Jane's interest in a lower loan fee and a lower interest rate make the bank's offer attractive. Nonetheless, she may have other interests which make it problematic to accept. For example, she may keep money in another bank, with which she has good relations that she wants to preserve. She may also think it unwise to have access to a \$10,000 credit account, as she wishes to keep her overall debt load as low as possible and does not want an open temptation to spend. Jane will have to weigh her several interests carefully in order to make a decision regarding these issues the bank's offer raises for her.

Plainly, figuring out one's interests is important because they will, together with the other party's interests, define the issues in the negotiation. Furthermore, one's interests vary from situation to situation, and have varying weights in different contexts. Negotiations often affect multiple interests that a party has. Depending on how negotiation issues are resolved, those interests may be affected in different ways and to different degrees. Multi-issue negotiations open possibilities of different "packages" or combinations of ways issues can be resolved. In such circumstances, a negotiator often finds decisions whether to accept negotiation proposals difficult to make because he confronts choices not considered before and does not know how to compare and value the possible trade-offs. In addition, the speed and pace of such negotiations, and the involvement of multiple parties can compound the difficulty of figuring out how a particular proposal affects one's interests.

For example, the Law of the Sea Treaty Negotiation involved

more than 150 countries with very different interests and ideologies⁵⁵ and hundreds of complicated, often interlocking issues, concerning territorial seas, the rights of land-locked countries, fishing zones, navigational freedom, the ownership of the sea-bed, sea-bed mining, commercial mining rights, the role and authority of the United Nations, and the like.

While few negotiations are this large, momentous, and complicated, many negotiations do present choices that are difficult for the negotiator to value and assess. When parties are not clear about exactly what it is they seek from a negotiation, or when they are surprised by issues that arise, they may not be able to protect or further their interests. Consequently, it is important for a party to think through impending negotiations, how they implicate her interests and how she values or weighs them, what her preferences and priorities are. This knowledge will help her to compare different possible agreements and determine which is best for her. In these cases, the negotiator should have some method or process for carrying out a comparative assessment of relative preferences.⁵⁶

1. Figuring Out Fundamental Interests

Deciding what you value, and how much -- what you are willing to give for what -- requires you to analyze your fundamental interests and how the pending negotiation might affect them or contribute toward realizing them. Usually, as you begin to think about an upcoming negotiation, you have some sense of what you want from it and what the issues are likely to be. To discover your fundamental interests, simply begin by making a list of what you think will be involved in the negotiation, the issues that are important to you. Then go over the list, and for each item on it, ask yourself why that item is important. Analyze the reasons you offer for holding these items important, and ask again why those are important to you. Eventually, you will reach a bedrock level where you cannot go further, where you cannot find any reason for an item's importance other than a recognition that it is important. When you have reached that level, you have identified an interest that's fundamental to

55. JAMES K. SEBENIUS, *NEGOTIATING THE LAW OF THE SEA* 9 (1984).

56. This is true whether one negotiates for oneself or a client. When working for a client, the negotiator must have a way to get the client to address and decide what is most important and what configuration of packages or outcomes will best satisfy his or her interests. See *infra* note 59 for an outline of quantification procedures.

you.⁵⁷

A company is negotiating to buy a 100 acre tract of land from a farmer who owns 1000 acres. The company intends to build family housing and a commercial center on the property. One item it wishes to discuss in purchase negotiations is whether there are any toxic substances on the site. Why is that item important? Well, if there are toxic substances on the site, the site may not be developable, or clean-up may cost the company more than it can pay and yet make a profit, or the company may face toxic substances liability suits sometime in the future after it has developed the site. Why are these important to the company? Obviously, all these reasons relate to the financial viability of the project. But the last reason also implicates the company's reputation, future business prospects, and a desire to avoid debilitating litigation. Why are these important? They too relate to financial viability or profitability, but also to company survival, integrity, and stature. Why are these important? It is hard to push them back further. They just *are* important; they are fundamental.

Having identified one's own fundamental interests in this way, the negotiator should try to identify the other side's fundamental interests as well. This allows the negotiator to determine which issues are likely to be important to the other side. There may be issues that are of mutual importance to each side. Other issues may be of immediate concern only to one side or the other. Nonetheless, whatever is an issue for one side will be an issue in the negotiation, and the other side will have to deal with it in some way. Anticipating the other side's issues enables a negotiator to figure out possible trade-offs.

In the land purchase example above, suppose the development company discovers that the farmer is in financial difficulty and has a large farm mortgage balloon payment due within three months. The farmer has a clear financial interest in making the sale, and his financial need is likely to make the transaction closing date quite important to him. The closing date may or may not be as important to the development company, but it is most useful to the company to know that it may be important to the farmer.

2. Figuring Out Possible Outcomes

Issues grow out of interests, and identifying each side's fundamental interests is essential to figuring out the possible issues in a

57. See RALPH L. KEENEY, VALUE-FOCUSED THINKING 65-69 (1992); see also Ralph L. Keeney & Howard Raiffa, *Securing and Analyzing Values*, in NEGOTIATION ANALYSIS 131, 148-149 (H. Peyton Young ed., 1991).

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negotiation. Once you have listed the issues the negotiation will likely involve, it is important to try to specify the possible resolutions or range of outcomes for each issue. For example, in the land sale hypothetical, we have thus far posed two issues. For each issue, we can pose possible outcomes, for example:

<u>Issue</u>	<u>Outcomes</u>
toxic substances	<ol style="list-style-type: none">1. no toxic substances2. toxic substances minor, readily remediable3. toxic substances significant - but reduced purchase price4. toxic substances significant - no reduction in price, but hold harmless clause5. toxic substances significant - no reduction in price, take land as is6. toxic substances an insuperable problem

<u>Issue</u>	<u>Outcomes</u>
transaction closing date	<ol style="list-style-type: none">1. 6 months2. 3 months3. 1 month

After the negotiator specifies the range of outcomes for each issue in this fashion, she can then rank or weigh issues and outcome preferences. If the issues and outcomes lend themselves to it, the planner can quantify them in accordance with the additive scoring model described below.⁵⁸ If not, the planner can make a qualitative assessment of issues and outcomes, trying to determine the relative importance or weight she accords each issue and her outcome preferences within and across issues.

