Dealcrafting: The Substance of Three-Dimensional Negotiations

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Much of our understanding of negotiation focuses on the process at the table involving a complicated set of interpersonal dynamics and strategies, or a "one-dimensional" approach to the subject. Conceptually independent of one-dimensional process factors is a second dimension of negotiation, "dealcrafting," which focuses on substance in the effort to create joint value. A third dimension of negotiation, involving entrepreneurial moves "away from the table," includes the first two dimensions but offers ways in which negotiators can change the game advantageously. Within this overall 3-D perspective, the second dimension (dealcrafting) calls for a relentless focus on creating maximum value and an equally relentless focus on differences as means to create joint gains. Following their description of the overall 3-D approach, the authors use numerous case examples to illustrate how principles of dealcrafting work in practice.

Most people think of negotiation as an interpersonal process at the table, though the interplay could take place by phone, fax, e-mail or other means. Wherever it actually occurs, negotiation requires people to focus on a variety of important dynamics: communication, trust-building, cross-cultural perceptions, personalities, bargaining styles, and tactics such as crafting offers and

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counter-offers. Thus, a preoccupation with process underlies most analysis of negotiation among academics, whether economists, game theorists, or psychologists.

We use the shorthand “one-dimensional” to describe this focus on process, or the interpersonal behavior and tactics at the table dealing with a fixed game of parties, issues, no-deal options, and so forth. Indispensable as these process elements are, we argue that this common view can be partial and limiting. A primarily one-dimensional approach can weaken one’s ability to analyze negotiating situations fully and to maximize one’s potential outcomes.

“Two-dimensional negotiators” understand that an exclusively interpersonal process view can miss the underlying purpose of negotiation, which is substantive and should be driven by its value-creating potential. By joint action, the parties to a successful negotiation each seek to advance the full set of their interests relative to their no-agreement alternatives; thus the “pie” can be expanded or value created through agreement. Beyond process factors, therefore, two-dimensional negotiators tenaciously focus on the potential value latent in the situation and the “dealcrafting” principles for structuring agreements to realize that potential value for the parties. The concept of value in negotiation depends on the full set of the parties’ interests, and these interests may be noneconomic as well as economic, intangible as well as tangible, altruistic as well as selfish, and group as well as individual. Since most important negotiations occur in the context of continuing relationships and since effective negotiators often look beyond single transactions, the key question thus is: How can parties create value on a sustainable basis? (Of course, that value must also be distributed or “claimed,” often in tandem with its creation, but that is a subject for elsewhere.)

For effective two-dimensional (2-D for short) negotiators, deep understanding of substance and value should drive interpersonal process, not the reverse. In this view, process is the servant of substance, not its master. The goal of 2-D negotiators is to look relentlessly beyond interpersonal process to the underlying substance of the problem, seeking to figure out where potential value exists and how to embody it in sustainable agreements.

Our main purpose in this essay is to lay out the basic principles, independent of interpersonal process or tactics, for crafting value-creating deals in negotiation. What we refer to as “dealcrafting” involves the engineering of value in agreements; it is based in part on venerable economic theories of gains from trade, comparative advantage, and the design of optimal contracts.

Consider, for example, a couple of deadlocked one-dimensional negotiators: an entrepreneur who is genuinely optimistic about the future prospects of her fast-growing company faces a potential buyer who truly likes the company but who is much more skeptical about the company’s future cash flow. While these parties have negotiated earnestly and in good faith, no unconditional price is acceptable to both sides. Informal meals together, joint trips to prime hockey games, earnest actions to build the relationship and trust, as well as actively listening for each side’s real interests have been helpful but insufficient to bridge the fundamental gap between the high valuation of the seller and the sharply lower maximum of the prospective buyer. Unhappily, the gap has stubbornly resisted an array of tactical choices, such as starting high, agreeing to locking themselves in a room until an acceptable agreement emerges, and even the seller’s feigning the existence of other interested buyers and an urgent deadline for the buyer to commit. At the end of the day, despite flip-chart and brainstorming virtuosity in the context of deep psychological insight, the interpersonal process at the table has failed: the two sides may simply disagree on the likely future of the company and, hence, a mutually acceptable unconditional price.

Of course, there is a promising dealcrafting solution that remained undiscovered: The two parties could bridge the value gap by structuring an agreement in which the buyer pays a fixed amount now, less than its current valuation of the company, and a contingent amount later based upon the performance of the company over a future period. Properly structured with adequate incentives and monitoring mechanisms in place, such a contingent payment, or earnout, will appear valuable to the optimistic seller but not particularly costly to the less optimistic buyer. Both sides may now find the deal attractive relative to walking away in the face of a process-resistant value gap.

While neither effective interpersonal behavior, process innovation, nor tactical skill could produce an acceptable agreement in this stylized example, knowledge of a basic principle of dealcrafting could have enabled the parties to create mutual expected benefits. In this case, given genuinely divergent beliefs about the future, the parties should explore a contingent contractual structure that gives to each side what it wants if the state of the world it believes to be most likely does, in fact, occur. The gain comes from substantive knowledge and is independent of process, though effective process may be necessary to discover the underlying differences of belief. Of course, this sort of agreement raises a number of complex design issues that we shall discuss later.

In many cases, the value that can be realized in interactions should be obvious. Two parties want the same thing and agree upon it. Or they come together to combine complementary capabilities: the technology manufacturer looks for someone who can sell the technology in new markets. Or the gains from potential economies of scale are captured by an acquisition and shared via the purchase price. Yet considerable experimental evidence, along with our own experience, suggests that significant and valuable joint gains often go unrealized. There are many psychological and process barriers that result in potential value failing to be created.

A unifying theory of the bases of value creation (or what we call dealcrafting) may be a useful antidote. By stressing the principles underlying value creation, we do not mean to minimize the potentially critical role of
good process in crafting valuable agreements (see, for example, Susskind and Cruikshank 1987 or Ury 1991). And process itself can become a substantive interest of the parties (see Kim and Mauborgne 1997). Our premise in this introductory article, however, is that knowing the substantive underpinnings of what you are looking for while you work to create value can only enhance the effectiveness of various process and interpersonal suggestions.

