HUMAN COMMUNICATION RESEARCH

Human Communication Research ISSN 0360-3989

ORIGINAL ARTICLE

Dyadic Power Profiles: Power-Contingent Strategies for Value Creation in Negotiation

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Using a simulated employment negotiation, we tested the conditional relationships among dyadic power profiles (symmetric high, symmetric low, and asymmetric), the choice and sequencing of strategies, and value creation. We showed that negotiators in symmetric high, symmetric low, and asymmetric power dyads took distinctly different paths to value creation. Value creation was associated with increased mutual accommodation in high-power dyads but with increased contentiousness in low-power dyads. Asymmetric power dyads maximized value creation when they adopted a neutral stance, neither overusing nor underusing any one strategy. Although strategy use was a better predictor of value creation than strategy sequencing, sequences played an increasingly important role in value creation as the level of total power within the negotiation increased.

doi:10.1111/j.1468-2958.2012.01440.x

Negotiation is an integral part of many interpersonal and organizational interactions. Despite the pervasive nature of negotiation in social interactions, individuals frequently fail to obtain outcomes that are beneficial to both parties. This failure is most likely to occur when negotiators try to improve their individual outcomes at the expense of their opponents' outcomes, that is, to claim value. When negotiators do find solutions that address the most important needs and interests of both parties, they create value. Value creation is possible when there are differences in negotiators' preferences, including in the value that they assign to the items under negotiation (Lax & Sebenius, 1986). Better understanding this value creation process is important because in many, if not all, complex negotiations the ability to identify and implement mutually beneficial outcomes is the key to enduring agreements (Pruitt, 1981). Successful value creation requires that negotiators both advance individual needs via deal-making and manage the underlying relationship (Lax & Sebenius, 2006; Olekalns & Brett, 2009).

A consistent finding in negotiation research is that the success or failure of any strategy in the value creation process is partially determined by the social context

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(Weingart & Olekalns, 2004). Among the many social contextual factors that might influence negotiators' strategy choices, negotiators' power stands out as a potentially critical, but underinvestigated, variable. Nonetheless, the negotiation context is likely to contain important information about each negotiator's power and status that affects the strategies that negotiators favor. To further our understanding of the role that power plays in negotiation, we investigated how negotiators' power shifts their strategy preferences and linked these preference shifts to their ability to find mutually beneficial solutions. We focused on power because, despite theory linking power to negotiators' strategies or outcomes, the power-strategy-outcome relationship in negotiation is not well understood. In part, this lack of understanding occurs because past research has portrayed power either as an attribute of the individual negotiator or of the negotiating dyad, yielding seemingly contradictory findings.

Viewed as an individual attribute of negotiators, high-power increases contentiousness: high-power negotiators are more likely than low-power negotiators to make first offers, make more extreme offers, and give fewer concessions (Magee, Galinsky, & Gruenfeld, 2007). Although these tactics enable high-power negotiators to claim a greater share of the resources than low-power negotiators (McAlister, Bazerman & Fader, 1986; Mannix, Thompson, & Bazerman, 1989), they are also likely to constrain value creation. When viewed as a dyadic attribute, unequal power elicits more contentiousness than equal power (De Dreu & Van Kleef, 2003; Giebels, De Dreu, & Van de Vliert, 2000) and, as a result, negotiators are less likely to achieve high joint gain when power is unequally distributed (Giebels et al., 2000; Mannix & Neale, 1993; Wolfe & McGinn, 2005). The findings to date suggest that it is the distribution rather than the level of power that facilitates or inhibits value creation.

To understand fully the power-strategy-outcome relationship, we simultaneously need to consider both negotiators' absolute power and their power relative to their opponents. In our research, we identified three power profiles on the basis of level and mutuality of dependence within a negotiating dyad (Rusbult & van Lange, 2003). Level of dependence refers to the ease with which negotiators can leave a relationship, which is potentially a function of the number of alternatives that they have (Giebels et al., 2000; Kim, Pinkley, & Fragale, 2005). Mutuality of dependence refers to the distribution of power within a negotiating dyad: mutual (symmetric) and nonmutual (asymmetric; Rusbult & van Lange, 2003). Combining these dimensions yields three distinct power profiles: symmetric high-power, symmetric low-power, and asymmetric power. Our central proposition, which extends existing theory, was that the strategy paths that lead to value creation are contingent on the dyad's power profile as well as how negotiators blend deal-making and relationship-building strategies.

Identification of strategy clusters

To develop our hypotheses, we needed to determine the strategy clusters negotiators used in this experiment. Participants in this research negotiated an employment contract, described in more detail in the "Methods" section. Each negotiation was

conducted face-to-face and videotaped for subsequent transcription. We used a modified version of the coding scheme reported in Weingart, Brett, Olekalns and Smith (2007) to classify negotiation tactics into 32 categories. Each speaking turn by a negotiator constituted as a single unit that raters coded on the basis of its dominant theme. Two raters coded all transcripts. Cohen's kappa (0.82) was the index of interrater agreement. Bakeman and Gottman (1986) classify κ at or above 0.75 as excellent. All discrepancies between raters were resolved through discussion.