B. Valuing Outcomes

Merely identifying issues and possible outcomes, however, is not quite enough. In order to trade, a negotiator must have a sense of the

58. See *infra* text accompanying notes 59-61.

value of the items traded. In other words, the negotiator needs to look at the array of possible or probable interests and outcomes implicated in the negotiation, and assign values to them, for himself and the other participants. Assigning value may be a matter of identifying preferences, outcome priorities, or even attempting to quantify particular outcomes by giving them a relative numerical weight.

Valuing possible outcomes in this way greatly facilitates intelligent and efficient bargaining. Having assigned relative values to different outcomes prior to negotiation, the negotiator is well-prepared to assess different packages of proposals during the negotiation and to make package adjustments or counterproposals having more value to him.

Valuing potential outcomes is not easy work. It is often unclear, without considerable thought and without obtaining more information, whether outcome A is valued more than outcome B. Is a contract for one year at 8 per cent preferred over a contract for 3 years at 4 per cent? The answer depends on how well a particular outcome serves your interests.

There may even be a tension or some conflict between your interests of which you are unaware until forced to confront it. As a simple example, suppose you have to choose between two job offers: one, well-paying, in a large, congested city, and the other, not as remunerative, in a small, attractive city in the mountains. You are attracted to each, for you like the culture, excitement, and opportunities of the large city, but you also love the mountains and outdoor sports and are repelled by urban squalor and congestion. This may be a hard choice, for choice of a job implicates many more interests than those stated, including career opportunities, relationships to partners and relatives, other opportunities, life-style, and so on. Resolving which job to take is not necessarily an easy question and may require much sorting through. It takes time to find out what you really value.

This is also true regarding choice and decision-making in complex negotiation. Unless the negotiation is extended over a long period of time, the negotiators may have extraordinary difficulty in sorting out the complexity of the issues presented because the choices regarding them bear on their own best interests. Sorting this all out in advance, insofar as possible, is the ideal way to do this.

1. Quantification.

A useful way to value interests for purposes of assessing possible trade-offs and the attractiveness of various packages is to attempt to

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quantify them.⁵⁹ Many people are uncomfortable with the thought of quantifying decisions, particularly where issues to be decided are qualitative and appear unquantifiable. However, the aim of quantifying decision-making is not to impose a false mathematical precision where none can exist, but simply to give rational guidance in situations involving confusing trade-offs. Quantification is a means of preparation that forces a party to think through what it really values, and how much it values it, as

59. Here is an outline of the quantification procedure, adapted from LAX & SEBENIUS, *supra* note 2, at 78-84. See also KEENEY, *supra* note 57, at 129.

a. Identify the interests the negotiation may involve. Consider both concrete interests, such as job security, and more abstract interests, such as the client's desire to vindicate a principle or the precedential value of any particular settlement.

b. Assess the situation, role-playing if necessary, from the other side's point of view and identify its interests.

c. Array the respective interests, note common and complementary interests, and consider carefully where the parties' interests may conflict. Determine the probable issues in the negotiation and the range of possible outcomes over all issues.

d. Figure out the least and most attractive set of outcomes. Use these to compare other possible outcomes.

e. Work out other possible outcomes and compare them. Try to determine which outcomes are preferable to others. To help decide whether one outcome is preferable to another, quantify outcomes as outlined below. Quantification may seem a bit artificial, but the procedure is not rigid and is designed to reflect subjective valuations and weightings.

1. Allocate 100 points over the range of issues. Assign weights among issues by allocating points, or values, to each issue according to subjective feelings about their relative value.

2. After dividing up the 100 points between issues, allocate the points assigned to a particular issue by assigning weights to each possible outcome on that issue.

3. This procedure will produce a schedule or matrix of issues and outcomes with point values assigned to each outcome on each issue. Comparing different packages then simply involves adding up the points the different packages produce. The package with the most points should be the most preferred outcome.

f. Once a party works through this exercise, it should attempt to do the same thing for the other side, role-playing if necessary, to get an understanding of its interests, preferences, and priorities.

compared to other things implicated in the decision.

The quantification procedure itself is not difficult. It is simply a matter of deciding the relative importance of issues, and then, within issues, deciding the relative importance of the possible outcomes. This can be done by assigning points or various weights to issues and outcomes.

Assume you represent a cable television company, and you want to buy customer billing services from a data service company. The data service company provides television usage monitoring devices, computers, and software that will allow your company to do its billing automatically, no matter what level of service your customers individually have. To simplify the example, further assume there are only five issues to negotiate: price, features, delivery date, training, and service.

After thorough discussion within your company, the CEO decides that, given the range of possible outcomes for each issue, the company should weigh the issues as follows:

<u>Issue</u>	<u>Points</u>
Price	30
Features	20
Del. Date	10
Training	20
Service	20

Having determined the relative weight of the issues on a 100 point scale, the CEO proceeds to analyze possible outcomes on each issue. After she identifies them, she also weighs them by allocating point values

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based on the total number of points assigned to that issue:

<u>Issue</u>	<u>Outcomes</u>	<u>Points</u>
Price	\$1000/mo.	20
	900/mo.	25
	800/mo.	30
Features	10 features	20
	7 features	15
	5 features	10
Delivery Date	3 months	10
	2 months	8
	1 month	5
Training	In house	20
	Mixed - in house & at vendor	15
	At vendor	10
Service	24 hour call/ 7 days a week	20
	w/i one day	15
	w/i two days	10

Quantifying in this fashion allows the cable company to compare the value it holds for alternative packages that the vendor may propose.

The hypothetical presupposed that the issues in the negotiation were independent of one another. When issues are independent, they can be valued separately, as in the example, and points for each issue simply added. In other words, simple, additive scoring systems work where issues are independent of one another.

