
Research Reports

The Illusion of Transparency in Negotiations

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The authors examined whether negotiators are prone to an “illusion of transparency,” or the belief that their private thoughts and feelings are more discernible to their negotiation partners than they actually are. In Study One, negotiators who were trying to conceal their preferences thought that their preferences had “leaked out” more than they actually did. In Study Two, experienced negotiators who were trying to convey information about some of their preferences overestimated their partners’ ability to discern them. The results of Study Three rule out the possibility that the findings are simply the result of the curse of knowledge, or the projection of one’s own knowledge onto others. Discussion explores how the illusion of transparency might impede negotiators’ success.

In most cartoon depictions of negotiators in action (a tiny fraction of the cartoon universe, we admit), negotiators are shown with dialog bubbles depicting their overt comments and thought bubbles revealing their private thoughts. These conventions convey the different levels at which negotiators operate: Some of their wants, wishes, and worries are conveyed to the other side, but some are held back for strategic advantage. Because one task in negotiation is deciding how much information to hold back (Raiffa 1982),

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it follows that part of the phenomenology of negotiation is monitoring how well one has conveyed what one wants to convey and concealed what one wants to conceal.

Do negotiators know how well they have conveyed or concealed their preferences? Typically, negotiators know what they have and have not said, of course, so they may generally have a good idea what their partners know about their preferences. But how well calibrated are negotiators' assessments of what they have conveyed and concealed?

We explored one source of potential miscalibration, namely, whether negotiators experience an *illusion of transparency*, overestimating the extent to which their internal states "leak out" and are known by others (Gilovich, Savitsky, and Medvec 1998). Most research on the illusion of transparency shows that people overestimate their ability to conceal private information. But there is also evidence that people experience the illusion when trying to convey private information. Individuals who were asked to convey emotions with facial expressions alone overestimated observers' ability to discern the expressed emotion (Savitsky 1997). Likewise, participants who were videotaped while exposed to humorous material thought they had been more expressive than observers subsequently rated them as being (Barr and Kleck 1995).

These findings suggest that, when trying either to conceal or convey information, negotiators may experience an illusion of transparency, overestimating what their partners know about their preferences. Whether they do so is important, because previous research has shown that the likelihood of (optimal) settlement is often contingent on accurate perceptions of what others know about one's own preferences (Bazerman and Neale 1992; Raiffa 1982; Thompson 1991).

We conducted three different studies to examine whether negotiators experience an illusion of transparency in negotiations. Studies One and Three examined whether novice negotiators trying to conceal their preferences tend to overestimate the likelihood that their negotiation partners would be able to identify those preferences. Study Two investigated whether experienced negotiators attempting to communicate some of their preferences also succumb to an illusion of transparency. Study Three was also designed to distinguish the illusion of transparency from the "curse of knowledge," or the tendency to project one's knowledge onto others (Camerer, Loewenstein, and Weber 1989; Keysar and Bly 1995; Keysar, Ginzler, and Bazerman 1995). Specifically, we examined whether observers who are "cursed" with the same knowledge as the negotiators exhibit the same biases as the negotiators themselves.

Study One

Method

Twenty-four previously unacquainted Cornell University undergraduates participated in pairs in exchange for course credit. Participants learned that

they would complete a negotiation exercise in which they would each represent the provost at one of two campuses of a multi-campus university system. Because of budget constraints, all of the system's eight social psychologists needed to be consolidated at the two provosts' universities. The provosts were to negotiate the distribution of the social psychologists between the two campuses.

Participants were informed that some social psychologists were more valuable than others, and that some were more valuable to one campus than the other. These differences were summarized in a report describing the strengths and weaknesses of each psychologist and assigning each a specific number of points. The eight psychologists were among the fifteen most frequently cited in social psychology textbooks (Gordon and Vicarii 1992). To familiarize participants with the psychologist and his or her expertise, each psychologist was depicted on a 2- by 4-inch laminated "trading card" that displayed a picture of the social psychologist, his or her name, and two of his or her better-known publications.