We carried out a correspondence analysis (Greenacre, 1993) on a Dyad $\times$ Strategy Frequency table using ANACOR in SPSS to determine whether the large number of individual tactics identified by the coding scheme could be reduced to a smaller number of meaningful strategic clusters. Correspondence analysis (rather than factor analysis) is the appropriate data reduction procedure when data are frequencies (Greenacre, 1993). It is an optimal scaling technique that, with appropriate normalization, yields a graphical representation of the similarity structure in a set of multinomial frequency tables, such that tactics with similar frequency profiles are shown close together. The purpose of this analysis was to ascertain which tactics formed meaningful clusters and to determine the number of clusters needed to represent the similarity structure among the 32 tactics. The analysis suggested that the strategies could be grouped into the five general clusters shown in Table 1. This table also shows interrater reliabilities for each strategy cluster. We recoded tactics as representing one of these five strategy clusters.

The first two strategy clusters (coordination, affiliation) facilitate mutual accommodation and value creation. The coordination strategy cluster comprises tactics that enable sharing information about negotiators' priorities, accommodating the other party's needs (accepting offers), and managing the negotiation process. These tactics provide vital information for achieving high joint gain. Complementing these deal-making tactics, the affiliation strategy cluster comprises tactics that facilitate building a strong, positive relationship with the other negotiator.

The third and fourth strategy clusters (argumentation, dominance) reflect a competitive approach to negotiation that emphasizes personal gain. The argumentation strategy cluster comprises tactics intended to persuade and challenge the other negotiator's assessment of what is possible. The dominance strategy cluster complements these deal-making tactics by focusing on expressions of dominance, used to assert and redefine power within relationships. The fifth cluster, offers, comprises a set of neutral tactics that advance the negotiation through offers and counteroffers.

Power contingent paths to value creation

To explore the relationships among dyadic power profiles, negotiators' strategy choices, their sequencing of strategies, and their ability to create value, we analyzed the strategies that individuals used to reach agreement at two levels. The first level of analysis focused on the frequency with which negotiators used the strategy clusters described in the preceding section. Analysis at the level of strategy frequency provides information about negotiators' dominant strategic approach (Olekalns & Weingart,

Table 1 Summary of Negotiation Strategies and Their Associated Tactics

Strategy	Tactics Associated With Strategy
Coordination	Gives or requests priority information
$\kappa = 0.97$	Suggests a new approach
	Suggests possible solutions, clarifies information or accepts offer
Affiliation	Makes an open-ended statement
$\kappa = 0.85$	Expresses support of the other person
	Engages in rapport building
	Notes differences in a positive way, anticipates agreement
Argumentation	Gives or requests positional information
$\kappa = 0.86$	Disputes information provided by other
	Introduces new arguments
	Refers to issues without making an offer
Dominance	Asserts wants, states minimum acceptable outcome
$\kappa = 0.89$	Notes differences in a negative way, anticipates disagreement
	Rejects other's offer
Offer Management	Makes single or multi-issue offer
$\kappa = 0.91$	Request modification of offer on the table
	Gives a concession
	States a range of acceptable outcomes
	States expectation that other will reciprocate

2008). The second level of analysis focused on how negotiators sequenced these strategy clusters. Strategy sequences capture how negotiators respond to each other as a negotiation progresses. They reflect the interchange between two negotiators and show the relationship between one negotiator's strategy and the other party's response. Negotiators may choose either to match or to mismatch one another's strategies. Whereas matching signals a shared perspective and confirms negotiators' strategic approach, mismatching enables them to redirect the dominant approach (Olekalns & Smith, 2000; Olekalns & Weingart, 2008). Past research has shown that negotiators use strategy sequences to navigate context-specific obstacles to creating value (Olekalns & Smith, 2003).

Symmetric high-power

High-power negotiators favor individualistic tactics such as argumentation, threats, and extreme opening offers (Lewicki, Barry, & Saunders, 2010). This suggests that such negotiators are partial to the dominance and argumentation strategy clusters that we described earlier. Both strategies reportedly inhibit value creation (Olekalns & Smith, 2000; Wilson & Putnam, 1990). High levels of argumentation can restrict effective information flow, and expressions of dominance often trigger power struggles that jeopardize the relationship. Because high-power negotiators are able to exit negotiations easily, the key to value creation is preserving the relationship with the other party. To do this, they need to shift from expressing power (dominance)

to fostering their relationship through affiliation. This strategy can play a key role in value creation because high-power individuals are more attuned to rewards than are low-power negotiators (Anderson & Berdahl, 2002). Expressions of liking and optimism serve to keep negotiators in a relationship that they are able to exit by building affective commitment (Lawler, 2001).

