Fall March 26, 2010

Power Profiles: The Power-Action Link in Negotiation

Mara Olekalns, *Melbourne Business School*
Philip L Smith, *University of Melbourne*

Power Profiles: The Power-Strategy Link in Negotiation

Mara Olekalns
Melbourne Business School
University of Melbourne
200 Leicester St
Carton, Victoria, 3053
AUSTRALIA
Tel: 61 3 9349 8146
Fax: 61 3 9349 8133
email: m.olekalns@mbs.edu

Philip L. Smith
Department of Psychological Sciences
University of Melbourne
Parkville, Victoria, 3052
AUSTRALIA
Tel: 61 3 8344 6343
Fax: 61 3 9347 6618
email: philipls@ unimelb.edu.au

Power Profiles: The Power-Strategy Link in Negotiation

Negotiations can be represented as a series of micro-exchanges, directing attention to the conditional relationships between negotiators' strategy choices in consecutive speaking turns (strategy sequences). Using a simulated employment negotiation, we investigated how these conditional relationships were affected by the power structure within negotiations. Based on the level and distribution of power within a negotiating dyad, we identified three power profiles – symmetric high, symmetric low, asymmetric – and linked these power profiles to differences in how negotiators responded to each other.   Our analysis showed that each power profile was associated with a unique pattern of activation and inhibition of strategy sequences.

Power Profiles: The Power-Strategy Link in Negotiation

Many of our social relationships are, at the outset, ambiguous.   Individuals face uncertainty both about others' goals and intentions and their relative status within relationships. In resolving this uncertainty, individuals look for cues to position their relationships along two dimensions, those of affiliation and dominance (Dillard, Palmer & Kinney, 1995). Affiliation refers to perceptions of liking, trust and friendliness whereas dominance refers to others' power and status relative to our own.   Multiple cues help individuals to resolve how their relationships are placed along these dimensions. Organizational structures reduce ambiguity about relative status because they provide important information that positions individuals within a formal status hierarchy. However, relationships are not static and formal relationships evolve over time as individuals interact with each other.   Even when status and power are determined by organizational roles, how individuals respond to each other can affect affiliation, redefine power and alter the nature and quality of organizational relationships (Cropanzano & Mitchell, 2005; Ferris et al., 2009). Individuals' conversations consequently play a central role in how relationships are defined and shaped over time.

Conversations contain both explicit and implicit cues about how we perceive ourselves relative to others. What we say, the literal content of our messages, tells others about our needs and goals.   How we say it conveys implicit information about the way in which we represent the underlying relational structure (Donellon, 1994; Tannen, 1994).   Language thus provides a vehicle for communicating dominance and affiliation. Individuals who speak assertively, using

the first person and present tense are perceived as more powerful than those who qualify the content of their message by using linguistic devices such as tag questions (isn't it?), hedges (kinda, sorta) and disclaimers ("I'm not really sure, but …."; Bradac, 1990; Fragale, 2005). At the same time, a powerful speech style conveys less affiliation and liking than a powerless speech style. How conversations unfold over time also provides information about power and affiliation. Communication patterns that become increasingly dissimilar over time convey dislike and independence (an attempt to assert dominance) whereas communication patterns that become increasingly similar over time convey liking and interdependence (Burgoon et al, 1995, 1998). Power thus becomes an emergent property of ongoing relationships, determined by patterns of exchange over time (Bacharach & Lawler, 1981).

Because relationships develop over time, they can be conceptualized as a sequence of exchanges in which individuals negotiate both tangible, economic outcomes and intangible, social outcomes (Molm, 1990). Whereas the trade of tangible resources such as goods, services and information determines resource allocation and economic outcomes, the trade of intangible resources such as status, liking and esteem influences perceived affiliation and dominance consequently shaping social outcomes (Blau, 1964; Foa & Foa, 1980). These two facets of an exchange – the economic and the social – are closely connected because how a relationship is defined in terms of affiliation and dominance influences tangible economic outcomes, which in turn shape the ongoing relationship and individuals' social outcomes. Cropanzano and Mitchell (2005) note the cyclical and evolving nature of exchange relationships, arguing that many transactions are part of an ongoing process in which the outcomes of past exchanges become the input for future exchanges. In this research, we focus on one commonly occurring exchange relationship,

negotiation, and test how power affects the exchange of economic and social resources, as communicated through negotiation strategies. We propose that (a) negotiators' strategy choices reflect the relative emphasis that they place on trading economic or social resources and (b) differences in the underlying power structure shift negotiators' preferences for trading these two resource categories.

Our focus on the power-strategy link addresses a gap in the understanding of how power structures shape negotiation processes. Whereas the power-outcome link in negotiation is well-established, relatively little is known about how power affects negotiators' strategy choices. Despite a well-developed theoretical framework for differentiating power tactics in negotiation (Kim, Pinkley & Fragale, 2005; Lawler, 1992), few researchers have explored the power-strategy link. The small number of existing studies shows that negotiators in asymmetric (unequal) power relationships are more contentious, more hostile and more likely to deceive than those in equal (symmetric) power relationships (De Dreu & Van Kleef, 2003; Giebels, de Dreu & Van de Vliert, 2000; Olekalns & Smith, 2009; Rubin & Zartman, 1999, 2000). In this research, we also shift the level of analysis from the individual to the negotiating dyad. Drawing on theories of negotiating power and interdependence (Bacharach & Lawler, 1982; Rusbult & van Lange, 1992), we differentiate three power profiles based on the level and distribution of power in negotiating dyads: symmetric high power, symmetric low power and asymmetric power. This shift in focus allows us to assess how the structure of power shapes not just negotiators' strategy choices but also their responses to the other party. By shifting the level of analysis to the dyad, we are able to examine how power profiles affect the activation or inhibition of strategy sequences.

Negotiation as an Exchange Relationship

Negotiations can be characterized as a series of micro-exchanges in which, on a moment-to-moment basis, individuals trade both economic and social resources (Cropanzano & Mitchell, 2005; Foa & Foa, 1980). How these resources are traded shapes the deal-making and relationship-building aspects of negotiation, respectively. To understand how negotiators engage in deal-making and relationship-building, we need to analyze their strategies, that is, the set of behaviors they employ to move the negotiation to its conclusion. Negotiators' strategy use can be analyzed at several levels: the frequency with which specific strategies are used, how those strategies are sequenced, and how strategy use evolves over time (Brett, Weingart & Olekalns, 2005; Putnam, 1990). Our representation of negotiations as a series of micro-exchanges implies that analyzing strategy sequences will provide insight into the relationship between dyadic power profiles and negotiators' strategy choices. Like social exchange theorists, we seek to specify conditional relationships between two parties' actions over time (e.g., Molm, 1990).

Strategy sequences capture how negotiators respond to each other as a negotiation progresses. They reflect the interchange between two negotiators, showing the relationship between one negotiator's strategy and the other party's response. An important function of sequences is that they offer each negotiator the possibility of transforming and redirecting the negotiation process (Kelley, 1997). As negotiators work towards their goals, they need to manage the negotiation process and steer it in a way that supports deal-making and relational goals. Consequently, on a moment-to-moment basis, how negotiators respond to each other will be influenced by their

negotiation goals. Negotiators may choose to reciprocate, or match, each others' strategies. Reciprocating the other party's behavior signals a shared perspective and confirms negotiators' broad strategic approach. Negotiators redirect the negotiation when they mismatch, or fail to reciprocate, the other party's behavior (Brett et al., 2005; Olekalns & Smith, 2000). Nonreciprocal sequences challenge the strategic approach of the other person and have the potential to alter how the negotiation unfolds. In her research, Molm (1990) showed that individuals' decisions to reciprocate others' use of rewards are affected by the average power in their relationship.

