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Learning to Negotiate: Novice and Experienced Negotiators

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INTRODUCTION

Everyone negotiates, and everyone could stand to learn to negotiate better. Effective negotiation requires understandings and skills that tend not to be intuitive (Loewenstein & Thompson, 2000). People exhibit a large number of cognitive and social foibles that limit and misguide them (see Bazerman & Chugh chapter 2; and Neale & Fragale, chapter 3). And yet, our hopes for what effective negotiation can bring about are high—more value creation, less strife, more peace. Negotiation training might also increase academic achievement (Stevahn, Johnson, & Johnson, 2002). Accordingly, we should have the goal of understanding how people learn to negotiate, what they learn from negotiation experience, and how to instill more effective negotiation practices.

Two linked studies in many ways began the field's experimental examination of learning and experience in negotiation. First, Bazerman, Magliozzi, and Neale (1985) found that undergraduates in a market simulation learned to logroll issues (concede on a low-value issue to gain on a priority issue; Froman & Cohen, 1970) and thereby increase their gains as they repeatedly bargained over the same three issues with new partners. Second, Neale and Northcraft (1986) found that corporate real estate negotiators with about 10 years of experience also learned to logroll issues in the same market simulation, although their initial rates of logrolling exceeded that of the undergraduates. The real estate negotiators also completed more transactions in the same amount of time than did the undergraduates. Finally, both groups were influenced by a framing manipulation (values reported as losses or gains) and a goal-setting manipulation (on the number of transactions to complete).

These studies are foundational both because they provided compelling data and because they stimulate a host of questions. First, is it a general truth that with

repeated experiences people learn to logroll to secure joint gains? If so, how? And what about learning other means for creating value? Second, does experience also have an effect on bargaining to claim value, and if so, how and in what ways? Third, might experience confer any protection from decision biases (such as framing)? Fourth, does it matter whether people negotiate in the context within which they acquired their experience (e.g., do corporate real estate negotiators perform differently in corporate real estate negotiations than other kinds of negotiations)? Fifth, does experience influence the process negotiators use at the table—does it matter, for example, that corporate real estate negotiators bargained only with each other? In what follows we review the literature's current answers to these questions. We then analyze learning processes and what we know about novice negotiators' understandings of negotiation.

WHAT NEGOTIATION EXPERIENCE BRINGS

Learning to Create Value

It seems clear that repeated experience within similar negotiations allows people to logroll effectively. The initial studies asked people to repeatedly engage in the same negotiation within a market of other negotiators. This means that increased logrolling could be due to learning the structure of the negotiators' preferences, or trial and error followed by imitation (among other alternatives). Accordingly, in a subsequent stream of research, Thompson (1990a, 1992; Thompson & Hastie, 1990; see also Roloff & Jordan, 1991) showed logrolling still increased across negotiating rounds in a series of studies using negotiations written in different situational contexts (e.g., buying a computer, renting a house, forming a job contract) but with a consistent issue structure (two equally preferred distributive issues, two unequally preferred issues that could be traded off, and a similarly preferred compatible issue). Logrolling levels increased even if only one negotiator engaged in prior rounds of negotiating (Thompson, 1990b). Increased logrolling was associated with setting higher goals, implying that negotiators learned as an indirect result of increased motivation to find agreements that allowed them to create enough value to meet their own targets. Increased logrolling was also associated and with drawing more accurate inferences about one's counterpart's preferences. This was confirmed in a later experiment: Negotiators who were provided outcome information were less effective in learning to logroll than negotiators who were also provided with information about the other party's preferences (Thompson & DeHarpport, 1994).

In contrast to logrolling, there is little evidence that people learn many other forms of value creation from repeated negotiation. We have found no data on whether repeated experience yields learning to add issues, to unbundle issues to find tradeoffs, to generate contingent contracts, to bridge issues by reframing them to allow agreement, or other forms of creating value, with the following two exceptions. First, in the same series of studies just discussed, Thompson found that negotiators did not improve in maximizing value on compatible issues.

They also did not improve their insight into this aspect of their counterpart's preferences, implying that inferring preferences related to logrolling is easier than inferring compatible issues. This difference is useful because it sheds light on how people learn from experience. It is hard to imagine a learning mechanism that would show that issue valuations would be easier to understand than positions on issues, given that positions are more concrete and more likely to be discussed explicitly. Rather, as novice negotiators share information and offers, they might assume that a proposal on a compatible issue is a concession or an unthinking mistake, or even simply fail to notice it because they do not need to discuss it further if it is set at their preferred outcome. That is, studies of compatible issues provide indirect evidence that learning takes place against a backdrop of assumptions about negotiations and the structure of parties' preferences.

