At a loss for words: Dominating the conversation and the outcome in negotiation as a function of intricate arguments and communication media

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Abstract

Under what conditions do intricate pre-planned arguments enable negotiators to dominate the conversation and ultimately the outcome? We proposed the advantage occurs when the communication media involves the expectation of rapid turn-taking, because counterparts cannot generate rebuttals in time and end up making concessions. In an experiment with a negotiation task, sellers were provided with either intricate or simple arguments to support a competitive tactic and negotiated via either a quick-tempo (Instant Messaging) or slow-tempo (E-mail) medium. As predicted, intricate (versus simple) arguments enabled sellers to claim more value in the quick (Instant Messaging) but not the slow (E-mail) medium. Mediational analyses traced this effect through two process measures: the extent to which sellers enacted the competitive strategy (coded from transcripts), and the extent to which buyers consequently felt "at a loss" (measured by self-reports). We discuss the theoretical and practical consequences of these findings for negotiations.

Introduction

Research on negotiation and joint decision-making has increasingly focused not just on individual cognitive processes but also on interpersonal dynamics that emerge between negotiators (Brett, Northcraft, & Pinkley, 1999; Lytle, Brett, & Shapiro, 1999; McGinn & Keros, 2002; Olekalns, Smith, & Walsh, 1996; Thomas-Hunt, Ogden, & Neale, 2003; Weingart, Hyder, & Prie-

tula, 1996). The affectively charged dynamics that are so consequential in negotiations, such as rapport and dominance, depend to a surprisingly large extent on negotiators' communication conditions rather than their personalities. For example, research finds that the presence (versus absence) of visual access to one's counterpart is a catalyst for these affectively charged dynamics—it enables dominance contests through staring in a conflict where interests largely diverge (Carnevale, Pruitt, & Seilheimer, 1981), yet it fosters rapport through exchange of positive emotion in a conflict where interests converge (Drolet & Morris, 2000). A key method for identifying the critical features that enable

these dynamics is negotiation experiments that vary communication media. For instance, the role of visual access in fostering rapport has been documented by comparing speakerphone to face-to-face (Drolet & Morris, 2000) and comparing E-mail to face-to-face (Morris, Nadler, Kurtzberg, & Thompson, 2002).

Given that an ever-widening array of communication media have become accepted as means of handling negotiations, media effect research is an area of practical as well as theoretical interest. For example, 63% (45/72) of recent samples of executives we surveyed stated that non-face-to-face negotiations were very or extremely relevant. A clear set of findings concerning the limitations of E-mail, as opposed to telephone or face-to-face, have emerged from a number of studies (for a review, see Thompson, 2005). We examine a potential benefit of E-mail negotiations, and contrast E-mail with Instant Messaging (IM), another text-based, electronic media that is rapidly increasing in use (Heim, 2003). Our interest in IM is primarily due to E-mail and IM forming a minimally different pair, which as we will argue differ only in our key variable of interest, turn-taking tempo.

The gist of our proposal about dominance and communication media can be introduced with a story. Ned, a biology professor friend, had fared poorly when negotiating with car dealers. When Ned stated the model and price he wanted, the dealer responded with a barrage of reasons (referring to various minutia of the car business) why it was not possible. Ned would get talked into compromises and concessions he later regretted. Ned tried negotiating by telephone, but he still felt at a loss when the fast-talking dealer began his spiel. Ned's breakthrough came when he noticed an E-mail address in the car dealer's ad. In a series of E-mails over the next week he conducted his first successful car negotiation. The dealer's elaborate arguments did not overwhelm Ned when he could take time to consider them without the pressure to reply immediately. Ned's story suggests that a salesperson's ability to dominate a customer depends on the communication conditions, and hence the right media may be able to shield otherwise vulnerable parties from influence, thereby improving their economic outcomes. The current research attempts to identify which feature of communication media matters.

Conversational dominance

Claiming value in complex negotiations has been described as a verbal poker game in which negotiators bluff about their own goals and attempt to undermine their counterpart's confidence (Donohue, 1981a, 1981b). We use the term "conversational dominance" to capture the dynamic in which one negotiator makes arguments that the other cannot answer, thereby diminishing the confidence or credibility of the one who is at a loss for words. In developing the proposal, we apply concepts

from prior research on debates and conversations to the context of negotiation.

As an example of conversational dominance, suppose a car buyer says "I'd like the car in yellow, with leather, for the advertised price," and the seller counters "Of course you know that yellow is a very popular color—I don't think we even have one on the lot—but we could 'special order' one and in four weeks it can be yours, although there is a $3000 charge for special orders." The seller's counterargument may be difficult to answer. This reply may trigger the buyer's doubts that he or she is mistaken or poorly informed about the issue. Such feelings may lead to heightened susceptibility to persuasion, to reduced assertiveness, and to premature concessions. Communication research elucidates why this occurs. A seller who waits for the buyer to bring up the issue gains from the fact that conversational norms place the burden of proof on the speaker who initiates a claim on a given issue (Bailenson, 2001; Rips, 1998). Failing to defend one's initial claim implies that the counter-claim stands as an accepted part of the discusssion's common ground (Clark, 1996; Rogers & Farace, 1975). Not only does silence undermine a claim, so does an indirect response. In debates, politicians who do not directly answer arguments appear less competent, less knowledgeable, and are less well remembered (Davis & Holtgraves, 1984). In sum, negotiators' failure to answer an argument may lead to their conceding the issue and thereby result in less favorable outcomes.

