# Using "Shocks and Rumors" to Teach Adaptive Thinking

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The business landscape is constantly changing. Moreover, because of globalization, increased competition, and instant communication, the rate of change is accelerating. A student who has practiced only static scenarios is ill prepared to recognize, process, or adapt to changing negotiation issues and interests. Thus, negotiation instructors must change our practices to prepare students to succeed in the increasingly dynamic negotiation situations they will face by utilizing simulations that are also dynamic. This article reviews research on adaptive thinking, applies it to negotiation training, and provides examples of dynamic simulations that require students to adapt. Finally, it offers advice on how to make existing cases dynamic by using "sbocks and rumors."

**Key words:** negotiation pedagogy, simulation, adaptive thinking, schema, dynamic.

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## The Need for Dynamic Simulations

Negotiation simulations are powerful vehicles for personal development (Schneider and Macfarlane 2003). They provide purpose and context for students in the process of learning to analyze issues, interests, parties, and linkages. They offer the foundation for developing plans to achieve one's objectives and to manage the exchange of information between parties to explore the possibilities for finding an agreement. Most simulations used today, however, lack a critical element of realism. As Michael Watkins (2007) noted, "Most existing exercises have static architectures in the form of fixed parties, issues, and interests." This article builds on his recommendations for designing "manageably dynamic" exercises. Specifically, we focus on how the introduction of new facts or issues may affect interests and positions, and therefore, negotiation strategies and tactics.

When people hear new ideas, understand them, integrate them into their thought patterns, and then think new thoughts that align with what they have learned, they engage in adaptive thinking. We have found that dynamic negotiation simulations are an excellent tool to encourage adaptive thinking. They give students the framework within which they can learn to assess and reassess each party's best alternative to a negotiated agreement (BATNA), bottom line, goals, issues, interests, priorities, and constraints, so that they might adjust specific parts of their negotiation strategy in real time. Because dynamic exercises require students to critically examine their initial assessments and plans, they also help students to develop increased situational awareness (Watkins 2007) and self-awareness (Holtom and Kenworthy-U'Ren 2006). Further, teaching students to systematically reanalyze negotiation situations within a rational framework may help them to avoid well-documented decision-making errors (e.g., escalation of commitment) when at the negotiation table (Bazerman 2005).

In the following pages, we first discuss the need to teach adaptability in negotiations. Then, we explain how to cultivate adaptive thinking skills and describe ways in which dynamic simulations can help students to do so. Next, we introduce two examples. While a few dynamic simulations are available on the market,<sup>1</sup> we examine one that has not been discussed previously because we have found it especially beneficial in helping students practice adaptive thinking techniques. Finally, we use another example to show the ways in which professors can make many classic exercises dynamic with the use of shocks and rumors.

# The Need to Learn Adaptability within Negotiations

It is not uncommon for people or organizations to look back to evaluate the success of an activity and the critical factors influencing the outcome. For example, the National Aeronautics and Space Administration calls these "pause and learn" sessions. The U.S. military calls them "after-action reviews." Their purpose is to take the key lessons learned from one situation and apply them to the next. These are sound practices. Here, however, we call for adaptive thinking that moves beyond applying learning from one situation to the next. Instead, we primarily focus on teaching a person to adjust *within* a given situation.

The reasons why one might need to be alert to learning and updating within a given negotiation are many. At a most basic level, no one knows everything, and no one can accurately predict all that will transpire during a negotiation session. Because our rationality is bounded (Simon 1991), we simply do not have the capabilities to plan a "perfect" strategy before engaging our counterpart. We can, and should, put forward our best assumptions about the other party's interests and constraints, as well as ideas about our own interests and constraints. Accordingly, negotiation professors teach their students to prepare a written negotiation plan that outlines these considerations (Raiffa 1982; Wheeler 2001; Lewicki, Barry, and Saunders 2006). But these bargaining points are based on assumptions — they are educated guesses, based on experience, but with missing information. Once at the table, negotiators should not mistake these assumptions for "facts" and should actively look for evidence that either verifies, discounts, or refutes their initial assumptions.