_____

Insert Table 1 about here

_____

In this research, we investigate how the level and distribution of power in a negotiation shapes the way in which negotiators exchange economic and social resources via the sequencing of deal-making and relational strategies. We focus on five empirically-identified strategy clusters that we link to deal-making and relationship building. These strategies and their associated tactical actions are summarized in Table 1. Deal-making focuses negotiators on the exchange of economic resources through tactics such as making proposals, claiming and creating value. These strategies allow negotiators to put forward and discuss proposals, advance arguments in support of their claims and provide information about their underlying needs and interests. They therefore affect how negotiators identify and divide tangible, economic resources. The negotiation relationship, or the shadow negotiation, evolves in parallel with negotiators' deal-making activities (Kolb & Williams, 2003; Lax & Sebenius, 2006). Expressions of affiliation and dominance are associated with relationship-building. Negotiators build affiliation and

affective commitment by expressing liking, trust and optimism whereas they assert dominance by referring to available alternatives, making threats, asserting their needs and rejecting offers made by the other person. These strategies reflect the exchange of intangible, social resources.

In describing negotiations as a series of micro-exchanges, we recognized that the exchange of economic and social resources may evolve in parallel. The concept of a shadow negotiation further reinforces the possibility that negotiators simultaneously trade economic and social resources, implying that deal-making and relationship-building strategies may support each other. Consistent with this view, negotiation theory and research link the deal-making strategies of making offers and value claiming to a more competitive style of bargaining that is best supported by expressions of dominance. Conversely, the deal-making strategy of value creation is associated with a more cooperative style of bargaining that is best supported by expressions of affiliation (e.g., Larrick & Blount, 1995).

Linking Negotiators' Strategy Sequences to Power Profiles

The link between power and strategy use cannot be considered independent of the social structure within which individuals are located (Lawler, 1992). In social relationships, it is important to understand not only an individual's level of power but also how that power is distributed within the relationship. Viewing power as relative and relationally-defined provides information about the goals that individuals have for their relationships and, in negotiations, the potential risks that they face. These risks vary as a function of both the level and mutuality of dependence within relationships (Rusbult & van Lange, 2003).

Level of dependence refers to the ease with which negotiators can leave a relationship. In negotiations, dependence is determined by both the number of alternatives available to the current negotiation as well as the perceived attractiveness of the resources offered by the other party (Emerson, 1962; Kim et al., 2005). The level of dependence decreases when negotiators have good alternatives and are able to leave the current negotiation easily (Giebels, De Dreu & van de Vliert, 1998, 2000) or when the other party is unable to offer sufficiently attractive resources (Kim & Fragale, 2005). Negotiation researchers have consistently shown that negotiators with low dependence (high power) are able to claim a greater share of the resources than negotiators with high dependence (low power; McAlister, Bazerman & Fader, 1989; Mannix, Thompson & Bazerman, 1989; Sondak & Bazerman, 1991). To fully understand how power shapes negotiators' actions, it is also necessary to consider how power is distributed between negotiators, that is, the extent to which their dependence is mutual (Bacharach & Lawler, 1981). The advantages of high power and the disadvantages of low power are attenuated when negotiators are equally dependent on each other. Only when there is an asymmetric distribution of power, that is when one negotiator has greater power than the other, can high power negotiators gain an advantage. Mutuality of dependence refers to the distribution of power within a negotiating relationship, differentiating between mutual (symmetric) and non-mutual (asymmetric) distribution of power.

To understand how the level and mutuality of dependence influence negotiators' strategy choices, we turn to theories of behavioral activation-inhibition and regulatory focus. The level of power determines whether a behavioral activation or a behavioral inhibition system is primed (Keltner, Gruenfeld & Anderson, 2003). These behavioral systems are linked to differences in

regulatory focus, which refers to the motivational patterns that shape behavior, focusing individuals on potential benefit or potential harm (Higgins, 2000). Jointly, these behavioral and motivational systems provide insight into the power-strategy link. High power primes behavioral activation and a promotion focus, with its accompanying emphasis on maximizing opportunities and rewards. Conversely, low power primes the behavioral inhibition system and a prevention focus, with its accompanying emphasis on minimizing threats and risks. As a result, high power individuals are more likely to take action, are more attentive to rewards in their environment, and less attentive to the consequences of their actions (Anderson & Berdahl, 2002; Galinsky, Gruenfeld & Magee, 2003). In negotiations, high power individuals are more likely to make the first offer and less likely to ask diagnostic questions than low power individuals (De Dreu & Van Kleef, 2003; Magee, Galinsky & Gruenfeld, 2005). We use these behavioral and motivational differences to identify the strategy sequences that will characterize each of three power profiles: symmetric high power, symmetric low power and asymmetric power.

Symmetric high power. Although it seems intuitive that negotiators in symmetric high power dyads will favor expressions of dominance, this is a high risk strategy because of the likelihood that expressions of dominance will be reciprocated by the other party. For negotiators in symmetric high power dyads, the greatest threat to settlement is a deteriorating relationship. Because high power negotiators have low affective commitment (Molm, Takahashi & Peterson, 2005), defined as positive feelings and commitment to the other person (Lawler, 2001), and good exit options, it becomes easy for them to leave the negotiation. As a result, such negotiators need ensure that their behaviors do not disrupt the relationship. Expressions of dominance, because they call into question the other party's power, are likely to trigger an

escalatory power struggle that will worsen the negotiating relationship and threaten the deal. This threat can be offset if, instead of reciprocating dominance, high power negotiators respond with affiliation. Expressions of affiliation, because they appeal to high power negotiators focus on social rewards, both strengthen affective commitment and avert a power struggle. We therefore expect that reciprocal sequences of dominance will be inhibited whereas non-reciprocal sequences of dominance-affiliation will be activated.

High power negotiators also face risks in their deal-making. Despite their preference for value claiming (Mannix & Neale, 1993), this strategy necessarily attempts to improve one negotiator's outcomes at the expense of the other party. Because these negotiators have high aspirations, they are unlikely to accommodate demands from the other person. This makes initiating sequences with value claiming a high risk strategy because it is likely to elicit reciprocal demands and arguments from the other party, triggering an escalatory cycle of argumentation. Nonetheless, high power negotiators will attempt to influence resource division in a way that favors them. We expect that, in order to avert escalatory cycles of argumentation, value claiming is most likely to be elicited by offers from the other party. Initiating a sequence by making proposals allows negotiators to express their demands indirectly (Adair, 2003) preventing a downward spiral of argumentation. Responding to offers with value claiming enables negotiators to influence resource allocation by shaping the other party's perceptions of what is possible. However, by incorporating value claiming into non-reciprocal sequences, high power negotiators reduce the likelihood of escalating contentiousness. We conclude that reciprocal sequences of value-claiming will be inhibited whereas non-reciprocal sequences of offer-value claim will be activated.

H1a.   Symmetric high power dyads will be characterized by the use of non-reciprocal

sequences of dominance-affiliation and offer-value claim.

H1b.   Symmetric high power will be characterized by the inhibition of reciprocal sequences of

dominance and value claiming.

Symmetric low power.   When both negotiators have low power, the absence of alternative

options means that they are bound to each other if they wish to achieve their goals.   Because

each party has poor or no alternatives, the negotiating context effectively guarantees that both

parties will stay in the relationship.   As a result, the negotiating context reduces the need for

negotiators to build affective commitment and strengthen the relationship.   These contextual

guarantees affect negotiators' strategy choices because they shift tactical actions away from

expressions of liking and optimism.   Based on this reasoning, we expect that affiliative strategies

will be inhibited in these dyads and that both reciprocal and non-reciprocal strategy sequences

incorporating these strategies will be similarly inhibited in symmetric low power dyads.

Low power increases behavioral commitment, defined as the willingness to continue trading

(Molm et al., 2005), suggesting that negotiators in symmetric low power dyads will focus on

deal-making.   The principle mechanism for deal-making will be the use of offers, because – as

we described earlier – it enables negotiators to assert their demands indirectly thereby averting

power struggles.   The principle strategic goal for negotiators in symmetric low power dyads is to

ensure that their outcomes do not fall below their resistance point, that is, their minimum

acceptable outcome (Magee et al., 2005).   The heightened awareness of threats that is associated

with low power implies that these negotiators will be highly attuned to the possibility that they

will not meet their minimum outcomes, consequently choosing self-protective strategies.