The second and final kind of value creation about which there is evidence of learning through experience is cooperation in bargaining games. With a finite round repeated game, players show a moderate tendency to coordinate on cooperation (a mean rate of about 50% cooperation; Rapoport, 1988) until the final rounds, when they largely defect (Ledyard & Palfrey, 1995). Across games, players learn to cooperate more during the early rounds, and thereby create more value (Loewenstein, Zhong, & Murnighan, 2003).

Thus far, we have discussed prior experience as if it were only a positive. Yet one's negotiation experience may also lead to less value creation. There are at least three kinds of reasons. First, prior experience with a skewed sample of negotiation situations (e.g., pure distributive haggling) may lead people to assume that value creation is not possible—and assuming it is not possible should make it less likely to occur (cf. Kelley & Stahelski, 1970). Second, prior experience with one kind of counterpart may make it difficult to create value with other kinds of counterparts because of misunderstandings—an issue we pursue in discussing the cultural specificity of negotiation experience. Third, O'Connor and Arnold (2001) found that after an impasse, relative to those not experiencing an impasse, negotiators were less interested in working with their counterparts again, planned to share less information in the future, planned to behave less cooperatively, and felt that negotiation was a less effective means for resolving conflicts. And people appear to follow through with these behavioral intentions (O'Connor, Arnold, & Burris, in press), creating a self-reinforcing cycle of poor negotiated outcomes. In short, prior experience can yield lessons that are counterproductive.

Learning to Claim Value

Surprisingly few studies have addressed learning to claim value in negotiation simulations, perhaps because of the substantial number of studies of bargaining games, whose central purpose is to examine value claiming (Camerer, 2003). The negotiation simulation data reveal the principal finding that one would expect. People can learn to use tactics (Gist & Stevens, 1998), and people who have engaged in several negotiation simulations claim more value than their counterparts without such experience (Murnighan, Babcock, Thompson, & Pillutla, 1999). However, if the less experienced counterparts are warned that they will be

negotiating with someone with a reputation for value claiming—even though this reputation is randomly assigned and not told to the negotiator supposedly possessing the reputation—no discrepancy in actual value claimed across parties results (Thinsley, O'Connor, & Sullivan, 2002). It is unclear how strong this effect of knowing about another's reputation is—the difference between experienced and inexperienced negotiators was a matter of a few days' work, not months or years, and neither party was particularly experienced with the particular bargaining context. It is still possible that the average person on the street will be fleeced by a wily salesperson, even knowing to watch out for wily salespeople.

As for the literature on bargaining games, the base finding concerning learning is that inexperienced players often do not know how to maximize their value, but often improve across trials. Depending on the game, they might initially start with fair divisions (e.g., in ultimatum bargaining games and coalition games, as discussed shortly). They might instead rely on a personal tendency or situational cue to make a cooperative or competitive choice (e.g., in prisoners' dilemma games; Bettenhausen & Murnighan, 1985; Liberman, Samuels, & Ross, 2004). They might also choose based on risk preferences, be they stable or situationally induced (Roth & Malouf, 1979). Critically for learning, across trials they might learn to coordinate (following Schelling, 1960, e.g., Van Huyck & Battalio, 2002), or they might learn they can claim more value. For example, Bottom, Holloway, McClurg, and Miller (2000) found that players in a coalition games tended to pursue less risky strategies initially, but then examined riskier strategies in search of claiming more value in a subsequent round. Slonim and Roth (1998) found a similar pattern with an ultimatum bargaining game with reasonably high stakes (12 to 62 times hourly wages). They found players generally started by making roughly even split offers, then learned to offer less across trials. We will return to these studies when we discuss learning processes.

The Limits of Learning From Experience

The Neale and Northcraft (1986) study with corporate real estate negotiators showed they were influenced by a framing effect (although they were not in their usual setting of real estate negotiation). In a subsequent study, Northcraft and Neale (1987) showed that real estate agents were influenced by an anchoring effect based on (a manipulated) sale price. This raises the question of whether experts are affected by decision biases, just as novices are (see Bazerman & Chugh, chapter 2). The Northcraft and Neale (1987, Experiment 2) study showed that real estate agents were influenced by sale prices set above and below the actual appraised value. The listed sale prices (manipulated between subjects) were roughly \$120,000, \$130,000, \$140,000, and \$150,000, and the appraised value was in the middle, about \$135,000. Novices (students) reported estimates ranging from about \$110,000 to about \$140,000. Real estate agents averaging 9 years of experience responded with estimates ranging from about \$112,000 to about \$128,000, with higher sale prices producing higher estimates. Both groups were clearly influenced by the listed sale prices, but it is also clear that real estate agents were influenced differently than the novice group. Perhaps adjustment strategies take

domain knowledge into consideration (e.g., some houses just have optimistic sellers so are priced artificially high, while other houses are priced low either because they are nonobvious problems or because they want to sell quickly).