Each negotiator's most and least valuable psychologists were assigned +5 and -5 points, respectively, and the other psychologists were assigned intermediate values. The experimenter said that all psychologists must be employed at one of the two universities because all were tenured. The most and least valuable psychologists were not the same for the two negotiators; the correlation between how much each of the eight psychologists was worth to the two participants was .79. Participants were told that they should conceal their report, which was somewhat different from the other participant's report.

Because pilot testing indicated that many participants were unsure how to negotiate, we showed them a five-minute videotape of a staged negotiation in which two confederates bartered over who would get (or be forced to acquire) each psychologist. Confederates were shown trading cards actively back and forth.

Participants were given as much time as they needed to negotiate, usually about 30 minutes. They were told that several prizes would be awarded at the end of the academic term (e.g., a \$50 gift certificate to the Cornell book store, dinner for two at a local restaurant) and their chance of winning a prize corresponded to the number of points they earned in the negotiation.

We asked participants both early in the negotiation (after approximately five minutes) and at the end to name their partner's most valuable and least valuable psychologists. At both times, we also asked them to estimate the likelihood (expressed as a percentage) that their partner would correctly identify their most and least valuable psychologists. We pointed out that the probability of correct identification by chance alone was 12.5 percent. Question order was counterbalanced, with no effect of order in any of our analyses.

Results and Discussion

Our key analysis was a comparison of participants' mean estimates to a null value derived from the overall accuracy rate. Participants can be said to exhibit an illusion of transparency if their estimates, on average, are higher than the actual accuracy rate.

As predicted, negotiators overestimated their partners' ability to detect their preferences, but only after the negotiation was complete (see Table One). Early in the negotiation, individuals slightly underestimated (by 2 percent) the likelihood that their partners would correctly identify their most valuable psychologist and slightly overestimated (by 8 percent) the likelihood that their partners would identify their least valuable psychologist. Neither of these differences was statistically reliable.¹ Following the negotiation, participants overestimated the probability that their partners would identify correctly their most and least valuable psychologists by 14 percent and 13 percent, respectively. Both of these differences were statistically reliable. That is, the probability that negotiators overestimated by pure chance how much their partners knew about their preferences is less than .05 (the *t* statistics for these two comparisons are 3.16 and 3.30, respectively).² Negotiators thus experienced an illusion of transparency at the end of the negotiation, overestimating their partners' ability to discern their preferences.

Table One

Negotiators' estimates of the likelihood that their partners would be able to identify their most and least valuable social psychologists, and the corresponding percentages actually able to do so.

	Estimated %	Actual %
Early negotiation		
Most valuable	69%	71%
Least valuable	58%	50%
Post negotiation		
Most valuable	72%*	58%
Least valuable	76%*	63%

Note: * indicates that the estimated percentage is reliably greater than the corresponding actual percentage, $p < .05$

These findings extend earlier research on the illusion of transparency, showing that negotiators believe their inner thoughts and preferences “leak out” and are more discernible than they really are. This result was obtained only during the second assessment, but we do not wish to make too much of this finding. First, it is hardly surprising because, at the time of the initial assessment, most groups had yet to engage in much discussion of specific candidates, and thus there was little opportunity for participants’ preferences to have leaked out. Furthermore, it was only participants’ estimates of the detectibility of their least valuable psychologists that rose predictably (from 58 to 76 percent) from early in the negotiation to the end — an increase that was highly statistically reliable ($t = 3.78$).

Their estimates of the detectibility of their most valuable psychologists stayed largely the same across the course of the negotiation (from 69 to 72 percent) and it was only a decrease in identification accuracy (from 71 to 58 percent) over time that led to the difference in the magnitude of the illusion of transparency. These subsidiary findings may result from the usual dynamics of the negotiation process: Negotiators typically focus initially on the most important issues, postponing a discussion of less important issues or of what they are willing to give up to obtain what they want until later in the negotiation. This would explain why negotiators felt that they had already leaked information about their most important psychologists early in the negotiation, but that a similar feeling of leakage regarding their least important psychologists took longer to develop.