In addition, the environment in which we negotiate is subject to change, and as it changes, so too might our interests and constraints as well as those of our counterparts. For example, during multiparty negotiations, the formation of coalitions may significantly change the negotiating environment. When two or more parties talk "off-line" with each other and make a deal to support each other's interests, they will have more power than either party had alone. Faced with the possibility of gaining power this way, a negotiator's interests and constraints may change significantly.

Despite the strength they bring to the negotiating table, however, coalitions can also be problematic in that they are inherently unstable. Because coalitions are usually formed on the basis of interests and not on the basis of friendship, and because parties periodically scan the environment to assess whether more of their interests can be met elsewhere, coalitions tend toward instability. They form, break, and re-form with other members. Savvy negotiators realize that coalitions offer a dynamic social context and recognize the need to continuously ask themselves if their initial assumptions are still valid.

Finally, the relationship between negotiators and their counterparts evolves over time, and as it evolves, new issues and interests may become important. Similarly, new constraints may be introduced. For example, one of the authors assisted an insurance company in negotiating a contract with an important vendor who was performing critical services quite competently. The insurance company entered negotiations expecting that price would be the primary item to be negotiated. At the table, however, representatives of the insurance company learned that the vendor was willing to provide not only its current services, but also additional services that would bring significant savings to the insurance company. In the face of these new potential savings, the cost of the original services became almost inconsequential to the insurance company. The discussion quickly shifted as the parties explored the idea of expanding their relationship.

Thus, a negotiator's initial plans and strategies, while perfectly reasonable at the time they were formulated, may need to be updated throughout the negotiation. Recognizing the opportunity for a different type of deal than originally envisioned can be critical to attaining optimal outcomes. For this reason, adaptive learning is a critical skill for negotiators.

# **Cultivating Adaptive Learning Skills**

People often tend toward inertia in both their thinking and actions. All else being equal, we allow past attitudes, cognitions, behaviors, and strategies to shape present behavior. Psychologists explain this habitual behavior in terms of "schemata" or mental models that people have learned that help them to interpret stimuli from the environment and guide their reactions to them (Anderson 1977).<sup>2</sup> Schemata are robust, easily accessible knowledge structures that allow us to move through life without pausing to analyze every action occurring around us as if it were new. Although schemata do evolve over time (this is the essence of learning), they tend toward "stickiness" (Fiske and Taylor 1991). In this article, we focus on adaptive learning at two levels. First, it is critical that we teach negotiators *how to update their plans* within a given negotiation. Second, it is important to help individuals to *develop broad negotiation schemata* that include an understanding of the need to regularly update these plans.

One purpose of exposing students to dynamic negotiation simulations in which the environment is complex and changing is to motivate adaptive learning. Students who do not adapt their strategies will fare poorly compared with classmates who do. That failure — when coupled with the security that comes from working with what students perceive to be a safe environment — should motivate change. Such learning environments as a classroom debrief or an organizational retreat allow participants to watch and listen to others engage in mindful reflection (e.g., critically examining assumptions and beliefs as well as altering where necessary). As a person learns to question initial assumptions, he or she may become more comfortable with the concept that initial impressions are not always correct, which can further motivate adaptive learning.

Once motivated to adapt, students then need to develop *the ability* to adapt. As a first step, they must understand the models from which they have based their behavior — that they have made assumptions about the situation, about themselves, about the other parties, and about everyone's interests and constraints. In improvisational theater and jazz, performers

rely on a basic framework that gives them the freedom to modify the performance in real time. Improv exemplifies how such minimal frameworks can give participants the freedom to adapt in a logical and productive way (Moshavi 2001; Balachandra et al. 2005). The frameworks of negotiation planning and processes (that parties each have BATNAs, bottom lines, aspirations, issues, interests, priorities, and constraints) can provide the perfect minimal framework for students to practice managing change.