H1a: Symmetric high-power dyads that achieve high joint gain use affiliation more often and dominance less often than symmetric high-power dyads that achieve low joint gain.

The risks associated with using the high-power-congruent strategies of argumentation and dominance increase if negotiators reciprocate each other's use of these tactics. Reciprocation of either strategy contributes to an escalatory cycle that inhibits value creation (Olekalns & Smith, 2000; Putnam & Jones, 1982). The most direct path for breaking this pattern is to redirect the negotiation to the substantive aspects of the task (Kolb, 2004). Although high-power negotiators may accomplish this redirection by responding to dominance or argumentation with coordination, such strategy sequences (dominance-coordination and argumentation-coordination) are risky in a high-power context. Because coordination offers direct information about preferences, each negotiator may use the other's openness for personal gain rather than to create value. High-power negotiators are, therefore, likely to redirect negotiations to deal-making by responding to argumentation and dominance with offers. The offer strategy cluster enables value creation by providing indirect information about preferences (Adair, 2003) without exposing negotiators to the risks stemming from revealing explicit information about their preferences (Murnighan, Babcock, Thompson, & Pillutla, 1999). Negotiators also can increase joint gain if they further strengthen their relationship by reciprocating affiliation. Unreciprocated, affiliation has the potential to convey submission and to encourage the other party to claim rather than create value. Reciprocal affiliation, however, signals the shared importance of the relationship and paves the way for value creation.

H1b: Relative to symmetric high-power dyads that achieve low joint gain, symmetric high-power dyads that achieve high joint gain display low levels of reciprocal dominance and argumentation, as well as high levels of reciprocal affiliation and nonreciprocal dominance-offer and argumentation-offer sequences.

Symmetric low-power

In contrast to high-power negotiators, those with low-power favor the coordination and affiliation strategy clusters shown in Table 1. Use of these strategies is consistent with low-power individuals' greater attention to relationships, the needs of others, and the consequences of their own actions. Employing these strategies, however, is not without risk. Heightened relationship concerns can inhibit value creation because they restrict negotiators' search of the settlement space (Fry, Firestone, & Williams, 1983; Pruitt, 1981) and result in compromise rather than value creation. In the absence of contentiousness, negotiators may act with the best intentions but lack the motivation to push beyond the first acceptable deal (Fry et al., 1983; Pruitt, 1981).

Because low-power negotiators have no or poor exit options, using contentiousness does not pose the same risks for low-power negotiators as it does for high-power negotiators. Nonetheless, we expected that argumentation rather than dominance would facilitate value creation because argumentation offers the benefit of adding indirect information to the negotiation (Adair, 2003), challenging the other party's point of view, and encouraging further exploration of the settlement space. Against a background of mutual accommodation, its use can assist in value creation (Putnam & Wilson, 1989). Argumentation is preferable to expressions of dominance, because the latter can lead to significant and possibly unacceptable relational damage.

H2a: Symmetric low-power dyads that achieve high joint gain use argumentation strategies more, as well as coordination and affiliation strategies less, than symmetric low-power dyads that achieve low joint gain.

The risk of premature settlement increases if negotiators reciprocate affiliation because as liking grows, so does negotiators' unwillingness to assert their needs (Fry et al., 1983). Consequently, high levels of reciprocal affiliation can inhibit value creation. Low-power negotiators can use sequences strategically to disrupt prolonged cycles of mutual accommodation. In this context, the negotiators may benefit from the limited introduction of dominance, specifically by expressing dominance in response to affiliation. Such assertions of power introduce some relational tension and serve to prolong the negotiation. However, because it is introduced in a predictable way (contingent on affiliation), it is less likely to incur relational costs than an increase in the noncontingent use of dominance. In terms of deal-making, negotiators can maximize the benefits of argumentation if they use it in response to coordination by their opponent. Used in this way, argumentation clarifies negotiators' reactions to specific information. It is, therefore, likely to encourage negotiators to continue exploring the settlement space and unlikely to divert the negotiation to an unproductive cycle of counterarguments.

H2b: Relative to symmetric low-power dyads that achieve low joint gain, symmetric low-power dyads that achieve high joint gain will be characterized by low levels of reciprocal affiliation, as well as by high levels nonreciprocal coordination-argumentation and affiliation-dominance sequences.

Asymmetric power dyads

Negotiators in asymmetric dyads experience lower joint gain than negotiators in symmetric power dyads (Giebels et al., 2000; Mannix & Neale, 1993; Wolfe & McGinn, 2005). Theory and related research suggest that their inability to create value is a result of relationship mismanagement. The structure of the power relationship invites high-power negotiators to display power, and low-power negotiators to display submission. High-power negotiators are over-confident of low-power negotiators' submissiveness and overutilize dominance to claim value. At the same time, low-power negotiators overutilize affiliation, to ensure that high-power negotiators do not exercise their exit options. We hypothesized that to create value negotiators in

asymmetric power dyads need to shift from a relationship-focus (i.e., a focus on their relative power) to substantive issues (e.g., Kolb, 2004). In a context that invites power struggles, negotiators who can reframe the negotiation in this way are better able to create value. Our analysis implies that, in such dyads, value creation will be supported by deal-making strategies: argumentation, coordination, and offers. However, because of the potential for argumentation to trigger power struggles, we expected that negotiators would create value to the extent that they favor coordination and offers.