More broadly, there are two important conclusions and two large open questions concerning expertise and decision biases. First, practitioners with years of experience nonetheless show decision biases (see Camerer, 2001, for a review). Second, decision biases are surely more consequential for practitioners than novices because the former make more consequential decisions. This leads to the open questions. Can people be taught to minimize decision biases (Fischhoff, 1982)? There are some signs of hope (for a review, see Larrick, 2004). For example, being held accountable for one's decision can ameliorate some decision biases (Lerner & Tetlock, 1999), as can considering the opposite of one's initial judgment (Arkes, 1991). Formal instruction is effective (for what it sets out to teach; Nisbett, 1993). Yet debiasing remains a fragmented set of partial cures. Indeed, Diekmann, Tenbrunsel, Shah, Schroth, and Bazerman (1996) argued that expert negotiators should take others' biases into consideration because other parties think and behave according to those biases, and accordingly they are consequential for forming negotiated agreements. Second, and most broadly, there is little attempt to define what constitutes expertise in decision making. For example, in the Northcraft and Neale (1987) study, the expert population was real estate agents with about 9 years of experience, engaging in about 16 transactions per year. This is only 144 total transactions—by contrast, Chase and Simon (1973) estimated that chess experts knew at least 50,000 chess patterns. Further a given transaction does not provide all that much clear feedback, and there is little in the way of formal training to serve as a substitute. This is typical for negotiation as well—feedback is typically poor and subject to misinterpretation (e.g., Morris, Larrick, & Su, 1999), and formal training rarely exceeds a course or two. Impoverished training and poor feedback are troublesome because people's intuitions are not particularly well honed for effective negotiation (Loewenstein & Thompson, 2000), and expertise appears to require planning, monitoring, analyzing, and reflecting on one's practice, not merely repeated performance (Ericsson & Lehman, 1996).

The Situational Specificity of Experience

Most negotiators are neither novices nor experts. They have negotiated repeatedly in a particular setting defined by national, regional, and professional cultures, and the particular contexts of bargaining (e.g., real estate agents over property sales, company purchasing agents with suppliers, or union leaders over employment contracts). For this reason, negotiators likely use situated, not general, concepts of negotiation (see Medin & Ross, 1989). Thus, it may be unrealistic to assume that context-specific negotiating experience leads to domain general effective understanding and performance. For example, although it is obvious to management consultants that they could charge a client based on how valuable their advice turns out to be ("value billing"), it is not at all obvious that they could set a sales price for a television show contingent on its Nielsen ratings, despite these being analogous contingent contracts (Gentner, Loewenstein, & Thompson, 2004).

Thus, experience negotiating can lead to effective performance and even provide the fodder for general insights, but typically the result is learning that is bound to the situations in which it was acquired.

The situated nature of most knowledge has daunting implications for learning to negotiate. Because negotiations occur in a wide variety of settings, people's knowledge about negotiating is fragmented across situations, as the value billing example suggests. Not only are sophisticated negotiation strategies artificially limited in scope, people are also limited because they do not think of their actions in a variety of settings as all being negotiations. Therefore they approach situations in different fashions based on what they think the situation calls for, even if they all appear to be negotiations to an expert and warrant a more consistent approach. One result is that people's assumptions about what a negotiation is are shaped by the limited situations they actually think about as being negotiations. For example, people may fail to claim value because they do not realize a situation is a negotiation and simply agree to another's proposal (Babcock, Gelfand, Small, & Stayn, 2002). But people may also fail to be contentions if they were spontaneously thinking of a situation as a problem-solving opportunity, rather than as a negotiation, and perhaps create more value (O'Connor & Adams, 1999). We will examine further results of situated knowledge when we later consider learning processes.

The Cultural Specificity of Experience

Prior experience negotiating shapes one's expectations about whether an event is a negotiation, and what is likely to occur, how one should act, what will likely result, and so forth. That is, experience breeds expectations (Schank & Abelson, 1977). Negotiation research has documented a wealth of such expectations. For example, novice negotiators are looking for another party, a monetary issue or two, an argument, and concessions leading to an agreement (O'Connor & Adams, 1999). McGinn and Keros (2002) examined negotiation transcripts and found that parties tended to enact one of three social scripts: haggling, opening up (full honest information exchange), and working together (respectful problem solving). Expectations also differ according to structural aspects of context (e.g., one-time encounters or repeated negotiations), probably the most interesting of which are differences across national cultures (Brett, 2001; Brett & Gelfand, chapter 9). For example, one might expect others to communicate directly (e.g., in the United States), or indirectly (e.g., in Japan); one might expect others to be individualistic (France) or collectivist (Chile); one might expect others to talk as equals (Turkey) or as part of a status hierarchy (Singapore). This is a simplistic fragment of cultural differences and glosses over underlying mechanisms (see Hong, Benet-Martinez, Chiu, & Morris, 2003). The point is that negotiators have a wealth of expectations about what negotiations are and how they are supposed to be carried out; these expectations are rich, have many implications, and are largely implicit.

