Advances in Decision Analysis
FROM FOUNDATIONS TO APPLICATIONS

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Regulation Analysis: Between Decisions
Decision analysis, the practically oriented cousin of decision theory, would seem a logical candidate to fill this prescriptive void. It suggests a systematic decomposition of the problem: structuring and sequencing the parties' choices and chance events, then separating and subjectively assessing probabilities, values, risk and time preferences. A von Neumann–Morgenstern expected utility criterion typically aggregates these elements in ranking possible actions to determine the optimal choice. This approach is well-suited to decisions "against nature," in which the uncertainties — such as the probability that an earthquake will strike San Francisco in August — are not affected by the choices of other involved parties that themselves anticipate one's own actions.

Yet when decision making is interactive — as is true in negotiation, where each party's anticipated choices affects the other's and vice versa — assessment of what the other side will do qualitatively differs from assessment of "natural" uncertainties. Of course, the theory of games was developed to provide a logically consistent framework for analyzing such interdependent decision making. Full descriptions of the courses of action open to each involved party are encapsulated into "strategies." Rigorous analysis of the interaction of strategies leads to a search for "equilibria," or plans of action such that each party, given the choices of the other parties, has no incentive to change its plans. A great deal of analysis by game theorists seeks conditions for unique equilibria among such strategies.

Game theory has been especially useful for understanding repeated negotiations in well-structured financial situations. It has offered useful guidance for the design of auction and bidding mechanisms, has uncovered powerful competitive dynamics, has usefully analyzed many "fairness" principles, and now flourishes both on its own and in applications such as microeconomic theory and the economics of business strategy and industrial organization. Despite signal successes, however, the dominant game-theoretic quest to predict equilibrium outcomes resulting from the strategic interactions of fully rational players often lacks prescriptive power in negotiations.

Three major aspects of mainstream game theory, discussed at length in Sebenius (1992, 2002), contribute to this "prescriptive gap." First, on standard assumptions, there are often numerous plausible equilibrium concepts, each with many associated equilibria — and no a priori compelling way to choose among them. Second, even where one party wishes to act rationally, the other side may not behave as a strategically sophisticated, expected utility-maximizer — thus rendering conventional equilibrium analyses less applicable. A large and growing body of evidence — especially in "behavioral game theory" and experimental economics — suggests that people systematically and significantly violate the canons of rationality. Third, the elements, structures, and "rules" of many negotiating situations are not completely known to all the players, and even the character of what is known by one player may not be known by another. The frequent lack of such "common knowledge" limits — from a prescriptive standpoint — much equilibrium-oriented game analysis. Even where it is possible to shoehorn such a situation into the form of a well-posed game, and gain insights from it, the result may lose considerable prescriptive relevance.

The Negotiation Analytic Approach

If descriptive psychological approaches to negotiation lack a prescriptive framework; if decision analysis isn't directly suited to interactive problems; and if traditional game theory generally presupposes too stringent a form of rationality and strict common knowledge, then "negotiation analysis" represents a response that yokes the prescriptive and descriptive research traditions under less exacting assumptions. Using Howard Raiffa's (1982) terms, unlike the "symmetrically prescriptive" approach of game theory — wherein fully rational players are analyzed in terms of what each should optimally do given the other's optimal choices — the "asymmetrically prescriptive/descriptive" approach typically seeks to generate prescriptive advice to one party conditional on a (probabilistic) description of how others will behave. This need not mean tactical naiveté; as appropriate, the assessments can incorporate none, a few, or many rounds of "interactive reasoning."

Works that embody the spirit of this approach can be found as early as the late 1950s. Although Luce and Raiffa's (1957) Games and Decisions was primarily an incisive synthesis and exposition of game theory's development since von Neumann and Morgenstern's (1944) classic work, Luce and Raiffa began to raise serious questions about the inherent limits of this approach in analyzing actual interactive situations. Perhaps the first work that could be said to be "in the spirit of negotiation analysis" was The Strategy of Conflict by Thomas Schelling (1960). Its point of departure was explicitly game-theoretic but it proceeded with less formal analysis and the analysis had far broader direct scope. Though nominally in the behavioral realm, Walton and McKersie's (1965) A Behavioral Theory of Labor Negotiations drew on Schelling's work as well as rudimentary decision and game theories.