H3a: Asymmetric power dyads that achieve high joint gain will use coordination and offers more, and affiliation and dominance less, than asymmetric power dyads that achieve low joint gain.

Reciprocal dominance is one of two sequences that can easily inhibit value creation. Low-power negotiators reportedly fight back when high-power negotiators act contentiously (Kim & Fragale, 2005; Rubin & Zartman, 1995), triggering escalatory power struggles that limit value creation. However, responding to dominance with affiliation also limits possibilities for value creation. This nonreciprocal sequence clearly places one negotiator in the dominant position, and the other in a submissive position. By highlighting power differences, this sequence is likely to focus negotiators on claiming value rather than creating value. Negotiators in asymmetric power dyads can facilitate value creation if they are able to integrate information constructively into offers or are able to increase the creativity of proposals. Thus, the benefits of coordination and offers would be enhanced if negotiators combined them into nonreciprocal sequences.

H3b: Relative to asymmetric power dyads that achieve low joint gain, asymmetric power dyads that achieve high joint gain are characterized by low levels of reciprocal dominance and nonreciprocal dominance-affiliation sequences, as well as by high levels of nonreciprocal offer-coordination and coordination-offer sequences.

Methods

Participants

One hundred and twenty undergraduate students at a large metropolitan university participated in a simulated employment contract negotiation. Of these, 29 were male and 91 were female, with an average age of 19.1 years. The participants were randomly assigned to one of three experimental conditions: symmetric power (low), symmetric power (high), and asymmetric power. In the asymmetric power condition, high- and low-power instructions were counterbalanced across the role of recruiter and applicant. All negotiations ended in agreement.

Procedure

The participants had to negotiate a simulated employment contract. The written instructions assigned them to the role of either a recruiter or an applicant and

described the eight issues that comprised their employment contract: salary, vacation, moving expenses, performance bonus, location, start date, additional benefits, and job assignment. The instructions also provided the participants with a payoff schedule, which included information concerning the value of each issue for them. High maximum points meant that an issue had high priority for a negotiator; low maximum points meant that an issue had low priority. The task was mixed-motive, containing both zero- and nonzero-sum issues. In the former case, negotiators' preferences were opposed, meaning that one negotiator's gain was necessarily the other negotiator's loss. In this task, vacation and moving expenses were such issues. In the latter case, nonzero-sum issues enabled value creation because negotiators did not attach equal value to them. For example, whereas the job applicant placed greater value on salary (6000 points) than performance bonus (1600 points), the recruiter placed less value on salary (1600 points) than performance bonus (6000 points). This payoff structure allowed the negotiators to make trade-offs and to achieve mutual gain.

A power manipulation was embedded in the instructions. Negotiators received information about the availability of alternative applicants (if they were the recruiter) or alternative recruiters (if they were the applicant). In the high-power condition, negotiators were told that they had several alternative desirable applicants/recruiters with whom they could negotiate. Conversely, in the low-power condition, negotiators were told that they had no alternative desirable applicants/recruiters with whom they could negotiate. To reinforce these instructions, we used a priming task to establish a power mindset (Galinsky, Gruenfeld, Magee, 2003). Before negotiating, the participants rated their perceived power on a 1 (low)-to-7 (high) scale. Negotiators in the high-power condition rated themselves as having more power ($M = 5.45$, $SD = 1.1$) than negotiators in the low-power condition. ($M = 3.9$, $SD = 1.4$), $F(1, 118) = 40.69$, $p < .001$.

Classification of outcomes

We divided outcomes into three equal groups, based on the total value of the contract to both parties: low joint gain (21,100–25,100 points), moderate joint gain (25,300–27,700 points), high joint gain (27,800–32,200 points).

Results

To test our hypotheses we used the generalized linear model procedure, glm, of the modeling package R to fit a series of log-linear models to our data. Our dyad-level, Markov chain approach to analyzing sequential dependencies in communication is described in detail in Smith, Olekalns, and Weingart (2005). We analyzed the frequency of strategy use in a 5-way contingency table formed from the variables, dyadic power profile ($d = 3$), outcome ($o = 3$) and strategy use ($s_1 = 5$, $s_2 = 5$, $s_3 = 5$). The notation s_1, s_2, s_3 refers to the strategies used at each of three consecutive speaking turns. This analysis assumes that the sequential dependencies in negotiations

can be modeled as a second-order Markov chain. In our previous analyses of communication processes in negotiation, second-order Markov models have sufficed to describe all the significant sequential dependencies present in data of this kind (Smith et al., 2005).

