Negotiating via Information Technology: Theory and Application

Leigh Thompson[*]
Northwestern University

Janice Nadler
Northwestern University and American Bar Foundation

In this review article, we examine how people negotiate via e-mail and in particular, how the process and outcomes of e-negotiations differ from those of traditional face-to-face bargaining. We review the key tasks of negotiation and then undertake a review of the research literature that has examined e-negotiations. We outline four theories of interaction that provide insights about social behavior in e-media: rapport building, social contagion, coordination, and information exchange. Our research program has focused on the interpersonal factors and social identity factors that can enhance the quality of e-negotiations. E-negotiators often succumb to the temporal synchrony bias, the burned bridge bias, the squeaky wheel bias, and the sinister attribution bias. We discuss social psychological factors that can reduce these biases and the future of research on e-negotiations.

There is a mix of evidence on how information technology affects social behavior (Kiesler & Sproull, 1992; Postmes, Spears, Sakhel, & de Groot, 2001). In this article, we review research and theory on how e-mail, as a particularly important type of information technology, affects negotiation behavior. First, we introduce negotiation theory, which conceptualizes negotiation as a mixed-motive enterprise, involving both cooperation and competition. Next, we review theories of how information technology affects social behavior. We then review our program of research and identify four social interaction biases that are produced when information technology meets negotiation. In particular, we examine

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[*]Correspondence concerning this article should be addressed to Leigh Thompson, Management & Organizations, Kellogg School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208 [e-mail: leighthompson@kellogg.northwestern.edu].

factors that lead to what we term (1) the temporal synchrony bias, (2) the burned bridge bias, (3) the squeaky wheel bias, and (4) the sinister attribution bias. Finally, we examine practical and theoretical implications of this research program.

Negotiation is an interpersonal decision-making process by which two or more people make mutual decisions concerning the allocation of scarce resources (Pruitt & Carnevale, 1993). Negotiation is a mixed-motive endeavor, such that negotiators are motivated to cooperate with one another to reach agreement, but compete with one another to claim resources (Lax & Sebenius, 1986; Walton & McKersie, 1965). For example, an employee and employer may both recognize the value of reaching mutual agreement, yet each is motivated to maximize his or her own gain. Thus, the key tasks of negotiation are expanding the pie of resources (the cooperative aspect) and claiming resources (the competitive aspect). In negotiation theory, these tasks are known as integrative negotiation and distributive negotiation.

Integrative negotiation is the process of how negotiators reach mutually beneficial agreements. Moreover, when people have different preferences, beliefs, and interests, it is possible to craft outcomes that are better for both parties than simple "split it down the middle" solutions. Unfortunately, most people have a fixed-pie perception of negotiation—that is, they believe that the other party's interests are directly and completely opposed to their own interests (Bazerman & Neale, 1983; Thompson & Hastie, 1990; Thompson & Hrebec, 1996), and consequently, often fail to capitalize on their mutual interests.

It is particularly ironic, then, that most negotiation situations contain potential for mutually beneficial agreements. In most negotiation situations, parties' interests are imperfectly correlated with one another, so that the gains of one party do not represent equal sacrifices by the other (Lax & Sebenius, 1986). However, the fixed-pie perception is a powerful and pervasive heuristic. A meta-analysis of several laboratory and some field investigations of negotiations revealed that people fail to realize compatible interests about 50% of the time (Thompson & Hrebec, 1996).

The task of claiming resources in negotiation is known as distributive bargaining (Deutsch, 1985; Walton & McKersie, 1965). For distributive bargaining to result in an agreement, a positive bargaining zone must exist, meaning that there must be a range of possible agreements that both parties would be willing to accept. For example, if the buyer of a car is willing to pay a maximum of $8,000, and the seller is willing to accept a minimum of $6,500, there is a positive bargaining zone (i.e., any price between $6,500 and $8,000), and the parties must simply decide how the pie will be divided.