Negotiators have two ways in which they can protect their minimum outcomes: a deal-making

path, via reciprocal offers, and a relational path, via expressions of dominance.   The

reciprocation of offers is a well-established strategic pattern that ensures both parties protect

their outcomes by maintaining a balanced trade of concessions without revealing too much

information (Adair, 2003). Responding to offers with expressions of dominance allows

negotiators to shape resource allocations by shifting perceptions of status and entitlement.

Because both strategies address resource allocation indirectly, they protect outcomes without

threatening the deal-making process. We therefore expect symmetric low power dyads to be

characterized by the activation of reciprocal offer-offer and non-reciprocal offer-dominate

sequences.

H2a.   Symmetrical low power dyads will be characterized by the use of offer-offer and offer-
        dominance sequences.

H2b.   Symmetrical low power dyads will be characterized by the inhibition of reciprocal
        affiliation and nonreciprocal sequences that end in affiliation.

Asymmetrical power. The strategic focus for both parties changes when power is

asymmetrically distributed across negotiators. The differences in negotiators' exit options mean

that whereas high power negotiators need to be less concerned about both deal-making and

relationship-building, low power negotiators need to be more concerned about preserving their

outcomes and building the relationship. Under these circumstances, high power negotiators are

likely to focus on asserting their power to maximize their resource share.   Since there are very

few risks in asserting their demands, we expect these negotiators to emphasize the deal-making tactics of making offers and claiming value to improve their outcomes. In asymmetrical power dyads, it is not viable for low power negotiators to respond to these strategies by claiming value or expressing dominance. Both responses are likely to challenge the high power negotiator's status and trigger a power struggle. In order to protect and meet their minimum acceptable outcomes, low power negotiators will shift strategic focus to value creation strategies. Only by identifying more resources, are low power in negotiators in asymmetrical relationships able to improve their individual outcomes (Mannix & Neale, 1993). They may also improve their outcomes by increasing high power negotiators' affective commitment. Expressing liking, which appeals to high power individuals' responsiveness to social rewards, is a highly effective influence tactic (Cialdini, 2001) that will strengthen the negotiating relationship. However, the heightened concerns about exploitation by the high power party in the negotiation imply that expressions of affiliation will be used in a self-protective manner, in response to offers and value claiming.

Our reasoning implies that high power negotiators will initiate sequences either by making offers or claiming value. These strategies provide the most direct route for maximizing outcomes. Although low power negotiators are not passive partners when power is asymmetrically distributed (Rubin & Zartman, 1999, 2000), their strategic range is restricted. For low power negotiators, both value claiming and expressions of dominance are high risk strategies that may alienate the other party and escalate high power negotiators' demands. Consequently, they will attempt to influence the deal-making activities of high power negotiators in one of two ways. First, they may improve their outcomes by increasing the resources available to both parties, that

is, by responding to offers or value claiming with value creation. Second, they may influence high power negotiators by increase liking and sympathy, that is, by responding to offers or value claiming with expressions of affiliation. We therefore expect that non-reciprocal sequences in which offers or value claiming elicit affiliation or value creation will be activated in these dyads, whereas reciprocal and non-reciprocal sequences that end in expressions of dominance or value claiming will be inhibited.

H3a. Asymmetric power dyads will be characterized by the use of non-reciprocal sequences in which offers or value claiming elicit affiliation or value creation.

H3b. Asymmetric power dyads will be characterized by the inhibition of reciprocal and non-reciprocal sequences that end in expressions of dominance or value claiming.

METHOD

Sample

One hundred and twenty undergraduate students at a large metropolitan university participated in a simulated employment contract negotiation. Of these, 29 participants were male and 91 were female, with an average age of 19.1 years. Participants were randomly allocated to one of 3 experimental conditions: symmetric power (low), symmetric power (high), and asymmetric power. In the asymmetric power condition, high and low power instructions were counter-balanced across the role of recruiter and applicant. All negotiations ended in agreement.

Procedure

Participants negotiated a simulated employment contract. Written instructions assigned participants to the role of either a recruiter or an applicant, described the eight issues that comprised their employment contract, and gave participants their payoff schedule. This schedule, shown in Table 2, told participants what the value of each issue was 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. As can be seen in Table 2, negotiators were required to reach agreement on eight issues. The task was mixed-motive, containing both distributive and integrative issues. Distributive issues are issues in which negotiators' preferences are opposed, meaning that one negotiator's gain is necessarily the other negotiator's loss. In this task, vacation and moving expenses were distributive issues. Integrative issues enable value creation because negotiators do not place equal value on 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). This means that negotiators are able to make trade-offs and simultaneously increase outcomes. In this task, salary, performance bonus, location and additional benefits were integrative issues. Before negotiating, participants calculated the value of four hypothetical contracts to ensure that they understood the points system. Each negotiation was conducted face-to-face and was videotaped for subsequent transcribing.

_____

Insert Table 2 about here

_____

A power manipulation was embedded in the instructions. Negotiators were given 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 candidates/recruiters with whom they could negotiate. Conversely, in the low power condition, negotiators were told that they had no alternative, desirable candidates/recruiters with whom they could negotiate. To reinforce these instructions, we used a priming task to establish a power mind-set. Negotiators in the high power condition wrote a short essay describing a situation in which they had felt powerful and negotiators in the low power condition wrote a short essay describing a situation in which they had felt powerless (Anderson & Galinsky, 2006; Galinsky et al., 2003). Before negotiating, participants were asked to rate their power on a 1 (low) to 7 (high) scale. There were reliable differences in perceived power at the start of the negotiation, $F(1,118)=40.69$, $p<.001$. 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).

Coding Strategies

We used a modified version of the coding scheme developed by Weingart et al. (2007), which classified tactics into 32 categories. Each speaking turn by a negotiator was treated as a single unit and raters coded that unit on the basis of its dominant theme. All transcripts were coded by two raters (κ =0.82). Bakeman and Gottman (1986) classify κ at or above 0.75 as excellent. All discrepancies between raters were resolved through discussion.

To assess whether these 32 tactics could be reduced to a smaller number of meaningful strategic clusters we carried out a correspondence analysis (Greenacre, 1993) on a Dyad x Strategy frequency table using procedure ANACOR in SPSS. The purpose of this analysis was to determine the number of clusters needed to represent the similarity structure among the 32 strategies. The analysis suggested that the strategies could be grouped into five general clusters, shown earlier in Table 1. For the purposes of subsequent data analysis all tactics were recoded as representing one of these 5 strategies.

RESULTS

To test our hypotheses about the structure of communication we used the generalized linear model procedure, glm, of the modeling package R to fit a series of log-linear models to our data. We analyzed the frequency of strategy use in a 5-way contingency table formed from the variables dyadic power profile ($d = 3$), negotiation half (first, second, $h = 2$) 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. The models tested for systematic variations in the frequency with which negotiators used strategies, how those strategies were sequenced (their sequential dependencies) and the extent to which dyadic power profile shaped the frequency and sequencing of negotiation strategies. In addition, because strategy use and strategy sequencing can change during the course of the negotiation, we divided each negotiation into halves, based on the number of speaking turns, when forming the contingency table.

The set of models and associated fit statistics are shown in Table 3. The notation in Table 3 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. For example, the notation $[d][h]$ means that a model contained terms for the main effects of dyadic power profile and negotiation half but had no interaction term; $[d,h]$ means a model contained both the main effects and the $d.h$ interaction. All of the models in Table 3 investigated the dependencies within the power × half marginal table so the $[d,h]$ term was included in all models.