This tendency might also explain why it may have been relatively easy for the negotiators to discern one another’s “top choices” early in the discussion. It may have been harder to do so later on, after the negotiators discussed all of the psychologists and the various tradeoffs between them.

Study Two

In Study One, participants experienced an illusion of transparency when they were instructed to conceal their preferences from their partners. In many negotiations outside the laboratory, however, negotiators often attempt to communicate rather than conceal their preferences. In fact, negotiation instructors often advise MBAs and other would-be negotiators to communicate information about their preferences.

Do negotiators experience an illusion of transparency when they attempt to communicate rather than conceal their preferences? Past research has shown that people experience an illusion of transparency when trying (nonverbally) to *convey* thoughts and feelings in settings outside negotiations (Barr and Kleck 1995; Savitsky 1997). We therefore examined whether negotiators attempting to communicate some of their preferences, whose efforts at communication are not limited to nonverbal channels, would likewise experience an illusion of transparency.

As part of a classroom exercise, MBA students in negotiation courses completed a complex six-party negotiation simulation (Harborco, a teaching tool available from the Clearinghouse of the Program on Negotiation at Harvard Law School, www.pon.org). The course emphasized the importance of negotiators communicating some of their preferences to one another in negotiations. Prior to the Harborco negotiation, students had engaged in numerous other exercises in which their failure to convey information resulted in nonoptimal settlements.

To verify that the Harborco negotiators were attempting to communicate information about their preferences, we asked 22 Cornell and Northwestern University MBA students (not included in following study) who had just completed the Harborco negotiation to indicate which strategy they engaged in more: an information-sharing strategy (attempting to communicate their preferences to others), or an information-hiding strategy (attempting to conceal their preferences from others). Everyone indicated that they used the information-sharing strategy more.

We hypothesized that the same psychological processes that lead novice negotiators trying to conceal their preferences to experience an illusion of transparency would also lead experienced negotiators trying to communicate at least some of their preferences to experience a similar illusion. We thus predicted that participants would overestimate the number of other negotiators who could correctly identify their preferences.

Method

Two hundred and forty MBA students at Cornell and Northwestern completed the Harborco simulation, negotiating whether, and under what circumstances, a major new seaport would be built off the coast of a fictional city. There were six parties to the negotiation. The negotiator who represented Harborco (a consortium of investors) was most central. A second negotiator, representing the federal agency that oversees the development of such seaports, had to decide whether to subsidize a \$3 billion loan Harborco had requested. The other negotiators represented the state governor, the labor unions from surrounding seaports, the owners of other ports that might be affected by a new seaport, and environmentalists concerned about the impact of a new seaport on the local ecology.

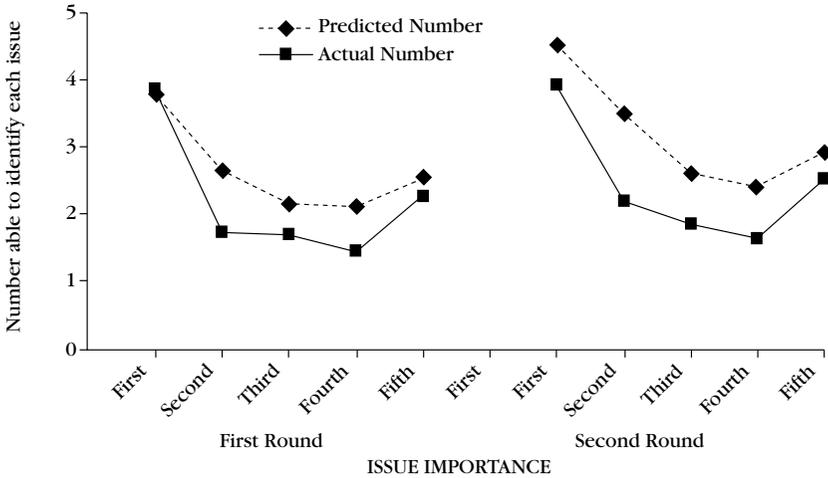
The negotiation involved five issues, each with several options of varying importance to the six parties. For each negotiator, points were assigned to each option of each issue. Student performance was evaluated according to the number of points accumulated. For example, the most important issue to the Harborco representative was the approval of the subsidized loan (worth 35 points for approval of the full \$3 billion, 29 points for approval of a \$2 billion loan, etc.); the second most important issue was the compensation to other ports for their expected losses due to the new seaport (worth 23 points for no compensation, 15 points for compensation of \$150 million,