Negotiating via Information Technology

Given the pervasiveness of negotiation as a form of social interaction, coupled with the rising prominence of information technologies as a communication

mechanism, the question of how negotiation is conducted via e-mail is of great theoretical and practical importance (Turban, Lee, King, & Chung, 2000). We review four theoretical principles: interpersonal rapport, coordination, social contagion, and information; we then consider their implications for negotiation behavior.

Interpersonal Rapport

Most definitions of rapport include in their descriptions the feeling of being "in sync" with the other person in the interaction. Tickle-Degnen and Rosenthal (1990) note that there are three components to rapport: (1) mutual attentiveness (i.e., my attention is focused on you and your attention is focused on me), (2) positivity (i.e., we are friendly to each other), and (3) coordination (i.e., we are in sync, so that we each react spontaneously to the other).

Empirical investigations reveal that rapport enhances the quality of social interaction. Morris and his colleagues (Drolet & Morris, 1995, 2000; Moore, Kurtzberg, Thompson, & Morris, 1999) have examined how rapport mediates negotiated outcomes. More face-to-face contact produces more rapport, which in turn leads to more favorable outcomes for both parties. In another investigation (Drolet & Morris, 1995), rapport was a powerful determinant of whether people developed the trust necessary to reach integrative agreements. Nonverbal cues, such as body orientation, gestures, eye contact, head nodding, and paraverbal speech, such as fluency, use of fillers, such as "uh-huhs," were key to building rapport.

Coordination

Coordination in a negotiation context is the ability of negotiators to agree, implicitly or explicitly, on a course of action that results in a particular outcome. For example, in one bargaining game, called the "double auction" (Myerson & Satterthwaite, 1983), each party simultaneously submits an offer; if there is no overlap, no transaction takes place; if there is a positive overlap (e.g., the buyer demands $30, and the seller is willing to pay $40), the final price is the outcome midway between the two offers (i.e., $35). Although rational choice theory predicts that the communication medium should be inconsequential, empirical investigations have revealed that communication medium makes a large and dramatic difference, such that negotiators who communicate face to face or via telephone are more likely to converge on a single offer prior to submitting their bids, compared to those who communicate only via written offer (Valley, Moag, & Bazerman, 1998; Valley, Thompson, Gibbons, & Bazerman, in press). Valley, Thompson, Gibbons, and Bazerman refer to this strategy, which emerges only in an information-enhanced medium (i.e., face-to-face or telephone interaction), as coordination.

Information

Physical proximity presents certain advantages for social exchange in general and for the exchange of information in negotiation. People who are located in physical proximity have opportunities to interact more frequently. The casual conversations that negotiators have in the restroom, by the water cooler, or walking back from lunch are often where many difficult negotiation problems are solved. Conflicts are expressed, recognized, and addressed more quickly if negotiators are in physical proximity. Problems can be recognized and resolved more quickly when people interact in the same physical space. Thus, it is often the case that more information is exchanged between people in physical proximity simply because they interact more often.

A second reason why information is exchanged more readily face to face than over e-mail arises from fundamental differences between verbal and written exchange. People talk faster than they write or type. In addition, face-to-face verbal interaction occurs all in one session: People sit down and interact for 10 min, and then get up and leave. By contrast, the exchange of the same amount of information over e-mail might be accomplished over the course of hours or even days. However, several investigations of face-to-face versus more restricted forms of communication reveal that people engage in more non-task-relevant discussions in face-to-face discussions, resulting in less efficient discussions (Paulus et al., 1998). In one of our investigations, we asked participants to negotiate a buyer-seller task. Half the negotiation dyads used face-to-face verbal communication exclusively, and the other half used e-mail exclusively (Morris, Nadler, Kurtzberg, & Thompson, 2000). We found that the face-to-face negotiators exchanged more than three times the amount of information, on average, than the e-negotiators. Thus, interactions that are removed physically and are lacking in temporal contiguity (such as in e-negotiations) can result in less overall information exchange and less than optimal social outcomes.