The standard two-dimensional negotiation — balancing substance and process issues, no matter how cleverly — may not always be enough. We propose a third dimension of negotiation, negotiating away from the table, to change the perceived game itself. The great insight of 3-D negotiators is that, once the parties are engaged at the bargaining table in a face-to-face process of creating and claiming value over a given agenda, much of the die is cast. If single dimensional players seek to resolve the issues under negotiation via the interpersonal process at the table, and 2-D negotiators think beyond process to the substance of potential value from cooperation, 3-D negotiators take entrepreneurial actions away from the table to set up and often reset the “table” to yield the best possible outcome. If 1-D and 2-D negotiators focus on the tactics of playing the game well at the table, 3-D negotiators focus on the strategy of designing the game and changing it advantageously, often away from the table. While the focus of this essay is on dealcrafting, the second dimension of negotiation, we shall nonetheless, in the following pages, offer examples in which the inclusion or exclusion of parties or the changing of the issues under discussion enables the parties to create additional value by changing the game that is being played.

**Basic Dealcrafting Orientation 1: A Relentless Focus of Creating Maximum Value**

Consider the case of a proposed joint venture between Lakeside Corp. and Tonicron Corp. to produce an improved custom chipset that could be sold to two classes of industrial customers. Either firm is capable of producing the chipset separately; the necessary capital cost would be $20 million. The different costs to each firm for making various contributions to the joint venture (debt, semi-finished chips, manufacturing) are summarized in Table One. As the last line of the table suggests, Lakeside is already selling an earlier version of this chipset to one class of industrial customers, while Tonicron is not.

How should this joint venture be structured? Which party should contribute what or carry out which activities? Several elements are obvious: The proposed joint venture would have the lowest net cost if Lakeside provides the semi-finished chips and Tonicron incurs the debt for capital expenditure and manufactures the chipset at its lower variable cost. If each firm makes these contributions, overall cost and revenue sharing can be adjusted so there is a net benefit to both parties relative to other possible structures.

However (see the last line of Table One), notice that Lakeside wants to restrict the joint venture from selling to its existing class of customers to avoid cannibalizing its current business. Tonicron wants complete marketing freedom for the joint venture to sell to all potential customers. This could play out as a classic positional battle in which Lakeside’s preferred position in the negotiations was for full restrictions on new sales while Tonicron’s position permitted complete marketing freedom. Clearly these individually preferred positions are incompatible.

| Table One |
| Costs and Customers Relevant to Lakeside-Tonicron Joint Venture |
| Lakeside Corp. | Tonicron Corp. |
| Cost of new debt | 9% | 7% |
| Cost of supplying semi-finished chips | $40/unit | $45/unit |
| Variable production costs (% of sales) | 30% | 22% |
| Existing customers | Yes | No |

The ordinary psychology of this kind of negotiation involves powerful and persistent images of a mythical fixed pie, meaning that one side’s gain on this issue necessarily involves the other side’s loss. Indeed Leigh Thompson (1998) reviews a large series of experiments which show that illustrate the incompatibility bias — each side sees its interests fundamentally in conflict with the others — is so pervasive that large numbers of subjects in negotiating simulations failed to find resolutions in which their preferences were fully compatible. In short, it would be quite normal for Lakeside and Tonicron to battle this issue out with the result being a winner, a loser, or a split-the-difference compromise. Suppose such a process took place — that Lakeside “won” outright, and that the parties agreed to restrict joint venture sales for, say, two years. Could both sides do better than this outcome? Of course Lakeside is on both sides of this negotiation, but has a clear individual preference for the joint venture to observe sales restrictions.

Let us push this analysis a bit. Suppose the two sides worked together to produce the data shown in Table Two, which illustrates the effect on the net sales both of Lakeside and the joint venture as a function of the length of time that the Lakeside-Tonicron venture would be restricted from selling to Lakeside’s existing customers.

Agreement on a two-year restriction would result in net sales to Lakeside of $24 million and $66 million to the Lakeside-Tonicron venture (however, the revenues from the latter were split between Lakeside and Tonicron). Could the two sides jointly do better than this? Suppose they reduced the restrictions to eighteen months; then Lakeside would get $22 million while the Lakeside-Tonicron project would net $74 million. Even
though Lakeside would lose $2 million individually by this move relative to a two-year restriction, the gain to the joint venture — an $8 million increase from $66 to $74 million — would more than offset Lakeside’s loss from relaxing the restriction. Indeed, by compensating Lakeside by an amount between $2 million and $8 million, both the joint venture and Lakeside would be better off with the eighteen-month restriction rather than a two-year ban. Similarly, by moving from eighteen months to a one-year restriction, both sides could again be made better off since the joint venture’s gain ($9 million) could more than compensate Lakeside’s loss ($4 million) from relaxing the restriction further. And moving to a six-month restriction could improve both sides yet more as the joint venture’s incremental gain ($15 million) could more than compensate Lakeside’s added loss ($4 million), leaving both better off. However, going all the way to remove the restriction entirely would cost Lakeside $14 million while benefiting the Lakeside-Tonicron project only by $2 million; there is no way that this extra move could result in a joint gain.

Table Two
Timing and Restraints on Lakeside-Tonicron Sales

<table>
<thead>
<tr>
<th>Length of restrictions on joint venture sales to Lakeside customers (years)</th>
<th>Net present value of Lakeside sales to Lakeside customers ($mm)</th>
<th>Net present value of total potential joint venture sales ($mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>$0</td>
<td>$100</td>
</tr>
<tr>
<td>Six months</td>
<td>$14</td>
<td>$98</td>
</tr>
<tr>
<td>One year</td>
<td>$18</td>
<td>$83</td>
</tr>
<tr>
<td>Eighteen months</td>
<td>$22</td>
<td>$74</td>
</tr>
<tr>
<td>Two years</td>
<td>$24</td>
<td>$66</td>
</tr>
</tbody>
</table>

This reasoning makes clear that, with respect to the market restriction issue, a six-month restriction is, with appropriate allocation to Lakeside and Tonicron, better for both sides than any other outcome. Another way to see this is to look at the total benefit (to Lakeside individually plus the joint venture) for any option. From the data shown in Table Two, it is clear that a six-month restriction gives higher total projected net sales ($112 million) than unrestricted sales or any restrictions longer than six months. (The total benefits of moving from no restrictions to two years of them in six-month increments, in millions of dollars, are 100, 112, 101, 96, and 90.) As such, allocating the added benefit created by a six-month restriction can provide more benefits jointly and individually than other restrictions. In short, where value can be transferred in this manner, focusing on how to increase the total net pie is the right guide to creating value.