Where issues are interdependent, that is, where the value of one issue depends on how another issue is resolved - quantification may be more difficult. Suppose in the cable company example that the vendor ties the monthly contract price to the number of features each billing service package provides. In that case, those two issues can no longer be considered separately. Nonetheless, they could be thought of as

comprising a unit, that is, as a single issue, weighted appropriately, and then added to the other, independent issues.⁶⁰

2. *Prioritizing or Preference Ordering Interests*

Prioritizing or preference ordering interests is another way to value them, useful either when interests are not readily quantifiable or when one does not want to quantify. Essentially, prioritizing is a matter of thinking hard about interests in order to become clear about their relative importance or value. Indeed, this is the only way to figure out what trade-offs to make. In other words, one needs to know what an interest is worth compared to other interests one has in order to do this. Valuing interests, particularly intangible interests, can be quite hard, however. While one cannot expect exactness in weighing intangible interests, almost any method of relative weighing brings greater clarity to trade-off decisions. Thus, it is helpful to prioritize or preference-order interests.

3. *Comparative Valuation*

Another way to comparatively value an intangible interest is to ask how much one would be willing to pay for it if one could buy it on the open market. For example, how much would a trial-averse woman plaintiff in an automobile accident case be willing to pay to avoid the anxiety of trial?

[Someone] asks her to imagine that a pharmacist offered to sell her a magic potion that would completely eliminate the feeling of anxiety from court proceedings. What would be the most she would pay for the potion before going to trial? Would she pay \$10. "That's silly. Of course." Would she pay \$100. "Sure." \$100,000? "Certainly not, that's one-third of my minimum settlement! What about \$50,000? "Probably not." \$1000. "I think so." \$10,000? "Well, that's a tough one. But, if push came to shove, the trial would be an awful experience so, probably yes." \$25,000? "Maybe not, but I'm not

60. See Keeney & Raiffa, *supra* note 57, at 138-139. Simple additivity also does not work, without adjustment, where a party must impose a reservation level or bottom line on one or more issues. In that case, it is not possible simply to add points to compare different deals, for it is necessary to insure that a minimum score is achieved on the designated issues. *Id.* at 139.

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sure. . . ." And so on.⁶¹

C. *Scoring Alternatives to Negotiation.*

When quantifying, weighing, or preference ordering possible issues and outcomes to help in negotiation decision-making, it is important to attempt to do the same for one's alternatives to agreement. When the possible alternatives to agreement involve the same issues as the negotiation, this is not difficult, for there is direct comparability. In fact, in that case, the alternatives to agreement essentially set the reservation prices for the issues under negotiation.

For example, suppose you are a manufacturer seeking new contracts for the purchase of raw materials. You have existing suppliers, and you can continue using them if you cannot obtain better materials and terms with new suppliers. Because your basic alternative to agreement is to renew the old contracts, you can use those contract terms as your basis for comparing possible new contracts. Some of the existing contract terms will already be quantified - for example, price and quantity - and you can readily quantify others - for example, quality - on some appropriate scale. Once you have done this, you can readily compare old supplier contract terms with those offered in negotiations with potential new suppliers.

Scoring your best alternatives to agreement will be more difficult when they involve some issues other than, or in addition to, those which the negotiation concerns. Suppose, in the manufacturing example, that one of the manufacturer's old suppliers has proposed entering a joint venture with the manufacturer, and the manufacturer is somewhat attracted to this proposition. Whatever issues and possibilities the joint venture prospect raised, they would not be a direct part of the manufacturer's negotiations with potential new suppliers. In this case, the manufacturer's best alternative to a new agreement, which involves this altogether different and large issue of a possible joint venture, seems noncomparable with the price, quantity, and quality issues involved in negotiations with new suppliers.

Even in this situation, however, it is possible to assign values to the issues in the alternative and those in the negotiation and obtain at least rough comparability. There should be no difficulty in scoring those issues which are common to the negotiation and the existing alternative, that is, price, quantity, and quality.⁶² For the issue that is different, the possibility of a joint venture with an existing supplier, the manufacturer

61. LAX & SEBENIUS, *supra* note 2, at 75.

62. See Keeney & Raiffa, *supra* note 57, at 145.

could estimate the value that has for it and add that to the scores for the common issues. The manufacturer could then use this figure to compare new supplier proposals.⁶³ To be acceptable, any new proposal must deliver a value greater than that which the manufacturer calculated as deriving from remaining with the old supplier and entering a joint venture with it.⁶⁴

IV. COGNITIVE DIFFICULTIES IN NEGOTIATION

Notwithstanding the fullest understanding and most careful planning and preparation, efforts to undertake problem-solving bargaining can go awry because the parties do not take into account some of the ways in which humans tend to make decisions in situations of uncertainty. Researchers studying human problem-solving and decision-making have

63. *Id.*

64. Negotiation results also sometimes turn on contested facts: how and where the parties decide to settle may depend on what facts they accept as a foundation for bargaining. It is, therefore, important to know whether the parties will contest facts during the negotiation, what facts they will contest, and how to settle the factual contest.

In some cases, settling the facts may simply require getting additional, or more accurate, information, and it is obviously valuable to have such information available when the negotiation begins. However, the source of such information may also be important, for a negotiating party may not trust the information if it comes from an interested party negotiating on the other side. Consequently, in preparing for a negotiation, it is important to consider not only what information is necessary and useful, but also how to present the information in a manner most acceptable to the other side - by using a trusted expert or a neutral source.

There will be other cases, however, in which no amount of additional information will help settle the facts. For example, consider the kinds of factual disputes typical in lawsuit negotiations involving a tort suit over an alleged product failure or a performance suit over an alleged contract. In these kinds of cases, the facts of what actually happened are usually in dispute. Did the product fail when used as intended or did the user use the product improperly? Did a party actually agree to enter a contract or did she not? Furthermore, even if some of the basic facts are not in dispute, there may be a dispute about what those facts mean, that is, how they should be interpreted. When the alleged contracting party said, "Yeah, I'd like to see another order like that," did she actually order or was she just hypothesizing?

Arguing about facts in such cases is likely to result in an endless go-around, neither side convincing the other because so much turns on how the facts are settled. What is required, therefore, when the parties cannot accept each other's version of the facts and cannot agree on a common version, is some method or process, acceptable to both sides, for settling them. Thus, if this is a problem anticipated to arise in a negotiation, it is important to think through alternative ways, likely to be agreeable to all parties, to settle facts, *i.e.*, appointment of a neutral fact-finder, arbitration of facts, or some such means.