The first overall synthesis of this emerging field appeared with Raiffa's (1982) The Art and Science of Negotiation, elaborated in Raiffa (1997), and greatly extended in Raiffa, Richardson, and Metcalfe's (2002) Negotiation Analysis: The Science and Art of Collaborative Decision Making. Building on Sebenius (1984), this approach was systematized into an overall method in Lax and Sebenius' (1986) The Manager as Negotiator and extended in their (2006) 3-D Negotiation Analysis (1991), edited by Young, furthered this evolving tradition, which was characterized, summarized, and reviewed in Sebenius (1992, 2001, 2002). Further contributions to the field, in the same rationalist vein, were included in Zeckhauser, Keeney, and Sebenius (1996). Arrow, Wilson, Ross, Tversky, and

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4 See the classic discussions of von Neumann and Morgenstern (1944) and Luce and Raiffa (1957); for a more recent, very insightful assessment, see Aumann (1989).

5 Work by, e.g., Aumann and Brandenburger (1995) has begun to relax the widespread understanding that common knowledge of the situation was essential to game models.
Mnookin (1995), and, adding insights from organizational and information economics, in Mnookin, Peppet, and Tulumello (2000).

Meanwhile, another group of researchers was coming to a negotiation analytic view from a behavioral point of departure. With roots in the cognitive studies of behavioral decision theorists, for example, Bell, Raiffa, and Tversky (1988), behavioral scholars began in the early 1990s to explicitly link their work to that of Raiffa and his colleagues. In particular, Neale and Bazerman’s (1991) Cognition and Rationality in Negotiation, Bazerman and Neale (1992), and Thompson (2001) pulled together and developed great deal of psychological work on negotiation in an asymmetrically prescriptive/descriptive framework. These efforts began to systematically build up more structure on what had been, in the works of Raiffa et al., a largely ad hoc descriptive side of the ledger.

Elements of a Negotiation Analytic Approach

Full negotiation analytic accounts (e.g., Sebenius 1992, 2000) generally consider the following basic elements: the actual and potential parties, their perceived interests, alternatives to negotiated agreement, the linked processes of “creating” and “claiming” value, and the potential to “change the game” itself.

Parties

In the simplest negotiation, two principals negotiate with each other and enumerating the parties is a trivial exercise. Yet, potentially complicating parties, such as lawyers, bankers, and other agents, may be present, as may multiple internal factions with very different interests. Potentially influential parties, who themselves may not be principals or even involved at all in the nominal negotiation, may be able to block or enable a deal. Multiple parties, some of whom may not be immediately obvious, are thus involved. The crucial first step for an effective negotiation analysis is to map the full set of potentially relevant parties and their relationships in the context of the decision processes. Lax and Sebenius (2006) offer a framework for assessing the full set of parties that are and should or should not be involved.

Interests

The next step is to probe deeply for each relevant party’s or faction’s underlying interests and to carefully assess its tradeoffs among interests. In principle, this assessment is radically subjective in the sense that less tangible concerns for self-image, fairness, process, precedents, or relationships can have the same analytic standing as the “harder” or “objective” interests such as cost, time, and quality that are common to traditional economic approaches.

It is often useful to distinguish the full set of parties’ underlying interests from the issues under negotiation, on which positions or stands are taken. To illustrate, suppose you’re negotiating a job offer; the base salary will usually be an issue. Perhaps your position on that issue is that you need to earn $100,000. The interests underlying that position certainly include your need for a good income but may also include status, security, new opportunities, and needs that can be met in ways other than salary. Rather than a $15,000 higher base at the start of a new job, your real interests may be better served by a more direct reporting relationship, a wider set of responsibilities, and an expedited compensation review – as well as a later start date that permits you to take that long-postponed vacation with your family. And, of course, an assessment of the full set of the other sides’ interests is a vital complement to assessing one’s own. (Raiffa 1997) and Lax and Sebenius (1986) illustrate this kind of assessment in the context of employment negotiations.

In conflict situations, emphasizing positions can drive the parties even further from advancing their real interests; in other cases, emphasizing interests will only generate hopeless conflict when mutually beneficial agreement on certain overt positions could be reached. To take the more common case in which an interest-based focus is preferable to a positional one, consider a dispute over a dam project. Environmentalists and farmers opposed a power company’s plans to build a dam in the midwestern United States. On the surface, the parties had deeply felt, irreconcilable positions: “absolutely yes” versus “no way.” Yet, as in many bargaining situations, these incompatible positions masked compatible interests. In reality, the farmers were worried about reduced water flow below the dam, the environmentalists were focused on the downstream habitat of the endangered whooping crane, and the power company needed new capacity and a greener image. After a costly legal stalemate, the three groups devised an interest-driven agreement that all of them considered preferable to continued court warfare. The agreement included a smaller dam built on a fast track, water flow guarantees, downstream habitat protection, and a trust fund to enhance whooping crane habitats elsewhere. Rather than a convergence of positions, this agreement entailed efforts to reconcile each side’s deeper interests.