The set of models and associated fit statistics appear in Table 2. The notation in Table 2 is a standard one for log-linear models (Agresti, 1990) in which interactions among model terms are represented by combining them in brackets. Terms that are independent of one another appear in separate brackets; terms that interact appear in the same bracket. All of the models in Table 2 contained the *d*.*o* interaction to constrain the expected and observed frequencies in the Power Profile × Outcome marginal table to be equal. They differed in respect to whether the frequency and sequencing of strategies depended on the power profile or were associated with different outcomes.

We fit a sequence of models that described relationships among the frequency and sequencing of strategies as a function of dyadic power profile and outcomes. Table 2 shows the overall model fit, G^2, and the improvements in fit, ΔG^2, which results from adding further model terms. Because of the sparseness of the contingency table (1125 cells), ΔG^2 is a more informative statistic than G^2, so we report *p*-values for the former but not the latter. Because the margins of the contingency table are formed from the strategies at three consecutive speaking turns, the models tested in Table 2 contain redundancies, in which effects involving frequencies are represented three times (once each for s_1, s_2, and s_3) and effects involving sequences are represented twice (once for $s_1.s_2$ and once for $s_2.s_3$). The tests for the improvement in fit in the table are conservative and based on the average of such redundant terms. This is the reason why the reported ΔG^2 and Δdf values are only one-third (for frequencies) or one-half (for sequences) of the overall change between consecutive models.

Model 1 is a null model in which the strategies in consecutive speaking turns are mutually independent, both of one another and of dyadic power profile and outcome. This model controlled for the lengths of the negotiations in each power profile and outcome class, and provided a baseline against which to test other models. We then tested the series of progressively more complex models shown in Table 2. Model 2 related to whether the strategies at three consecutive speaking turns were mutually dependent but unaffected by dyadic power profile and outcome (low, moderate, high joint gain). Models 3–5 focused on dependencies in the frequencies of strategy use, and Models 6–8 on dependencies in strategy sequencing. For Models 3–5, frequency of strategy use varied with both dyadic power profile and outcome, both independently and in combination. Power profile was predictive of frequency of strategy use and frequency of strategy use was predictive of outcomes. Models 6–8 showed that the sequencing of strategies similarly depended on power profile and outcome: Power profile was predictive of the sequencing of strategies and the sequencing of strategies of outcomes.

To determine the reasons for the improvement in fit associated with more complex models, we examined the standardized residuals for the fit that resulted

Table 2 Likelihood Ratio Model Fits (G^2) and Conditional Likelihood Ratio Fits (ΔG^2) for Length Three Sequences

Model	G^2	*df*	ΔG^2	Δdf	*p*
1. No sequential dependencies; frequencies independent of power profile and outcome $[d, o][s_1][s_2][s_3]$	4221.0	1104			
2. Second-order sequences; frequencies and sequences independent of power profile and outcomes $[d, o][s_1,s_2,s_3]$	1840.4	992	2380.4	112	<.001
3. Power dependent frequencies, independent sequences $[d, o][s_1,s_2,s_3][d,s_1][d, s_2][d, s_3]$	1616.2	968	74.7	8	<.001
4. Outcome dependent frequencies, independent sequences $[d, o][s_1,s_2,s_3][o,s_1][o, s_2][o, s_3]$	1435.5	944	60.3	8	<.001
5. Power × Outcome dependent frequencies, independent sequences $[s_1,s_2,s_3][d,o, s_1][d, o, s_2][d, o, s_3]$	1068.7	896	122.2	16	<.001
6. Power dependent sequences; independent of outcomes $[s_1,s_2,s_3][d,o, s_1][d, o, s_2][d, o, s_3]$ $[d,s_1,s_2]$ $[d,s_2,s_3]$	948.3	832	60.2	32	<.001
7. Power dependent sequences; sequence dependent outcomes $[s_1,s_2,s_3][d,o, s_1][d, o, s_2][d, o, s_3]$ $[o,s_1,s_2]$ $[o,s_2,s_3]$	862.8	768	42.7	32	<.05
8. Power, sequences and outcomes mutually dependent $[s_1,s_2,s_3]$ $[d,o,s_1,s_2]$ $[d,o, s_1,s_2]$	721.7	640	70.6	64	<.05

Note: Significance tests for improvements in fit (ΔG^2) have been adjusted for duplicate and triplicate model terms. d = dyadic power profile; o = outcome type; s = strategy.

when significant model terms were omitted. Cells with standardized residuals greater than ±1 (the expected value of the Pearson chi-square statistic with one degree of freedom when the null hypothesis is true) were important in diagnosing the cause of a model's failure to fit. In subsequent discussions, we focus on Model 5, which shows a significant three-way relationship among power profile, strategy frequency, and outcomes, and Model 8, which shows a significant four-way relationship among power profile, strategy sequencing and outcomes. In interpreting significant effects, we focus on strategies and strategy sequences with a standardized residual (e_j) of at least ±1.20.