There are multiple implications of negotiator expectations for learning. One classic claim is that one's expectations may limit learning by shaping one's experiences: Kelley and Stahelski (1970) argued that people playing prisoners'

dilemma games who defected would lead their counterparts to defect and, hence, would confirm their beliefs that defection was the only plausible choice. Players who tended to cooperate realized that both joint cooperation and joint defection were stable outcomes. De Dreu and Boles (1998) extended this finding. Cooperative negotiators not only choose more cooperative than competitive negotiating strategies when presented with both during preparation, but they recall the cooperative strategies better later and feel they are morally appropriate. Competitive negotiators choose competitive strategies, recall them better later, and prefer them because they are seen as effective. That is, expectations guide choices and what one later remembers, and these are shaped by broader motivations. And because expectations may be specific to social groups, the same situations may engender different interpretation, performance, and learning.

As a result of generating varied expectations about negotiations, experience can disrupt otherwise effective negotiators if they are negotiating with someone whose expectations clash. McGinn and Keros (2002) showed that negotiators who could not get in sync with one another did not develop rapport, shared less information than those who did, and created less value as a result. This seems of fundamental concern for learning to negotiate across cultures effectively (see Earley & Peterson, 2004).

CHARACTERIZING LEARNING PROCESSES

Experienced negotiators were once novices. We turn to examining classes of learning processes that cause novices to become more expert. One approach is to examine how people use feedback to update probabilities that actions will be successful. These models assume learners have a small amount of knowledge and that their goal is to maximize value within the limits of a boundedly rational information processing system. A second approach is to examine how people learn from examples. This approach assumes people have considerably more knowledge and focuses on how people construe situations. A third approach is to examine people's motivations. This approach assumes broad classes of motivations that provide different goals, and lead to different kinds of learning strategies.

Feedback-Driven Learning

People update their beliefs based on their perception of what has happened. That is, people learn from feedback about the results of their (and others') behavior. Several different theoretical models attempt to explain the process whereby a person's future behavior can be affected by knowledge of the outcome of their past behavior (Balzer, Doherty, & O'Connor, 1989; Brunswik, 1955; Einhorn & Hogarth, 1978; Hammond, McClelland, & Mumpower, 1980; Hogarth, 1981). From the research we have already reviewed, it is clear that people sometimes derive inappropriate lessons from feedback.

People in bargaining games make unambiguous choices, receive unambiguous feedback, and then make somewhat different patterns of choices. This setting is

useful for modeling, and behavioral economics researchers have been active in proposing learning models that use outcome feedback to update their likelihoods of making choices. We revisit the Slonim and Roth (1998) study to show the benefits and limitations of such models for research on negotiation. Slonim and Roth showed that with sufficiently high stakes, a population of ultimatum bargaining players generally starts by making mostly even split offers, then learns to offer less across trials. The authors' explanation is that people making offers learn that responders will accept less, then fit their data to a reinforcement learning model (Roth & Erev, 1995) to explain how people come to offer less. The model assumes a probability distribution for making a given offer based on the actual population distribution of offers made in the initial two rounds of their behavioral study. Learning is a matter of drawing by chance from the initial distribution of choices, then updating based on the choice's success. Alternative learning models in this literature, nicely reviewed by Camerer (2003), instead might adjust differently off of a prior choice (learning direction theory), consider other information, such as opponents' choices (belief learning models, anticipatory models, and imitation models) or use a blend of information about one's own and one's opponents' choices (Camerer's own EWA models). All of these learning models are used for predicting changes in play across repeated, identical game situations, with unambiguous known choices and clear outcome feedback after each choice. Thus, even before we examine the models more closely, we should note that their value for understanding learning in negotiation situations suffers from several substantial caveats. Negotiators do not make single pure choices under dictated and severely constrained social conditions, but rather multiple simultaneous and hence confounded choices. Thus, whatever feedback they receive will be problematic to interpret. Second, negotiators do not receive unambiguous feedback, and thus people, in contrast to these learning models, have considerable leeway in generating attributions. Third, negotiators are not making identical choices in repeated games but rather making a series of different choices. The choices are path dependent. This presents a considerable categorization challenge to assessing what feedback should adjust what prior choice. These are nontrivial challenges to generalization.