As a second step, students need opportunities to practice to improve their ability to respond to new information about a situation. One context in which this is especially true is military operations training. In his book on the importance of training military leaders to have adaptive thinking skills, Donald Vandergriff (2006: 46) wrote:

The greater the experience that an adaptive leader has, the greater the intuitive decision-making power he or she will also possess. Experience equates to going through numerous problem-solving scenarios and learning from them. It does not have to equate to time in terms of a career, but can be based upon how well the leader learns from each intense problem-solving scenario they participate in, can reflect upon, then verify through research those aspects of their performance they questioned — this is learning.

Further, successful negotiators need to develop the ability to read emotions and diagnose metalinguistic signals. They need to pick up on discrepancies between the agreements their counterparts express verbally and the body signals that signal discomfort, and suggest that a deal is not progressing as well as they want it to. Alternatively, they need the selfawareness and mindful presence to recognize when they themselves feel discomfort either because discussions are going the wrong way or because they intuitively perceive that something is amiss.

Not all discomfort requires changes in strategy, but all discomfort should prompt the negotiator to mindfully reflect and evaluate his or her current assumptions, to entertain both the source of the discomfort and the possibility of change. For example, if a negotiator offers terms that she thinks are quite advantageous to her counterpart, she may feel frustrated if her counterpart does not seem to agree that the terms offered are favorable. This feeling of frustration may indicate that a break is needed. During the break, the negotiator can consider whether she is not explaining her offer clearly, whether she misunderstands her or her counterpart's interests, or whether some other problem has arisen. Sometimes, talking through such possibilities with colleagues can help a negotiator to understand an issue more clearly. Like any skill (such as driving, flying, or writing), adaptive thinking is something that gets easier with practice. Finally, taking a break during negotiations can also be a useful strategy. Negotiators need certain structures for adaptive learning. They need pauses — time to think and reflect — and they need safe spaces to do so (meaning not necessarily in front of the counterpart).

These breaks allow negotiators time and space to reflect on new information revealed by their counterparts, to consider any discrepancies between the counterparts' verbal expressions and body language, and to adjust prior assumptions. Our point is that this time should be structured to take place *within* any important negotiations.

Multiparty negotiations often provide natural pause and learn opportunities. Because some parties may be absent during a particular deliberation, those off-line parties have an opportunity for a "time-out" away from the negotiation table, which they can and should use to reflect on necessary schematic adjustments that they might need to make. Negotiators in twoparty exchanges should also feel free to call time-outs. Moreover, negotiators should be taught to respect their counterpart's need for a time-out. This behavior often breeds nervousness, particularly in novice negotiators, who should be reminded that there is nothing inherently disadvantageous in allowing the other party time and space to revise its assumptions. People who are exposed to and discuss these dynamics beforehand in a learning environment should become more comfortable with such situations when they actually experience them in an actual negotiation. With practice, managing these dynamics will cause negotiators less stress and require less energy, leaving them freer to tackle the task of examining and questioning their own previously held schematic beliefs (Devine 1989; Fiske and Neuberg 1990).

According to Jeffery Loewenstein and Leigh Thompson (2000), and supported by our own observations, most negotiations professors use a combination of instruction and simulations to expose their students to negotiation concepts. Simulations are used in part because negotiation requires dozens of skills that many students can learn well through immersion and practice. Simulation situations also provide opportunities for feedback from participants and observers as well as for self-reflection. When time allows, simulations can even be repeated multiple times to allow students to try out different negotiations approaches and experience different outcomes.