Strong counterarguments should be effective regardless of their veracity. For example, savvy negotiators voice rationales that send misleading signals about their interests so that they can feign concessions when in fact they have made none (O'Connor & Carnevale, 1997). A negotiator's success in asserting such rationales and rebutting those of their opponent is pivotal to the verbal poker game. Conversational dominance determines whose bluffs are effective and whose are exposed.

Communication media

In answering the proverbial fast-talking car salesman, the challenge is not just the number of arguments but also the pace of the conversation. It is hard to rebut his first reason for a low trade-in value before he is on to the second reason, the third reason, and so forth. The turn-taking tempo—and the resulting pressure to generate quick replies—is a feature that differs across communication media.

Research on communication media has increased due to the emergence and growth of information technology for interpersonal communication and negotiation. Increasingly, managers and consumers use E-mail for negotiations (Thompson, 2005). Instant Messaging (IM) is less widely used than E-mail and less widely studied, although industry analysts at Gartner and IDC expect

that IM will soon surpass E-mail as the primary online communication tool used in the United States (Heim, 2003). It is already estimated to be used by over 6.5 million US adults at work for work purposes, and 53 million US adults use it overall—a number growing at an annual rate of nearly 30% (Shiu & Lenhart, 2004). IM is used instead of E-mail if an immediate response is desired, such as when clarifying questions need to be answered before the conversation can proceed or when a matter must be settled quickly.[1] We have anecdotal evidence IM is used for negotiations, but what is critical for our purposes is that both E-mail and IM were deemed viable options by our subject population (MBA students), and that E-mail and IM form a minimally different pair.

E-mail and Instant Messaging (IM) are alike on most of the features that media researchers traditionally analyze, such as textual rather than oral encoding and lack of physical co-presence. They differ on the synchronous versus asynchronous feature (e.g., Poole, Shannon, & DeSanctis, 1992). In synchronous media—such as face-to-face, telephone, or IM—one person waits for the other's reply; the two are together in time. Asynchronous media, such as E-mail, mail, or fax, offer greater leeway in the pacing of one's response, because the two conversants are not together in time. In sum, E-mail and IM are minimally different communication media that contrast with regard to expected turn-taking tempo.

Turn-taking expectations may seem to be the least of negotiators' problems when, say, facing a car dealer. Yet failures to live up to conversational expectations—such as fluently answering a direct question—have important consequences for how one feels, sees oneself, and acts. Individuals across many social contexts reliably demonstrate an interest in complying with such norms as part of their self-presentation concerns (Jones & Pittman, 1982). Specifically, sociolinguistic studies show that in oral conversation, people accurately predict when speakers will begin and end conversational turns (e.g., Beattie & Bernard, 1979). As a result, parties who fail to maintain turn-taking tempo are vulnerable to negative attributions (Clark, 1996). As Tannen (2000, p. 393) bluntly asserted, in "countries that I know about, people from the slower-speaking regions are stereotyped as stupid." Of course, people from slower speaking regions may actually be smarter than those from faster speaking regions—the key is that people will feel a pressure not to appear slow. In sum, oral conversation involves an expectation of rapid turn-taking that exposes those who cannot answer quickly, making them feel pressured.

Oral conversation involves the most rapid turn-taking tempo, and any written form may allow for deviation from this norm. However, we contend that the tempo of

IM is much closer to that of oral communication than is E-mail. Some IM systems even allow one to see the counterpart's reply as it is being typed. Delays in replying are evident in IM, so the turn-taking norms are like those of oral communication. In contrast, E-mail is more like letter-writing, as there is no expectation that the sender and receiver are at their computers at the same time. The turn-taking norms for E-mail are explicitly stated in the Elements of E-mail Style. "E-mail allows you to digest your messages and put more thought into your responses, which you might not be able to do on the phone" (Angell & Heslop, 1994, p. 2). This may be particularly consequential in competitive negotiations, where the pressure to answer intricate arguments in time enables domination by more prepared negotiators. For these reasons, we predict dominance through intricate arguments is more likely in negotiations via IM than E-mail.

Study overview

We investigated our proposal with an experiment crossing argument quality (intricate versus simple) and communication media (IM versus E-mail) in the context of a car-buying scenario. We then predicted that sellers supplied with intricate (versus simple) arguments would claim more value than their counterparts, provided that they communicated using IM rather than E-mail. The conversational dominance dynamic should occur only with the combination of intricate arguments and IM; hence we contrast this group with the other three in the experimental design.