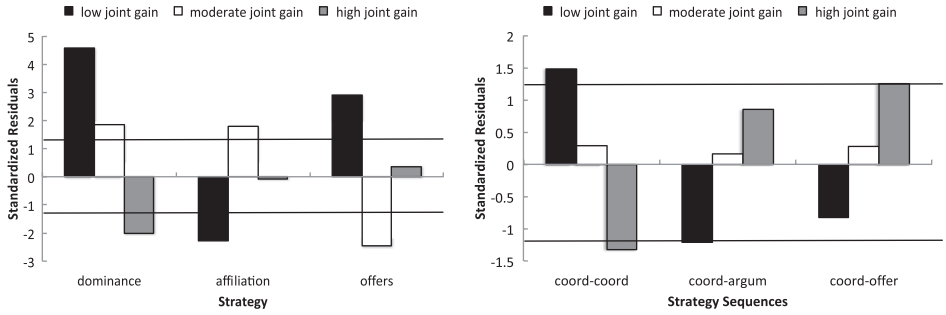

Figure 1 Strategies and strategy sequences with standardized residuals greater than ±1.2 in symmetric high-power dyads.

Symmetric high-power profile

In high-power dyads, both the frequency and sequencing of strategies contributed to low joint gain. Negotiators failed to create value when they overutilized offers ($e_j = 2.90$) and dominance ($e_j = 4.57$), and underutilized affiliation ($e_j = -2.29$). Moderate joint gain was associated with a reversal of this pattern (high affiliation ($e_j = 1.79$), low dominance ($e_j = -1.84$) and offers ($e_j = -2.46$)), and high joint gain was also associated with the underutilization of dominance ($e_j = -2.01$). Our results provide partial support for H1a, which predicted that the overutilization of dominance and underutilization of affiliation would lead to low joint gain, and that high joint gain would be associated with a reversal of this pattern.

We also determined that low and high joint gain were distinguishable in respect of the way in which high-power negotiators managed coordination, rather than by their ability to redirect contention (H1b). Negotiators who achieved low joint gain were more likely to reciprocate coordination (coordination–coordination, $e_j = -1.47$) or to respond to coordination with affiliation (coordination–affiliation, $e_j = 1.63$). They were also less likely to respond to coordination contentiously (coordination–argumentation, $e_j = -1.21$). Moderate joint gain was not associated with any distinctive strategy sequences. Negotiators who underutilized reciprocal coordination ($e_j = -1.32$) but increased their use of coordination-offer sequences ($e_j = 1.25$) appeared to maximize joint gain (Figure 1).

Symmetric low-power profile

The frequency with which negotiators used strategies, but not how those strategies were sequenced, predicted outcomes in symmetric low-power dyads. In these dyads, low joint gain was associated with an underutilization of dominance ($e_j = -2.66$) and offers ($e_j = -1.65$), and an overutilization of coordination ($e_j = 2.11$). Negotiators achieved moderate joint gains when they increased their use of dominance ($e_j = 1.81$) and offers ($e_j = 2.76$), but decreased their use of argumentation ($e_j = -2.82$). High joint gain accrued when negotiators underutilized offers ($e_j = -1.51$) and coordination ($e_j = -1.54$), but overutilized argumentation ($e_j = 2.53$). These results

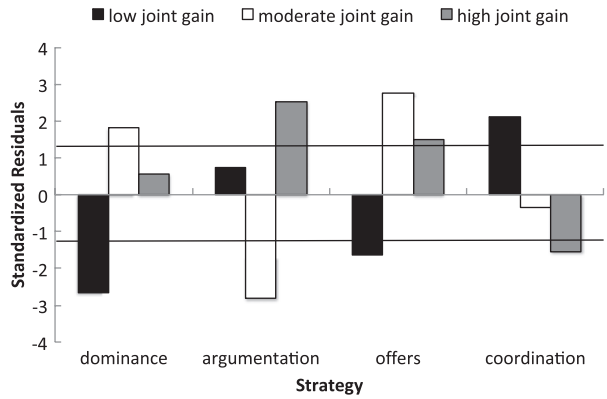

Figure 2 Strategies with standardized residuals greater than ±1.2 in symmetric low-power dyads.

provided partial support for H2a, which predicted that high joint gain would be associated with argumentation, whereas low joint gain would be associated with coordination and affiliation (Figure 2).

Asymmetric power profile

Both the frequency and sequencing of strategies were predictive of outcomes in asymmetric power dyads. Negotiators obtained low joint gain when they overutilized affiliation ($e_j = 2.19$), and underutilized both dominance ($e_j = -1.66$) and coordination ($e_j = -1.65$). Moderate joint gain was associated with an overutilization of argumentation ($e_j = 3.02$) and an underutilization of affiliation ($e_j = -4.33$), and high joint gain was associated with the underutilization of argumentation ($e_j = -1.9$). These results provide partial support for H3a, that is that low joint gain would be associated with the overutilization of affiliation and dominance.