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long observed that our rationality is bounded.⁶⁵ Put otherwise, people always make choices based on a simplified mental model of a real situation, and unconsciously use judgmental strategies to make decisions when asked to take risks or when interpreting ambiguous or otherwise unclear information. In certain circumstances, these cognitive strategies, sometimes called judgmental heuristics⁶⁶ or cognitive illusions,⁶⁷ can even cause people to make objectively inconsistent or irrational choices. While useful and efficient shortcuts that enable them to draw conclusions about situations without consciously analyzing them, these strategies can lead to misjudgment and erroneous decisions.

Negotiations usually require negotiators to make decisions under conditions of uncertainty where choices depend on interpreting information and taking or avoiding risks. This is particularly true where parties, because they are somewhat non-trusting, have not agreed to share information fully. Even in problem-solving bargaining, parties often have to infer the information they need to make decisions. Where trade-offs are involved, this occurs through the package proposals that the parties make and evaluate. Negotiators must assess the information they obtain in negotiation, and integrate it with other information they have. They must assess other negotiators, examine and compare various possible outcomes, and decide whether to agree and on what.

A. Reference Points

There appear to be two phases in common decision-making: a simplification or "editing" phase, where the decision maker engages in a preliminary analysis of the decision situation in order to simplify it; and an evaluation phase, where the decision-maker decides which of the "edited" choices is the best.⁶⁸

Editing involves coding possible choices and assessing gains or losses with respect to a defined reference point. For example, if I am considering taking a new job, I will most likely take the characteristics of my present job as a reference point to help me compare the new job and make a decision about whether to accept a new position. I will take my

65. JAMES G. MARCH & HERBERT A. SIMON, *ORGANIZATIONS* 136-142, 151, 203 (1958).

66. DANIEL KAHNEMAN, ET AL., *JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES* (1982).

67. See DETLOF VON WINTERFELDT & WARD EDWARDS, *DECISION ANALYSIS AND BEHAVIORAL RESEARCH* 530 (1986).

68. See Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 274 (1979).

current salary, benefits, duties, and so on, as given and attempt to figure out how the new job may better or worsen those items.⁶⁹

Obviously, people make judgments by reference to a defined point, what that point is and how it is defined is quite important. In a negotiation, a party's overall decision reference point is its reservation price, that is, whatever it feels it must minimally obtain in order to agree at all. In interest-based bargaining, a party establishes that point for itself by figuring out its best alternatives to a negotiated agreement.

1. Framing

People tend to adopt their status quo, whatever that may be in what is at issue, as a reference point for their decision-making. What people value, positively or negatively, are changes in their wealth or welfare from their defined reference point.⁷⁰

However a party establishes its reference point for assessing negotiation offers, what is important to understand is that it may be possible to induce a party to change its judgmental reference point. If a party changes its reference point, it will, of necessity, perceive its decision situation differently. In fact, this is what occurs when an interest-based negotiator negotiates with a positional bargainer and persuades the latter to look at the situation from the point of view of his interests rather than his positions. Consequently, it is possible to shape the decisions people are likely to make by inducing them to consider their decision from a different reference point.

In simpler terms, the way a problem is stated affects the way persons approach and resolve it. The way negotiators define and view issues affects the way they bargain and the concession and settlement decisions they make. Issue-framing therefore can affect negotiation results, and there are a variety of factors that negotiators should take into account in framing their negotiations.

2. Risks of Loss or Gain

For most people, losses loom larger than gains, and we are generally more willing to gamble to prevent or minimize losses than to secure or maximize gains. Put otherwise, people are loss-averse, that is, inclined to protect their current position and willing to take risks to pre-

69. Indeed, focusing on differences between one situation and another appears to be a fundamental feature of human perception. We notice sound or color intensity only in relation to current levels that we are experiencing.

70. See Kahneman and Tversky, *supra* note 68, at 273, 277.

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vent losses. They will not, however, take similar risks to secure gains. People are risk-positive or even risk-seeking in taking action to prevent a loss, but risk-averse in taking action to secure a gain.⁷¹

We can even expand these propositions somewhat. Persons presented with a choice between a certain small gain and a possible larger gain also tend to act conservatively, taking the small gain and not gambling for the larger. On the other hand, where the situation is framed as a choice between a small sure loss and a larger possible loss, people will gamble to avoid the smaller loss. Consider the following example.⁷²

Choose between:

- a. a sure gain of \$3000
- b. an 80 percent chance of winning \$4000 and a 20 percent chance of winning nothing.

In this situation, most people choose alternative *a*. When the problem is reversed, however:

Choose between:

- a. a sure loss of \$3000
- b. an 80 percent chance of losing \$4000 and a 20 percent chance of losing nothing

most people choose alternative *b*. In other words, people will take risks to try to prevent a loss, but will not take equal risks to try to secure a gain.

It is often possible to frame a situation positively or negatively, as a case of maximizing gains or minimizing losses. Consider a bettor at a race track, having lost \$140 on prior races and thinking about making a \$10 bet, in the final race, on a horse running at 15:1 odds.⁷³ The bettor can look at the final bet as offering a \$140 gain versus a \$10 loss; however, he may think of himself as having lost \$140, with the prospect of losing another \$10, for a total of \$150. It is easier to forego a gain

71. See Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 *SCIENCE* 453, 456 (1981); see also Margaret A. Neale & Max H. Bazerman, *The Effects of Framing and Negotiator Overconfidence on Bargaining Behaviors and Outcomes*, 28 *ACAD. MGMT. J.* 34, 37-38 (1985).

72. Kevin McKean, *Decisions, Decisions*, *DISCOVER*, June 1985, at 22, 28.

73. Tversky & Kahneman, *supra* note 71, at 456.

than to suffer a loss, and parties facing possible losses are more likely to take a chance than parties faced with the prospect of a possible gain. Furthermore, a loss is less painful if thought of as part of a larger loss rather than considered alone.⁷⁴ Consequently, the bettor is more likely to risk the bet if he frames his situation in terms of losses than in terms of possible gain. He is more likely to make the bet if he thinks of himself as trying to break even, incurring no overall losses, than if he focuses on winning \$140.