Social Contagion

Social contagion is defined as "the spread of affect, attitude, or behavior from Person A (the 'initiator') to Person B (the 'recipient') where the recipient does not perceive an intentional influence attempt on the part of the initiator" (Levy & Nail, 1993, p. 266). According to Levy and Nail (1993), there are three subtypes of contagion, the most relevant one for the study of e-negotiation being "echo contagion," which occurs when a social actor imitates or reflects spontaneously the affect or behavior of an initiator. The term *echo* refers to a tendency toward automatic imitation of another (cf. Polansky, Lippitt, & Redl, 1950). There are several behavioral measures of echo contagion, such as when people cough, sneeze, or yawn when others do (Pennebaker, 1980); modify their overall activity level to accommodate

a partner's activity level (Jaffe & Feldstein, 1970); synchronize temporal aspects of the conversational activities with those of an interviewer (Matarazzo, Saslow, & Guze, 1956); regulate gaze patterns (Exline, 1971); and amplify their voices (Natale, 1975). Emotional contagion (Gump & Kulik, 1997; Hatfield, Cacioppo, & Rapson, 1994; Schachter, 1959) is a particular type of social contagion wherein people mimic the facial expressions and behaviors or others and in turn feel the same emotions of others. The "chameleon effect" refers to nonconscious mimicry of the postures, mannerisms, facial expressions, and behaviors of others (Chartrand & Bargh, 1999). Chartrand and Bargh suggest that the mere perception of another's behavior automatically increases the likelihood of engaging in that behavior oneself.

Whereas the great bulk of research on social contagion processes has been carried out in face-to-face settings, we suggest that social contagion can also occur in e-interaction. An excellent early empirical investigation is Starch's (1911) study of unconscious imitation in handwriting. Although participants never interacted directly, they imitated the handwriting (slant and size) of another participant. We suggest that e-actors nonconsciously imitate not only the linguistic structure of each other's messages (e.g., message length, informational content, grammar) but also the social-emotional connotations of the other's message (e.g., tone, directness) and perhaps even the rate at which the message is attended to (in terms of e-reply lag time). Indeed, McGrath and Kelly's (1986) entrainment model suggests that interacting dyads and groups will match one another in terms of the rate and quality of their task performance. On the other hand, failure to match these cues, such as delaying a long time in responding to an e-mail message during a critical phase of relationship development, can impart powerful meaning about the status of the relationship (Lea & Spears, 1995).

In addition to basic social contagion factors, communication media such as e-mail have been associated with counternormative social behavior (Kiesler & Sproull, 1992). Kiesler and Sproull (1992; see also Sproull, Subramani, Kiesler, Walker, & Waters, 1996) argue that to the extent that situations fail to provide cues relevant for normative behavior, there are fewer constraints on counternormative behavior. In short, e-interactors show feelings that otherwise might be masked in socially appropriate ways. Our own work examining negotiation behavior has revealed that e-negotiators feel less restrained about expressing normatively inappropriate behavior and as a result make more threats and issue more ultimatums than do face-to-face negotiators (Morris et al., 2000).

In addition to counternormative behavior, the absence of social cues in electronic communication can cause people to become disengaged. Sproull et al. (1996) argue that people's responses to e-communication differ as a function of the "humanness" of the interface. For example, in an investigation of a career counseling system, when interacting with a "talking-face" interface, people were more aroused, attributed personality traits to the other party, and presented themselves

in a more favorable light as compared to when they interacted with a "text-display" interface (Sproull et al., 1996).

On the other hand, Spears and Lea (1992) argue that group computer-mediated communication can actually promote normatively positive behavior among group members. Salient group norms can be enhanced in e-communication because the group image is uncontaminated by the physical presence of individuals who might deviate from the group (Spears, Lea, & Lee, 1990). Furthermore, in e-communication, visual anonymity and physical isolation encourage self-disclosure (McKenna, Green, & Gleason, this issue), and as a result, group members engaged in e-communication feel greater identification with the group and have more positive impressions of one another than they would in face-to-face communication (Spears & Lea, 1992).