Traditional negotiation exercises provide students with opportunities to observe changing emotions as partisan perceptions are revealed, as trust is built or shaken, and as coalitions form or break. But static exercises are insufficiently dynamic and fail to mimic the full range of interrelationships that can evolve at the negotiating table. Static exercises can be effective teaching tools because variables can be controlled and the professor can focus the students on specific skills, such as how to prioritize interests, how to explore settlement options, or how to achieve compromise. But as useful as they may be, static simulations go only so far. To effectively teach situational awareness and adaptive learning, we argue, professors need access to complex dynamic simulations in which facts, roles, relationships, interests, and constraints change as the interaction unfolds.

# The Essence of Dynamic Simulations

Dynamic simulations introduce new information throughout the exercise as well as opportunities to process and respond to this new information. New information might be in the form of:

- 1. *New facts* (including game-changing facts that we call "shocks"), possibilities, or rumors. New facts may come directly from the other party or from outside sources during negotiations. They may be true or they may be rumors, but either way, the negotiator must evaluate them in order to determine whether to adjust his or her plan.
- 2. *New understanding of the negotiators' roles and relationships* with other parties, which can influence either party's interests.
- 3. *New understanding of the other parties' interests or constraints*, which can be learned by developing trust and sharing information directly, by noting parties' reactions to multiple equivalent multi-issue offers, or from outside sources.
- 4. *New understanding of one's own interests or constraints* that can come from considering information learned in the negotiation (i.e., items 1 through 3 above).

To incorporate this new information, negotiators may need a break to consider what they have learned and to edit their game plan. We encourage negotiators to physically change their written negotiation plan to update it to include new information. They should note emotions, relationships, and opportunities that have surfaced during the negotiation. We believe that the act of physically recording new considerations onto the written negotiation plan helps the negotiator acknowledge that his or her initial plan is being changed and that a new strategy is being formulated. This deliberate act of changing one's plan in the face of new information is the essence of adaptive learning.

Teaching students to use these effective away-from-the-table negotiations techniques can be particularly challenging. Thus, it seems wise to systematically incorporate them into the simulation structure. If we accept that we should make our simulations dynamic, the next step is to address how to do so. The easiest way would be to acquire dynamic cases from the traditional outlets (e.g., the Program on Negotiation and the Dispute Resolution Research Center). Very few currently exist, however (Watkins 2007). Moreover, there are a number of ways that a negotiation simulation can be dynamic. It might be dynamic in the sense that the players influence the "architecture" of the situation including the parties, issues, linkages, and action-forcing events in advantageous ways. (For examples of this, see Watkins 2007.)

Another way in which a simulation can be dynamic is the introduction of new facts (e.g., a new BATNA), interests, and relationships. In the following pages, we describe two examples of the latter. First, we describe a simulation with dynamic facts. Second, we delineate a process by which existing cases may be adapted to make them factually dynamic. Our goals are, first, to argue the necessity of updating current negotiation plans and, second, to help students develop broad negotiation schemata that incorporate continuous, conscious updating.

### Example of a Dynamic Simulation: Aussie Air

Aussie  $Air^3$  is a quantifiable (scorable), multiparty, dynamic negotiation exercise in which coalitions typically have a large influence over the outcome. The purpose of this exercise is to demonstrate the following three key concepts:

- 1. the dynamic nature of the social context in most negotiation situations;
- 2. the need for negotiators to update their plans throughout the negotiation process to account for these changing contextual factors (e.g., assumptions, interests, relationships between parties); and
- 3. the ways in which coalitions offer a natural environment for shifting (dynamic) social contexts.

Although the exercise is modeled after the attempt of a Macquarie Bank-led consortium to take over Qantas Airlines and most of the facts are based on publicly available information, the purpose is not to detail the specifics of this deal. Instead, our objective was to create a plausible scenario for illustrating how negotiations are influenced by new information, changing interests, and shifting coalitions. In fact, the interpersonal dynamics, emerging information, and rumors all contributed to the failure of the Qantas takeover attempt — knowledge that heightens the realistic nature of this exercise, when it is revealed during the debrief.