In virtually all cases, however, an important first analytic step is to probe deeply for interests, distinguish them from issues and positions, and to carefully assess tradeoffs. Raiffa et al. (2002) offers an extended discussion of assessing tradeoffs in negotiation, building on extensive work by Keeney and Raiffa (1976). (See also Keeney 1996; Keeney and Raiffa 1991; Hammond, Keeney, and Raiffa 1998.) Lax and Sebenius (1986, 2006) offer a simplified discussion of the principles behind such tradeoffs and systematic suggestions for “getting interests right,” while Wierzbicki (1983) critically surveys the methodologies of multiobjective analysis.

When individuals or groups with different concerns constitute a negotiating “side,” it is no longer in general possible to specify overall tradeoffs; however.

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6 Much in the following sections is directly from Sebenius (1992).

carefully tracing which set of interests is ascendant according to the internal bargaining process of given factions may continue to provide insights. (Wilson’s (1968) work on “syndicates” suggests the formal conditions under which a “group utility function” exists.) One result of such analysis of interests may be the disaggregation of a side into factions whose interests are shared enough to justify treating the faction as another distinct party. For cases in which such disaggregation is not sensible, Keeney, Renn and von Winterfeldt (1983) discuss “value tree” analysis, whereby effective preferences of larger groups can be assessed for decision-making purposes, including international and broader policy negotiations.

**Alternatives to Negotiated Agreement**

People negotiate in order to satisfy the totality of their interests better through some jointly decided action than they could otherwise. Thus, for each side the basic test of a proposed joint agreement is whether it offers higher subjective worth than that side’s best course of action absent agreement. In examining a negotiation, therefore, one should analyze each party’s perceptions of its own – and the others’ – valuations of their alternatives to negotiated agreement.

Alternatives to agreement may be certain, with a single attribute: an ironclad competing price quote for an identical new car. They may be contingent and multiattributed: going to court rather than accepting a negotiated settlement can involve uncertainties, trial anxieties, costs, time, and precedents that contrast with the certain, solely monetary nature of a pretrial accord. No-agreement alternatives may also involve potentially competing coalitions, threats and counter-threats, or the necessity to keep negotiating indefinitely.

Evidently, decision analysis (including multiattribute value and utility theory) can often help assess alternatives to agreement. When there are many possible alternatives – or example, many potential purchasers, each with associated uncertainties and costs of discovery for the seller – optimal search theory can provide strategies for searching efficiently and valuing the expected findings from the search (Lax 1985). When the parties’ alternatives to agreement are interdependent, concepts from game theory – including the dynamics of threats and counter-threats as well as the many variants of coalitional analysis – can help bargainers understand and assess their no-agreement alternatives (Luce and Raiffa 1957; Raiffa 1982).

Although this evaluation provides a strict lower bound for the minimum worth (the “reservation price”) required of any acceptable settlement, alternatives to agreement also play tactical roles. The more favorably that negotiators portray their best alternative course of action and willingness to “walk away,” the smaller is the ostensible need for the negotiation and the higher the standard of value that any proposed accord must reach. Moves “away from the table” that shape the parties’ alternatives to agreement can strongly affect negotiated outcomes.

For example, faced with a two-party negotiation, the importance of moves to enhance competition – and thereby improve their no-agreement alternatives in the initial negotiation – is virtually an article of faith among top negotiators. A senior AOL executive remarked about the importance of such moves to favorably change the setup: “You would never do a deal without talking to anyone else. Never.”

Martin Lipton, virtual dean of the New York takeover bar, compared the effects of adding another interested party “at the front end” of corporate acquisition negotiations with simply negotiating more effectively with your initial counterpart “at the back end” of the process. Lipton even roughly quantified the added value of adding competing negotiator with greater negotiating skill in the initial two-party deal: “The ability to bring somebody into a situation is far more important than the extra dollar a share at the back end. At the front end, you’re probably talking about 50 percent. At the back end you’re talking about 1 or 2 percent.”