Our Research Program

During the past 5 years, we have conducted a program of research that examines the dynamics of negotiation behavior conducted via electronic mail. In this section, we briefly review our methodological paradigm and highlight our findings. Our basic paradigm involves Master's in Business Administration students at Kellogg Management School negotiating via e-mail with students at Stanford University. Occasionally, departure from this paradigm was required. For example, because of distance constraints, participants in face-to-face negotiations were from the same school. Thus, our e-mail comparison group also contained students from the same school as the face-to-face group.

All students completed the "e-mail negotiation" as part of a 10-week-long course on negotiations. Specifically, students at each university were randomly assigned to either a buyer or a seller role in a classic buyer-seller negotiation involving the purchase of company cars. The eight-issue negotiation task contained integrative potential, but this had to be discovered by the students. Students were given printed instructions containing the e-mail address of their counterpart and strict guidelines to complete the negotiation within 7–10 days. Following the completion of the negotiation, students forwarded all of their e-correspondence for data analysis. The e-correspondence was coded and analyzed according to a coding scheme developed and published in our first empirical article (Moore et al., 1999). Then the participants completed the postnegotiation measures.

In all studies, we were careful to counterbalance and/or randomize all factors, such as role, gender, and university. Whereas there are equal proportions of men and women across universities, there are substantially fewer women in relation to men overall. Thus, in several of our investigations, we are not able to include female-female dyads. Another unexplored issue concerns race and ethnicity, as our participant population does not contain sufficient diversity on this variable.

Using analysis of variance techniques, we tested several different treatments for effects on negotiation performance and process. For example, we compared e-negotiations following a brief telephone conversation (the treatment group) with e-negotiations that took place without any telephone contact (the control group).

Our key research questions have centered on three major issues:

1. What are the major behavioral and performance differences of e-mail versus face-to-face negotiation (Morris et al., 2000)?

2. What are the key social factors that can affect the nature and quality of negotiating via e-mail (Moore et al., 1999)?

3. What steps can be taken by people who must negotiate via e-mail, so that they can enhance the social as well as economic outcomes of negotiation (Moore et al., 1999; Morris et al., 2000; Thompson, Morris, & Nadler, 2000)?

Our paradigm allows investigation of interpersonal factors (such as the nature of the relationship between the two parties in the interaction) and social identity factors (such as ingroup vs. outgroup interactions) as well.

Key Research Findings

The major research findings from our program of research are summarized in Table 1, which identifies both social and economic outcomes. Compared to face-to-face negotiations, what appears to be starkly absent from e-mail negotiation is communication with others that is non-task-related and is more relationship-focused, which we call "schmoozing" (Moore et al., 1999; Morris et al., 2000). We hypothesized that schmoozing plays an important role in building rapport in the negotiating relationship and that the rapport developed between negotiators in turn sets the stage for the kind of cooperation and trust that facilitates agreements that are beneficial to both parties. We tested the "schmoozing" hypothesis in several ways (Moore et al., 1999; Morris et al., 2000). The results were dramatic: Negotiators who schmoozed (on the phone) developed more realistic goals, resulting in a larger range of possible outcomes, and were less likely to impasse compared to nonschmoozers. The key mediating factor was rapport. In short, even though both schmoozers and nonschmoozers conducted all of the business aspects of the deal via e-mail, there were dramatic differences in the negotiators' strategies and in the result of the negotiation.

Moreover, negotiators who schmoozed on the phone prior to conducting the e-mail negotiation expressed greater optimism about a future working relationship with the other party, compared to negotiators who did not schmooze (Morris et al., 2000). Negotiators who attempt to build rapport engender more positive emotion and trust than do those who attempt to dominate (Tiedens, Thompson, Morris, & Nadler, 1999). Further, negotiators' feelings and memories about a business

Table 1. Negotiating via E-mail: Effects of Rapport and Social Identity on Negotiation Outcomes