Contrary to H3b, low joint gain was not associated with reciprocal dominance or with nonreciprocal dominance–affiliation sequences. Our results suggest that it was associated with the mismanagement, not of the relationship, but of deal-making: negotiators with low joint gain overutilized coordination–affiliation ($e_j = 1.31$) or coordination–argumentation ($e_j = 1.38$) sequences. They increased joint gain when they reciprocated affiliation (affiliate–affiliate; $e_j = 1.63$) when it occurred, as well as by responding to argumentation with dominance ($e_j = 1.24$). No sequences were associated with the high joint gain (Figure 3).

Discussion

Although negotiation theory has elaborated the relationship between power and negotiation strategies (Kim et al., 2005; Lawler, 2001), there is a marked absence of theory in regard to the more complex power-strategy-outcome link that we investigated. Consequently, we developed our hypotheses drawing on theories of interdependence

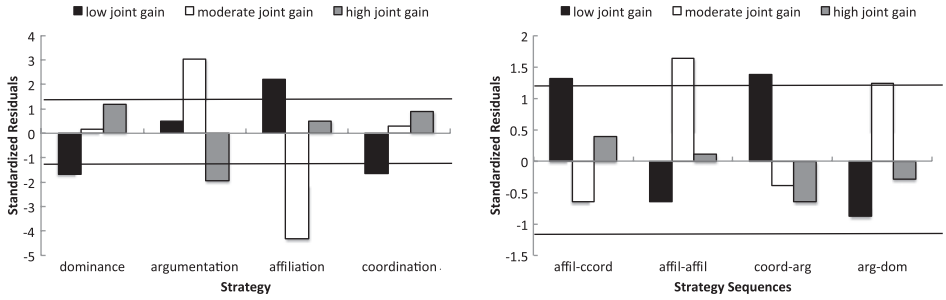

Figure 3 Strategies and strategy sequences with standardized residuals greater than ±1.2 in asymmetric power dyads.

and research investigating either the power–strategy or power–outcome relationship. Our analyses revealed that the level and distribution of power within a negotiating relationship affects how negotiators create value, not whether they are able to do so. Consequently, we extended the idea of contingent paths to value creation from goal orientation (Weingart & Olekalns, 2004) to negotiating relationships, specifically to the level and distribution of power within a negotiating dyad.

Power profiles and communication structure

A key difference in paths to value creation is the extent to which communication needs to be structured, that is, which specific strategy sequences emerge as predictors of negotiators' outcomes. Strategy sequences serve two important functions in negotiation: to confirm the dominant strategic orientation or to challenge and redirect this orientation (Olekalns & Weingart, 2008). Past research has shown systematic links among goal orientation, strategy sequences, and the quality of negotiated outcomes. This research led to the conclusion that negotiators' ability to create value is determined by which strategies they reciprocate, as well as their ability to redirect negotiations from competition to cooperation. In contrast, in this experiment we established that when the underlying relationship (power distribution) rather than the outcome is salient, how strategies are sequenced does not necessarily facilitate value creation and may instead restrict or even block it. This conclusion rests on the finding that specific strategy sequences were more likely to be associated with low and moderate, than with high, joint gain.

The broad pattern of communication that we observed implies that as the level of power within a negotiating dyad increases, so too does the complexity of creating value. In symmetric low-power dyads, we uncovered no evidence that how strategies are sequenced affects negotiators' outcomes. Only when dyads had at least one high-power negotiator did it appear necessary to manage the negotiation process on a moment-to-moment basis by means of strategy sequences. These findings suggest that when at least one negotiator has high-power, the default stance is one of value claiming rather than value creation. Consequently, the tasks of settlement and value

creation become more complex as the ability for at least one negotiator to leave the negotiation increases. When the nature of the relationship-specifically negotiators' power—is highly salient, negotiators' need to become increasingly attentive to the other party's tactical moves as the overall level of power increases.

Power contingent paths to value creation

Negotiators in symmetric power dyads differed in how they introduced information. Whereas negotiators in symmetric low-power dyads were able to create value by increasing their use of indirect information (argumentation), negotiators in symmetric high-power dyads created value when they introduced direct information (coordination). In the case of low-power dyads, the impact of indirect information was straightforward: High levels of argumentation were associated with value creation. This finding challenges the assumption that argumentation necessarily limits negotiators' ability to create value. Instead, it demonstrates that when dyads attach a high degree of importance to the negotiating relationship outcomes improve with increased contentiousness (see also Fry et al., 1983).

For high-power dyads, the introduction of direct information is more complex. Only when negotiators respond to coordination with offers, do high-power negotiators appear to create value. The association between this sequence (coordination-offer) and value creation in high-power dyads suggests that the key to successful value creation is not the exchange of information as such, but a clear demonstration by high-power negotiators that they are sufficiently mindful of the other party's needs that the information provided through coordination strategies is used to craft offers.