In this exercise, the five parties attempt to reach agreement about an international buyout and the future direction of the popular, profitable Australian airline. The parties' interests are distinct but interdependent: each party has something significant to gain if a five-party deal is reached. There is also a three-party deal that provides benefit to those parties included in the deal. Students act as representatives of five parties in the negotiations:

- Down Under Airlines (DUA), a private equity consortium seeking to acquire control of Aussie Air;
- Aussie Air Shareholders (AAS), an investment group that currently holds a significant share of the company's common stock;
- current management of Aussie Air (MGT);
- current union leadership (ACTU), which represents the majority of employees of Aussie Air; and
- The Government of Australia (GOVT), which has both regulatory and economic interests in proceedings.

The negotiation simulation takes place in five stages. First, all the parties participate in a general meeting with the goal of gathering information about each other, probing for interests, relationships, and constraints.<sup>4</sup> The DUA representative usually welcomes participants and leads the session. The second stage comprises a series of private conferences in which any party may meet with any other party or set of parties. More explicit interest-gathering generally occurs in these small-group conferences, and coalitions or nonbinding agreements are often formed. The third stage is another all-party meeting in which parties may expose some of their incipient coalitions and may be more explicit about their interests.

At the end of the third stage (the second all-party meeting), the instructors distribute "shocks and rumors" in the form of "addenda." Students do not anticipate this and should not be given prior notice of this possibility. While all students receive an addendum, the information they receive varies in importance across the roles. Thus, each student is left to interpret the importance of what he or she received, and to decide whether to share this new information. The addendums include the following changes to the negotiation scenario:

- 1. One party, DUA, receives an improved BATNA in the form of a wealthy AAS who offers to sell the needed 15 percent of shares at \$6.00, which is generally lower than the price requested by shareholders involved in this negotiation. This is the only new material "fact" in the case it might also be called a "shock." The additional "new information" provided to participants is based on "rumors" and thus primarily affects the parties' perception of facts.
- 2. A second party, the shareholders (AAS), hears of a reputable independent analysis valuing their shares for somewhat less than what they had been asking for previously. This alters their aspiration points, and together with fact number 1, above, this thus shifts the bargaining zone.
- 3. The other parties all hear rumors that change the relative value they place on various issues, hence changing their priorities and their

perceptions of whom an attractive coalition partner might be. The management (MGT) hears a rumor that DUA is considering hiring Blake Dunn, successful chief executive officer of U.S. airline BlueJet. This knowledge, which DUA does not have, changes the payoff matrix to put more stress on the management to keep their jobs. The government official (GOVT) and labor representative (ACTU) hear a rumor that DUA has started talks with Malaysian firm Aerotech for aircraft maintenance in ports around Southeast Asia. This knowledge similarly changes their payoff matrices to offer more points for saving jobs for Australian workers.

The fourth stage of the simulation involves another private conference period in which parties are first encouraged to revise their negotiation plans in light of the new information and are then encouraged to talk to other parties, as necessary, before the final all-party meeting. When they are ready to talk to each other, they have the options of sharing or protecting their new information and sustaining or reformulating any coalitions or agreements formed in stage two. The final stage is an all-party meeting. Agreement must be reached by the end of this final session or "no deal" will be the outcome.

The impact of the updated or new information on parties is profound because the new information changes their BATNAs, reservation points, and priorities. Moreover, these material changes also alter the utility of certain relationships, potentially fracturing or strengthening alliances and/or creating new alliance opportunities.

In this simulation, the updated information provided to students also includes a revised payoff matrix, which simplifies their calculations of the utility of the new information. But unquantified changes also occur as students react emotionally to the shifting interests and relationships — just as a negotiator's emotions may swing during real, complex negotiations. Aussie Air helps students to realize that swings of emotion can be managed effectively by incorporating breaks to help them adjust their thinking and strategy.

When negotiators discover new information, their relationships can change as a result. Relationships based on honest and open communication are more likely to survive the shock of newly acquired information. If two parties have a strong relationship and if new, negative information comes as a surprise in light of how the negotiators perceive the other party, then the negotiator will be more likely to question the new information rather than assuming the worst of the other party. Interpersonal trust, thus, becomes a valuable asset.