Indeed, as Bulow and Klemperer (1996) analytically demonstrate, moves to transform a two-party negotiation into an active auction with many bidders vying for your deal can be a potent strategy in general.

Converting a two-party setup into more of an auction can change the psychology of a negotiation as well as the competitive pressures. After leading a string of alliances and acquisition negotiations that vaulted Millennium Pharmaceuticals from a 1993 startup to a multibillion-dollar firm less than a decade later, then-chief business officer Steve Holtzman explained the rationale for adding parties:

> Whenever we feel there’s a possibility of a deal with someone, we immediately call six other people. It drives you nuts, trying to juggle them all, but it will change the perception on the other side of the table, number one. Number two, it will change your self-perception. If you believe that there are other people who are interested, your bluff is no longer a bluff, it’s real. It will come across with a whole other level of conviction.

**Representing the Structure**

Imagine that two negotiators have thought hard about their underlying interests in different possible settlements of the apparent issues. Further, suppose that they have a relatively clear, if possibly changing, assessment of their tradeoffs and have compared them to the value of their best no-agreement alternatives. Each has a sense of any “rules of engagement” that structure their interaction. From the viewpoint of each party a set of possible agreements has been envisioned. Assume that an analyst were privy to the results of these evaluations by each side, along with the (likely asymmetric) distribution of information about interests, beliefs, no-agreement options, and possible actions; these evaluations need not be common knowledge of the parties. The situation might be familiarly represented as in Figure 23.1.

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8 See (Rivlin, 2000).
9 This quote and an extended discussion of related bargaining implications can be found in Subramanian (2003: 1).
10 See Bulow and Klemperer (1996).
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outcome(s) of the interaction. Indeed, as Rubenstein’s (1991) insightful commentary noted, “For 40 years, game theory has searched for the grand solution that would achieve a ‘prediction regarding the outcome of interaction among human beings using only data on the order of events, combined with a description of the players’ preferences over the feasible outcomes of the situation’ (p. 923).

Even with as powerful and ubiquitous a concept as that of the Nash equilibrium in noncooperative games, however, it is often impossible, even with the imposition of increasingly stringent requirements or refinements to limit a game’s equilibrium outcomes to a unique or even small number of points. Often there is an infinity of such outcomes. As Trole (1988) noted when explaining why “we are now endowed with nearly a dozen refinements of perfect Bayesian equilibrium,” the “keyway in specifying off-the-equilibrium-path beliefs usually creates some leeway in the choices of equilibrium actions; by ruling out some potential equilibrium actions, one transforms other actions into equilibrium actions.” (p. 446). Frequently this implies an infinite number of perfect Bayesian equilibria.

Despite insights into how rational players might select from among multiple Nash equilibria (Harsanyi and Selten 1988), the rationale for a particular choice may ultimately seem arbitrary. As Kadane and Larkey (1982) incisively remark, “we do not understand the search for solution concepts that do not depend on the beliefs of each player about the others’ likely actions, and yet are so compelling that they become the obvious standard of play for all those who encounter them.” This seems especially apt in light of their observation that “solution concepts are a basis for particular prior distributions” and hence “the difficulty in non-zero-sum, N-person game theory of finding an adequate solution concept: no single prior distribution is likely to be adequate to all players and all situations in such games” (pp. 115–116).

Because each party should accept any settlement in the zone of possible agreement rather than no agreement, Schelling (1960) made the potent observation that the outcome of such a situation could only be unraveled by the “logic of indeterminate situations.” Yet, without an explicit model or formal theory (equilibrium based or other) adequate to confidently map structure and tactics onto bargaining outcomes, how can an individual negotiator or interested third party decide what to do? In the (often implicit) view of many negotiation analysts, the negotiator’s subjective distribution of beliefs about the negotiated outcome conditional on using the proposed tactics must be compared with his subjective distribution of beliefs about the outcome conditional on not using them. The tactic is attractive if the former distribution gives him higher expected utility than the latter.

Such “improvement” has a subjective basis analogous to the Rothschild-Stiglitz (1970) characterization of a subjectively perceived “increase” in risk. Specifying these distributions may require an internalized and subjective model of the bargaining process because no such general model exists; where there is a well developed and applicable game-theoretic model, of course, it should be used. Of course, the “better” the empirical and theoretical basis for the assessment, the “better” the subjective distributions of outcomes.