All sellers were provided specific arguments they could use to bluff on a key issue. The quality of arguments was manipulated. For the simple argument, we generated a plausible but easily countered statement about the rarity of yellow cars, and an appeal to alter the buyer's preferences. For the intricate argument, sellers were provided with a causal argument about the difficulties in attaining a yellow car containing information only the seller was likely to have, including specific dollar values about the purported costs to the seller of attaining a yellow car. This argument from the seller should be challenging because the information is asymmetrically held (and hence hard to refute) specific evidence (Brem & Rips, 2000) that is credible for a seller to have (Pornpitakpan, 2004), contains causal chains (e.g., Slusher & Anderson, 1996), and employs anchoring (e.g., Galinsky & Mussweiler, 2001).

The mechanism in our account is conversational dominance, which we assessed in two ways. On the part of the sellers, we looked at indications that they deployed arguments to claim value. Accordingly, we analyzed the negotiation transcripts for indications of seller bluffing. On the part of buyers, we looked at feelings of being under pressure. Buyers encountering intricate arguments via IM should be more likely to find

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[1] Likewise, there are several reasons IM is used instead of telephone. One can more easily hold multiple parallel conversations. It also leaves a record of what is said.

themselves "at a loss" than those encountering the same arguments via E-mail or those encountering simple arguments via IM. We measured the extent to which negotiators felt uncomfortable, hurried, nervous, time pressured, and "at a loss for words."

The full model that we examined was whether negotiators using IM and given intricate arguments would bluff more than those in other conditions, leading buyers to feel at a loss, and as a result, enable these sellers to claim more value than their counterparts. Assessing each part of this model was our primary focus, and we examine each link. We also report additional analyses for three related issues: whether there were negative social consequences of the dominance dynamic; whether dominance was specific to bluffing or whether there was a more general tendency simply to use more words and thereby control the conversation; and whether we had evidence consistent with a turn-taking difference across communication media separate from our bluffing measures.

Method

Participants

Participants in the study were full-time masters students in business school. A total of 224 students from Stanford University's Graduate School of Business and Northwestern University's Kellogg School of Management took part in the study, with the permission of both schools' institutional review boards. Most students negotiated with someone from the other school. Because a larger number of Stanford students were included, 14 out of 112 dyads were composed of two students from Stanford. We matched students in these 14 same-school dyads from different masters programs and sections of the same course, so as to minimize the potential for contact between students before the study began. As we found no sign of effects due to same versus different school dyads, we included the 14 dyads in the larger sample. All students participated in fulfillment of a class assignment in a negotiations course.

Design

The study design was a between-subjects 2×2 factorial, manipulating Communication Medium (E-mail versus Instant Messaging) and Sellers' Argument Strength (intricate versus simple arguments). One-half of the dyads were assigned to the E-mail condition, while the other half were assigned to the IM condition. Subsequently, half of the E-mail dyads, as a well as half of the IM dyads, had sellers provided with intricate arguments and the remaining dyads had sellers provided with simple arguments. Our focus was in contrasting the IM

intricate argument group with all other groups, as it was only in the IM intricate argument group that we expected to find conversational dominance.

Procedure

Participants were instructed to conduct a two-party negotiation exclusively through E-mail or Instant Messaging, depending on their assigned condition. Each student received a set of materials that included: (i) a page of general confidential instructions and guidelines; (ii) the pertinent contact information for their negotiation counter-part (either an E-mail address or Instant Messaging account identification); (iii) a pre-negotiation questionnaire; and (iv) a post-negotiation questionnaire. Students in the IM condition additionally received an Instant Messaging instruction sheet and engaged in a brief IM session with the experimenter prior to negotiating. As there were several incompatible IM programs available, we created accounts for all students using one system, and accordingly needed to ensure everyone could install the software and use their assigned account such that technical difficulties did not influence their subsequent negotiations. Participants were given each others' E-mail addresses to coordinate, and had one week to schedule and complete their negotiations.

The argument strength manipulation was included in the sellers' role materials (see Appendix A for full instructions). All sellers were invited to bluff about their preferences on a specific issue combination (yellow color and high level trim) to claim value. The difference was in the information provided to generate that bluff. The intricate argument provided sellers with concrete details about two possible and expensive ways to obtain the requested color and trim. The simple argument provided sellers with a claim about the rarity of yellow cars and an attempt to persuade buyers out of wanting that trim and color combination.

Negotiation task

Students engaged in a negotiation simulation involving the purchase of an automobile from a salesperson at an automobile dealership. It was an eight-issue negotiation (e.g., purchase price, product attributes, and warranty specifications) that included both distributive (conflicting interests; fostering competition) and integrative (potentially aligned interests; fostering collaboration) elements. For each of the eight issues, both buyers and sellers received private information about their own payoffs—a specific point value was assigned to each negotiated outcome. The maximum joint outcome for any dyad was 3000 points. Additionally, both parties had an explicitly defined alternative—if the negotiation resulted in an impasse, both parties would receive 1200 points with a joint outcome of 2400 points.

Outcome measures

Pre-negotiation questionnaire

All students were instructed to complete a questionnaire, titled the "Preparation Worksheet," before beginning the actual negotiation. These questions asked participants about their strategic plans for the negotiation, including their reservation point, their target point, and the first proposal that they intended to employ. Because the manipulations of communication media and argument strength were expected to influence the actual progress of the negotiations themselves, rather than the attitudes, beliefs and expectations of the participants prior to the negotiation, we unsurprisingly saw little differences in participants' in responses to these questions across conditions.