	Key findings: Social outcomes	Key findings: Economic outcomes
Interpersonal (dyadic) factors	As compared to face-to-face negotiation, e-mail reduces rapport building (Morris, Nadler, Kurtzberg, & Thompson, 2000)	As compared to face-to-face negotiation, e-mail increases multi-issue offers (Tiedens, Thompson, Morris, & Nadler, 1999)
	Brief telephone call prior to e-mail results in greater cooperation and better working relationship (Morris, Nadler, Kurtzberg, & Thompson, 2000)	Brief telephone call prior to e-mail improves outcomes (Morris, Nadler, Kurtzberg, & Thompson, 2000)
	Negotiators who attempt to build rapport engender more positive emotion and trust than do those who attempt to dominate (Morris, Nadler, Kurtzberg, & Thompson, 2000)	Brief personal disclosure over e-mail reduces likelihood of impasse (Moore, Kurtzberg, Thompson, & Morris, 1999)
Group and social identity factors	Outgroup e-negotiators express more negative affect and develop less rapport compared to ingroup negotiators (Moore, Kurtzberg, Thompson, & Morris, 1999)	Negotiators concerned about their group's reputation use more aggressive strategies, leading to lower outcomes than negotiators concerned about their personal reputation (Thomas-Hunt, Nadler, & Thompson, 2000)
	Males e-negotiating with other males develop less cooperative working relationships compared to males e-negotiating with females (Morris, Nadler, Kurtzberg, & Thompson, 2000)	Outgroup e-negotiations result in more impasses than do ingroup e-negotiations (Moore, Kurtzberg, Thompson, & Morris, 1999; Thomas-Hunt, Nadler, & Thompson, 2000)

encounter are highly driven by their perception of the relationship, not the economic outcome (cf. Galinsky, Mussweiler, & Medvec, 1999; Thompson, 1995). In sum, rapport building between negotiators leads to trust and optimism about the future that motivates people to form long-lasting relationships and to maintain contact in the future.

In addition to explicit rapport-building rituals, another route to successful negotiation outcomes exploits existing features of relationships involving social identification with the other party. Comparing e-negotiations between parties at the same university to e-negotiations between parties at different universities reveals that membership in the same social group (e.g., the same university) can reduce the likelihood of impasse in e-negotiations (Moore et al., 1999; Thomas-Hunt, Nadler, & Thompson, 2000; Tiedens et al., 1999).

It is worth noting that in our experiments, the control group (negotiators who did not share social ties with their counterparts) consistently underperformed on the relevant measures of negotiation performance, in comparison to our treatment groups (negotiators who did share social ties with their counterparts). The

implication is that left to their own devices, e-negotiators are not as successful as they might be in terms of establishing rapport with the other party, reaching agreement when a positive bargaining zone exists, and reaching integrative outcomes. Our research has revealed a set of biases or assumptions that characterize the cognitions of e-negotiators that we review below.

Biases That Affect E-Negotiations

Just as research on face-to-face negotiations has identified a set of cognitive-motivational biases that threaten the quality of negotiated outcomes, our research program has identified a set of biases that can threaten the quality of negotiated interactions. We identify four of these biases below.

Temporal synchrony bias. The temporal synchrony bias is the tendency for negotiators to behave as if they are in a synchronous situation when in fact, they are not. E-negotiators are aware on some level of the asynchronous aspect of e-negotiation but discount it and ignore some of its implications. E-negotiators often behave as if they believe that they can control the rate of message exchange that occurs within the interaction. Such control is often possible in face-to-face interactions, because people tend to converge in the length of their utterances and rate of speech. This process of convergence is an example of social contagion. This difference in how senders and receivers parse the interaction in terms of time can lead to frustration and very commonly, negative dispositional attributions (see "Sinister Attribution Bias," below).

One of the widely cited advantages of e-mail is that any one can send a message whenever he or she wants. The problem is that there may not be anyone there to listen. In e-negotiations, this can be especially problematic, given that most negotiators have a "tennis game" mental model of negotiations; that is, they expect the other party to "volley back" offers much faster than is actually possible using asynchronous media. Indeed, in our research, we found less turn-taking behavior in negotiations conducted via e-mail than in face-to-face negotiations (Morris et al., 2000). And turn taking is positively correlated with schmoozing behavior (e.g., discussion of background issues) that leads to trust and rapport (Morris et al., 2000).