One modeling improvement would be to consider learning at higher levels of analysis than choices. To return to the Slonim and Roth (1998) paper, they take a distribution of choices made by a population as a model of a given individual's likelihood of making various offers. However, it is just as plausible that individuals each consider a few strategies for generating offers that collectively produce a distribution of offers broader than any individual member actually considers. To consider the simplest example, perhaps some people try even split offers because they are fair, they value being fair, and feel these offers are likely to be accepted, and other people try low offers because they feel the stakes are high enough that responders will overlook the disparity in gains because something is better than nothing. The point is to examine plausible strategies bearing some causal logic and then to examine how people come to learn, select, and adapt various strategies (e.g., Siegler, 1995). Examining strategies as well as choices provides a natural route to transfer across situations, namely that the strategies remain the same

although available choices change with the game one is playing. Rule learning models within behavioral economics come closest to using this approach (Stahl, 2000). However, they still have the problems of needing unambiguous choices and feedback, they take in considerable information about other players that negotiators likely ignore, and they require knowing all possible strategies in advance (Bazerman & Carroll, 1987). Yet it is possible to generate new strategies, and it is possible to choose strategies based on less information, but based on changing goals. To return to Slonim and Roth's (1998) data on ultimatum games, it is plausible that learning over trials is driven by people for whom lower offers are only considered after discovering that even offers are accepted. This is essentially the logic of a postsettlement settlement in negotiations (Raiffa, 1985): Once people have an agreement, their reservation point shifts, and they generate new goals and use new strategies to explore new alternatives. This logic is also consistent with a motivational shift (Higgins, 1997): Novices may initially be prevention focused, concerned with getting their offers accepted, and only after they have resolved that uncertainty will they shift to being promotion focused and accordingly consider strategies for maximizing their gains.

To summarize, learning models in behavioral economics are useful for specifying testable claims, yet at least at the moment, the strong ties to the specifics of the bargaining games limit providing novel general insights. Doing better seems to mean adding complexity, such as considering not just choices, but strategies that would lead to those choices and goals that would lead to those strategies. An advantage of generating these learning models is that they have required little learning about what people actually know. However, the utility of such models may ultimately be limited. People do have knowledge and expectations, and generate not just probabilistic leanings, but assumptions about causes (which are not just probabilities; e.g., Dennis & Ahn, 2001).

There have already been several demonstrations that could be interpreted as showing the limitations of simple outcome feedback in the absence of thought about what people actually know. For example, in a repeated decision situation, Ball, Bazerman, and Carroll (1991) found that outcome feedback was ineffective to curb poor bidding choices in a decision scenario (as did Foreman & Murnighan, 1996, in a follow-up study). This is because making better choices required most people to develop more complex interpretations of the situation, and outcome feedback was unable to prompt such thoughts. People had an alternative attribution, namely their lack of success could be due to anticipated variability in what outcomes would occur (i.e., bad luck). And in a very different kind of study, Morris and associates (1999) examined negotiator attributions about competitive behavior in a negotiation simulation. Negotiators given more valuable alternatives were viewed as less agreeable than those given less valuable alternatives. Negotiators made both situational and personality attributions and generated behavioral intentions purely about the person. Thus, people both under-learn and over-learn from experience. We suspect this is due to prior knowledge.

It is possible to integrate learning from feedback with an understanding of people's prior knowledge. Several studies show that people can learn from counterfactual reasoning. Outcomes that are close to category boundaries can

prompt counterfactual reasoning (if we had not gotten stuck in traffic we would have made our flight; if we had not offered a pay increase up front, we would have been able to keep under our spending cap; and so forth; see Medvec & Savitsky, 1997). For example, with respect to negotiation, negotiators who have their first offers accepted feel worse despite gaining more than negotiators who start with the same offer but haggle and make further concessions (Galinsky, Seiden, Kim, & Medvec, 2002). The claim is that having one's first offer accepted inspires regret because one realizes one could have asked for more, and this kind of feedback would prompt learning in the sense that negotiators would, for example, plan to make higher first offers in the future. Of the various kinds of counterfactuals one might generate, there is some evidence that counterfactuals concerning how one could do better next time (as opposed to, say, how if the situation had been different one would have done worse) are most likely to lead to learning that transfers (Morris & Moore, 2000). Finally, as regret is not an emotion people wish to feel, there is evidence that people make riskier choices in a bargaining game after experiencing regret in an earlier game (Zeelenberg & Beattie, 1997).

A second approach to self-guided learning that regards feedback to be critical is case-based reasoning (Kolodner, 1993). The claim is that when people's expectations turn out to be incorrect, they will attempt to explain why their expectations failed (Chi, 1996; Schank, 1982). Thus, expectation failures prompt reflection and self-explanation, which provides a trigger and a mechanism for changing one's mental models. Although there are computational models of negotiation that use this approach (e.g., Sycara, 1990), there is little behavioral negotiation research that does so.