etc.). The Harborco negotiator's preference order for the five issues was somewhat different from the preference order of the other five negotiators.

Participants were given approximately one and a half hours to reach an agreement. They were required to vote on a settlement proposed by the Harborco negotiator at three points during the negotiation: after 20 minutes, after one hour, and at the end. A successful agreement required the approval of at least five negotiators. Any agreement that included the subsidized loan required the approval of the federal agency representative. The Harborco negotiator could veto any proposal.

The dependent measures, collected after the first and final rounds of voting, concerned the Harborco negotiator's estimates of the other negotiators' identification of his or her preference order. The Harborco negotiators estimated how many of the other five negotiators would identify the rank ordering (to the Harborco negotiator) of each issue — for example, how many would identify the approval of the loan as their most important issue? We made clear that one negotiator would guess the exact importance of each issue by chance alone. Meanwhile, each of the other negotiators estimated the issue that was most important to Harborco, second most important, and so on.

Figure One



Predicted and actual number of negotiators able to identify correctly the importance of each issue to the Harborco negotiator after the first and final rounds of voting.

Results and Discussion

The dashed lines in Figure One indicate that, as predicted, the Harborco negotiators' estimate of the number of other negotiators who could identify the rank of each issue was greater than the actual number of negotiators able

to do so (as indicated by the solid lines). Following the first round of voting, the Harborco negotiators overestimated the number of their fellow negotiators able to identify the importance — to them — of all mid-range issues. All these differences were statistically reliable (all t s > 2.30). Negotiators did not overestimate the number of negotiators able to identify their most and least important issues. Following the final round of voting, Harborco representatives overestimated the number of negotiators able to identify their four most important issues. This overestimation was statistically reliable for the four most important issues (all t > 2.25), and was marginally reliable with a probability level of .14 for the least important issue ($t = 1.5$).

These findings replicate and extend those of Study One and of previous research on the illusion of transparency. Experienced negotiators who were attempting to convey (rather than conceal) their preferences to other negotiators tended to overestimate the transparency of those preferences.

Study Three

We contend that negotiators' overestimation of their partner's ability to discern their preferences reflects an egocentric illusion whereby negotiators overestimate the transparency of their internal states. An alternative account is that negotiators experience a "curse of knowledge," overestimating the knowability of whatever they themselves know (Camerer et al. 1989; Keysar and Bly, 1995; Keysar et al. 1995).

Negotiators may thus overestimate the discernibility of their preferences because they cannot undo the knowledge of their own preferences, not because they feel like their preferences "leaked out." Studies One and Two provide some evidence against this alternative interpretation because participants did not significantly overestimate their partners' ability to discern their preferences early in the negotiation — when they were "cursed" with the same knowledge, but had little opportunity for their preferences to leak out.

To provide a more rigorous test of this alternative interpretation, Study Three employed a paradigm in which observers were yoked to each individual negotiator. The observers were informed of their counterpart's preferences and thus were "cursed" with the same abstract knowledge, but not with the *phenomenology* of having — and possibly leaking — the negotiators' preferences. After watching a videotaped negotiation between their yoked counterpart and another negotiator, observers estimated the likelihood that their counterpart's negotiation partner would identify their counterpart's preferences. We expected that observers' estimates would be lower than actual negotiators' estimates because observers would not have the experience of their preferences "leaking out."