_____

Insert Table 3 about here

_____

Our approach to sequential dependencies in communication is described in detail in Smith, Olekalns, and Weingart (2005). We fit a sequence of models that described relationships among the frequency and sequencing of strategies in the first and second halves of the negotiation and as a function of dyadic power profile. Table 3 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 (750 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 3 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 tests 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. This model controlled for the length of the negotiation in each dyad type and provided a baseline against which to test other models. Model 2 tests whether the strategies at three consecutive speaking turns are mutually dependent but are unaffected by dyadic power profile and negotiation half (first, second). This is formally equivalent to treating the dependency among strategies as a second-order Markov chain. Previous research has repeatedly shown that a second-order Markov model suffices to capture the dependency structure in negotiation sequences (see Smith et al., 2005). The improvement in fit for Model 2 over Model 1 shows that the assumption of second-order Markov dependency accounts for 68% of the unexplained variance in the contingency table. This is variance unexplained by the assumption of independent strategies at consecutive speaking turns. We conclude that we are better able to describe strategy use in negotiation by focusing on how negotiators sequence their strategies (Model 2) than by focusing simply on the frequency with which strategies are used (Model 1).

The remaining models test the effects of adding dependencies among the frequency of strategy use, the sequencing of strategies, dyadic power profile, and time (first or second half of the negotiation). Models 3 to 5 investigated dependencies in the frequencies of strategy use; models 6 to 8 investigated dependencies in strategy sequencing. Models 3 to 5 showed that frequency of strategy use varied with both dyadic power profile and time, but not with their interaction. Models 6 to 8 showed that the sequencing of strategies similarly depended on both dyadic power profile and time, but not their interaction. Model 7 provided a test of our hypothesis that dyadic power profiles affect the strategy sequences used by negotiators.

To investigate the reasons for the improvement in fit associated with more complex models, we investigated the standardized residuals for the fit that resulted when significant model terms were omitted. The standardized residual for any cell j, denoted e_j, is equal to $e_j = (n_j - m_j)/m_j^{1/2}$, where n_j and m_j are, respectively, the observed frequency and the fitted value for cell j (Agresti, 1990). 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) are important in diagnosing the cause of a model's failure to fit. Thus, for example, Model 3 showed a significant improvement in fit when the frequency of strategy use, $[d,s_i]$, $i = 1, 2, 3$, was allowed to depend on negotiation half. To characterize the reason for this improvement, we calculated the standardized residuals for negotiation half $\times$ frequency marginal table for the preceding model in the table, Model 2, in which negotiation half and frequency were independent. This analysis showed that the frequency of affiliation strategies decreased from the first to the second half of the negotiations ($e_j = -4.3$), whereas the use of value creation and value claiming strategies both increased ($e_j = +2.4$ and $e_j = +2.3$, respectively). We analyzed the dependencies in sequence use in a similar way.

––––––––––––––––––––––––––––––

Insert Table 4 about here

––––––––––––––––––––––––––––––

Our results show that although some sequences have large standardized residuals, they occur in absolute terms relatively infrequently. In subsequent discussion, we concentrate on those sequences that met two criteria: (a) the standardized residuals are at least ± 1.25 and (b) the expected frequency for the sequence is at least 5. As can be seen in Table 4, the three dyadic

power profiles were associated with differences in both the strategies and strategy sequences that

were used more and less frequently than expected. These patterns are summarized in Figures 1 -

3. Figure 1 shows sequences incorporating deal-making strategies, Figure 2 shows sequences

incorporating relationship-building strategies, and Figure 3 shows sequences that combined deal-

making and relationship-building strategies. Although we focus on strategy sequences in

subsequent sections, we also provide a brief overview of the differences in how frequently

strategies were used to establish a baseline against which to interpret strategy sequences.

_____

Insert Figures 1 – 3 about here

_____

Symmetric high power profile. Symmetric high power dyads used more value claiming (e_j =

1.71) and made fewer offers (e_j = -2.44) than expected. Our analyses provide support for the

hypothesis that dominance-affiliation and offer-value claiming sequences would be activated in

these dyads (H1a). As can be seen, these dyads used both dominance-affiliation (Figure 1) and

offer-value claiming (Figure 2) sequences more frequently than expected. We also found that

the reciprocal trade of offers (offer-offer sequences, Figure 2) was inhibited and this sequence

was used less frequently than expected.

Symmetric low power profile. Symmetric low power dyads expressed less affiliation (e_j = -

3.83), more dominance (e_j = 3.04) and made more offers (e_j = 4.94) than expected. Our analysis

showed that low symmetrical power negotiators used reciprocal offers (Figure 1) and

nonreciprocal offer-dominate (Figure 3) sequences more frequently than expected (H2a). With

the exception of reciprocal affiliation (Figure 2), sequences that ended with affiliative strategies

(claim-affiliate, create-affiliate, offer-affiliate, dominate-affiliate; Figure 3) were inhibited in these dyads (H2b).

Asymmetric power profile. Finally, asymmetric power dyads expressed more affiliation ($e_j =$ 3.99), less dominance ($e_j = -3.21$) and made fewer offers than expected ($e_j = -2.45$). We predicted than in asymmetric power dyads negotiators would use sequences in which offers or value claiming elicited affiliation or value creation more frequently than expected (H3a), whereas they would use sequences that ended in expressions of dominance or value claiming less frequently than expected (H3b). We found support for both hypotheses: negotiators used claim-affiliate and offer-affiliate sequences more frequently than expected and claim-dominate and offer-dominate sequences less frequently than expected (Figure 3). In addition, negotiators in asymmetric power dyads used offer-create sequences more frequently than expected. They used claim-offer and offer-offer sequences less frequently than expected (Figure 2). Supplementary analyses showed that these sequences were equally likely to be initiated by low and high power negotiators.

DISCUSSION

Despite a strong theoretical framework linking power to action in negotiation, relatively few researchers have tested how power affects negotiators' strategy choices and none have tested the link between power and strategy sequences. Drawing on theories of power and exchange, we tested how the level and distribution of power shaped negotiators' strategy sequences. Our analysis showed that the resources negotiators exchanged and how they were exchanged varied as a function of the power profile that characterized their negotiating relationship. When power

was symmetrically distributed, negotiators traded within resource boundaries, combining either

deal-making or relationship-building strategies into sequences. Only when power was

asymmetrically distributed, did negotiators cross resource boundaries by combining deal-making

strategies with relationship-building strategies. When power was asymmetrically distributed we

also observed a distinct pattern of behavior that was the mirror image of the one in dyads with

symmetrically distributed power. Our analysis gives us insights into how power affects the

structure of negotiators' communication as well as the relative emphasis that they place on

managing deal-making and relationship-building.

Because we represented negotiations as a series of micro-exchanges, we focused on how dyadic

power profiles shaped the conditional relationships between negotiators' strategies, that is,

strategy sequences. This relationship can be examined across different time horizons. Although

our hypotheses focused on a proximal time horizon (immediate reciprocity), we also tested

whether power profiles affected the use of strategy sequences over the course of the negotiation.

These two distinct time horizons recognize the possibility that negotiators take both immediate

and longer-term actions in pursuit of their goals (Kelley, 1997; Leifer, 1988). Our analysis

showed that although the frequency with which specific strategy sequences were used changed

from the first to the second half of the negotiation, these changes were not influenced by dyadic

power profiles. This finding suggests that, independent of the level and distribution of power,

negotiations follow a predictable path from the beginning to the end of the negotiation (Holmes,

1992). Relationship management occurs over a shorter time horizon: Our findings further

suggest that power dynamics are reflected in how negotiators respond to each other on a

moment-to moment basis.

The number of sequences that were either activated or inhibited varied across power profiles, being lowest in symmetric high power dyads. This lack of structure in the communication of high power negotiators is consistent with their relative insensitivity to others' behavior (Overbeck & Park, 2001; Galinsky et al., 2003). High power negotiators are more likely to believe that only their actions contribute to their outcomes, and consequently exert less effort in redirecting others' behavior in order to attain their goals. This belief is reflected in the unstructured communication that characterized these dyads. Substantially more sequences were either activated or inhibited in symmetric low power and asymmetric power dyads, consistent with low power individuals' greater dependence on, and consequent greater attentiveness to, others. Our findings also suggest that even when there is only one low power party in a social interaction, both individuals are more attentive to how a social interaction unfolds over time.