Recall that the preferred negotiating positions of each side individually were completely incompatible: Lakeside wanted two years of restrictions while Tonicron, arguing on behalf of the joint venture, demanded total sales freedom. Viewed individually, and through the prism of the mythical fixed pie, these opposing positions were indeed the most valuable to each side: Lakeside wanted two years while Tonicron wanted no restrictions. But the six-month optimal outcome was not a compromise that each side could live with; it actually created value both jointly and individually relative to the other possible outcomes. (Note that a seemingly “fair” compromise — restrictions for a year — between the two individually preferred positions, of no restrictions versus two years of them, would leave $11 million on the table, as value uncreated.)

To find the most value-creating outcome requires a view toward maximizing the whole first, rather than taking the positions most preferred by individual side. Then the added total value can be used to compensate any individual “losers,” such that all parties are strictly better off. This is not an argument about sacrificing individual interest for the good of the whole. Individual positional bargaining generally suboptimizes relative to a focus on increasing the total, both on individual and collective bases.

Consider the potential value of such an approach in dealing with the siting of noxious facilities (such as waste treatment plants), which are often blocked by the so-called “NIMBY” problem — all agree that the facility is needed but “not in my backyard.” The value to the region as a whole can be enormous. Particular groups who are able to block its siting near them clearly feel damaged by having such a facility nearby. Yet, the cost of the damage to them can easily be a small fraction of the aggregate value to the people of the region of having the facility available. Devising a mechanism that adequately compensates the abutters of the facility can unlock great value for the region as a whole (see Raiffa 1985).

In general, potential value-creating agreements between organizations are often blocked because individuals or groups within an organization believe that they will be hurt individually by the agreement. For example, pharmaceutical giants SmithKline Beecham and Glaxo announced plans for a merger in 1998, including the executive lineup of the new entity. Immediately, the combined market capitalization of the two companies rose by about $20 billion. Incredibly for the shareholders, this agreement was scuttled with renewed disputing between the two CEOs over who would hold which senior management roles. When the announced merger was called off, the combined market capitalization dropped back to previous levels.

One can imagine many approaches to better handling of such “social issues.” Somewhat tongue-in-cheek, suppose the board were to offer whichever executive who agrees to leave a sum that could be ratcheted up...
Basic Deal-Crafting Orientation 2: A Relentless Focus on Differences as the Raw Material for Joint Gains

Given conventional wisdom that one negotiates to overcome differences and that differences divide us, typical negotiation advice exhorts negotiators to find "win-win" agreements by searching for common ground. While common ground — in the sense of accurate communication and trust along with the possibility that both sides want an identical outcome — is generally a good thing, we take the view that the most valuable sources of value in agreement are typically created because of differences among the parties. These include differences in relative cost or revenue structure; in priority or valuation; in forecasts or beliefs about the future; in attitudes toward risk; in attitudes towards time; in capabilities; in tax or accounting treatment; or in myriad other characteristics of the negotiators.

In many instances, the sources of value from negotiated agreements are obvious: appropriately motivating the parties, reaping economies of scale, cutting costs, or simply increasing the efficiency of production. Yet, based on our experience over the years, we consistently observe that important classes of differences exist, and that crafting a characteristic form of agreement can exploit each class of difference to mutual advantage. Our experience, backed up by considerable experimental study (see, e.g., Thompson 1998 or Bazerman and Neale 1992), is that negotiators frequently miss these sources of potential value. We believe that the principles can be explicit and elaborated in the following sections can systematically guide negotiators' attention to unrealized value in many negotiations.

Differences in Cost/Revenue Structure

Return for a moment to the Lakeside-Tonicron joint venture and reexamine the source of joint gains. The simplest gains came from disaggregating the various joint venture tasks and allocating them to the low-cost party (with appropriate compensation in terms of ownership or profit sharing). At the most basic level, value was found here by focusing on cost/revenue differences between the parties. But push further to the potentially contentious sales restriction issue; when focused on its individual outcomes, Lakeside wanted two years of total sales restrictions while Tonicron wanted complete marketing freedom. As we showed, however, when sales restrictions were progressively relaxed from two years on down to six months, the gain to the joint Lakeside-Tonicron venture at each stage was larger than the loss to Lakeside. It is this difference that permitted the pie to expand and joint gains to be realized. If the cost of relaxing the restrictions to Lakeside were equal at each stage to the gain for the joint venture, no mutual benefit could be found; the negotiation over restrictions would be strictly zero-sum or a matter of pure value-claiming. But difference in this element, the cost/revenue structure, underlies the joint gain potential here (just as differences above in costs of borrowing, manufacturing, or furnishing semifinished chips pointed the way to the optimal structure for the joint venture).

Principle: Craft deals so that differences in cost/revenue structure combine to create the largest net economic pie. This permits each party to get more than would be possible otherwise.

Differences in Capability

Closely related to net cost and revenue structure are complementary capabilities. Obviously, a company with strong production capabilities can combine forces with another firm that has great marketing and distribution channels to create value that neither could achieve otherwise. Similarly, a company with strong basic research and development activities may profitably combine forces with another firm that has strong applications engineering.

Principle: Craft deals so that complementary capabilities combine to create the largest net economic pie. With appropriate compensation, this permits each party to gain more than would be possible otherwise.

Differences in Interest and Priority

Parties with different interests and priorities can be the ingredients of trades that create value for both parties. This venerable principle underlying pure exchange-based gains from trade can be seen in very simple cases. Suppose Jerrold has three apples, which he intensely dislikes, while craving pears. Geraldine, by contrast, loathes pears, of which she has three, and dreams of eating apples. Precisely because of this difference of interest or priority, the apple-pear swap creates value for both, relative to no-trade.

In a more elaborate example, an American buyout group sought to purchase a money-losing luxury consumer brand company with a highly prestigious brand and a loyal following among elite consumers. The potential seller was a healthy European family whose net worth would be
enhanced by the sale but whose lives would likely not be materially affected. After considerable due diligence, which detailed the extent of the underlying business problems, the maximum price the buyout group was willing to pay was well below the minimum on which the family was firmly insisting. The gap was such that the buyout group had virtually concluded that no deal was likely and pursuing other opportunities was a better option.