Conversational turn taking does not just make interaction seem smoother, it also serves an important informational function, with interactants engaging in a process of mutual corrections. In face-to-face interactions, receivers and senders typically engage in a process of rapid correction of information. In e-negotiations, by contrast, negotiators must attempt to interpret what the other party has said without the opportunity for brief requests for clarification as the other party is talking. Thus, e-negotiators make assumptions. For example, in our investigation of e-mail versus face-to-face negotiation, e-negotiators asked fewer clarifying questions than did face-to-face negotiators (Morris et al., 2000). These assumptions, however, are often egocentrically tainted, which leads to anger.

Burned bridge bias. The burned bridge bias is the tendency for e-negotiators to engage in risky interpersonal behaviors in an impoverished medium that they would not engage in when interacting face to face. For example, negotiators may create "tests" for the other party that lead to a high probability of failure (e.g., negotiators may say, "If I don't hear from you in 1 hr, then I am going to assume that you don't want to reach an agreement and I will refuse to send any more offers.") In face-to-face interactions, there are a variety of behaviors that negotiators engage in—many of them on a micro level—that enhance relationships (Sproull et al., 1996). For example, politeness rituals, such as smiling, nodding, making direct eye contact, and verbalizations that endorse what the other is saying (e.g., "uh-huh," "OK"), serve to strengthen the relationship between negotiators. Negotiators who build positive rapport are less likely to burn bridges or create situations that imperil the relationships (Morris et al., 2000). A lack of rapport encourages feelings of anonymity and social distance, leading people to reason that the relationship is more temporary and fleeting.

One of the reasons why e-negotiators may burn bridges is that there is less accountability for the relationship. In this sense, e-negotiation often occurs in a vacuum, meaning that short of people explicitly inviting others, such as colleagues or third parties, to witness the interaction, the nature of the interaction is oblivious to others. In contrast, face-to-face negotiations often take place in a richly grounded social network, and in this sense there is greater accountability for one's behaviors (cf. Wicklund & Gollwitzer, 1982). Indeed, observers of face-to-face interactions are able to immediately assess the felt rapport among interactants. Furthermore, observers appear to pay attention to the right cues: The greater the synchrony of nonverbal displays, the more likely an outside observer will judge that a high level of rapport is present in the interaction (Bernieri, 1991; Bernieri, Davis, Rosenthal, & Knee, 1994). An important question for further investigation is whether introducing an accountability mechanism into e-negotiation (such as copying each message to a designated third party who has social ties to both parties) would reduce the risky interpersonal behaviors that occur via e-mail.

Squeaky wheel bias. The squeaky wheel bias is the tendency for negotiators to adopt an aversive emotional style when interacting via an impoverished media, such as e-mail, to achieve their goals, whereas the same negotiator might use a positive emotional style in a face-to-face interaction. Thompson, Medvec, Seiden, and Kopelman (2001) identified three common emotional styles that negotiators can adopt: positive, rational, or negative. The positive negotiation style is the "win more flies with honey" approach. In contrast, the rational emotional approach is devoid of emotion. The inherent belief is that emotion is weakness and that it is best to be rational. Finally, the negative emotional style is a manifestation of the belief that it is more effective to behave in a slightly irrational fashion and use negative emotion to achieve one's goals. One such negative style is the squeaky wheel approach, which captures the idea that a negotiator who throws a temper

tantrum is most likely to achieve her goals. Negotiators are likely to use a squeaky wheel approach when they believe intimidation will be effective (cf. Rothbart & Hallmark, 1988). Our argument is that the squeaky wheel approach is most likely to emerge in an e-mail context.