When power was asymmetrically distributed, negotiators' communication patterns did not align with those of either high or low power negotiators in power symmetric dyads. Instead, the pattern of activation and inhibition in these dyads was the mirror image of the sequences that characterized low, symmetric power dyads. Also, and contrary to our expectations, the sequences that characterized asymmetric power dyads were equally likely to be initiated by high or low power negotiators. We conclude that, despite power differences, negotiators rapidly converge to a stable communication pattern that is not differentiated based on negotiators' level of power. This may occur because, as Rubin and Zartman (1989) note, unequal power distribution does not generate submissiveness on the part of low power negotiators. Attempts to preserve status differences, on the part of high power negotiators, are thus likely to be met with resistance. Consequently, negotiators benefit from converging to a stable pattern of

communication that accommodates asymmetric power distribution without differentiating between high and low power negotiators. The communication patterns that we observed provide insight into how both deal-making and relationships are managed within an asymmetric power structure.

Implications for Theory

In developing our hypotheses about the power-strategy link we drew on theories of behavioral activation-inhibition and regulatory focus. Our findings fit better with regulatory focus than behavioral activation-inhibition. We found that each power profile was associated with both the activation and inhibition of specific sequences, implying that power profiles did not simply either activate or inhibit strategy use. Instead, the level and distribution of power shaped which strategy sequences were activated or inhibited. The selective activation and inhibition of strategies is congruent with regulatory focus theory, which argues that individuals strive to achieve fit between their goals and the means by which those goals are pursued (Higgins, 2000). We therefore suggest a refinement to theories of power and action when we move from the domain of individual action to the domain of social interaction. In describing individual action, Keltner et al. (2003) align high power with behavioral activation and a promotion focus whereas they align low power with behavioral inhibition and a prevention focus. We propose that in social interactions both systems influence behavior. Power influences behavior by shifting individuals' interaction goals, thereby selectively activating behaviors that are congruent with those goals and inhibiting behaviors that are incongruent with those goals.

Our findings link the level and distribution of power to patterns of influence in negotiation. Negotiation theory describes three distinct paths to influence, via the use of strategic, normative or relational influence strategies (Fisher, Ury & Patton, 1990; Polzer, Mannix & Neale, 1995). When negotiators refer to their alternatives, engage in argumentation or clarify the standards against which outcomes should be assessed they are using strategic and normative influence strategies. Our analysis suggests that this strategic-normative influence path characterizes symmetric high and asymmetric power dyads, who respond to offers with argumentation or additional information about their needs. A sequence of strategies in which offers elicit information implies that negotiators are using information to redefine what the other party believes is an acceptable deal. Symmetric low power negotiators reverse this pattern, initiating sequences with information which then elicits offers. This information-offer sequence better aligns with a relational approach to influence because it implies that negotiators are attentive to the needs of the other party and incorporate those needs into their proposals. Our findings suggest that dyadic power profiles determine which of two influence paths negotiators follow: whereas strategic-normative influence characterizes dyads with at least one high power negotiator, relational influence characterizes symmetric low power dyads.

The use of reciprocal and non-reciprocal sequences links dyadic power profiles to the implementation of different exchange rules. Social exchange theorists differentiate negotiated and reciprocal exchanges, based on the directness with which trades are made. Negotiated exchange describes a process in which reciprocity is clearly and directly articulated, whereas reciprocal exchange describes a process in which the terms of trade and the return of obligations remain implicit (Flynn, 2005; Molm et al., 2005). Power profiles affected the directness of

exchange: negotiators in symmetric low power dyads reciprocated each others' offers and expressions of affiliation, whereas when dyads had at least one high power negotiator, reciprocity either did not occur or was inhibited. The immediate reciprocity observed in symmetric low power dyads may be interpreted as the implementation of a negotiated exchange process, suggesting that negotiators in these dyads were most concerned about ensuring that both economic and social resources were traded in a balanced way. The desire to ensure balanced trades reflects low power negotiators concerns about protecting their outcomes and minimizing losses. The presence of at least one high power negotiator shifts negotiators preferences away from explicit trades that highlight the equivalence of exchanges.

Finally, our results challenge the common assumption in negotiation theory that negotiators' deal-making and relationship-building activities support each other (Wilson & Putnam, 1990). Independent of power, negotiators strive to achieve their economic and social goals. Power profiles shaped the extent to which deal-making and relationship-building activities supported or complemented each other. Negotiators in symmetric high power dyads complemented deal-making sequences that expressed power (offer-claim) with relationship-building sequences that mitigated power use and preserved social harmony (dominance-affiliation) whereas those in asymmetric power dyads supported their deal-making activities (offer-create) with their relationship-building activities (offer-affiliate). The most complex relationship emerged in symmetric low power dyads, whose relationship-building actions both supported (affiliate-affiliate) and complemented (offer-dominance) their deal-making actions (offer-offer). While individual negotiators may strive to achieve congruence in their actions, our findings suggest that at the dyadic level of analysis the link between how negotiators manage their outcomes and

relationships is not a foregone conclusion. Rather, the characteristics of the negotiating dyad –

in this case, their power profile – influence the extent to which deal-making and relationship

building strategies support or complement each other.

Implications for Negotiators

The idea of fit informs our recommendations for negotiators. Power brings with it expectations

about how interactions will unfold. These expectations render interactions more predictable.

When individuals' behaviors are congruent with expectations, interactions unfold more smoothly

because they do not call into question the other person's intentions, consequently enhancing both

economic and social outcomes (Barry & Crant, 2000). We associated unique patterns of

sequences with each power profile. To avoid expectancy violations and the negative

consequences that flow from such violations – negative affect, reduced trust and reduced liking

(Barry & Oliver, 1996; Burgoon, Stern & Dillman, 1995) – we recommend that negotiators

modify their patterns of behavior, specifically how they respond to the other party's strategies,

based on the level and distribution of power within the negotiation. Much of negotiation is

about influencing the other party. Extending the principle of fit to negotiation implies that

individuals will be most successful in their influence attempts if they are able to adapt their

responses to fit with the behavioral expectations created by different power profiles.

Finally, our results also provide insights into the most effective behavioral modifications that

negotiators can make. With a small number of exceptions, we found that each power profile was

associated with distinct, non-reciprocal sequences. In terms of nonverbal communication,

individuals report greater liking and comfort when their expressions of dominance or submission

are complemented rather than mimicked (Tiedens & Fragale, 2003). Extending this finding to

strategy sequences suggests that relational benefit may accrue to negotiators indirectly by virtue

of using non-reciprocal sequences, which also complement rather than mimic the other party's

strategy choices. However, this benefit is accumulated in different ways, depending on the

power profile of the dyad. More generally, recent research suggests that influence attempts are

more effective when personal characteristics (and preferred influence styles) fit with

organizational context (Anderson, Spataro & Flynn, 2008).   Negotiators may thus enhance their

influence capabilities by ensuring that they use the non-reciprocal sequences that are

characteristic of their dyadic power profile.

Limitations and Future Directions

We explored the power-strategy link in negotiations using a simulated employment contract

negotiation.   While this approach allowed us to successfully manipulate the level and

distribution of power, it is likely that power differences have a greater impact in field

negotiations. Nonetheless, research shows remarkably few differences in the behaviors of

negotiators in simulated or field negotiations (Donohue, Diez & Hamilton, 1985).   The only

identifiable difference is the effect of role differentiation on the initiation of strategy sequences:

Donohue et al. (1985) demonstrated that although attack-defend and defend-attack sequences

characterized both actual and simulated labor management negotiations, in actual negotiations

attack-defend sequences were more likely to be initiated by labor whereas defend-attack

sequences were more likely to be initiated by management. Donohue et al.'s (1985) research

suggests that our finding that, in asymmetric dyads, high and low power negotiators were

equally likely to initiate the sequences that characterized an asymmetric power profile may

reflect restricted role differentiation in this experimental setting.   In an applied setting, it may be possible to demonstrate that sequences associated with asymmetric power distribution are differentially initiated by high and low power parties.