Yet in reading carefully between the lines of the discussions, it became clear that the family wanted to be able to tell their equally wealthy friends that they had “gotten the best” of the American group: a high price and an option to buy a controlling stake back if the Americans could not improve the performance of the firm. Privately, the business-savvy family members also realized that the business itself was a mess and could not rationally fetch their asking price. Yet there was simply no way they would agree to a sale on the buyout group’s terms; as word got out, it would be too humiliating.

Ultimately, however, the deal was done at the lower price and the family received options to buy back a major part of the firm — but only after an initial public offering of the stock, at which point the family would not actually be able to regain control. This satisfied the buyout group’s priority interest in the economic and control aspects of the deal. What made the deal happen, however, was the fact that the terms were openly “leaked” by various credible third parties as having taken place at a higher price. Moreover, these third parties described the family’s options as if they could regain control. When the parties were just talking about price and control, there was an impasse between the conflicting positions of the two sides. Pushing behind these starkly incompatible positions to discover underlying priority differences, however, suggested that a deal could be possible. Then, unbundling appearance and substance — that is, widening the set of issues under negotiation to match the underlying different interests — permitted a trade to go through that was better for both parties than no deal.

**Principle:** Where the parties assign different priorities to different underlying interests, seek trades that give to each party what is relatively most important to it. Look behind apparently incompatible positions on a set of issues that bundle together differently valued interests; seek to unbundle these differently valued interests by way of a new set of issues that enables a mutually beneficial trade.

**Implication: Agenda Management**

When negotiating large contracts, it is common to have one party’s attorney make a list of unresolved issues and have the group work down the list one issue at a time, attempting to get closure on each, before moving on to the next issue. While this method of agenda setting can help the parties to organize the remaining questions, it is almost guaranteed to leave value on the table for all parties. If the parties have opposing interests on each issue, they will typically reach mid-range settlements on each of the issues. Yet this fails to heed the principle laid out earlier, in which the party who places greatest weight on each issue should receive more favorable treatment on that issue in return for “compensation,” such as giving the other(s) favorable treatment on the issues most important to them (providing the issues are of roughly similar importance). As such, the agreement reached by finalizing one issue at a time is likely to be substantially worse for all parties than that reached by a process that is geared to look for differences in interest and thereby to facilitate trades. Yet issue-by-issue agenda management is often the default procedure in many complex negotiations.

**Examples: 3-D Moves — Adding Parties to Exploit Differences of Interest**

The principle of seeking differences of interest or relative priority to craft mutually beneficial trades is well-known in its simple forms, but it is in its elaboration that it can provide dealmakers with surprising power. Consider the possibility of fashioning value-creating trades by adding parties with different interests. For example, in 1997, WorldCom (now MCI WorldCom) acquired CompuServe for $1.2 billion, largely to obtain CompuServe’s internet infrastructure, data transmission and key corporate customers. However, CompuServe also had a large internet content business and 2.6 million subscribers. WorldCom enhanced the value of the transaction by the addition of AOL, which wanted CompuServe’s subscribers to augment its then 9 million subscribers. Obviously, AOL valued these subscribers differently (far more) than did WorldCom. AOL also received: (1) CompuServe’s 850,000 European subscribers (three times AOL’s then subscriber base in Europe), which AOL placed in a joint venture with Bertelsmann in return for $75 million; (2) $175 million from WorldCom; and (3) immediate use of 100,000 modems from WorldCom to relieve the congestion that, at that point, was sharply hurting AOL’s performance and reputation. In return, WorldCom received AOL’s internet backbone network and data services to augment those it acquired in its purchases of UUnet and MFS along with a five-year major service contract to run much of AOL’s network. By bringing in AOL as part of the CompuServe deal, WorldCom was able to bring in a player with complementary differences that facilitated several value-creating trades as part of this transaction.

In the diplomatic realm, potentially valuable bilateral deals can be impossible without a third party with complementary differences of interest. Janice Gross Stein (1985: 334) describes Henry Kissinger’s role in Middle East negotiations:

> ...the circular structure of payment was essential to promoting agreement among the parties: Egypt improved the image of the United States in the Arab world, especially among the oil-producing states; the United States gave Israel large amounts of military and financial aid; and Israel supplied Egypt with territory. Indeed
a bilateral exchange between Egypt and Israel would not have succeeded since each did not want what the other could supply.

Overall, then, differences in relative priority, importance, or valuation can lead to mutually beneficial trades. Sometimes the differently valued interests are bundled; in which case creative unbundling can unlock value. And sometimes, moves away from the table to bring in a party that differentially values some of the elements of the deal can create value.

Differences in Forecast or Belief about the Future

Mark Twain once quipped that it is “differences of opinion that make horse races.” Along these lines, differences in beliefs about how future events will unfold — e.g., what a key price will be, whether a technology will work, whether a permit will be granted or court suit won, etc. — can be the basis of mutually beneficial contingent agreements.

Example: Cogeneration Plant. In the early 1980s, an engineering firm was seeking to build plants that burned solid waste to generate electricity and be paid for disposing of the waste and selling the electricity. In its first deal, the firm found a city willing to supply waste and which would be able to use steam generated by such a plant in municipal facilities to augment electricity it received from oil-fired plants. The firm and the city had reached agreement on a fixed (tipping) fee for disposing of the municipal waste but could not reach agreement on a fixed price for the steam that the city would purchase. Discussion revealed that the impasse resulted from different forecasts: the city planning department expected an oil glut and hence low electricity prices in the next few years while the firm expected oil prices to rise.

The parties were able to get beyond impasse by structuring an agreement in which the steam price varied but was tied to oil prices. Note that each party placed high value on this agreement precisely because of differing beliefs: the city expected to pay a low price for steam because it believed oil would be cheap while the engineering firm expected to receive a much higher price because it believed oil would be expensive. Although each side expected incompatible outcomes, each was willing to take the risk that it would be wrong and permit an agreement to go forward that, in an ex ante sense, created value for both sides relative to no deal.11

The contingent agreement should be structured, however, to be sustainable once the underlying uncertainty is resolved. It would be self-defeating, for example, (1) to permit the price of steam to drop below a level that provided for debt service and plant maintenance; or (2) to rise to levels that would be politically unsustainable. Sustainability could easily be enhanced, for example, by setting floor and ceiling prices for the steam or partially indexing its price to the oil price. (A 3-D negotiation move might have been contemplated for the two parties to hedge future oil prices by using sufficiently long-dated futures or options written by third parties or markets with different effective future expectations and risk attitudes.)