The way one frames an issue, therefore, affects the decision made. In a negotiation, the issue frame as it bears on risk can affect both the character of the bargaining and negotiation results. Negotiating parties risk non-agreement by the positions they take and on which they stand firm. If the parties are some distance apart, there will be no agreement unless one or both concede to close the gap. In this situation, refusing to concede or conceding too little constitute risky behavior. Making concessions, by contrast, moves toward securing an agreement and is therefore an attempt to avoid the risk of no agreement. Consequently, a party that views a negotiation as an effort to minimize losses is more likely to engage in hard-bargaining (risky behavior) than a party focused on potential negotiation gains.

If all parties to a negotiation look upon it as an opportunity to maximize gains, they will all make concessions and come to agreement more easily and productively. Indeed, this is part of the theory of problem-solving bargaining. If a negotiator persuades the other side to view the negotiation as an opportunity to secure a gain, she is framing the negotiation in a way most likely to encourage the other side to make concessions.⁷⁵

On the other hand, if a negotiator is attempting to hard-bargain, she may do so by framing her own position in the negotiation as an effort to prevent losses. With a risk-positive frame, she will be less likely to make concessions and perhaps more likely to get them. Similarly if a negotiator is seeking to get as much gain as possible from a negotiation, she may frame her own situation negatively, as an effort to minimize

74. See McKean, *supra* note 72, at 31.

75. Doing so obviously requires the negotiator to listen carefully in order to discern just how the other side is framing the negotiation or particular issues in it. Suppose, for example, that a real estate broker is trying to negotiate the sale of some property. The prospective buyer is hesitant and unenthusiastic, but the broker discovers that the buyer is worried about the cash outlay. In other words, the buyer views himself as losing his financial liquidity. In this situation, the broker might do well to frame the purchase as one which will protect the buyer's wealth from inflation (no loss) and which may lead to a profit on resale in the future (possible gain).

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losses, while attempting to persuade the other side to view its situation positively, as an opportunity to secure gains.⁷⁶ What this analysis counsels the problem-solving negotiator is that she must determine the other party's negotiation frame and, if necessary, seek to change it from a risk positive frame to a risk-averse frame. It is apparent that understanding how parties frame a negotiation choice, and understanding how to reframe it are essential to effective problem-solving negotiation.⁷⁷

3. *Anchoring and Adjustment.*

When people are uncertain, it is possible to center their attention on a particular point merely by mentioning it. Then, when asked to make a decision, the person so focused unconsciously uses that point as a reference point for their decision. In other words, decision-makers adjust their decision up or down from the noticed reference point. In effect, focusing a person's attention on a certain point tethers or anchors his judgment to the vicinity of the point.

This psychological phenomenon, appropriately called anchoring, is easiest to demonstrate when people are asked to make estimates,

76. See Max H. Bazerman & Margaret A. Neale, *Negotiator Rationality and Negotiator Cognition: The Interactive Roles of Prescriptive and Descriptive Research*, in NEGOTIATION ANALYSIS 109, 121 (H. Peyton Young ed., 1991).

77. People also analyze a decision-situation by dividing it into riskless and risky components and focusing their attention on the risk. In comparing choices, they focus on the differences between choices and disregard what is the same in the choices.

Suppose you want to start a business and invite a few people to invest in it. You acknowledge that it is a risky venture and that anyone who invests in it could lose her capital. Suppose you frame the offer in the following ways:

(1) the investor will have a share in the business and its profits equal to the percentage of her investment as a share of total investment, and a complete loss of capital if the business fails;

(2) the same, except that, on business success, the investor will receive a fixed return plus a percentage.

Simplified, the first formulation presents the investor with a risk while the second presents her with a risk followed by a certainty. While both formulations involve the same amount of risk, the second appears more attractive, and the investor is most likely to focus on the difference.

One may invest money in a venture with some probability of losing one's capital if the venture fails, and with a choice between a fixed agreed return and a percentage of earnings if it succeeds. The isolation effect implies that the contingent certainty of the fixed return enhances the attractiveness of this option, relative to a risky venture with the same probabilities and outcomes.

although it operates in other situations as well. For example, subjects in an experiment were asked to estimate what percentage of countries in the United Nations were African.⁷⁸ Before making the estimate, however, experimenters asked the subjects to state whether the percentage was greater or less than a number chosen by spinning a wheel having the numbers 1 through 100 on it. Unknown to the subjects, who supposed the number selection was by chance, the experimenters rigged the wheel to stop at 10 or 65. The subjects who saw the 10 made an average estimate that the percentage of African countries was 25%. Those who saw 65 made an average estimate of 45%. Obviously, seeing the 10 and the 65 influenced the later estimates of the subjects, even though they believed the numbers they saw were selected by chance.⁷⁹

This experiment, and others like it, make it clear that it is possible to affect people's judgments through using an anchor. In effect, once focused on a point or alternative, people confine their search for solutions within an area centered on the point. People use the focus as a reference point for judgment and adjust from there.

The anchoring phenomenon is important in negotiation. A negotiator can consciously attempt to anchor another party, and a negotiator needs to be wary of being anchored. As interest-based bargaining is focused on satisfying interests rather than focused on particular means of satisfying interests, interest bargainers seem less susceptible to anchoring than positional bargainers. However, interest-based bargaining divides into phases of problem-definition, option generation, and selection of solutions, and involves both value-creation and value-claiming.⁸⁰ Roughly speaking, the option generation phase is the value-creation stage, while the solution selection phase is the value-claiming stage. It is at the value-claiming stage that interest-based bargaining may turn competitive and where anchoring may occur and shape decisions. In other words, anchoring is likely to occur during the solution-selection phase, and, in fact, many parties attempting interest-based bargaining focus inordinately on just one or two solutions rather than consider all thoroughly and systematically.

B. Attribution Error

In the United States, most people, when observing someone making a choice, attribute the choice to the actor's character or dis-

78. ROBYN M. DAWES, RATIONAL CHOICE IN AN UNCERTAIN WORLD 121 (1988).

79. *See id.*

80. *See supra* text accompanying note 12.

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position. In other words, most people operate from the unconscious premise that people behave as they do because of their dispositions. The actor, however, usually explains his choice by reference to the immediate situation, that is, factors he thought facing him that caused him to choose one way rather than another.