From Structure to Outcome: Favorable Changes in the Perceived Zone of Possible Agreement

This is the point at which game-theoretic and negotiation-analytic approaches tend to diverge. A game theorist would typically tighten the above specification of the situation, presume common knowledge of the situation and strategic rationality of the parties, and, by invoking a rigorous concept of equilibrium (such as a Nash equilibrium or Bayesian Nash equilibrium), and investigate the predicted


In other decisions, approximately 50% of the observations are fully included in the primary data analysis. This proportion is quite variable, ranging from about 20% to over 90% of the observations. The variability is due to the nature of the data and the specific analysis methods used. For example, in some cases, the data may be incomplete or may require additional processing before analysis. In other cases, the variability may be due to the sampling method used to collect the data. The variability in the proportion of data included in the primary analysis highlights the importance of carefully considering the methods used to collect and analyze data. It is crucial to ensure that the analysis is as complete and accurate as possible, while also recognizing the limitations of the data and the findings.
Social Behavior in Regulation

Complexity, ambiguity, and conflict.

The inability to respond to a variety of potentially meaningful phenomena in a dynamic, interactive, and rapidly changing world. The need for quick and effective responses to unexpected events. The requirement for coordination and cooperation among individuals and organizations. The need for decision-making and problem-solving under uncertainty. The importance of communication and negotiation in resolving conflicts and reaching agreements.

Individual Negotiation Behavior

Negotiation is a process of communication and interaction between two or more parties with differing interests and goals. It involves the exchange of information, the expression of preferences, the negotiation of terms, and the development of agreement. Negotiations can be conducted through verbal and nonverbal communication, and can be facilitated by formal or informal processes.

Managing the Tension between Creating and Claiming Value

The Negotiation Process

Creating value involves generating new ideas, discovering opportunities, and leveraging resources to create something of value. Claiming value involves protecting and exploiting the value created through negotiations and other means.

The Need for Negotiation

Negotiation is essential in many aspects of life, including business, politics, and personal relationships. It is a fundamental aspect of human interaction, and is necessary for resolving conflicts and achieving mutual satisfaction.

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different genders, races, or cultures. Group dynamics can involve pressures for conformity, a hardening of approach by a representative before an “audience” of constituents, bandwagon effects, and the individual taking cues from the behavior of others to decide on appropriate actions in the negotiation.

This experimentally-based work is developing an empirical grounding for the behavioral basis of much a priori theorizing in economics and game theory. For negotiation analysis, these experimental approaches to actual behavior help to remedy a key defect of prior game theoretic work. Although for the most part not prescriptively framed, this body of work also provides rigorous evidence and theory on how people in fact are likely to behave – to inform assessments of outcome distributions and against which to optimize as appropriate.

CHANGING THE GAME. Much existing theory proceeds from the assumption of a well-specified and fixed situation within which negotiation actions are taken. Yet purposive action on behalf of the parties can change the very structure of the situation and, therefore, the outcomes. Often actions can be understood as a tacit or explicit negotiation over what the game itself will be. This means that a perfectly legitimate and potentially valuable form of analysis may involve a search for ways to change the perceived game – even though the menu of possibilities may not be common knowledge.

Issues can be linked or separated from the negotiation to create joint gains or enhance leverage. Parties may be “added” to a negotiation to improve one side’s no-agreement alternatives as well as to generate joint gains or to extract value from others. Though perhaps less commonly, parties can also be “subtracted” – meaning separated, ejected, or excluded – from larger potential coalitions. For example, the Soviets were excluded from an active Middle East negotiating role in the process leading up to the Camp David Accords that involved only Israel, Egypt, and the United States. The process of choosing, then approaching and persuading, others to go along may best be studied without the common assumption that the game is fully specified at the outset of analysis; Sebenius (1996) dissects and offers many examples of the process sequencing to build or break coalitions. Walton and McKersie (1965) focus on how negotiators seek to change perceptions of the game by what they called “attitudinal restructuring.” In the context of competitive strategy and thinking, Brandenburger and Nalebuff (1996) develop a powerful, analogous logic for “changing the game” that provides an overall approach and many ingenious examples of this phenomenon.