Example: Earnouts. As the introductory example in this article described, when an entrepreneur seeks to sell her company to a much larger corporation, there is often a gap between the price the buyer will maximally pay and the seller will minimally accept. The entrepreneur often sees much brighter future prospects for the company but needs capital and organizational scale to reach the perceived potential, whereas the prospective buyer has a positive but typically more skeptical view.

The two sides may be able to bridge this characteristic value gap by structuring a contingent agreement called an earnout in which the seller pays a fixed amount today and then subsequent amounts that are contingent upon the future performance of the firm. Thus, the more optimistic entrepreneur believes the value of the payments she receives through the earnout will be higher than the buyer expects; both are happy to do the deal given their forecasts. Without the earnout, an otherwise mutually beneficial deal may well languish. Earnouts, sometimes of very large magnitude relative to the nominal deal value, are quite common.12

In addition to enabling parties to trade based on differences in belief, contingent deals can create incentives for particular behavior. For example, if the entrepreneur running the company after it has been purchased will receive large payments based on profits over the next three years, she has a strong incentive to maximize profits. It is important, therefore, to analyze carefully whether the contingent agreement creates perverse incentives. To return to the earnout example, the entrepreneur may well seek to optimize against whatever performance measure is used to compute the earnout while the corporation may have an incentive to depress this measure. For example, if the performance measure is profit-after-tax over the first three years after the sale, the entrepreneur may have an incentive to neglect investments that would only pay off after three years. Thus, one needs to think through the incentives created by agreements when the variable upon which the outcome is contingent can be influenced by the parties.

Contingent agreements can also act as a “truth serum” for parties who are prone to misstate their beliefs. To return to the example of an entrepreneur negotiating the sale of her company for a fixed price, what happens if she tells prospective buyers that she is highly confident that her few large customers will stay with the company over the next few years, even when she has grounds for some uncertainty? An astute buyer might structure an agreement whose value depends on whether the customers stay, in other words asking the seller to absorb the risk (which she asserts is negligible) that these customers leave. Had the seller contemplated a payment based on whether these customers stay, she would have had an incentive to be more truthful about her forecast. Indeed, to the extent that the discussion switches from a fixed purchase price to a contingent arrangement, the entrepreneur may be forced to backpedal from her overstated beliefs.
Principle: When forecasts of future events differ, contingent agreements may create expected value for the parties. Typically, such agreements give to each side the outcome it values most in the state of the world it forecasts as most likely. Such agreements need careful structuring both (1) to induce desirable behavior and avoid perverse incentives; and (2) to be sustainable once the uncertain quantity underlying the contingent agreement has been resolved.14

Contingent Agreements Based on Forecast Differences: A 3-D Extension

This principle — dovetailing expectational differences by way of contingent contracts — can sometimes be extended by bringing in third parties with different beliefs. In the mid-1990s, Ahmanson, a major California thrift institution, was negotiating to acquire a smaller competitor, Coast Financial Savings.14 The acquisition would have made Ahmanson the second largest thrift in the United States, raising its share of the California market from 7.5 to 9.1 percent. The value of Coast’s banking assets, given likely cost savings and synergies, suggested a purchase price of about $900 million.

Beyond this value, Coast had acquired weaker competitors consistent with agreements with the relevant regulatory bodies during the U.S. savings and loan crisis of the 1980s. These agreements also involved promises about the regulatory and accounting treatment that Coast would receive with regard to the acquired assets. Later, the regulators dramatically shortened the write-off period for these assets, precipitating disastrous financial results for Coast. In a legal action similar to that of a number of other institutions, Coast sued the federal government for $1.1 billion, alleging an arbitrary shortening of the write-off period. Coast had received favorable preliminary judgments in lower courts and some observers were confident that it would win a sizeable award, but were uncertain as to the amount and timing.

Given the size of the potential settlement relative to the value of the banking assets themselves, the negotiation dynamic involved Coast arguing for a higher price based on its argument that the payout would be large and soon; predictably, Ahmanson argued for a much lower price, based on its assertion that the likely payout would be smaller and farther into the future.

Instead of trying to negotiate whose projection was more accurate, or even trying to structure a contingent agreement based on the outcome of the litigation, the parties overcame the potential impasse by a more interesting device: structuring an acquisition in which Coast shareholders received $900 million in Ahmanson stock along with “litigation participation certificates.” These certificates would pay in cash all proceeds ultimately received from the lawsuit, net of expenses. This contingent agreement enabled each side to value the uncertain outcome of the lawsuit using its own forecasts. However, these certificates were created to trade publicly, which allowed additional value creation. Coast shareholders who were skeptical of Coast’s chance in its suit could sell the certificates at a price in excess of their valuation to other investors who valued them more highly, implicitly bringing in investors who had the most optimistic forecasts about the outcome of the suit. Relative to a straightforward Coast-Ahmanson deal on price, spinning out the litigation participation certificates and making them tradable created value.

Differences in Attitudes Toward Risk

The next important extensions of the differences principle involve differences in the parties’ attitudes toward risk, specifically differences in the ability to bear, influence, or assess particular risks.

Example: A Restaurant in Arbitration. A restaurant owner was selling his highly successful restaurant to his head chef. The restaurant had a dispute with the contractor who had renovated the restaurant and had withheld $1,000,000 that the contractor felt she was owed. The dispute was in arbitration and likely to be completed soon. Both the owner and the chef agreed that there was a 50 percent chance that the contractor would win and be owed $1,000,000 and a 50 percent chance that nothing would be owed. Thus there was no difference in forecasts for the future.

However, because the chef was putting the bulk of his assets into the purchase, he was quite averse to the risk of paying additional money to the contractor. The chef and restaurant owner had agreed on a purchase price of $1 million under the assumption that the chef would have to pay the contractor if the restaurant lost its suit. The chef valued the restaurant at $2 million if he did not have to bear the arbitration risk, but only $1.5 million if he had to bear the risk. In short, the chef’s risk aversion caused his valuation of the restaurant to drop by $700,000 if he bore the risk — even though the expected cost of the dispute with the chef was only $500,000.