Post-negotiation questionnaire

All students completed a survey after the negotiation. This survey asked a number of questions about their impressions of their own and the other party's behavior and perceptions. Our primary focus was the buyers' self-reported indications of difficulty they experienced responding to sellers. Specifically, we asked buyers to report the extent to which they felt "at a loss," "time pressured," "nervous," "hurried," "in control" (reverse coded), and "comfortable" (reverse coded) at any point during the negotiation (1 = not at all descriptive; 7 = very descriptive). These ratings formed a scale of feeling dominated, $\alpha = 0.71$. We also asked how effective people thought their negotiating counterparts were (on the same 7-point likert scale): were they were "flexible," "savvy," "agreeable," "principled," "reasonable," "effective," "interest based," "knowledgeable," "fair," and "strategic." These rated impressions formed a scale of perceived effectiveness for both buyers ($\alpha = .87$) and sellers ($\alpha = .85$). Finally, we asked questions concerning the negotiation process—about how easy it was to figure out one's counterpart's priorities, how easy it was to clarify one's own points, how well the two parties worked together, whether one would choose to negotiate with the same counterpart again, and whether one would choose to negotiate with the same communication medium again.

Negotiation transcript content coding

We analyzed the negotiation transcripts looking for evidence of sellers exerting dominance by bluffing. The transcripts were first segmented into obvious discrete units at the level of conversational turns. For E-mails, each separate message constituted a conversational turn. For IM, a transition from one conversant to another constituted a conversational turn. The beginning and end of each segment was self-evident using this procedure. Each turn was then coded according to a scheme distinguishing types of offers, questions, and statements, based on one used in prior research (Moore, Kurtzberg, Thompson, & Morris, 1999; Morris et al., 2002). A given turn could receive multiple codes. To adjust for conversations of different length, we focused on the rate of each tactic per 1000 words to give a consistent interpretation of the frequency of tactic use (the pattern of results was unchanged when we instead divided by the number of words spoken). There were codes for accurately sharing information about particular topics as well as for misrepresenting. Codes for offers distinguished extreme, single-issue, and ultimatum offers. All conversational turns were coded by a trained judge. A second independent judge coded a randomly selected subset of these transcripts (25%) in order to assess the reliability of the coding scheme. For the sellers' portions of the transcripts, we focused on coded categories relevant to bluffing: deception (misrepresentation of preferences and capabilities; 83% agreement, $\kappa = .62$), extreme offers (offers outside the range specified for an issue; 94% agreement, $\kappa = .65$), and quantitative arguments (93% agreement, $\kappa = .72$). These three measures were correlated with each other (min $r = .49$, $p < .001$; $\alpha = .76$). We used the sum of these three types of statements as an indicator of sellers generating conversational dominance through bluffing.[2]

Negotiated agreements

The primary dependent measure was the economic advantage gained by sellers over buyers. This was computed by a difference score using the payoff tables in the seller and buyer roles. Other outcome measures were buyer points, seller points, and the buyer and seller sum. Each negotiator reported the agreement after the negotiation and it was independently verified through the transcripts.

Results

Negotiation outcomes

Economic advantage

Table 1 shows the value claimed by buyers and sellers, the sum, and the difference. Our focus is the last of these, which measures economic advantage gained by sellers over buyers. We predicted a greater differential outcome in the IM and intricate arguments condition as a result of conversational dominance. The planned contrast comparing the IM intricate argument condition to the remaining three conditions showed that sellers in the first group gained a reliably greater economic advantage (143 versus 20 points), $F(1,110) = 4.98$, $p < .05$, $R^2 = .04$.

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[2] This measure yielded unequal variances across conditions, but because a transformation based on a natural logarithm of the raw data removed concerns over variances with only trivial changes in the statistics, we report the raw data throughout for ease of comprehension.

Table 1
Means (SDs) of negotiated agreement values

Measure	IM + intricate argument (n = 27)	IM + simple argument (n = 27)	E-mail + intricate argument (n = 29)	E-mail + simple argument (n = 29)
Buyer points	1366 (152)	1415 (150)	1418 (148)	1394 (184)
Seller points	1509 (186)	1431 (168)	1417 (161)	1439 (174)
Total points	2876 (210)	2847 (207)	2836 (220)	2834 (233)
Differential points (seller economic advantage)	143.0 (266.8)	15.6 (242.2)	−0.7 (217.0)	45.5 (272.8)

It was significantly greater than 0 in this condition, $t(26) = 2.86$, $p < .01$, but not in any of the others (all other group's t's < 1). The measure of joint points did not differ across conditions.