As we discussed earlier in the context of social contagion, communication media such as e-mail have been associated with counternormative social behavior (Kiesler & Sproull, 1992). Indeed, as compared to face-to-face negotiations, strangers negotiating over e-mail are more likely to negatively confront one another. Rude, impulsive behavior, such as flaming, increases when strangers interact on e-mail, in part because people pay more attention to content and less attention to etiquette over e-mail and in part because people perceive the squeaky wheel strategy as most effective. In fact, one study suggests that people are eight times more likely to flame in e-discussion than in face-to-face discussion (Dubrovsky, Kiesler, & Sethna, 1991). On the other hand, when e-discussion members are part of a cohesive group, the anonymity and lack of physical contact of electronic communication makes group norms more salient and can increase conformity to communication norms over time (Postmes, Spears, & Lea, 2000; Postmes et al., 2001; Spears et al., 1990). Nonetheless, e-mail negotiators for whom group norms are not salient (e.g., strangers who have not had the opportunity to schmooze before negotiating) find that conflict escalates more often and more quickly, and this process of conflict escalation frequently serves as a roadblock to the process of information exchange often required for integrative outcomes.

Sinister attribution bias. People often misattribute behavior of others to personal dispositions and overlook the influence of temporary, situational factors (Ross, 1977). The sinister attribution bias is a type of mutation of the fundamental attribution error, wherein attributions of the other person's behavior are not only dispositional, but also diabolical. People do in fact behave in less appropriate ways when communicating via e-mail (and other impoverished media); we argue that the likelihood of making dispositional attributions increases disproportionately to the rate of counternormative e-behavior.

Social identity theory suggests that more similar we perceive others to be, the more cooperative and trusting we are; conversely, if someone is perceived as an outgroup member, particularly from a threatening group, the less likely people are to show trust and cooperation (Tajfel & Turner, 1986). The more we perceive the other party as a member of an outgroup, the more we attribute his actions to malevolent motives, a phenomenon Kramer (1995) refers to as the "sinister attribution error." Attributing sinister motives to outgroup members is especially prevalent in e-mail communication, where the absence of social cues leads to feelings of social distance. Indeed, Fortune and Brodt (2000) found that negotiators interacting via e-mail were more likely to mistrust and suspect the other party of lying or otherwise deceiving them, relative to negotiators interacting face to face. Yet e-negotiators were in fact no more likely than face-to-face negotiators

to deceive the other party. Thus, the increased suspicion of the other party on the part of e-negotiators had no factual basis.

Perceived ingroup status of the e-negotiation opponent can reverse the sinister attribution effect and can have a dramatic effect on e-negotiation outcomes and processes. In one study, the likelihood of impasse was reduced to nearly zero when e-negotiators perceived that their counterpart was a member of their ingroup (Moore et al., 1999). E-negotiators who did not perceive the other party as an ingroup member were economically the worst off: They left more money on the table than other e-negotiators, because their suspicion and distrust of the other party hindered the kind of information exchange necessary to engage in mutually profitable trade-offs. Moreover, Spears and his colleagues (Postmes et al., 2001; Spears et al., 1990) have demonstrated that, under conditions of salient social identity and ingroup status, the very anonymity of electronic communication causes e-group members increase their group allegiance and normative behavior.