By contrast, the restaurateur was already wealthy and would add a significant amount to his assets with a sale. He was much less averse to the arbitration risk and would not pay a premium to avoid it. Indeed, he valued the risk at its expected value and thus would pay up to $500,000 to avoid it. Given their different risk profiles, therefore, if the chef paid the owner $1.6 million for the restaurant with the current owner bearing the construction dispute risk, both sides would gain relative to the original offer. The chef would be paying $600,000 to avoid a risk that it was willing to pay up to $700,000 to avoid, for a net gain of $100,000. Similarly, the owner was receiving $600,000 to accept a risk that he valued at $500,000, for a gain of $100,000. Both sides would be better off if the risk were allocated to the less risk-averse party, who would see it as less costly than a more risk averse individual, and if he were compensated for bearing that risk in the price paid by the more risk-averse party. In other words, the total net cost of risk bearing to both parties would be reduced by this allocation.

Example: Specialty Steel Joint Venture. A marginally profitable, publicly traded, risk-averse steel company was discussing a joint venture with a highly profitable, privately held scrap metal company. The proposal on the
table was to jointly build and operate a modern specialty steel facility that would use scrap metal as an input that would be operated by the steel company. There was no disagreement about the forecasts of future expenses and profits. However, the proposed deal that both parties were considering called for an even split of the investment costs, operating costs, future funding obligations, and returns. Even though this seemed fair to both sides, this proposed deal structure led to an impasse. The publicly traded steel company was highly averse to the risk of any losses that could hurt its earnings, reduce its share price, and increase its cost of capital. Yet the scrap company was far more aggressive in terms of its risk attitudes. The two firms were able to reconcile their interests by structuring an agreement in which the scrap company accepted more than a pro rata share of the losses in return for a larger share of the profit. Both parties strongly preferred limiting the steel company’s downside in return for a higher share of the upside to the scrap company. In short, value was created by allocating more risk to the less risk-averse party and compensating it with a higher prospective return.

Example: Public-Private Real Estate Development. A city with a blighted downtown section was seeking a developer for a major mixed use project with office, retail, and residential components. The city was prepared to commit significant resources to assist in the development of the public-private project. Getting approval of the local Zoning Board, however, could be a significant hurdle. Although its members were appointed by the current and previous mayors, the board was intended to function as a quasi-independent body. Moreover, market risk loomed large: would the project generate the acceptable occupancy rates and rents in a reasonable timeframe? Significant costs would be borne in developing a proposal for the Zoning Board (e.g., architects, consultants, environmental analyses, traffic planning, land acquisition, lobbying, public relations, etc.). Much larger costs would be incurred in construction of the project.

In early negotiations, the city’s attorney proposed that the city and developer split all project development costs evenly, even if the proposal were turned down by the Zoning Board. The developer rejected this proposal. He believed that the mayor could have much greater de facto influence on the outcome of the Zoning Board review and thus that the city should bear the costs of failure there. Similarly, he believed that, as a developer, he would have much greater influence over the project’s success in the market and was prepared to take the bulk of the risk at that stage. Relative to equally sharing costs and risks, the agreement between the city and the developer largely followed his suggestion, in which the party who had the greatest influence over a particular risk bore the largest share of that risk; this deal structure also created appropriate incentives.

Example: Selling a Waste Disposal Plant. Pushing this line of analysis further, differences in the ability to assess risk can drive its appropriate allocation. In one instance, a small developer of a waste disposal facility was deadlocked in his negotiation to sell the environmental permits he had obtained for a site to a large firm in the waste management industry. A quirk of state law seemed to create a crucial ambiguity: while the permits would legally transfer to a buyer if a facility were actually built, there was some question as to whether the permits would legally transfer if no facility had yet been built. When the large corporate buyer’s attorney asked the seller for a representation of transferability, the seller was uncomfortable with this proposal.

While this anxiety could have been interpreted as an indication of his superior knowledge that the permits were, in fact, not transferable, the real explanation was simpler: The seller was an entrepreneur who had begun his career driving garbage trucks and was far less capable of assessing the transferability risk than the large waste management firm, which had specialized legal and regulatory compliance staffs. Indeed, the seller would have been willing to pay something to avoid the risk of nontransferability. A joint gain was created by (1) splitting the premium the seller was willing to pay to avoid the risk; and (2) transferring the risk to the buyer, who now had a very strong incentive to use its superior risk assessment and mitigation capabilities.

Risk-Profile Differences: 3-D Extensions. A predominantly value-claiming negotiation can develop when two parties to a negotiation with very similar risk attitudes seek to shift a large risk in the transaction to the other party. In such cases, changing the game by bringing in a third party or the market — with an effectively different risk profile — may be a value-creating move. Recall the co-generation case in which the city believed oil prices would rise and the construction firm had opposite views. Suppose each party was also averse to the risks involved in fluctuating prices. Then laying off that risk to the market through various options, futures, or derivative instruments based on future oil prices could reduce the net cost of risk-bearing to the two parties; indeed this could be true even if both sides agreed on oil price forecasts.

Or consider a supplier of goods to retail stores who is highly averse to the risks of late payment or nonpayment. Such a supplier may insist on much tougher payment terms than the stores were willing to offer, leading to an impasse in the supplier-retailer negotiations. Yet bringing in a factoring firm that will purchase the supplier’s retail accounts receivable at a discount may permit the transaction to go forward on less onerous payment terms. Adding a third party with different risk attitudes (as well as differential collection capabilities and reputation) may reduce risk-bearing costs. In fact, this move may actually lessen the magnitude of the risks themselves, leading to the potential for joint gains.

Principles: When one party is more risk-averse than the other, seek to create value by shifting risk from the more risk averse party to the less risk averse one in return for a greater share of the rewards (or other form of compensation). When parties have
influence over different risks, seek to create value by shifting risks to the parties that can best minimize them, again with appropriate compensation. When there is a difference in the parties’ abilities to assess a particular risk, consider shifting that risk to the party best able to assess it in return for compensation in other dimensions. In some cases, changing the game by bringing in third parties or markets with different risk attitudes than the principals to a negotiation may create value.

Differences in Attitudes Toward Time

The next important extension of the differences principle involves the parties’ attitudes toward time, which again can be understood to imply differences in expected value of the present value of a deal.