Conversational dominance—sellers' behaviors

Sellers supplied with intricate arguments used them extensively to bluff over Instant Messaging (see Table 2). Specifically, the index of seller bluffing showed a greater enactment of this tactic ($M = 6.4$, $SD = 5.3$) in the IM intricate argument condition compared to bluffing statements by those in the other three conditions ($M = 2.8$, $SD = 3.3$), reliably different according to a linear regression, $\beta = .37$, $t = 3.87$, $p < .001$, $R^2 = .14$. Bluffing, in turn, had two consequences across conditions. First, the sellers' bluffing led buyers to feel dominated, $b = .05$, $SE = .02$, $\beta = .21$, $t = 2.03$, $p < .05$, $R^2 = .04$. Second, the sellers' bluffing led them to secure economic advantages, $b = 23.41$, $SE = 6.49$, $\beta = .35$, $t = 3.60$, $p < .005$, $R^2 = .12$.

Conversational dominance—buyers' feelings

Buyers were asked a variety of questions after negotiating, including a set of questions about whether they felt dominated (e.g., hurried, at a loss, not in control, uncomfortable; $\alpha = 0.71$, see Table 3). The buyers' feelings of being dominated were not reliably predicted by the condition contrast. Buyers facing sellers given intricate arguments and using Instant Messaging had a non-significant tendency to feel most dominated, 3.55 ($SD = 1.01$) versus 3.23 ($SD = 0.84$) for all others, $F(1, 110) = 2.66$, $p = .11$. However, buyers' feelings of being dominated were clearly related to an economic advantage for sellers, as shown by a regression, $b = 93.18$, $SE = 25.59$, $\beta = .33$, $t = 3.64$, $p < .001$, $R^2 = .11$.

Conversational dominance mediates advantage

Sellers supplied with intricate arguments in the IM condition should have been able to conversationally dominate buyers and gain concessions. Hence, the measures of conversational dominance in sellers' behavior and buyers' feelings should carry the effect of the manipulations on the economic outcome. We tested this causal chain using Baron and Kenny's (1986) regression approach as well as structural equation modeling.

On the seller side, the measure of bluff enactment mediated the effect of the experimental conditions on

Table 2
Indications that sellers used arguments to bluff

Code	IM + intricate argument (n = 23)	IM + simple argument (n = 23)	E-mail + intricate argument (n = 24)	E-mail + simple argument (n = 24)
Deception	3.23 (2.91)	1.22 (1.90)	2.37 (1.80)	1.69 (1.92)
Quantitative arguments	1.39 (1.24)	0.41 (0.77)	0.65 (1.03)	0.33 (0.75)
Extreme offers	1.80 (2.28)	1.13 (1.43)	0.39 (0.60)	0.33 (0.69)
Bluffing enactment index	6.42 (5.32)	2.75 (3.71)	3.41 (3.11)	2.34 (3.03)

Note. Cells show mean (SD) proportional frequency (per 1000 words).

Table 3
Means (SDs) of buyers' responses for components of the conversational dominance index

Measure	IM + intricate argument (n = 27)	IM + simple argument (n = 27)	E-mail + intricate argument (n = 29)	E-mail + simple argument (n = 29)
Comfortable (reversed)	4.26 (1.65)	3.37 (1.15)	3.66 (1.67)	3.10 (1.32)
In control (reversed)	4.07 (1.07)	3.70 (1.17)	3.93 (1.07)	3.41 (1.05)
Time pressured	4.30 (2.02)	4.52 (2.10)	4.38 (1.76)	4.59 (1.55)
Hurried	4.22 (1.83)	4.26 (1.91)	4.10 (1.66)	3.90 (1.66)
At a loss	2.85 (1.38)	2.81 (1.30)	2.21 (1.24)	2.46 (1.48)
Intimidated	1.81 (1.04)	1.93 (0.92)	1.97 (1.05)	1.72 (1.10)
Nervous	3.33 (1.64)	2.85 (1.61)	2.31 (1.31)	2.72 (1.60)
Index of feeling pressured ($\alpha = .71$)	3.55 (1.01)	3.35 (0.94)	3.22 (0.80)	3.13 (0.80)

economic outcomes. The effect of condition here is the planned contrast between the condition of intricate arguments plus IM and the other three conditions. Specifically, presented as a regression model, the condition effect significantly predicts seller economic advantage, $\beta = .21$, $t = 2.23$, $p < .05$, $R^2 = .04$. We have already mentioned that the contrast significantly predicts seller bluff enactment and that this measure of the bluffing process significantly predicts economic advantage. In a final combined regression model ($R^2 = .13$), seller bluffing still significantly predicted economic advantage ($b = 20.71$, $SE = 7.00$, $\beta = .31$, $t = 2.96$, $p < .005$) whereas the contrast term was no longer a significant predictor ($b = 17.35$, $SE = 16.77$, $\beta = .11$, $t = 1.03$, $p > .10$). A Sobel test indicated a significant reduction in the magnitude of the contrast coefficient ($Z = 2.35$, $p < .05$), indicating that seller bluffing fully mediates the effect of experimental condition on seller economic advantage.