I once observed a classroom during a lecture-discussion. During the lecture, several female students raised their hands, but the professor did not call on them. At last, he did call on a male student who had raised his hand. A female student then challenged him, asserting that he was obviously sexist as he had not earlier called on women students. The professor, while taken aback, responded, "Well, perhaps. You will have to judge, but I really wasn't ready to take questions or comments earlier. I wanted first to cover some material." Clearly, the female critic attributed the professor's behavior to his character or disposition, while he attributed it to the situation.⁸¹

Attributing a person's action to his disposition could be a correct assessment, but it could also be incorrect. It will almost certainly be wrong from the actor's viewpoint, and the actor is not likely to be responsive to assessments, offers, or suggestions not salient to his own perception of the situation. It is easy to imagine how differential observer and actor perceptions of this kind could affect negotiators' judgments about one another. If each negotiator, observing the other, attributes the other's choices to disposition rather than to the situation, each may draw conclusions, and make predictions, which may be incorrect. One might think, for example, that because the other side was very resistant to one's proposals, it was basically competitive. To counter, one might bargain competitively as well. This could be mistaken, however, for it could be that the other negotiator was simply responding to the way the proposals were framed as he perceived them to bear on his interests.

[Persons] tend to simplify their decision task by ignoring the *contingent decision processes* of competitive others. They assume a particular future action by the opponent (e.g., based on a most likely course of action or based on an expected value

81. We may even hold strongly to character beliefs in spite of contradictory evidence. When evidence appears to disconfirm our beliefs, we carefully scrutinize the disconfirming evidence rather than examine our beliefs. Usually, with intense scrutiny, we can find problems with the disconfirming evidence and therefore reasons to discredit it. Often, people confronted with evidence which conflicts with their beliefs come away holding their beliefs more strongly than before. They either find the evidence to be too flawed to be credited or less damaging than it originally appeared to be. See THOMAS GILOVICH, *HOW WE KNOW WHAT ISN'T SO* 64-67 (1991).

assessment), rather than realizing that the opponent's behavior is contingent on a variety of factors.⁸²

Attributing behavior to disposition simplifies judgment, but leads to misunderstandings that impede or distort judgment. To avoid such errors of understanding, the negotiator must attempt to enter the other side's "problem space,"⁸³ that is, to see the negotiation issues and situation as the other side sees them. The negotiator, rather than offering his own positions and rationales, needs to elicit talk, to get a good sense of the other side's values, preferences, concerns and interests, the pressures it feels, the aspirations it has, and so on.

C. Schemas, Scripts, and Setups

People generally interpret new situations in terms of schematic conceptualizations, or schema, about what people are like, the ways events play out, and how people act.⁸⁴ A stereotype is a good example of a schema as applied to persons. We know that when people use stereotypes in characterizing others, they base their judgments about what others will do on generalizations inherent in the stereotype rather than on an individualized assessment. A "script" is a schema applied to events or situations, and it is easiest to think of a script as a stereotyped sense of how events or cause and effect sequences will play out.

When people communicate with one another, they of necessity interpret or decode what the other says and does. But much communication and behavior is ambiguous and subject to differing interpretations. The incident of the college professor described above is an example. People also use schemas of various sorts to help interpret others and their behavior.

1. Set-ups

While there are countless cognitive schemas, it is possible to predispose people to use one particular schema of interpretation rather than another by setting-up their expectations. Psychological studies have shown that people given positive introductions to a speaker or lecturer

82. Bazerman & Neale, *supra* note 76, at 112.

83. Max H. Bazerman, et al., *Groups as Mixed-Motive Negotiations*, in LAWLER, E.J., & MARKOVSKY, B., EDs., *ADVANCES IN GROUP PROCESSES: THEORY AND RESEARCH*, vol. 5 (1988).

84. See RICHARD NISBETT & LEE ROSS, *HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT* 28 (1980).

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consistently rate her more positively than people given negative introductions to the same speaker. Indeed,

[t]hose expecting a 'warm' instructor perceived him to be relatively sociable, informal, even-tempered, friendly, and so on, and they responded accordingly.... In contrast, subjects expecting a cold instructor rated *the same person* as relatively self-centered, unsociable, and formal, and they showed a corresponding reluctance to participate in the class.⁸⁵

In other words, by manipulating a person's prior expectations, one can dispose him to interpret another person's behavior or a situation favorably or unfavorably, in line with the set-up.

It is even possible to predispose people to act in certain ways. In an experiment involving persons playing the prisoner's dilemma game, the players were exposed to human interest stories prior to undertaking play. In one case, the story was a "heart-warming account of someone who offered a kidney to someone whom he did not know who was in need of a transplant. In another instance, subjects heard a ghastly account of an urban atrocity."⁸⁶ Those players who heard the heart-warming account played the game much more cooperatively than those who listened to the atrocity story.

The best explanation for what happened in these experiments is that the manipulations caused the subjects to access certain interpretive schemas which they then used to "read" ambiguous information or to cue their own behavior. The application of these ideas in a negotiation context is fairly obvious. A negotiator can "set-up" or predispose the other side to bargain in certain ways by manipulating its prior expectations. For example, when preparing to negotiate against someone anticipated to be a soft-bargainer, the negotiator could insure that the other side receives the message that his own side has little to give and that if there is to be a bargain, the other side will have to be willing to concede. Similarly, if one wants to promote cooperative or problem-solving bargaining, it would be useful, prior to bargaining, to regale the other side with stories likely to elicit a positive, cooperative, or problem-solving frame of mind.

85. *Id.* at 68 (emphasis added).

86. *Id.* at 37.

2. *Commitment and Escalation.*⁸⁷

Commitment to a goal and high aspiration secures persistence, tenacity, and often success. There is good evidence that commitment and high aspiration also contribute to negotiation success. The reasons are obvious. They both lead to firmness, and as long as the other party is less firm, to concessions from the other side. In problem-solving bargaining, commitment to maximizing one's interest leads to an intense search for ways to do just that.

But commitment can lead to failure too, or worse, even to escalating and expensive conflict as parties raise stakes and invest more in winning until winning becomes a single-minded prize apparently worth almost any cost.