As additional data are introduced, the students must adjust their preconceived notions and plans, and update their understanding of both the deal and the interests at hand. They must adapt their negotiating strategies accordingly. Their adaptation of their plans is a highlight of this complex negotiation simulation.

# Making a Static Case Dynamic: New Recruit

On the basis of our experience with the above case, we are confident that other teachers can effectively introduce dynamic elements into additional simulations and achieve advanced pedagogical goals once basic concepts have been well established. The key steps in this process are as follows:

- 1. Identify a case scenario that is unlikely to be resolved in one brief encounter.
- 2. Develop new information that might materially affect the negotiation (e.g., shocks or rumors could take the form of a new or improved BATNA, a disruptive technology, emerging market data such as a dramatic swing in stock price or market share, or new parties such as new competitors).
- 3. Plan when and where to introduce new information (e.g., while the parties are together or when separate). For example, in some cases, we have specifically recommended that one party approach another party to obtain "important new information about a common competitor." When this instruction is delivered to the parties when they are in the same room, other parties become suspicious about the possibility of a new alliance. Clearly, this effect is muted if the parties are not all in the same room. While there is no "right" answer about when or where to introduce the information, it is important to be conscious of the possible effects of both timing and location.
- 4. Design debrief questions to probe the influence of shocks and rumors.
- 5. Track the impact of new information on the outcomes compared with prior static versions of the same simulations.

We have used a number of questions to assess the impact of the new information during debrief sessions:

- 1. What new information was introduced? (This helps all class members to understand the complete fact set.)
- 2. What was the impact of this new information? Who was advantaged by it? How? Who was disadvantaged? How?
- 3. Did how the information was used play any role in determining its influence?
- 4. How did relationships change over the course of the negotiation? What was the impact of the new information on existing relationships?

- 5. Did any groups have an early deal or near deal that was derailed by the introduction of new information? Why?
- 6. Did you revise your negotiation plan based on the new information? If so, how?
- 7. How does this case mirror the reality of most negotiations?

The *New Recruit*<sup>5</sup> exercise is a dyadic simulation (recruiter and potential employee). The case teaches basic concepts such as bargaining zones and also brings in a dynamic element halfway through. While the two parties are busy negotiating about known issues, each receives a new piece of secret information that changes his or her opinion about what the outcome should be and that also affects his or her confidence level about attaining a positive outcome.

This exercise involves three different types of issues: distributive, integrative, and compatible. To maximize their joint outcomes, negotiators should identify and agree on the compatible issues, concede the integrative issues that are less important to them in favor of winning their positions on those issues that are more important, and split the difference on the distributive issues. It is rare, however, that students effectively do all of the above, and thus, they usually fail to reach Pareto-optimal results.

In most cases, professors may choose to run the exercise by handing out the role information in advance of the class and then letting students negotiate for thirty minutes in class. To increase the dynamism in the case, however, the professor could introduce new information in the form of a "high BATNA" or "low BATNA." This BATNA information could arrive in an envelope marked "urgent information" that is delivered mid-negotiation. It describes the value of an alternative job offer (candidate) or alternative job candidate (recruiter). The points associated with the alternative offer or job candidate are either "low" or "high" relative to the points to be gained in the current negotiation. The subsequent debrief can then focus on issues of BATNA quality and relative power. Those students who received a "high BATNA" envelope may have felt empowered to seek even better terms. Frequently, they do much better in the negotiations than those who received "low BATNA" envelopes. Not only is this an important lesson in the power of cultivating a strong BATNA but also a critical lesson in continuing to be connected to emerging events and updating one's negotiation plans.