Example-Driven Learning

Although we discussed studies showing that negotiators learn to logroll across rounds (e.g., Thompson, 1990a), we did not present a theory to explain how people did so. Surely people had experienced some form of negotiation in the past. What experience did they have across a few rounds of negotiating that they had not already had? We suspect people drew comparisons across the negotiations that occurred in such close proximity. People negotiated case after case, and any learning about the structure of the negotiation issues would have transferred to subsequent rounds. The common format of the payoff charts, people's presumed focus during the negotiations, might have pushed the contextual information more to the background than it normally would be, allowing people to focus on issue structure and value creation. A parallel argument was made by Van Hryck and Battalio (2002), who showed that people derived an abstract structure of a bargaining game by playing variants in close succession. Both of these lines of research suggest that people can learn by accumulating examples and comparing across them, yielding abstract principles.

People compare two examples either because they are presented together ("notice how negotiating for a used car is not quite the same as negotiating a job offer"), or because we are reminded of one when thinking about another ("this job candidate

thinks he is negotiating with a used car dealer!"; Gentner & Loewenstein, 2002). No matter how two examples become juxtaposed, once people initiate a comparison, they are likely to focus on the richest commonalities they can find, even if that is not what they began the comparison to discover (Gentner & Markman, 1997). Thus, learning by drawing comparisons can yield new insights people did not intend to discover.

Reminders People are reminded of prior experiences and draw on them as analogies to understand their current situations (Ross, 1984). The key question is what kinds of similar prior cases people are reminded of, and do these yield useful analogies. Gentner and associates (2004) gave undergraduates, university alumni, MBA students, and managers an example of negotiators forming a contingent contract. Unsurprisingly, people with more professional negotiation experience were more likely to recall an example of negotiating a contingent contract. A goal of learning then would be to develop a case library categorized by underlying principles to serve as useful analogies. Yet relying on reminders to generate such principles in the first place should be slow at best.

Analogical Encoding As we discussed in opening this section, another use of comparing examples to yield learning is for people to actively consider multiple examples at once. People are better at finding nonobvious similarities between examples they are actively considering than at generating reminders based on such a similarity (e.g., Gentner, Rattermann, & Forbus, 1993). Put another way, knowing two examples does not yield the same gains as comparing them. For example, Thompson, Gentner, and Loewenstein (2000) presented MBA students learning to negotiate with brief cases describing negotiators forming contingent contracts. Because the cases were set in different contexts (the timing of a shipment from an Asian merchant to a U.S. buyer, and two brothers considering a crop sale), only 10% of MBA students asked to analyze each one separately noticed any similarities between them. They were also unlikely to remark on the general usefulness of the contingent contract structure exemplified by the cases. In contrast, MBA students asked to compare the two examples focused on the contract structure. As a result of these case-processing differences, the two groups performed quite differently on a subsequent negotiation—those who compared cases were about three times more likely to form (appropriate and effective) contingent contracts in a negotiation simulation than MBA students who analyzed cases separately. Further research showed that people who analyze cases separately are no more likely to use the principles from the cases when later negotiating than are people never shown the cases (Loewenstein, Thompson, & Gentner, 2003). Additional studies also showed that more novice negotiators (undergraduates) benefited from being guided through comparing examples (Gentner, Loewenstein, & Thompson, 2003). Drawing comparisons across cases as a means of learning them, or *analogical encoding*, is a route to acquiring domain principles that facilitates their later use. Examples may otherwise be inert knowledge.

Motivation

Stepping back from the particular routes by which people obtain new information, we should also note that informal learning is facilitated by a motivation to learn. This may seem obvious, but then people are not always motivated to learn, and being in stressful negotiation situations may lower the likelihood that people take on this motivation. As Dweck (1986, Dweck & Leggett, 1988) has argued, people tend to take on either mastery goals, engaging metacognitive strategies to further learning, or performance goals, engaging strategies to demonstrate their effectiveness. These goals alter how one approaches a task.

Consider the basic finding that, due to outcome feedback across repeated trials, people who engage in the same negotiation situation repeatedly will discover available value-added tradeoffs and reach agreements worth more than their initial attempts (Bazerman et al., 1985). The opportunity for feedback and the demonstration of improved performance does not imply people have a general abstract understanding of the tradeoff contract structure nor that they have mastered the art of finding tradeoffs. As shown by a replication and extension of the Bazerman et al. (1985) study by Bereby-Meyer, Moran, and Unger-Aviram (2004), participants encouraged to have performance goals did form effective tradeoffs through repeated experience on a first negotiation task, but failed to form tradeoffs on a subsequent negotiation task at a rate greater than a baseline group just receiving the second negotiation task. In contrast, participants encouraged to have mastery goals learned to form tradeoffs on the first negotiation task and transferred that learning—they formed tradeoffs on the second negotiation task more than the baseline and performance goals groups did. Gist and Stevens (1998) reported a similar finding, showing greater transfer of new negotiation skills by negotiators with mastery goals than those with performance goals when put in particularly stressful negotiations. They also found that transfer was partially mediated by measures of cognitive learning. Thus, motivations provide enabling conditions for cognitive learning, which in turn leads to performance advantages.