In the simplest case, one party is more impatient than another, equivalently, one party has a higher discount rate. For example, a venture capital group had provided an early round of financing to a promising biotechnology firm that was now seeking additional financing. The biotech firm had contacted a large European pharmaceutical company that was impressed with the biotech firm’s technology and was interested in making a later-stage investment. The pharmaceutical company placed a high value on this investment as a window into a new area of biotechnology. Using its own hurdle rate, the European firm negotiated the terms of an investment that provided a 10 percent projected rate of return. However, the pharmaceutical firm wanted to see others invest at the same time and asked the existing venture capitalists to invest in this next round alongside it. The venture capitalists refused, which caused the pharmaceutical company to worry that they had lost confidence in the venture.

Discussion over how to break this impasse, however, revealed that, at this stage of development, the venture capitalists would require a projected 35 percent rate of return. To break the apparent deadlock, the biotech firm’s managers negotiated terms that provided the venture capitalists with a higher share of the early profits and the pharmaceutical company with a higher share of the later profits. Although both value early distributions more than later distributions, the much stronger preference of the venture capitalists for early returns means that to get a disproportionate share of the early distributions, they could compensate the pharmaceutical company with a much larger share of later distributions. Since the venture capitalists would discount later returns so much more highly (when using a 35 percent discount rate) than the pharmaceutical firm (which used a 10 percent rate), it was a value-creating move to shift the pharmaceutical firm’s return further out and increase its magnitude disproportionately.

In other settings, the parties’ time preferences are not easily captured by a hurdle or discount rate. For example, government officials in grant-making agencies that have not allocated all their funds often have a strong interest in allocating all the funds before their fiscal year-end. The officials may be eager to do so because (1) the funds will have to be returned, unspent, to the Treasury; and (2) the agency’s budget may well decline for the following year if some of this year’s funds went unspent. At a more prosaic level, companies often have annual budgets for consultants or certain kinds of supplies. It is often much easier to negotiate a large agreement at the beginning of a new budget year when they have the funds than at the end of the last year when their ability to allocate new funds is low. Similarly, sales organizations often have quarterly goals. It may well be possible for a consumer to get better prices and terms at the end of the quarter, when the sales force is stretching to reach its goals, than at the beginning of the quarter. Someone who knows that she will be switching to a new overseas job at year-end may care much more about the effects of an agreement under negotiation on the next few months’ results than about the effects after she is overseas. Each of these de facto differences in time attitudes offers the potential for joint gain among the involved parties — though one should be cautious about costs to others who are not party to the immediate deal.

**Principle**: Match payments and benefits received to relative time preferences. The relatively impatient should get more earlier but later compensate the other. In general, people should receive benefits at the times they value the benefits most highly in return for providing others with benefits at the times that the others value them most highly. Similarly, minimize the present value of costs to be borne by differentially allocating the timing of costs to parties to accord with their relative time preferences (and compensating accordingly).

Differences in Tax Status

Parties often differ in their tax status. For example, an individual in the United States cannot deduct interest from a loan used to purchase an automobile. However, if a corporation borrows money to purchase the same car and leases it to the individual, that party can deduct the interest from the loan. Assuming that the credit risk is not significant, it is often feasible and mutually beneficial to share the reduction in taxes experienced by the lessor rather than have the individual borrow and purchase the car directly. This is the simplest and most familiar form of tax arbitrage — with the joint gain effectively funded by the government. Tax-driven transaction structures, are, of course, legion; the following example is just one of myriad possibilities underpinned by differences in tax situation.

**Example: Converting Ordinary Income to Capital Gains.** For a number of years, U.S. investors in hedge funds that traded securities frequently were taxed each year at an ordinary rate on gains realized but not distributed to investors (rather than at the lower capital gains rate). Several investment banks developed “swap” instruments that transformed the ordinary income taxed each year into capital gains taxed only upon redemption from the fund. The investor would buy a bond whose face value was equal to the amount she wished to invest in the fund, and swap it for a promise from the
investment bank to pay the total return of the fund (less a fee) to the investor when the investor chose to redeem. By virtue of its business status, the investment bank would not pay taxes on the income the fund generated because this asset was matched directly by its promise to pay out the income. When the investor redeemed the swap, she would receive the principal and the returns that had accumulated in the fund less any fees to the investment bank. As an added bonus, if she had held it long enough, the investor could treat it as a capital gain for tax purposes. The difference in the tax treatment accorded the investor and the tax treatment accorded the investment bank facilitated trades of substantial mutual value.

**Principle:** Look for differences in tax treatment. Where feasible, the party with the lower tax rate should receive taxable income and the party with the higher tax rate should receive deductions. The joint gain from these actions can then be shared for mutual benefit.

**Differences in Accounting Treatment and Reporting Sensitivity**

Parties may also differ in the accounting treatment they receive and the appearance of a transaction to key constituencies. For example, privately held financial firms and publicly traded companies can have very different perspectives on good will and on the debt-equity ratio changes created by a proposed acquisition. The private firm may be centrally concerned about cash flow and risk while the publicly traded firm may be more focused on how an acquisition will affect its reported earnings (since goodwill from an acquisition reduces reported earnings). At the same time, the good will increases tax deductions and thus increases cash flow, which often is of greater value to the owners of privately held financial firms. In addition, a publicly traded firm may be more concerned about its reported debt-equity ratio.

If these differences in attitudes toward good will and capital structure are present, the public firm can partner with the private firm to make acquisitions for the publicly traded firm. By giving majority control of the partnership to the private financial firm, the acquiring entity can be structured in such a way that the public firm does not need to consolidate the acquisition debt or write off the good will. Such agreements typically allow for the public firm to exercise an option to buy the remainder of the firm after goodwill and debt have been reduced and for the private firm to be able to force the public firm to buy it after a period of time. The differences in accounting treatment (and their implications in capital markets) enable the publicly traded firm to make a profitable acquisition it might otherwise shun while providing healthy profits for the private firm. These differences are the chief bases for so-called “industrial-financial partnerships.”

**Principle:** Differences in accounting treatment and sensitivity to various constituencies can be used to create mutual benefit.