We tested the relationship between power profiles and strategy sequences in a very specific context, the negotiation of an employment contract.   Although the negotiation of employment conditions is a regular occurrence in our work lives, it focuses individuals on their economic outcomes.   Cropanzano and Mitchell (2005) describe four kinds of exchanges based on the nature of the resources exchanged (economic or social) and the relationship within which they are exchanged (economic or social). In terms of this typology, we explored how economic outcomes were negotiated within a primarily economic relationship. A possible consequence is that many more of the sequences that emerged as characteristic of negotiators' power profiles emphasized deal-making strategies than might be the case when the dominant exchange is social. Many of our organizational negotiations do not result in clearly identifiable economic outcomes. Instead, they bring to the foreground our relational outcomes.   Examining how power profiles shape strategy sequences in more relationally-oriented negotiations would further increase our understanding of the power-strategy link in negotiation.

The characterization of a single negotiation as a series of micro-episodes resulted in a focus on how power shapes strategy sequences within a negotiation.   However, many organizational negotiations are part of an ongoing relationship with managers, peers or subordinates. Consequently, how a specific negotiation is managed from beginning to end – and the resultant sense of satisfaction or dissatisfaction – shapes how individuals approach subsequent

negotiations and may determine not only the resources available for exchange but also redefine the nature of the relationship (e.g., Cropanzano & Mitchell, 2005). A final avenue for research is the analysis of how power affects negotiators' strategies over repeated negotiations.

Conclusions

We focused on how negotiating dyads' power profiles affected the way in which strategies were sequenced. Based on our results, we offer several insights into the relationship between dyadic power profiles and negotiators' actions. Each of these insights suggests an extension to existing theories of the relationship between power and action. We challenged the common assumption, in negotiation research, that deal-making and relationship-building activities support each other. Instead, we demonstrated that dyadic power profiles affected the extent to which these activities supported or complemented each other. We extended theories of influence by demonstrating that dyadic power profiles shaped whether negotiators use strategic-normative influence or relational influence. By linking power profiles to the implementation of different exchange rules in negotiation, we also extended theories of exchange. However, our key observation was that when we move from the domain of individual actions to the domain of social interactions, the level and distribution of power both activates and inhibits negotiators' strategy choices.

REFERENCES

Adair, W.L.

2003   "Integrative Sequences and Negotiation Outcome in Same- and Mixed-culture

Negotiations", International Journal of Conflict Management: 14, 273-296

Agresti, A.

1990   Categorical data analysis. New York: Wiley.

Anderson, C., & Berdahl, J.

2002   "The experience of power: Examining the effects of power on approach and inhibition

tendencies", Journal of Personality and Social Psychology: 83, 1362-1377.

Anderson, C., & Galinsky, A.

2006   "Power, optimism & risk-taking", European Journal of Social Psychology: 36, 511-536.

Anderson, C., Spataro, S.E., & Flynn, F.J.

2008   "Personality and organizational culture as determinants of influence", Journal of Applied

Psychology: 93, 701-710.

Bacharach, S.B., & Lawler, E.J.

1981   Bargaining: Power, tactics and outcomes, San Francisco: Jossey-Bass.

Bakeman, R., & Gottman, J.M.

1986   Observing Interaction: An Introduction to Sequential Analysis, Cambridge: Cambridge

University Press.

Barry B., & Oliver, R.L.

1996   "Affect in dyadic negotiation: A model and propositions". Organizational Behavior and

Human Decision Processes: 67, 127–143.

Barry, B., & Crant, J.M.

2000   "Dyadic communication relationships is organizations: An attribution/expectancy

approach", Organization Science: 11, 648-664.

Blau, P.M.

1964   Exchange and power in social life. New Brunswick, NJ: Transaction.

Bradac, J.J.

1990   "Language attitudes and impression formation". In H. Giles & W.P. Robinson (Eds.).

Handbook of Language and Social Psychology: 387-412. Oxford: England: John Wiley

& Sons.

Brett, J., Weingart, L., & Olekalns, M.

2004   "Baubles, bangles and beads: Modeling the evolution of negotiating groups over time".

In S. Blount, B. Mannix & M. Neale (Eds.), Research on Managing Groups and Teams:

Time in Groups: 39-66. Oxford: Elsevier Ltd.

Burgoon, J.E., Stern, L.A., & Dillman, L.

1995   Interpersonal adaptation: Dyadic interaction patterns. Cambridge: Cambridge University

Press.

Cialdini, R.

2001   "Harnessing the science of persuasion", Harvard Business Review: 79, 72-79.

Cropanzano, R., & Mitchell, M.S.

2005   "Social exchange theory: An interdisciplinary review", Journal of Management: 31, 874-

900.

De Dreu, C.

1995   "Coercive power and concession making in bilateral negotiations", The Journal of

Conflict Resolution: 39, 646-670.

De Dreu, C., & Van Kleef, G.

2003   "The influence of power, on the information search, impression formation, and demands

in negotiation", Journal of Experimental Social Psychology: 40, 303-319.

Dillard, J.P., Palmer, M.T., & Kinney, T.A.

1995   "Relational judgments in an influence context", Human Communication Research: 21,

331-353.

Donnellon, A.

1994   "Team work: Linguistic models of negotiating differences", Research on Negotiation in

Organizations: 4, 71-124. Greenwich, CN: JAI Press.

Donohue, W., Diez, M., & Hamilton, M.

1984   "Coding naturalistic negotiation interaction", Human Communication Research: 10, 403

- 425.

Emerson, R.M.

1962   "Power-dependence relationships", American Sociological Review: 27, 31-40.

Ferris, G., Liden, R.C., Munyon, T.P., Summers, K.K., Basik, K.J., & Buckley, M.R.

2009   "Relationships at work: Toward a multidimensional conceptualization of dyadic work

relationships", Journal of Management: 35, 1379-1403.

Fisher, R., Ury, W., & Patton, B.

1993   "Negotiation power: Ingredients in an ability to influence the other side". In L. Hall

(Ed). Negotiations: Strategies for Mutual Gain: 3-16. Newbury Park: Sage.

Flynn, F.

2005   "Identity orientations and forms of social exchange in organizations", Academy of

Management Review: 30**,** 737-750.

Foa, E.B., & Foa, U.G.

1980   "Resource theory: Interpersonal behavior as exchange". In K. Gergen, M. Greenberg,

& R. Willis (Eds), Social exchange: Advances in theory and research: 77-101. New

York: Plenum.

Fragale, A.

2006   "The power of powerless speech: The effects of speech style and task interdependence on

status conferral", Organizational Behavior and Human Decision Processes: 101, 243-261.

Galinsky, A., Gruenfeld, D., & Magee, J.

2003   " From power to action", Journal of Personality and Social Psychology: 85, 453-466.

Giebels, E., De Dreu, C., & Van de Vliert, E.

1998   "Social motives and trust in negotiation: The disruptive effects of punitive capability",

Journal of Applied Psychology: 83, 408-422.

Giebels, E., De Dreu, C., & Van de Vliert, E.

2000   "Interdependence in negotiation: Effects of exit options and social motive on distributive

and integrative negotiations"**,** European Journal of Social Psychology: 30, 255 – 272.

Greenacre, M.J.

1993   Correspondence analysis in practice. London : Academic Press.

Higgins, E.T.

2000   "Beyond pleasure and pain". In E.T. Higgins & A.W. Kruglanski (Eds.), Motivational

Science: Social and Personality Perspectives: 231-255. New York, NY: Psychology

Press.

Holmes, M.E.

1992   "Phase structures in negotiation". In L.L. Putnam & M.E.. Roloff (Eds.), Communication

and negotiation: 83-105. Newbury Park: Sage.

Kelley, H.H.

1997   "Expanding the analysis of social orientations by reference to the sequential-temporal

structure of situations", European Journal of Social Psychology: 27, 373-404.

Keltner, D., Gruenfeld, D.H., & Anderson, C.

2003   "Power, approach, and inhibition", Psychological Review: 110, 265-284.

Kim, P., & Fragale, A.

2005   "Choosing the path to bargaining power: An empirical comparison of BATNA and

contribution to negotiation", Journal of Applied Psychology: 90, 373-381.