Implications for Theory and Practice

The investigation of e-mail naturally raises questions that are central in the study of social psychology: How do people make first impressions, build rapport, recover from a breach of trust (Fiske & Neuberg, 1990; Wieselquist, Rusbult, Foster, & Agnew, 1999)? Social psychological theory has much to offer in explaining how people build relationships and exchange information (Berscheid & Reis, 1998; Rusbult & Van Lange, 1996). An important question, we believe, concerns impression development (Fiske & Neuberg, 1990). In face-to-face interaction, people have a panoply of cues to help them form impressions of others (Brewer, 1988). Further, social psychological research has revealed that the most important cues, perhaps to the chagrin of most people, are physical attractiveness, gender, and race (Brewer, 1988; Eagly, Ashmore, Makhijani, & Longo, 1991; Fiske & Neuberg, 1990; Mazur, 1985). Generally speaking, e-mail communication may cultivate relationships between people that would have otherwise never formed (McKenna & Bargh, 2000). Indeed, the availability of e-mail as a medium for initial negotiations might help to create opportunities for job candidates, sales representatives, consultants, and agents, to name just a few. The "gating features" (McKenna et al., this issue) present in face-to-face interaction that impede relationship formation for people who are physically unattractive or socially anxious are largely absent in e-mail. Thus, other information presumably forms the basis of e-impressions, including expressions of self-disclosure (Bargh, McKenna, & Fitzsimons, this issue). This suggests that rapport-building opportunities we discussed earlier are specific to computer-mediated communication but not unique to negotiation. McKenna et al. (this issue) reported that gating features are the most salient features of face-to-face meetings, preventing people from forming bonds based on the quality of the interaction, whereas over the Internet substantive features of an encounter, such

as the degree to which the participants got to know one another and the quality of the conversation, drive initial liking.

Practice and Policy Recommendations

Rapport and perceived ingroup status emerge as powerful factors that influence the quality of negotiated outcomes. Negotiators who have a positive relationship, either through perceived shared membership in an ingroup or through the process of engaging in a personal, getting-to-know-you exchange prior to the negotiation, are more likely to express positive affect during the negotiation process. This expression of positive affect, in turn, leads to lower impasse rates and increased integrative agreement.

A second factor influencing the quality of negotiated outcomes is trust. Negotiators who establish rapport prior to commencing negotiations via e-mail report significantly higher levels of trust in their counterpart compared to negotiators who fail to establish rapport prior to commencing negotiations (see Wieselquist et al., 1999, for a review of emotion and trust). Conversely, negotiators who don't feel a connection with their counterpart or perceive their counterpart as a member of an outgroup are more likely to engage in a negotiating style motivated by negative affect, resulting in flaming and escalation of conflict, which makes mutually beneficial information exchange less likely to occur and less trustworthy and thus makes the likelihood of agreement lower. Thus, the positive influence of trust and rapport on negotiated outcomes suggests that there are prescriptive techniques that can be employed to minimize losses that can occur in communication-impoverished negotiations. Organizations whose members rely on e-mail for negotiating with others outside of their own work groups might adopt policies for e-mail use that reflect the influence of rapport-building techniques on affect, trust, and ultimately, negotiated outcomes.

However, we fully expect that there are different classes of skills, currently not under standard social psychological investigation, that may prove to be important for helping people to be competent in an e-business world. Thus the challenge for the investigation of e-negotiation, and e-interactions in general, will be to develop concepts and theories that are unique to the medium, rather than merely borrowing from established disciplines. In this sense, it may be useful to combine experimental investigations, in which manipulations and treatments are introduced and their effect on preestablished indices are measured, with more passive observation in natural settings.

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LEIGH THOMPSON is the J. Jay Gerber Distinguished Professor of Dispute Resolution and Organizations in the Kellogg School of Management at Northwestern University. She is the director of the AT&T Behavioral Research Laboratory at Kellogg and an executive member of the Dispute Resolution Research Center, and she also directs the Negotiation Strategies and Leading High Impact Teams Executive Programs at Kellogg. She received an MA in Education from the University of California at Santa Barbara and a PhD in Psychology from Northwestern University. Thompson is a recipient of the National Science Foundation's Presidential Young Investigator Award, a fellowship at the Center for Advanced Study in the Behavioral Sciences at Stanford, and a grant from the Citigroup Behavioral Sciences Research Council of Citibank. Her research areas focus on negotiation, group decision making, learning and creativity, and team performance. She is the author of three books and over 60 articles in leading management journals and books.

JANICE NADLER is an Assistant Professor of Law at Northwestern University and a Research Fellow at the American Bar Foundation. She received a PhD in social psychology from the University of Illinois at Urbana-Champaign and a JD from the University of California at Berkeley. Her research interests focus on distributive justice, deference to legal authority, negotiation, and conflict resolution.