Method

Twenty-four previously unacquainted Northwestern University undergraduates participated in pairs in exchange for the opportunity to earn between \$4 and \$13, based on their performance in the negotiation.

Negotiators were taken to separate rooms and given instructions for the negotiation. The negotiation was similar to that used in Study One, except that it involved a buyer-seller framework, with which we felt our participants would be familiar. Participants learned that they would act as a provost of one of two campuses of a large university system. Because of budget cuts, the larger of the two campuses (the "seller") needed to eliminate fifteen of its 35 psychology department faculty. Because the fifteen faculty were tenured, they could not be fired, but they could be transferred to the smaller of the two campuses (the "buyer"), which was trying to acquire faculty.

Participants were to negotiate over the fifteen psychologists "in play"; any faculty not acquired by the buyer would remain at the seller's campus. Participants were given a report that described each psychologist and his or her associated point value. Some of the psychologists had a positive value to buyers and a negative value to sellers, others had a positive value to both, and still others had a negative value to both. Participants were told that they should not show their confidential reports to the other negotiator.

Participants earned 25 cents for every positive point and had to pay 25 cents for every negative point they accumulated. To give buyers and sellers an equal chance to make the same amount of money, we endowed sellers with an initial stake of \$10 and buyers with an initial stake of \$4. If buyers obtained all nine of the beneficial faculty and none of the four costly faculty (two were worth 0 points) they earned an additional \$8, for \$12 total. Similarly, if the sellers eliminated all eight costly faculty and retained all five beneficial faculty (two were worth 0 points) they earned \$2, for \$12 total. If no agreement was reached, sellers retained all faculty, losing \$6, and buyers acquired no psychologists, leaving both with \$4.

As in Study One, we gave participants laminated trading cards with a picture of each psychologist and two of that psychologist's better-known works on the back. The fifteen faculty members, although in reality all social psychologists, were arbitrarily divided into the three subdisciplines of social, clinical, and human-experimental psychology. We designed the payoffs so that the psychologist within each discipline who the buyer most wanted to obtain was not the psychologist the seller most wanted to eliminate.

To encourage participants to obtain or retain psychologists across the three disciplines, sellers were offered an additional two points if they eliminated at least one faculty member from each discipline, and an additional four points if they eliminated at least two from each discipline. Similarly, buyers were offered an additional two points if they acquired at least one faculty

member from each discipline, and an additional four points if they acquired at least two from each discipline. Thus, maximum earnings for buyers and sellers were \$13 (the \$12 earned by accumulating all possible positive points, no negative points, plus the \$1 bonus).

After negotiators understood their task, they were brought together and given as long as they needed to negotiate a division of the fifteen psychologists, usually about 20 minutes. Afterward, buyers estimated the likelihood (expressed as a percentage) that the seller would correctly identify the psychologists from each subdiscipline who were the most and least important for the buyer to obtain; sellers estimated the likelihood that the buyer would correctly identify the psychologists from each subdiscipline who were the most and least important for the seller to eliminate. Participants were told that the chance accuracy rate was 20% percent.³ Buyers were also asked to identify the psychologists from each subdiscipline who were the most and least important for the seller to eliminate, and sellers were asked to make analogous judgments about the buyers' incentive structure.

Control Condition. Twelve pairs of previously unacquainted Northwestern undergraduates were paid \$6 and “yoked” to one of the 12 pairs from the negotiation condition — one student matched to the buyer and one to the seller. Participants read the instructions given to their yoked counterpart (either the buyer or seller) in the actual negotiation before viewing their counterpart's videotaped negotiation. Participants then made the same estimates as their counterparts in the negotiation condition, identifying the psychologists from each subdiscipline who were most and least important for their counterpart's negotiation partner to acquire (or eliminate), and estimating the likelihood that their counterpart's negotiation partner would be able to guess the psychologists in each subdiscipline who were most and least important for their counterpart to obtain (or eliminate).