CHARACTERIZING NOVICE NEGOTIATORS

If learning is set against a backdrop of motivations and expectations based on prior experiences, then it would be helpful to know people's typical starting point. Several studies shed light on this (O'Connor & Adams, 1999; Rackham & Carlisle, 1978a, b; Van Boven & Thompson, 2003), but nonetheless the picture is far from complete. The best examined aspect of untrained negotiators is the assumption that negotiators are haggling over a fixed sum because people's preferences are perfectly opposed (Bazerman & Neale, 1983; Thompson & Hastie, 1990). This "fixed-pie" assumption has a host of implications that combine to drastically simplify novice's interpretations of negotiation situations. Equal and opposite preferences over a fixed set of issues implies the value of the contract is a fixed sum (hence the name of the assumption). This in turn implies that tradeoffs are useless, compatible issues (i.e., those on which both parties want the same outcome) are

unthinkable (Thompson & Hrebec, 1996), and value creation impossible. Thus, for example, novices can be convinced by a supposed negotiation expert to accept a poor agreement that fails to create value (Arnold & O'Connor, 1999). It also implies that discussing multiple issues at a time just needlessly complicates the conversation (see Balakrishnan, Patton, & Lewis, 1993), and thus it should be unsurprising that novices assume people should negotiate one issue at a time (O'Connor & Adams, 1999). The assumption implies that the only possible outcomes are standing firm on one's positions and prevailing, compromising, and meeting part way, or yielding completely to the other party's demands. Thus, negotiators are tough, fair, or soft. This and the previous implication, combined, may be responsible for the tendency of novice negotiators to focus on a single, salient issue such as price. The fixed-pie assumption also implies that there is no information to share other than one's positions and the arguments in favor of them; other information might just provide a basis for the other side to demand concessions or persuade one out of one's own positions. Further, given the fixed-pie assumption, one's major concerns must be power (ability to gain concessions, including through tactics and deceit), fairness (equal size concessions and value gained—which in this framework are perfectly complementary), and relationships (or lack thereof; i.e., what value one places on being fair and on the other party attaining value). What is striking is how much it follows from a core assumption about negotiation issue and preference structure, and how much it simplifies negotiations (though obviously not beneficially so).

Given the fixed-pie logic, we can generate predictions about how negotiators will interpret negotiation situations. For example, if one reaches agreement and one's counterpart is happy, then one will infer that they must have claimed more value (i.e., attribute their happiness to their satisfaction with their outcome), and hence one will be less satisfied with the outcome than if the counterpart is not happy (Thompson, Valley, & Kramer, 1995). This effect is driven by perceptions of emotion, which then drives interpretations about outcomes. In this situation one might additionally infer that they will appreciate the relationship, which, for prosocial cooperators, may inspire relief and confirm one's justification for conceding. Furthermore, one might actively seek out friends to negotiate with to avoid hard bargaining and foster fair concession making, despite the concomitant loss in value creation that comes with a rush to making concessions (Fry, Firestone, & Williams, 1983; Tenbrunsel, Wade-Benzoni, Moag, & Bazerman, 1999). With respect to learning, what is important is that negotiators may more readily remember their interpretations about their negotiation than the perceptions on which the interpretations were based. This impedes learning, as the more one abstracts away from what happened, the more one is assimilating the experience to old categories (Argyris & Schon, 1996).

A natural next concern would be to characterize expert negotiators. However, available research provides mostly tests of specific manipulations that result in better performance, as well as prescriptions from wise observers (see Rolloff, Putnam, & Anastasiou, 2003, for a review). This may be because it is challenging to identify and observe expert negotiators. There are also inherent issues of content, context, and cultural specificity; we should not expect to find negotiators

who are general experts but rather experts in, say, U.S. industrial labor contract negotiations, or diplomacy with the French, or possibly still more limited settings. Although it seems hard to argue that less value creation would be better than more, we should not expect to find consensus elsewhere, such as how to share value, how to value social relationships, or how to value reputations. Thus, there may be no single expert model to articulate.