**Additional Differences.** There are myriad other ways in which people may value the same things differently. If one firm has liquidity and another firm is in tremendous need of capital to exploit a new technology, the liquid firm can provide capital in return for an attractive percentage of the profits generated by the new technology. One player may place great value on the deal at hand while another may focus primarily on the relationship. In some organizations, decision makers may be more concerned about the appearance of or precedents set by an agreement while others may only care about the substance of today’s deal. In many, many such cases, the differences among the parties enable mutually beneficial dealcrafting.

**Crafting Value from a Variety of Differences**

Creative dealmakers frequently realize value from a variety of differences. For example, in settling personal injury litigation, insurers and plaintiffs can often dramatically improve the value to each side relative to a straight cash settlement. This value can derive from differences in attitudes towards time, tax status, capabilities, cost structure, forecasts, and risk aversion.

- **Attitude toward time.** Differences in attitudes toward time are common among parties in dispute; consider, for instance, injured plaintiffs in a battle with an insurance company who often have a lower discount rate than the insurers’ cost of capital. Thus, insurers and plaintiffs can sometimes gain by settling with higher aggregate amounts spread over longer time periods. There may be a symbolic joint gain as well; injured plaintiffs sometimes care intensively about maximizing the undiscounted sum of a settlement amount — the total payout — while insurers evaluate the stream of payments by calculating the discounted cash flow.

- **Tax status.** Income to a plaintiff generated by investing a cash settlement is taxable to the plaintiff. In contrast, annuity payments are not taxable to the plaintiff as long as the plaintiff has not and does not control the principal amount. Exploiting this difference in tax status, the insurer and plaintiff can both gain by structuring the settlement as an annuity and implicitly splitting the (considerable) tax savings.

- **Investment expertise, opportunities, and cost.** In many situations, a difference in investment capability typically exists. Relative to an individual plaintiff, the insurance company generally has greater skill and resources as an investor. Thus, having the insurance company invest can often be better for both parties than having the individual plaintiff responsible for his or her investments. By virtue of its size, moreover, the insurer is likely to be able to obtain lower commissions and better investment opportunities. Thus, having the insurance company invest can often be better than having the individual plaintiff be responsible for his or her investments.
• **Forecasts.** Insurers and plaintiffs are likely to have different forecasts about the plaintiffs’ life expectancies. Plaintiffs often believe that their life expectancy is equivalent to that of noninjured persons of their age. However, injuries often shorten life expectancy. Thus, plaintiffs may value the payment stream based on a longer forecasted life expectancy than that predicted by the insurer’s actuarial table.

• **Differences in attitudes toward risk.** Some plaintiffs are concerned their resources may not last over their lifetime; they may highly value the peace of mind from knowing that they have an assured income. Insurers provide this peace of mind at little cost.

In this example, the effects of these differences can be closely entwined: agreement on an annuity may bundle joint gains based on differential forecasts, time and risk profiles, tax status, as well as expertise and investment options. The broader point remains, however: when a variety of differences exist among the parties, substantial value can be created from the perspective of each by devising agreements that reflect the whole array of these differences.

**Conclusion**

In sum, one-dimensional negotiators primarily see negotiation as an interpersonal process at the table. A two-dimensional approach complements this process view of negotiation with an understanding of the substantive principles behind value creation. Knowing what you are looking for can counteract powerful psychological biases toward seeing the world in “fixed-pie” terms that assume interests are incompatible. We have suggested three broad prescriptions for effective dealcrafting, the core work that a 2-D negotiator needs to do.

First, rather than seeking directly to increase individual shares via a value-claiming orientation, we argued that a joint focus on maximally expanding the total net economic pie, then allocating shares, can offer superior individual as well as joint results.

Second, rather than looking mainly looking for common ground and shared interests, as important as they are and as naturally as they are sought, 2-D negotiators understand the potential power of differences in creating value when accompanied by legitimate and appropriate forms of “compensation.” Differences in cost and revenue structure point to arrangements of highest net value. Complementary differences in capability can be profitably combined. Differences in priority or relative importance lead to mutually beneficial trades or creative solutions that unbundle underlying interests. Differences in beliefs about the future can lead to joint gains from carefully crafted contingent agreements. Differences in attitudes toward risk — assessing, bearing, or influencing it — can lead to mutually preferable mechanisms. Differences in attitudes toward time, whether simple discount rate differences or more complex manifestations — can suggest collectively worthwhile intertemporal reallocations. And many other differences — in tax status, accounting or regulatory treatment, sensitivity to constituencies, etc. — can profitably be arbitrated by sophisticated dealcrafters to create value on a sustainable basis.

Finally, by looking outside the locus of the immediately involved parties and issues, a differences orientation can often suggest 3-D moves away from the table to change the game — by adding or subtracting parties and issues that manifest complementary differences — for mutual benefit.

**NOTES**

The ideas presented in this essay have evolved from a number of sources over the years. Chapter Five of Lax and Sebenius (1986) lays out more elaborate version of the sources of value creation in negotiation. A technical version of these ideas is developed in Sebenius (1984) while a general discussion of these concepts can be found in Raiffa (1982).

2. Standard economics texts deal with the first two bases of value creation; a modern example of the third can be found in Hart (1995).
3. See, for example, Thompson (1998: 49) for a summary of a number of standard papers on this subject.
4. The tension between creating and claiming value explored in Lax and Sebenius (1986) is one such barrier. A range of cognitive barriers is described in Bazerman and Neale (1992). An even fuller review of psychological barriers can be found in Thompson (1998). The barriers perspective is also generally well treated in Arrow et al. (1995).
5. This assumes that the cost figures reflect true economic (opportunity) costs.
6. This aspect of the example is inspired by the El-Tek case series written by Bazerman and Neale.
7. See Bazerman and Neale (1992) for an elaboration.
8. We are using the term “total pie” in a loose sense. If value is transferable among the parties, there is no ambiguity. Otherwise, adding up value to each side involves illegitimate interpersonal comparisons of utility, per standard textbook treatments. More accurately, we are referring to pareto-optimal moves, that benefit each side at no cost to the other.
9. The entire deal was entirely private and there were no public shareholders or regulatory authorities involved; otherwise such tactics would almost certainly have both unethical and illegal.
11. This example is based on a situation described by Professor David E. Bell of the Harvard Business School.
13. All sorts of tricky analytical issues are buried in this discussion, most obviously, the extent to which differences in probabilistic assessment are a function of differential informational heritage. These issues are considered at length in the technical portions of Sebenius (1984).
REFERENCES