This case is easy and quick to administer. The rich debrief discussions tend to emphasize a couple of key points. First, a change in the relative strength of one's BATNA has profound implications on perceptions and on reality. Whereas an opening offer might have been acceptable before receiving new information, it may not be afterward, which has important implications for subsequent tactics. Second, small changes may have large implications (e.g., freeing a minor constraint on one side of the equation may release considerable tension, enable valuable concessions, and speed closure). Third, markets are fluid. While time itself may not be a causal agent, as negotiations take place over time, the probability of new information emerging rises as does the possibility of positive or negative implications for the parties.

We believe that it is important to note that in the cases in which we have modified existing "static" simulations, we have used the base case, paid any corresponding royalties, and generally introduced it to students in the same way that we have introduced other simulations. Where we depart from the norm is in the development of "shocks and rumors," and the strategic deployment of this new information.

Following the general process outlined above, we have observed that few risks are associated with this practice. In some cases, we have observed a higher *impasse* rate. In others, students have suggested that this approach makes negotiations "too hard." We have not apologized for this complication but rather have thanked the students for this compliment. That is our intent — to mirror the challenges of real negotiations. The richness of class debriefs and student journal entries that we have seen after using these "modified" cases suggest that creating dynamic cases has been well worth the time and effort required. Moreover, the enhancement to the learning has clearly outweighed any critiques.

Adding dynamism exposes students to the challenge of unfolding information and developing interrelationships with other parties. Through this exposure and through certain structural elements of the exercises, students learn techniques that can help them in the areas of emotional selfawareness, exploration of interests, building relationships based on shared interests, and adaptive thinking. As students develop skill in these areas, we find that they also develop a well-earned sense of confidence in their ability to perform well at the negotiating table. Such confidence may help our more introverted students in particular to approach the table more confidently and should improve outcomes for all students.

## Conclusion

As negotiation professors, we have struggled with how to help students learn to proactively anticipate the need to update their schemata effectively during the course of negotiations. While they understand that to be successful, they must make adjustments to coordinate with their counterparts (Raiffa 1982), we have found relatively few who consciously pause to update their plans. Thus, we believe it is necessary to develop simulations to teach what Max Bazerman and Michael Watkins (2004) have called "expected unexpectedness."

Through the use of cases that incorporate shocks and rumors as well as other intentional disruptions to the *status quo* (e.g., new entrants, new technologies), we believe that our students will learn how to adapt in real time to changing conditions. Moreover, we hope that through repeated practice with dynamic cases, our students are developing mental models of negotiation that enable them to anticipate the unexpected. Thus, we advocate changing students' schemata at two levels by teaching them both how to adapt their negotiation plans to incorporate new information and how to understand the value of a broad negotiation schema that allows for dynamic environments and shifting alliances.

As Michael Wheeler (2006) noted, "Acknowledging the pedagogical challenges is only the first step. The search for new and creative ways to inspire deep learning can keep us fruitfully engaged for years to come." We hope that this article will contribute to the expanding tool kit for creating and deploying "manageably dynamic" simulations (Watkins 2007).

#### NOTES

**1.** *Bellicoso* (by Michael Watkins and Steven Reifenberg), available from Harvard Business School Publishing (HBS Cases #9-899-087 to #9-899-095 inclusive); *Windbam Negotiation* (by Michael Wheeler) (HBS Case #5-902-038); *Dirty Stuff* and *Development Dispute at Menehune Bay* (by Larry Susskind), available from the Program on Negotiation Clearinghouse (http://www.pon.org) (see Watkins 2007).

**2.** Sociologists and anthropologists would explain habitual behavior in terms of culture, and economists in terms of expected utilities. Nonetheless, habitual behavior is a relatively robust notion across social science disciplines.

**3.** *Aussie Air* by Brooks Holtom, Adam Bellotti, and Catherine Tinsley is available through the Dispute Resolution Research Center at Northwestern University.

4. For specific details including timing, how to divide students, etc., please see the *Aussie Air* teaching note.

5. New Recruit by Margaret Neale is available from the Dispute Resolution Research Center.

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