Decision-making in negotiation requires interpreting the moves and actions of other parties. Commitment to an end, however, tends to bias both a negotiator's interpretation of information and his judgment. When one has staked oneself on, and made investments in, a commitment, there is a tendency to justify oneself.⁸⁸ Rather than look at the situation objectively, one interprets it in ways that favor one's preconceived view of the situation. The poker player, having invested all of his chips in a hand, borrows more to stay in, believing the other player, who continues to raise, is just bluffing. When the defendant refuses to settle for a high figure, the trial lawyer remains confident that she can destroy the defendant's case before the jury. A country, having lost many lives in a war, believes the enemy is about to collapse, and that more troops and equipment -- just a bit more fighting, will bring victory. "It's not possible to stop now, in sight of victory when we have already sacrificed so much. Hang on just a little more."

Continued investments in the face of large losses is just another example of risk-taking to avoid a loss. What is important for present purposes, however, is not so much that phenomenon, but the rationalization process that accompanies it. Parties who have invested heavily in commitments are likely to entrap themselves in escalating conflict, even irrationally so, yet remain unaware of their lack of objectivity. This is most likely where parties have not set limits on their commitment; when they do not, or cannot, take time-outs to reassess their investment; when they are not clearly aware of the costs they are incurring; and where they must "save face," that is, justify their actions to

87. See generally PRUITT & RUBIN, *supra* note 13.

88. *Id.* at 121-122.

themselves or to some constituency or other audience.⁸⁹

Mere statement of these factors contributing to escalation points to obvious precautions that will help prevent spiraling conflict. Setting investment limits beforehand clearly helps. Periodic "objective" assessments of the investment in the conflict or negotiation are also useful. In such assessments, it is important to focus on the current and prospective set of costs and benefits rather than past expenditures. When parties focus on additional losses they may incur, they are more likely to adopt courses of action designed to prevent future loss. One evident course is simply to accept those losses already suffered and not to invest more.

3. *Sunk Costs*

Suppose you have purchased a \$100 ticket to a musical production. On the evening you had planned to go and see it, you feel tired and think, "Golly, I wish I hadn't bought that ticket. I'd much rather stay home tonight than go to the theater." Should you go to the theater or stay home? Would you stay home if you could get your \$100 back? Should you treat your ticket purchase as an investment you do not want to waste, or should you conclude that the money you paid for the ticket is gone, *whatever you do*?

Money you have already paid out, or investments of any kind that you have made, which you will lose no matter what you do are called sunk costs.⁹⁰ If you actually prefer to stay home rather than go to the theater, but you go to the theater anyway, you are doing something that you do not want to do in order to avoid a loss that you will experience in any case. In effect, you invest more, or impose additional costs on yourself, in order to feel that your prior expenditure has neither been in vain, nor wasted. But, while it is rational to base a decision on future consequences, it is irrational to base it on past events you cannot change. It is irrational to act merely to honor sunk costs, that is, to let a past investment govern a future choice simply in order to feel that you have gotten something for your investment. In other words, sunk costs, of themselves, do not provide a rational justification for incurring additional costs or maintaining a course of action.

If there are reasons other than sunk costs for continuing a course of action, then perhaps it is rational to do so. For example, if you have made a commitment to someone else that you would go to the theater, in not going, you break your commitment. Then you might become known

89. *Id.* at 124-125.

90. DAWES, *supra* note 78, at 22.

as someone who breaks commitments. In such a case, however, it is the future consequence of reputational loss that might persuade you to go to the theater, and your choice would be rational.

The irrational inclination to honor sunk costs may arise in negotiations in a variety of ways. One might, for example, be tempted to conclude a deal, rather than look elsewhere, because of the time, effort, and resources expended in the negotiation so far. But such costs are not necessarily an appropriate focus of negotiation decision-making, which instead should be the future consequences of the deal and the other alternatives one has, including all associated costs.

In a similar way, a concern with sunk costs might incline a negotiator to hard-bargain rather than problem-solve. If a party focuses on losses as a reference point, he or she will take risks, including risks of non-agreement, to avoid suffering the loss. If it were possible to persuade the party to think of the loss as sunk costs, however, it would be easier to focus on how a possible agreement would affect its interests in the future. A company sues an architect for an alleged flawed building design that the company has spent \$500,000 to correct. The suit, which is not by any means a sure winner, will cost the company \$250,000 to pursue through trial, including all attorney fees, discovery and expert witness costs, and lost staff time. In negotiations with the architect and her insurer, should the company hold out for \$500,000 because that is how much it is out of pocket? Clearly, the company should base its decision-making solely on the probabilities of winning its suit. If they are good, it should perhaps press for maximum recovery; if not, it should settle for what it can get, notwithstanding the losses it will be unable to recoup.

In summary, rational decisions are based on an assessment of future possibilities and probabilities. The past is relevant only insofar as it provides information about possible and probable futures. Rational decision-making demands the abandonment of sunk costs, unless such abandonment creates problems outweighing the benefits of abandonment.⁹¹

D. Saving Face and Giving Face.

How one addresses the question of saving face is not so obvious. Saving face is a matter of finding some interpretation of the situation, including losses, which permits a party to feel, or credibly claim, that its action or decision was justified, and that its action was not senseless, but had meaning.

91. *Id.* at 31.

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To give an example, I once represented a group of migrant farm workers who organized to protest and fight substandard living conditions at a farm labor camp. Getting little positive response from the authorities running the camp, the farm workers escalated their tactics progressively, moving from demonstrations to refusals to pay rent. Eventually, they took over the camp and refused to leave, even after the harvest season had ended. The struggle had cost them much, and authorities were threatening to enter the camp and evict the farm workers. In private meetings, the workers said they would chain themselves and their wives and children to beds and radiators to prevent their eviction. It was clear, however, that the authorities would take over the camp, using police forces to arrest the workers, and that they would prosecute them. Although the farm workers knew they would lose this battle, they were willing to go to jail to affirm the justice of their cause and to justify to themselves, and others, the actions they had taken up to this final confrontation.

After a long meeting, we resolved the issue by persuading the farm workers to declare a victory -- they had been successful in bringing their plight to public and official attention (even the Governor had sought to intervene) -- and to hold a farewell fiesta at the camp as a way of celebrating and thanking supporters. This is what the farm workers did.

In retrospect, the negotiation or conflict resolution strategy behind this solution is clear. The farm workers were involved in an escalating conflict that was headed for a showdown they would lose. Even a loss would give meaning to their protest, but declaring victory and holding a fiesta also gave meaning to their prior actions as well as providing a rationale for ending them. By allowing the farm workers to save face, it spared them further costly confrontations quite unlikely to create any gain.