Results

Negotiators. As anticipated, negotiators exhibited an illusion of transparency. As can be see in the left and right columns of Table Two, buyers and sellers overestimated their partners' ability to identify their most important psychologists by 20 percent — both statistically reliable differences (t s= 3.58 and 3.45, respectively). Buyers and sellers also overestimated the likelihood that their partner would be able to identify their least important psychologists by 4 percent and 25 percent, respectively, with only the latter result statistically reliable ($t = 4.34$).

Control participants. Control participants displayed a “curse of knowledge,” overestimating the likelihood that their counterpart's negotiation partner would correctly identify their counterpart's preferences (compare the center and right columns of Table Two). This was particularly true for

those yoked to sellers: They reliably overestimated the likelihood that their yoked counterparts' negotiation partners would identify their counterparts' most and least important psychologists by 12 percent and 19 percent, respectively ($t_s = 2.58$ and 4.49). Control participants who were yoked to buyers, in contrast, did not overestimate the likelihood that their yoked counterparts' negotiation partners would overestimate their counterparts' preferences.

Table Two			
Participants' estimates of the likelihood that their negotiators' partners were able to identify the negotiators' most and least important psychologists, and the corresponding percentages actually able to do so.			
	Negotiators' Estimates	Control Estimates	Actual Accuracy
Most Important			
Buyers	70%*	53%	50%
Sellers	59%*	51%*	39%
Least Important			
Buyers	62%	56%	58%
Sellers	68%*	63%*	42%

Note: * indicates that the estimated percentage is reliably greater than the corresponding actual percentage, $p < .05$

More important, in every case the control participants' estimates (overall $M = 56$ percent) were lower than the actual negotiators' estimates (overall $M = 64$ percent) — a statistically reliable difference ($t = 2.53$). Thus, negotiators overestimated the transparency of their preferences more than yoked observers who were “cursed” with the same knowledge, but did not have the same subjective experience as negotiators themselves.

Discussion

The results of Study Three indicate that negotiators' overestimation of their partners' ability to discern their preferences stems from both a curse of knowledge and an illusion of transparency. Observers who were provided with the same abstract knowledge as the negotiators — those provided with

abstract information about *sellers'* preferences at any rate — overestimated the likelihood that those preferences would be detected.

However, this effect was not as strong as that found for actual negotiators' estimates. Those participants, possessing more detailed knowledge about how it felt to want to obtain some psychologists and avoid others, apparently thought that some of those feelings had leaked out to their partners because they made significantly higher estimates of the likelihood of detection than the observers did. Negotiators experience an illusion of transparency over and above any curse of knowledge to which they are subject.

What Does it All Mean?

These three studies provide consistent support for an illusion of transparency in negotiations. Undergraduate students who were instructed to conceal their preferences thought that they had “tipped their hand” more than they actually had (Studies One and Three). Likewise, business students experienced in negotiation who were attempting to communicate information about some of their preferences overestimated how successfully they had done so (Study Three). These results are not due to an abstract “curse of knowledge” because observers who were cursed with the same knowledge as the negotiators did not overestimate the detectability of the negotiators' preferences to the same extent as the negotiators did (Study Three). The illusion of transparency is thus due to the sense that one's *specific* actions and reactions that arise in the give-and-take of negotiation — a blush here, an averted gaze there — are more telling than they actually are.

These results complement and extend findings by Vorauer and Claude (1998) who examined participants' ability to estimate how well others could discern their general approach to a joint problem-solving exercise — i.e., whether they were most interested in being assertive, being fair, being accommodating, and so on. They found that participants thought their goals would be more readily discerned than they actually were. Their findings, however, appear to reflect a curse of knowledge rather than an illusion of transparency because their participants' estimates of the detectability of their own goals were just the same as those made by observers who were simply informed of the participants' goals.