IMPLICATIONS FOR INSTRUCTION

Instructors have choices as to how to present material (see, e.g., Galbraith, 2004, for evaluations of forms of pedagogical practice). Negotiation classes commonly blend the use of simulations, games and role plays, demonstrations (live or on film), case study analysis, and discussion (Lewicki, 1986, 1997). The logic behind these various techniques is to foster planning such that students are motivated, committed, and encouraged to translate concepts into behavioral intentions; to foster attempts at new behaviors both for personal and classroom exploration of potential approaches, the reactions they engender, and confidence through sheer exposure; and to foster reflection and analysis to alter people's understanding of negotiation.

To summarize our suggestions for pedagogy, we examine the most common particular forms of learning interventions in negotiation training (Table 5.1). Clearly, an important part of an instructor's role is to attempt to teach by discussing principles and articulating the domain principles that play important roles in an expert mental model. However, instructors should recognize that brief abstract descriptions are best thought of as morals to a story. They should be substantiated and explicated through multiple concrete examples and not expected to stand on their own. People often fail to learn from abstractions alone (Gentner et al., 2004).

Perhaps the opposite of principle training is encouraging trial and error, so learning can occur through feedback. There are benefits of self-guided exploration for fostering motivation and exploration. However, trial and error is likely to be inefficient, can lead to misunderstandings, and is in itself a poor means of fostering reflection and reframing, given the paucity of information feedback alone provides. Negotiation simulations alone do not yield substantial learning (Druckman, 1995). As a result, feedback should be viewed as an instructional tool to prompt reflection and explanation.

Observational learning can allow unbiased viewers to notice possible actions and outcomes that the actors themselves fail to see. However, although watching a negotiation might allow others to notice differences in preferences that could be logrolled, if people are partisans and prefer one party over another, they will be unlikely to notice (Thompson, 1995). Learners can also imitate what they see, and learn what good (or bad) performance and outcomes are possible (Tourmadre & Villeval, 2004). The key challenge is that typically the only information available is behavioral, and cognitive or motivational aspects are hidden. It is also common for people to choose poor models to imitate, or to imitate without understanding. Ideally, expert models would share their interpretations, expectations, and attributions as well as their behaviors.

TABLE 5.1 Key Types of Learning and Teaching Methods in Negotiation

	Advantages	Disadvantages	Prescriptions
Principle Learning	Articulate expert model	Likely to be misunderstood, perhaps distrusted, or discounted	Link principles to concrete examples, provide clear labels
Trial-and-Error Learning	Can yield creative strategies	Inert knowledge problem	Foster exploration of many offers (bracketing, removing assumptions)
Observational Learning	Can learn good actions and strategies	Inefficient, mostly leads to repeating prior others' errors	Foster exploration of interpretations and options explicit
Learning via Feedback	Can catch people ready to learn	Cognitions and motivations may not be observable Companies may use poor models (=sampling on dependent variable)	Make expert interpretations and options explicit
Analogy	Facilitates understanding and generalization	Does not in itself provide new interpretation	Should be coupled with explanation, reflection, and some tool for generalization
		People may use wrong analogy (based on surface rather than structural likeness) Risk of deriving an overly simplified model	Provide multiple good analogies; foster critical evaluation

Finally, instructors often use stories or examples to illustrate what they teach, and these are often quite useful to facilitate understanding. However, it often requires more than one example of the same underlying point for learners to understand the idea sufficiently that they can integrate it with what they already know and transfer it to solve new problems. Examples can be misunderstood just as principles can, and experts should not have illusions about how obviously an example illustrates an idea. Explicit guidance to draw comparisons across multiple examples and critical evaluation of those analogies are useful additions to the instructional use of analogy.

CONCLUSION

Learning to negotiate requires more than just experience, and studying learning requires more than just suggesting mechanisms for changing beliefs. Most negotiators possess an understanding of negotiation that protects and maintains their

current system of beliefs. If they believe themselves to be capable adults who have negotiated in a professional context for years, they may have a sufficiently strong performance motivation that they fail to notice learning opportunities. Few novices become experts.

If people are open to the possibility of learning, they may learn from their own experiences as well as in formal instructional settings. Learning from feedback and examples, although studied in formal settings, may occur in everyday life. People receive some degree of feedback (they did or did not reach a deal; they can evaluate their agreements; they can compare themselves to others), generate counterfactuals, experience failed expectations, are reminded of prior negotiations when engaged in one, and compare previous negotiations. There is no guarantee that they will draw appropriate lessons from these experiences, but then again, there is often no such guarantee or even assessment in formal training settings either.

Learning to negotiate effectively requires developing a complex, nuanced, and broadly applicable understanding of negotiation. This in turn requires challenging and modifying a novice mental model that is simplistic, coarse, and narrowly applied. There are both cognitive and motivational factors that facilitate acquiring negotiation expertise, and fortunately in pedagogical practice, it seems feasible to combine them.

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