High- and low-power dyads were also distinguishable with respect to the consequences of expressing dominance. We observed a systematic relationship between the use of dominance and value creation in symmetric high-power dyads: High-power negotiators create value when they limit assertions of power. Not only does the assertion of power inhibit, if not block, value creation, it can prevent negotiators from reaping the benefits of reciprocal coordination: When used against a background of dominance, reciprocal coordination serves to avert impasse rather than to serve its more common role of facilitating value creation. In contrast, we observed an inverted-U relationship between the use of dominance and value creation in symmetric low-power dyads: Dominance lifted negotiators' joint gain but did not maximize it. We conclude that, in symmetric low-power dyads, the use of contention is more effective when it adds indirect information to the negotiating table (argumentation) than when it reflects the assertion of power (dominance).

Symmetric and asymmetric power dyads differed in terms of the consequences of expectancy violations. Unlike negotiators in power symmetric dyads, those in asymmetric power dyads were able to create value only when they adopted a strategically neutral stance in which the use of strategies (other than argumentation) and strategy sequences did not depart from baseline expectations. This pattern suggests that when negotiators have unequal power, they experience greater uncertainty about each other's intentions. Because negotiations in asymmetric power dyads are likely to

bring different behavioral expectations to the negotiating table, they may be especially sensitive to ''surprises'' (expectancy violations) with the resultant negative impact on the ability to create value.

Conversely, negotiators in symmetric power dyads may have greater certainty about the other party's intentions because they negotiate from a shared frame (high- or low-power). In the context of a shared frame, expectancy violations provide the process disruptions necessary for negotiators to transform the negotiation process (Olekalns & Weingart, 2008). When those disruptions address the specific risks associated with high or low power, they facilitate value creation.

Finally, symmetric and asymmetric power dyads differed in how the relationally focused strategies of affiliation and dominance affected the value creation process. Whereas in symmetric power dyads value creation was affected by how negotiators managed dominance, in asymmetric power dyads value creation was affected by how negotiators managed affiliation. In these dyads, a high level of affiliation appeared to inhibit value creation and also diluted the potential benefits of nonreciprocal sequences that paired coordination with either affiliation or argumentation. Asymmetric power dyads also differed from both high- and low-power dyads in terms of the role of contention in value creation. Like negotiators in high-power dyads, those in asymmetric power dyads presumably need to reduce their level of contentiousness to create value. Unlike negotiators in high-power dyads, who need to reduce dominance, and low-power dyads, who need to increase argumentation, negotiators in asymmetric power dyads appear to create value when they reduce argumentation. These findings suggest that negotiators in asymmetric power dyads do not assimilate to the strategic preferences of either the high- or low-power negotiator, but instead develop a distinct strategic approach.

Limitations and future directions for research

We explored the power-strategy-outcome link in negotiations via a simulated employment contract negotiation, which allowed us to manipulate the level and distribution of power. Power differences would possibly have a greater impact in field negotiations because of their association with other variables such as organizational or professional roles, or because the credibility of available alternatives is higher than in a laboratory setting. Nonetheless, research shows remarkably few differences in the behavior of negotiators in simulated or field negotiations in business negotiations (Donohue, Diez, & Hamilton, 1985; Herbst & Schwarz, 2011), if not in more emotionally charged contexts such as hostage negotiations (Holmes & Sykes, 1993). Because we simulated an employment contract, we believe that our findings capture underlying power dynamics in actual business negotiations.

We focused on how negotiators' power was expressed through the choice and sequencing of strategies. This level of analysis, which focuses on the broad intention of negotiators' communication, reflects only one of the ways in which power manifests itself in our social interactions. The linguistic forms that we use to express our intentions also convey information about how we see ourselves relative to others,

that is, how we perceive the underlying relational structure (Donnellon, 1994). For example, individuals who speak assertively, using the first person and present tense, convey more power than those who qualify the content of their message by using linguistic devices, such as tag questions (isn't it?), hedges (kind of, sort of), and disclaimers ("I'm not really sure, but . . . ."; Fragale, 2006; Mulac & Bradac, 1995). We may further increase our understanding of how power affects the value creation process in negotiation by undertaking these more micro level analyses of negotiators' speech patterns.

Conclusions

Our results challenge the common assumption that mutual accommodation is a prerequisite for value creation, and that contentiousness blocks value creation. To the contrary, we discovered that dyadic power profiles affected the extent to which these activities supported or complemented each other in the value creation process. We extended existing research on power by demonstrating that negotiators are able to create value under different distributions of power, but that they accomplish this in distinctly different ways. Our findings indicated that equal power dyads do not always benefit from mutual accommodation. Instead, we observed a cross-over in the benefits of mutual accommodation and contentiousness in symmetric high and low-power dyads, as well as demonstrating that asymmetric power dyads are most likely to create value when they implement a neutral strategic stance.

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