Kim, P., Pinkley, R., & Fragale, A.

2005. "Power dynamics in negotiation", Academy of Management Review: 30, 799-822.

Kolb, D.M., & Williams, J.

2001   " Breakthrough bargaining", Harvard Business Review (February), 89-97.

Larrick, R., & Blount, S.

1995   "Social context in tacit bargaining games: Consequences for perceptions of affinity and

cooperative behavior". In R. M. Kramer & D. M. Messick (Eds.) Negotiation as a Social

Process: New Trends in Theory and Research: 268-284. Thousand Oaks, CA: Sage

Publications, Inc.

Lawler, E.

 1992   "Power processes in bargaining", Sociological Quarterly: 33, 17-34.

Lawler, E.

2001   "An affect theory of social exchange", American Journal of Sociology: 107**,** 321-352.

Lax, D.A., & Sebenius, J.K.

2006   3-D Negotiation: Powerful Tools to Change the Game in Your Most Important Deals.

Harvard Business School Press: Boston, Massachusetts.

Leifer, E. M.

1988   " Interaction Preludes to Role Setting: Exploratory Local Action", American

Sociological Review: 53, 865-878.

McAlister, L., Bazerman, M., & Fader, P.

1986   "Power and goal setting in channel negotiation", Journal of Marketing Research: 23, 238-

263.

Magee, J.C., Galinsky, A.D., & Gruenfeld, D.H.

2007   "Power, propensity to negotiate, and moving first in competitive interactions". Personality

and Social Psychology Bulletin: 33, 200-212.

Mannix, E., Thompson, L., & Bazerman, M.

1989   "Negotiation in small groups", Journal of Applied Psychology: 74, 508-517.

Mannix, E., & Neale, M.

1993   "Power imbalance and the pattern of exchange in dyadic negotiation", Group Decision

and Negotiation: 2, 119-133.

Molm, L.D.

1990   "Structure, action and outcomes: The dynamics of power in social exchange", American

          Sociological Review: 55, 427-447.

Molm, L.D., Takahashi, N., & Peterson, G

2000 "Risk and trust in social exchange: An experimental test of a classical proposition",

          American Journal of Sociology: 105**,** 1396-1427.

Olekalns, M., & Smith, P.

2009   "Mutually dependent: Power, trust, affect and the use of deception in negotiation",

          Journal of Business Ethics: 85, 347-365.

Overbeck, J.R., & Park, B.

2001   "When power does not corrupt: Superior individuation processes among powerful

          perceivers", Journal of Personality and Social Psychology: 81, 549-565.

Polzer, J.T., Mannix, E.A., & Neale, M.A.

1995   "Multiparty negotiation in its social context". In R.M. Kramer & D.M. Messick (Eds).

          Negotiation as a Social Process: 123-142. Thousand Oaks, CA: Sage.

Putnam, L.L.

1990   "Reframing integrative and distributive bargaining: A process perspective", Research on

          Negotiation in Organizations: 2, 3 - 30. Greenwich, CN: JAI Press

Rubin, J.R., & Zartman, I.W.

1999   "Asymmetrical negotiations: Some survey results that might surprise", Negotiation

          Journal: 11, 349-364.

Rubin, J.R., & Zartman, I.W.

2000   Power and negotiation. Ann Arbor: University of Michigan Press.

Rusbult , C.E., & Van Lange, P.A.M.

2003   "Interdependence, interaction and relationships", Annual Review of Psychology: 54, 351-

375.

Smith, P.L., Olekalns, M., & Weingart, L.

2005   "Markov chain analyses of communication processes in negotiation", International

Negotiation: 10, 97-113.

Sondak, H., & Bazerman, M.

1991   "Power balance and the rationality of outcomes in market matching", Organizational

Behavior and Human Decision Processes: 50, 1-23.

Tannen, D.

1994   Gender & Discourse. New York: Oxford.

Tiedens, L., & Fragale, A.

2003   "Power moves: Complementarity in dominant and submissive nonverbal behaviors",

Journal of Personality and Social Psychology: 84, 558-568.

Wilson, S.R., & Putnam, L.L.

1990   "Interaction goals in negotiation", Communication Yearbook: 13, 374-406.

Table 1.

Summary of negotiation strategies and their associated tactics

	Strategy	**Tactics associated with strategy**
Deal-Making	Offers	Makes single or multi-issue offer
		Request modification of offer on the table
		Gives a concession
		States a range of acceptable outcomes
		States expectation that other will reciprocate
	Value Claiming	Gives or requests positional information
		Disputes information provided by other
		Introduces new arguments
		Refers to issues without making an offer
	Value Creation	Gives or requests priority information
		Suggests a new approach
		Suggests possible solutions, clarifies information or accepts offer
Relationship-Building	Affiliation	Makes an open-ended statement
		Expresses support of the other person
		Engages in rapport building
		Notes differences in a positive way, anticipates agreement
	Dominance	Asserts wants, states minimum acceptable outcome
		Notes differences in a negative way, anticipates disagreement
		Rejects other's offer

Table 2. Applicant and recruiter information.

Salary		Vacation		Moving expenses		Performance Bonus	
$110,000	**000**	2 wks	**000**	40%	**000**	2%	**000**
$120,000	**1,500**	3 wks	**1,000**	50%	**600**	4%	**400**
$130,000	**3,000**	4 wks	**2,000**	60%	**1,200**	6%	**800**
$140,000	**4,500**	5 wks	**3,000**	70%	**1,800**	8%	**1,200**
$150,000	**6,000**	6 wks	**4,000**	80%	**2,400**	10%	**1,600**

Location		Start Date		Additional benefits		Job Assignment	
Location A	**000**	in 2 weeks	**000**	$2,000	**000**	research	**000**
Location B	**200**	in 3 weeks	**000**	$4,000	**800**	marketing	**1,000**
Location C	**400**	in 4 weeks	**000**	$6,000	**1,600**	finance	**2,000**
Location D	**600**	in 5 weeks	**000**	$8,000	**2,400**	HR	**3,000**
Location E	**800**	in 6 weeks	**000**	$10,000	**3,200**	consulting	**4,000**

Table 2, continued.   Applicant and recruiter information.

Recruiter Profit Table

_____

Salary		Vacation		Moving Expenses		Performance Bonus	
$110,000	**1,600**	2 wks	**4,000**	40%	**2,400**	2%	**6,000**
$120,000	**1,200**	3 wks	**3,000**	50%	**1,800**	4%	**4,500**
$130,000	**800**	4 wks	**2,000**	60%	**1,200**	6%	**3,000**
$140,000	**400**	5 wks	**1,000**	70%	**600**	8%	**1,500**
$150,000	**000**	6 wks	**000**	80%	**000**	10%	**000**

_____

Location		Start Date		Additional Benefits		Job Assignment	
Location A	**3,200**	in 2 weeks	**4,000**	$2,000	**800**	research	**000**
Location B	**2,400**	in 3 weeks	**3,000**	$4,000	**600**	marketing	**000**
Location C	**1,600**	in 4 weeks	**2,000**	$6,000	**400**	finance	**000**
Location D	**800**	in 5 weeks	**1,000**	$8,000	**200**	HR	**000**
Location E	**000**	in 6 weeks	**000**	$10,000	**000**	consulting	**000**

Table 3.

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. Independence model $[d,h][s_1][s_2][s_3]$	3495.0	732			
2. Second-order Markov (independent sequence) model $[d,h][s_1,s_2,s_3]$	1115.0	620	238.0	112	<.001
3. Single strategy effects (half) $[d,h][s_1,s_2,s_3][h,s_1][h, s_2][h,s_3]$	983.3	608	43.9	4	< .001
4. Single strategy effects (power profile) $[d,h][s_1,s_2,s_3][d,s_1][d, s_2][d,s_3]$	757.5	585	75.2	8	< .001
5. Single strategy effects (half × power profile) $[s_1,s_2,s_3][d,h,s_1][d, h,s_2][d,h,s_3]$	744.8	560	4.25	8	.332
6. Sequence effects (half) $[s_1,s_2,s_3][d,h,s_1][d, h,s_2][d,h,s_3][h,s_1,s_2] [h,s_1,s_2]$	667.2	528	38.8	16	< .005
7. Sequence effects (power profile) $[s_1,s_2,s_3][d,h,s_1][d,h,s_2][d,h,s_3][h,s_1,s_2] [h,s_1,s_2]$ $[d,s_1,s_2] [d,s_1,s_2]$	557.4	464	54.9	32	< .01
8. Sequence effects (half × power profile) $[s_1,s_2,s_3] [d,h,s_1,s_2] [d,h,s_1,s_2]$	489.6	400	33.9	32	.337

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

Table 4.