When caught in a spiraling conflict, a party wishing to cut its losses and get out often needs to find an interpretation of its withdrawal that justifies its whole course of conduct to that point rather than making it appear senseless, foolish, cowardly, or weak. This is particularly true where the party must explain itself to a constituency or some public. There is simply a need to avoid or blunt belittling criticism.

Saving face is important in successfully concluding some conflicts and negotiations. Indeed, it is so important that negotiators need not only be sensitive to it, but also be willing to "give face." By giving face, I mean helping the other party to make face-saving claims about the course of the negotiations and the results achieved. This can be done by constructing some agreed upon, dignifying, justifying, public description of the parties' activities, and agreements or non-agreements. Alternatively, a negotiator can give the other side something it can publicly use to assert that it did not come away from the negotiation defeated, empty-handed, nor in any way taken or humiliated.

E. Cognitive Overload

As the number of parties, issues, and possible outcomes in a negotiation increase, so too does its complexity. Every party may take a different position on each issue, and each issue may have many possible outcomes. If the parties make trade-offs between issues and different possible outcomes on each issue, the complexity may seem unmanageable. Take, for example, a six party negotiation over six issues with six possible outcomes on each issue. The parties will have 36 possible outcomes to bargain over, and as each may value the outcomes differently, there may be as many as 216 trades to make. Actually, there may be more, as parties experiment with different possible packages.

To the potential complexity of trades, we must add different personalities, communication styles, bargaining expectations, and strategies. If the negotiators at the table represent organizations or constituencies, there will be additional bargaining problems as negotiators either attempt to carry out bargaining instructions or provide information to their principals so the latter can reassess their positions. Finally, depending on the nature of the issues involved, parties at the table may seek to form coalitions in order to secure an agreement. Forming such coalitions comprises a sub-negotiation within the larger negotiation and will affect it. Coalition members may strike sub-deals among themselves; countercoalitions may form.

Every such change in a situation that is quite fluid and dynamic affects the bargaining space and the configuration of bargaining positions within it. As each new item appears in the bargaining -- a new piece of information, a concession, a proposal, a change of position, an apparent coalition -- parties may responsively reassess their positions and further change the bargaining configuration. Multi-party, multi-issue bargaining operates much as a kaleidoscope, where a small change, a slight twist of the viewing cylinder, precipitates a complete reconfiguration of scene.

In such complex bargaining, the negotiating parties may have to process and deal with more information than they can handle, a situation of cognitive overload. It is in just such situations that people attempt to simplify decision-making by resorting to various rules or guidelines. For example, rather than deal with the complexity, a party may decide to follow its predetermined course of action, in effect ignoring information acquired in the bargaining. Another response might be quick compromise. Rather than work through the complexity, the negotiator, feeling overwhelmed, capitulates. In a sufficiently complex bargain, the negotiators might conclude they are just going around and around, without getting anywhere, and give up altogether. A party, not seeing any way through the complexity favorable or acceptable to itself, might fear the

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other parties might strike a deal either freezing it out or disadvantageous to it, and attempt to form a blocking coalition killing any deal.

Aside from patient, painstaking, hard work, there are three general ways to handle cognitive overload in negotiation. The first is simply awareness of the phenomenon, which can serve to inoculate a negotiator from the frustrations of complexity and check the tendency to seek easy solutions.

More importantly, negotiators involved in complex bargaining must have a concern for the processes they are using to attempt to reach agreement. Since they will be involved in a shifting dynamic of trade-offs, they need some process which will help them fairly sort out their relative preferences and priorities. In effect, the parties need to establish a clearinghouse for information, a neutral market for making trades, and a group problem-solving process to help them create additional value.

If the parties are trusting of one another, they can do this on their own. If not, they will have difficulty, for they will not be sufficiently disclosing information to make efficient trades. In such a situation, straw-voting on proposed packages sometimes works because, without any party disclosing too sensitive private information about where other parties stand, all parties can get information about where it ultimately stands, at least enough to allow reassessment of positions and repackaging. If the parties follow this procedure iteratively, they can often construct final packages acceptable to all.

Sometimes what occurs is that one party takes on a leadership or facilitative role, framing and preparing packages and eliciting responsive information which it then uses to reformulate proposals. Finally, parties involved in complex bargaining should consider using a neutral facilitator or mediator. A trusted, neutral party can sometimes create the information clearinghouse, trading market, and inventive problem-solving process the parties unaided cannot.

A final way to improve one's decision-making in complex negotiations, and to get better results, is intense preparation of the kind discussed in Parts II and III of this article. Indeed, carrying out those analyses and steps, with due attention to potential cognitive difficulties in negotiation, will greatly improve negotiation decision-making and results.

V. CONCLUSION

Negotiating in a problem-solving manner is the most productive way to negotiate and to resolve disputes. While the problem-solving model is a simple one, it is not necessarily simple to execute effectively. Many negotiations and disputes may involve conflicting interests which the

parties can reconcile only through trade-offs. Lacking an understanding of how compromise and trade-offs work in problem-solving negotiation, parties may bargain ineffectively, not maximizing their interests as well as possible under the circumstances. Even if they know how these matters work, they may yet bargain inefficiently if they have not clarified in advance what they seek from the negotiation and what they are willing to trade. The negotiator needs to identify all possible issues and outcomes, not only from her own perspective, but, insofar as possible, from that of other negotiating parties as well.

The negotiator should identify his own fundamental interests and those of other parties. Examining the array of interests allows a negotiator to anticipate the issues, and, in particular, the issues having relevance for other participants. Having identified possible issues, it is also possible to identify a range of outcomes on each issue and to value them. Not all the issues and possible outcomes a party identifies will have any immediate value to it, but some may have value as tradable items. In other words, the negotiator may identify outcomes that are of little or no concern to itself, but of value to other parties. During the negotiation, the negotiator can trade these items for items of value to him.

Finally, personality matters aside, a problem-solver working with others needs to appreciate their contingent decision-processes. He should attend to the cognitive frameworks that humans characteristically use to simplify decision-making, for the problem may lie in the frame, not in the framer.