Refer back to Figure 23.1: an improvement in Party One’s no-agreement alternative shifts the vertical axis to the right, leaving the bargaining set generally more favorable to that side. If Party Two’s no-agreement alternative worsens, the horizontal axis shifts down, worsening its prospects. A successful commitment to a bargaining position cuts off an undesired part of the zone of possible agreement for the party who makes it. A new, mutually beneficial option (e.g., suggestion of

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13 Sebenius (1983, 1984) began to investigate this phenomenon, dubbing it “negotiation arithmetic,” or “adding” and “subtracting” issues and parties.

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out within that setting. For example, Wheeler and his colleagues (Wheeler 1994; 
Wheeler, Gilbert and Field 1997) have evaluated the design characteristics chosen 
to stimulate productive negotiations in Massachusetts over hazardous waste treat-
ment facilities as well as a New Jersey system designed to foster socially desirable 
intermunicipal trading of affordable housing obligations.

In short, conscious actions to change the scope and sequence of a negotiation 
can be used to create and claim value in several distinct ways from complement-
ing the existing players and issues, to reducing transactions costs, removing deal-
brakers, invoking dispute resolution mechanisms, as well as broader concepts of 
negotiation design and systems. Using the term “setup” to refer to a negotiation’s 
parties, interests, no-deal options, sequence, and basic process choices, Lax and 
Sebenius (2006) offer an extensive prescriptive framework, illustrated by numer-
ous examples from practice, for ensuring the most promising possible situation 
for achieving a desired agreement.

The Approach as a Whole

Figure 23.1 can now be seen to visually summarize the extended negotiation ana-
lytic “model” of possible joint action. Parties determine the axes; interests pro-
vide the raw material and the measure; alternatives to agreement imply the limits; 
agreements hold out the potential; within this configuration, the process consists 
of creating and claiming value, which gives rise to characteristic dynamics; yet, the 
elements of the interaction may themselves evolve or be intentionally changed. 
In this sense, the elements of the approach form a logically consistent, complete 
whole oriented around perceptions of the zone of possible agreement.

In the skeptical view of Harsanyi (1982), this negotiation analytic approach 
might boil down to “the uninformative statement that every player should maxi-
mize expected utility in terms of his subjective probabilities without giving him the 
slightest hint of how to choose these subjective probabilities in a rational manner.” 
Yet, as described above, distinct classes of factors have been isolated that appear 
to improve subjective distributions of negotiated outcomes. Understanding the 
dynamics of creating and claiming value can improve prescriptive confidence. 
Psychological considerations can help as can cultural observations, organiza-
tional constraints and patterns, historical similarity, knowledge of systematic decision-
making biases, and contextual features. Less than full-blown game-theoretic rea-
soning can offer insight into strategic dynamics as can blends of psychological 
and game-theoretic analysis. When one relaxes the assumptions of strict, mutu-
ally expected, strategic sophistication in a fixed game, Raiffa’s (1982) conclusion 
is appealing: that some “analysis – mostly simple analysis – can help.”

Conclusions and Further Directions

Naturally, there are many other related topics ranging from game-theoretic con-
cepts of fairness for purposes of mediation and arbitration to various voting sche-
mes. More elaborate structures are under study. For example, where negotiation 
takes place through agents, whether lawyers or diplomats, or where a result must 
survive legislative ratification, the underlying structure of a “two-level game” is 
present.14 Negotiations also take place in more complex multilevel and coalitional 
structures.15 Perhaps most important, scientific study will continue to strengthen 
the empirical bases for improving assessments of outcome distributions.

Although game theorists and behavioral scientists will continue to make valu-
able progress in understanding negotiation from the standpoint of scientific expla-
nation and prediction, a complementary prescriptive approach has been develop-
ing that conditions its prescriptions on the likely behavior of the other side, fully 
“rational” or not, and regardless of whether the “game” is fixed and entirely com-
mon knowledge. In describing the logic of negotiation analysis and the concepts 
and tools that can facilitate it, this discussion has not stressed the many useful ideas 
that arise from focusing on interpersonal and cultural styles, on atmosphere and 
logistics, on psychoanalytic motivation, on communication, or on other aspects.
Yet because the logic is general, it can profitably accommodate insights from other 
approaches as well as from experience. The basic elements of this logic – parties’ 
perceptions of interests, alternatives, agreements, the processes of creating and 
claiming value, and changing the game or “setup” – become the essential filters 
through which other factors must be interpreted for a meaningful assessment of 
the zone of possible agreement and its implications for the outcome.

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14 These have been studied in a number of settings, notably by Putnam (1988).