Summary of sequences that depart from expected frequency. Observed frequencies and standardized

residuals (italics) shown in brackets.

Dyadic Power Profile	Sequences that occur more frequently than expected	Sequences that occur less frequently than expected
Symmetric, high power	dominate-affiliate (26, *1.26*) offer-claim (147, *1.31*)	offer-offer (95, *-2.55*)
Symmetric, low power	affiliate-affiliate (117, *1.31*) offer-dominate (91, *1.35*) offer-offer (207, *4.78*) claim-offer (179, *2.39*) create-offer (119, *1.33*)	claim-affiliate (195, *-3.42*) create-affiliate (80, *-1.48*) offer-affiliate (60, *-2.17*) dominate-affiliate (14, *-1.91*) offer-claim (137, *-1.75*) offer-create (145, *-2.18*)
Asymmetric power	offer-affiliate (69, *2.07*) offer-create (142, *2.21*) claim-affiliate (298, *4.09*)	offer-dominate (37, *-2.26*) offer-offer (71, *-2.97*) claim-dominate (12, *-1.68*) claim-offer (122, *-1.63*)

Figure 1.

Standardized residuals for sequences of relationship-building strategies showing departures from fit as a function of dyadic power profiles. Dotted line shows standardized residual +/-1.25
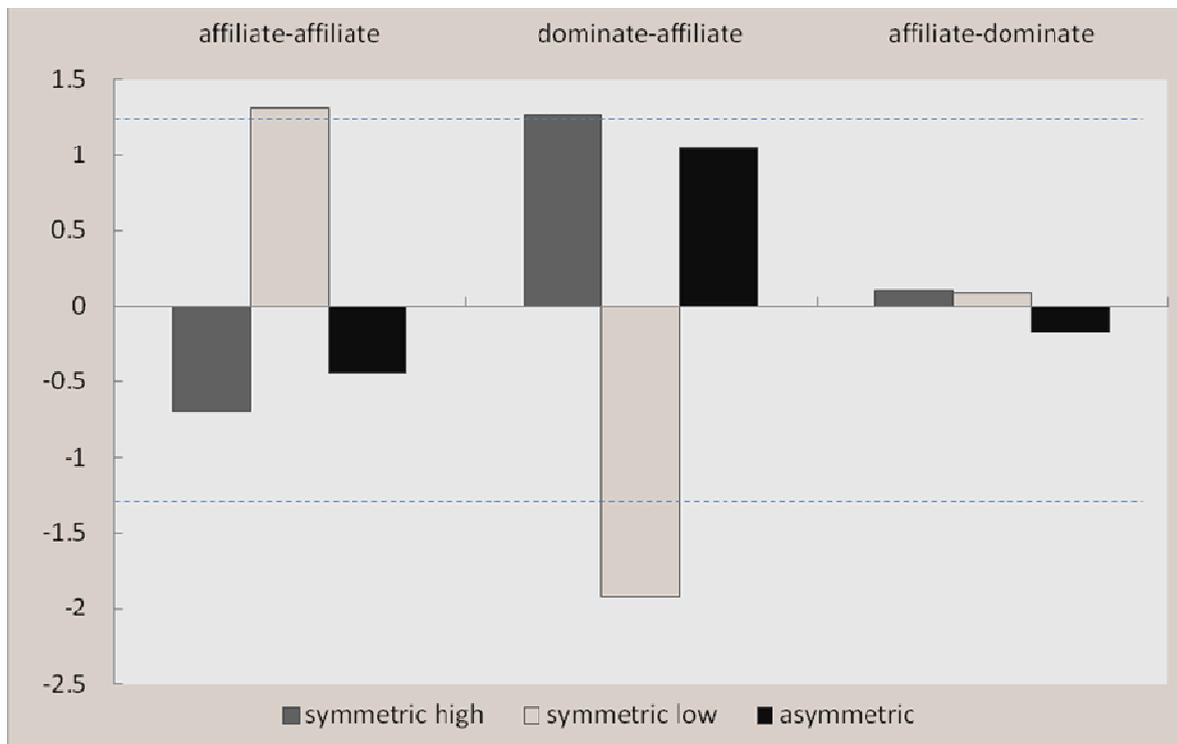
Figure 2.

Standardized residuals for sequences of deal-making strategies showing departures from fit as a

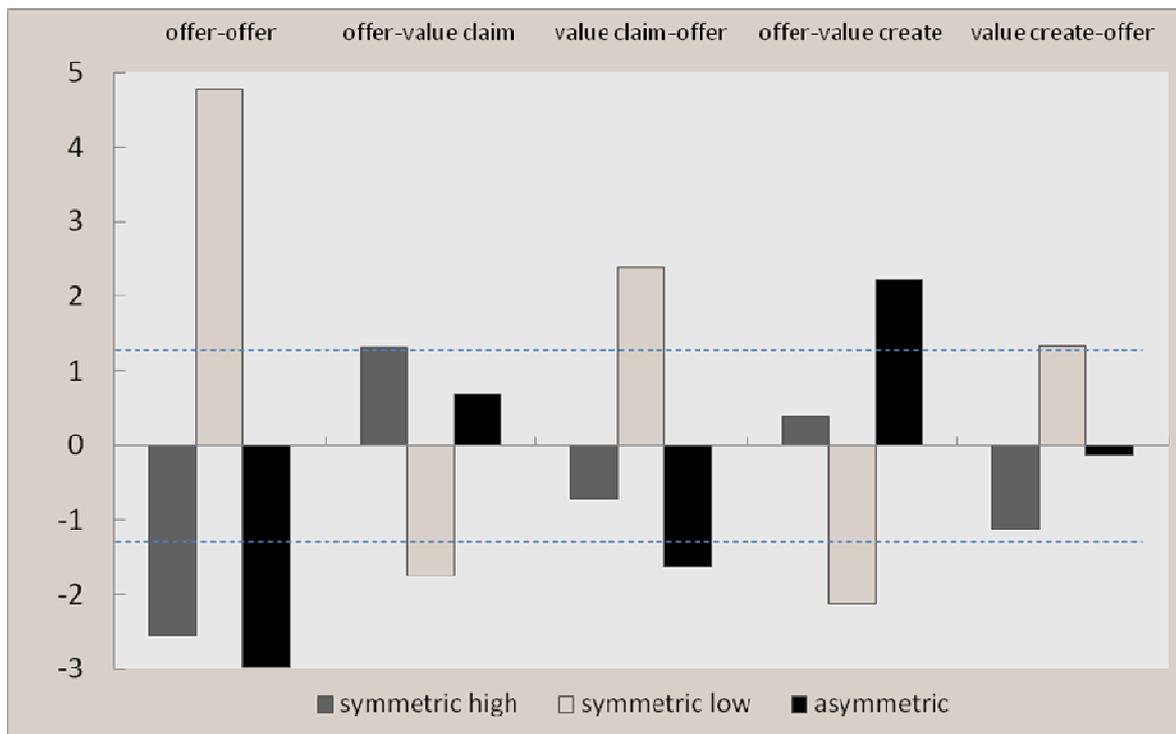function of dyadic power profiles. Dotted line shows standardized residual +/-1.25

Figure 3.

Standardized residuals for non-reciprocal sequences that combine relationship-building and deal-making strategies showing departures from fit as a function of dyadic power profiles. Dotted line shows standardized residual +/-1.25