On the buyer side, the dominance dynamic was measured by reports of feeling pressured. The index of those feelings partially mediated the effect of sellers bluffing on gaining an economic advantage. We already showed that sellers' bluffing led buyers to feel dominated and led to economic gains, as well as that buyers' feelings of being dominated led to the sellers' economic advantage. In a combined model ($R^2 = .20$), sellers' bluffing ($b = 19.52$, $SE = 6.38$, $\beta = .29$, $t = 3.06$, $p < .005$) and buyers' feelings ($b = 86.05$, $SE = 29.25$, $\beta = .28$, $t = 2.94$, $p < .005$) both reliably predicted sellers' economic advantage. Nonetheless, the effect of sellers' bluffing was reduced by including buyers' feelings, as shown by a Sobel test, $Z = 2.28$, $p < .05$. Thus sellers' bluffing led to claiming value directly, as well as indirectly through causing buyers to feel pressured.

Finally, structural equation modeling allowed us to examine both sellers' bluffing and buyers' reported feelings of being dominated together as mediators of the condition contrast's effect on economic advantage. Fig. 1 presents the full model, which we tested using AMOS 5 from SPSS. This model fit well, not reliably worse than a fully saturated model, $\chi^2(2) = 1.43$, $p = .49$, with an NFI of .97, and with an RMSEA less than .001 (below the conventional .05 cutoff), with an 90% upper bound of .17, and a p of close fit of .58. Removing any of the paths resulted in significantly worse fit (minimum loss of fit, $\Delta\chi^2 = 4.70$, $\Delta df = 1$, $p < .05$). Within this model, the condition variable (the planned contrast) produced a marked effect on the degree to which sellers enacted a bluff $\beta = .38$, $p < .001$. Seller bluffing, in turn, increased buyers' feelings of pressure (1 more bluffing statement was associated with an increase of .05 points of felt pressure), $\beta = .22$, $p < .05$. Seller bluffing had a direct effect on the point differential (each bluffing statement yielding a 17 point gain in seller economic advantage) $\beta = .27$, $p < .005$. Buyers' feelings of pressure independently produced a difference (a 1 point increase on the feeling index yielding a 77 point gain in economic advantage) $\beta = .27$, $p < .005$.

Additional findings

To further refine our interpretation of the data, we assessed three additional outcomes. First, we examined whether there was a social penalty to establishing dominance. Second, we examined whether effects of sellers' bluffing were simply due to some sellers just saying more in general, rather than something specific about bluffing, per se. Third, we looked for evidence of turn-taking tempo independent of bluffing to confirm our general claim about the difference between communication media.

Social judgments

In addition to an economic outcome, negotiations result in social judgments—impressions of the counterpart and intentions to deal or not deal with this person in the future. Across conditions, both buyers and sellers who found their counterparts effective were less interested in negotiating with them again, $r(112) = -.24$, $p < .01$ for buyers, and $r(109) = -.35$, $p < .001$ for sellers.
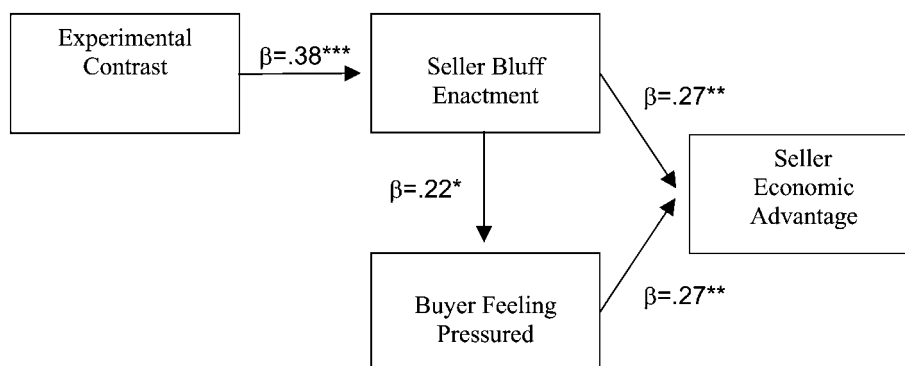

Fig. 1. Combined model of seller bluffing and buyer feeling dominated mediators of the condition contrast on economic advantage. $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Table 4
Mean (SD) of post-questionnaire items for counterpart selection (intention) and the rating scale of counterpart effectiveness (impression)

Code	IM + intricate argument ($n = 23$)	IM + simple argument ($n = 23$)	E-mail + intricate argument ($n = 24$)	E-mail + simple argument ($n = 24$)
Buyers' intention	3.85 (1.81)	5.22 (1.40)	4.69 (1.73)	4.76 (1.88)
Sellers' intention	4.24 (1.81)	4.74 (1.89)	4.86 (1.73)	4.86 (1.67)
Buyers' impression	3.47 (0.88)	3.37 (0.65)	3.06 (0.93)	3.32 (0.63)
Sellers' impression	3.16 (0.63)	3.12 (0.93)	3.05 (0.68)	3.16 (0.95)

Table 5
Mean (SDs) number of words used by buyers and sellers

Word count	IM + intricate argument ($n = 27$)	IM + simple argument ($n = 27$)	E-mail + intricate argument ($n = 29$)	E-mail + simple argument ($n = 29$)
Seller words	947 (504)	844 (420)	980 (394)	890 (559)
Buyer words	691 (288)	817 (477)	927 (327)	740 (304)
Total words	1638 (767)	1661 (838)	1907 (644)	1640 (802)
Differential count (sellers–buyers)	256 (292)	27 (325)	54 (332)	160 (408)