The Vorauer and Claude findings should not be surprising since their participants did not actually engage in face-to-face interaction. Instead, each participant exchanged notes with a “phantom” other, whose responses were crafted by the experimenters. Without interaction, it is difficult see how an illusory sense of transparency could emerge. Vorauer and Claude's studies, along with the results of Study Three, suggest that the curse of knowledge can likewise lead to exaggerated estimates of how readily one's negotiation partner can discern one's own perspective on the negotiation (Keysar et al. 1995).

It is important to note that both the illusion of transparency and the curse of knowledge reflect people's difficulty in getting beyond their privileged information. In the curse of knowledge, this information is abstract knowledge of one's beliefs, preferences, or goals; in the illusion of transparency, this information is more detailed, phenomenological knowledge of how one feels or how difficult it was to suppress a particular reaction.

At one level, then, it may be fair to characterize the illusion of transparency as a special case of knowledge — more detailed and affect-laden — with which one is cursed. At another level, however, the differences between the two phenomena may be sufficiently pronounced that there is more to be gained by viewing them as distinct. Ultimately, a more complete understanding of the relationship between the curse of knowledge and illusion of transparency must await the outcome of further research.

Future research might also further examine the underlying mechanism proposed for the illusion of transparency. Gilovich et al. (1998) attribute the phenomenon to a process much like Tversky and Kahneman's (1974) anchoring and adjustment heuristic. When attempting to ascertain how apparent their internal states are to others, people are likely to begin the process of judgment from their own subjective experience. Because people know that others are not as privy to their internal states as they are themselves, they adjust from their own perspective to capture others' perspective.

Because such adjustments tend to be insufficient (Tversky and Kahneman 1974; Epley and Gilovich 2001), the net result is a residual effect of one's own phenomenology, and the feeling that one is more transparent than is actually the case. This account suggests that the illusion of transparency should be particularly pronounced when the internal state being assessed is one that is strongly and clearly felt, such as when negotiating especially important issues.

In addition, future research might examine the impact of the illusion of transparency on negotiation processes and outcomes. Thompson (1991) has shown that when negotiators have different priorities, negotiators who provide information about their priorities to their partners fare better than those who do not. The illusion of transparency may lead negotiators to hold back information about their priorities in the mistaken belief that one has conveyed too much information already. By leading negotiators to believe that their own preferences are more apparent than they really are, the illusion of transparency may give rise to the belief that the other side is being less open and cooperative than they are themselves — which may lead each negotiator to hold back even more. The process can thus spiral in the wrong direction toward greater secrecy.

It may be advantageous, then, for negotiators to be aware of the illusion of transparency. If negotiators know they tend to conceal less than they think they do, they may open up a bit more and increase their chances of reaching optimal agreements. In other words, knowing that one's own "thought bubbles" are invisible to others can lead to more successful negotiations.

NOTES

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1. Because the data for each pair of negotiators are interdependent, all analyses in this and subsequent studies used the dyad (or group) as the unit of analysis.

2. A *t* statistic is a measure of how extreme a statistical estimate is. Specifically, a *t* is the ratio of the difference between a hypothesized value and an observed value, divided by the standard error of the sampled distribution. Consider negotiators' estimates, following the negotiation, that their negotiation partner had a 72 percent chance of correctly identifying their most valuable psychologist. Because, in actuality, negotiators identified their partners' most valuable psychologist only 58 percent of the time, the difference between the hypothesized value (58 percent) and the observed value (72 percent) is 14 percent. The standard error, in this case, is the standard deviation of the difference between a negotiators' predicted likelihood and the actual likelihood (the average squared difference between these two scores), divided by the square root of the sample size. In general, *t* statistics more extreme than 1.96 are statistically reliable — that is, the probability that the observed difference is due to chance alone is less than .05.

3. We also asked negotiators to estimate which subdiscipline was most important to their partner, and to estimate the likelihood that their partner would discern correctly their own preference order vis-à-vis the three subdisciplines. During debriefing, however, participants said they found these questions confusing because they did not parse the 15 faculty according to their subdiscipline, but instead focused on the value of each individual faculty. These responses are therefore not discussed further.

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