As Table 4 shows, buyers in the IM intricate argument condition ($M = 3.85$, $SD = 1.81$) were less interested in dealing with their counterparts again than were buyers in the other conditions ($M = 4.88$, $SD = 1.78$), $F(1, 110) = 6.83$, $p < .05$, $R^2 = .06$. Yet buyers' ratings of the effectiveness of their counterparts were uncorrelated with the condition contrast ($r = .12$, $p = .20$), and the correlation between the condition contrast and buyers' intention to negotiate again with sellers held even controlling for the buyers' ratings of the sellers' effectiveness, distributive advantage, sellers' bluffing, and buyers' self-reported feelings of being dominated (the latter three were uncorrelated with intention). Thus there was little clear indication of a social cost to establishing dominance.

Communication volume effects

We found additional effects based on the difference in volume of communication by role (there were no reliable differences across conditions in total number of words used, overall $M = 1712$, $SD = 762$; see Table 5). Sellers in the IM intricate argument condition said more than their counterpart buyers ($M = 256$ more words, $SD = 292$), a difference that was reliably greater than 0, $t(22) = 4.20$, $p < .001$. This difference exceeded the difference in the other conditions ($M = 81$, $SD = 357$), $F(1, 92) = 4.53$, $p < .05$, $R^2 = .05$, which was not reliably greater than 0. Word differential was also correlated with economic advantage, $r(94) = .26$, $p < .05$. When included with the condition contrast in a regression predicting economic advantage, word differential remained reliable and the contrast effect dropped out, suggesting mediation, but the Sobel test showed the reduction of the condition contrast was not reliable, $Z = 1.54$, $p = .12$. Critically, however, word differential is not correlated with either seller bluffing ($r = -.02$) or buyer feelings of being dominated ($r = .08$), and when added to the structural equation model, word differential captured additional variance (an incremental R^2 of .10) and if anything mildly strengthened the pattern of effects we described earlier (without eliminating the model fit). Thus sheer greater use of language by sellers, although it patterns in a similar way as our measures of conversational dominance, is a separate effect.

Media effects

Distinct from the manipulation of argument strength, negotiators used somewhat different approaches in the two communication media, consistent with a general difference in turn-taking. Negotiators requested and offered statements about preferences and capabilities more when using Instant Messaging ($M = 32.8$, $SD = 17.0$) than when using E-mail ($M = 13.9$, $SD = 8.4$), $F(1, 92) = 47.03$, $p < .001$, $R^2 = .34$. This may have been driven by IM encouraging shorter but more frequent speaking turns, and hence providing an easier means for information sharing.

Discussion

We tested the proposal that negotiators prepared with intricate arguments are better able to enact a bluff that pressures their opponents into concessions when they negotiate via IM as opposed to E-mail. Generating arguments to substantiate one's positions and to attack those of one's counterparts is key to claiming value. The ideal argument is one that is hard to rebut, of course, and what we have demonstrated is that an argument's effectiveness is influenced by conversational dynamics in addition to its content. The communication medium one uses to negotiate supplies expectations about turn-taking tempo, and consequently how long one has to respond. While a simple argument was ineffective

regardless of communication medium, we found that an intricate argument was effective if there were expectations of a rapid turn-taking tempo (generated by communicating with Instant Messaging), but was ineffective when there were only vague expectations about turn-taking (generated by communicating with E-mail). Thus one not only needs to craft good arguments, one also needs to be able to apply them fluently. Being at a loss for words can mean being at a loss for dollars.

Strong, intricate arguments were effective for generating concessions in Instant Messaging, and we showed that this was due to generating conversational dominance. Sellers used the arguments to bluff about their preferences. Such bluffing directly generated economic advantages, most likely as a result of false concessions and anchoring with extreme offers and quantitative arguments. Sellers' bluffing also led buyers to feel dominated, which also generated seller economic advantages (or, put another way, buyer concessions).

We found no clear social cost to bluffing to impose dominance and claim value. We did find that IM buyers were less interested in negotiating again with their counterparts given intricate arguments than were buyers in other conditions. However, buyers' willingness to choose their counterpart to negotiate again was uncorrelated with their feelings of being dominated and with sellers' bluffing. Although it is certainly plausible that extreme cases of bluffing and feeling dominated would cause deadlocks in the present and keep people from negotiating together again (cf. Roloff, Tutzauer, & Dailey, 1989), we did not find evidence either of increased impasse or future social cost.

Conversational dominance due to expected turn-taking tempo is not inevitable. Perhaps more skilled negotiators would be able to avoid becoming dominated by an argument by deferring a response until they were ready, refusing to succumb to momentary pressures imposed by the negotiating process. Nor does silence in negotiations necessarily imply conversational dominance and lead to concessions. We examined a specific dynamic: one negotiator stating a preference, their counterpart generating a rebuttal, and the initial negotiator having difficulty defending their initial position and therefore needing to accept the rebuttal. Silence is unhelpful here, and the ensuing conversational dominance led to concessions, most likely through false concessions or anchoring.

We contrasted two fairly new communication media, E-mail and Instant Messaging. Our primary interest was in examining expected turn-taking tempo, and these two media were useful because they are largely alike except on this dimension. Accordingly we would generalize these findings to negotiations using other communication media based on their expected turn-taking tempo. Media with a slow or uncertain turn-taking tempo (e.g., letter-writing, faxing) should provide leeway for negotiators to respond to challenging arguments. Media with a rapid expected turn-taking tempo (e.g., telephone or face-to-face) should allow conversational dominance of the sort we examined. Although negotiators may use deceit more when communicating using Instant Messaging and E-mail than face-to-face (Valley, Moag, & Bazerman, 1998), the conversational dominance dynamic that we examined seems perfectly plausible in face-to-face negotiation, especially given that we drew on research from face-to-face argumentation and communication to generate our hypotheses. We also note that expectations about turn-taking may vary for reasons other than communication medium, such as cultural norms.

A secondary reason for examining negotiations over Instant Messaging and E-mail is their increasing prevalence. E-mail is now widely used in business, and IM is rapidly gaining users. Both overcome a limitation of face-to-face and telephone communication, namely the inability to broadcast information to many people and then follow up in multiple direct conversations (potentially in parallel). We suspect that E-mail and IM will increasingly be used to initiate and conduct time-sensitive seeking out of negotiating partners and brief negotiations, and hence the dominance dynamic that we examined should be increasingly relevant. Negotiators will have to choose whether to choose E-mail or use a medium with a more rapid turn-taking tempo (such as IM or telephone) for the ensuing bargaining, and among other considerations, they should evaluate their ability to generate and respond to intricate arguments.

Directions for future research

We see several regions of exploration and integration, the most obvious being turn-taking tempo. It is related to studies of time pressure (e.g., Carnevale & Lawler, 1986; De Dreu, 2003), though tied to norms about communication media. When is turn-taking tempo relevant and what else influences it or is influenced by it? In this study, expected turn-taking tempo moderated the effective use of information. However, information-based strategies may be only part of a larger repertoire of tactics, such as intimidation and intransigence, which may also be moderated by expected turn-taking tempo. The use of more extensive measures of such behaviors in future studies may allow for better measurement of such effects.

It is also an open question as to whether advantaged sellers recognize the potential benefits of rapid turn-taking and plan to use tactics like misrepresentation to a greater degree. General social exchange processes may be influenced by the types of turn-taking expectations that exist for the medium. Therein may lie a root cause of many social phenomena related to choice of communication medium. For example, when an individual wishes to gain compliance for a request, he or she may wait for an opportunity for face-to-face contact. The targets of such requests, on the other hands, may seek

out other venues of contact, such as a voice-mail message.

Third, we found evidence for a penalty due to a failure to respond quickly, yet neither silence nor slow responses need always be disadvantageous. Silence can imply outright rejection of a proposal as well as grudging acceptance (genuinely or falsely). How silence is interpreted may interact with status, following Owens, Neale, and Sutton's (2000) examination of status in E-mail. Low status negotiators may need to respond quickly to high status negotiators, otherwise the high status negotiator's proposal will likely be deemed accepted. However, if low status negotiators' proposals are not responded to (i.e., ignored), this likely implies they are rejected. If people share this perception, then negotiators may make strategic use of a delay to convey to their counterparts that they are of higher status. In addition to silence and direct rebuttals, negotiators may also formulate slow or indirect responses. These may be successful for refuting arguments if they enable negotiators to stall or pursue a line of questions prior to mounting their response. Perhaps parties do not need to have a specific counter-argument, but just need to insert some simpler response that nonetheless diffuses the current threat.

Finally, we raise two broader topics. The first is whether dominance is a valid umbrella construct for the many and varied behaviors and psychological states we and others have mentioned. Should we group, say, emotional expressions of anger or contempt, nonverbal acts of aggression, and argumentation into one category? The second is whether research on informal arguments (Rips, 1998) can be integrated with the growing body of research on the negotiation process. Information exchange in negotiation is often discussed as leading to parties creating value (often through finding tradeoffs). In the current study, information was also used to assert dominance and claim value. Research on argumentation may provide a new approach and new tools for addressing these complexities.

Appendix A. Intricate and simple arguments provided to sellers

Sellers were provided with the following information:

Although you would like to get rid of your yellow cars, if the customer indicates that he/she would prefer yellow and a high level trim, you should use that against them with the following argument in order to extract some additional value:

Intricate argument

We don't have any Yellow cars on the lot right now. Additionally, Plymouth only makes yellow cars with the "Sport" Trim Level. The leather Trim packages only come on the conservative colors like Obsidian or Cabernet. I could do a couple of different things for you. First, we could factory order a yellow car with leather Trim, but special orders cost an additional $3000 and take 4 weeks to deliver. Or, we could do a repaint of one of our Obsidian cars with the leather Trim, but that would cost $4000 extra and increase the delivery time by a couple of weeks.

Simple argument

The yellow color is especially popular in California and it is hard to find. Besides, you don't want leather seats on a yellow car in California—they are extremely hot in the summer and you'll be uncomfortable.

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