POWER AND TACTICS IN BARGAINING

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This paper develops and tests an analytical framework for analyzing the selection of tactics in bargaining. Using a variant of power-dependence theory, the authors propose that bargainers will use different dimensions of dependence, such as the availability of alternative outcomes from other sources and the value of the outcomes at stake, to select among different tactics. To test this model, the authors conducted two simulation experiments that portrayed an employee-employer conflict over a pay raise, manipulating four dimensions of dependence: employee's outcome alternatives, employee's outcome value, employer's outcome alternatives, and employer's outcome value. Within this context, respondents estimated the likelihood of each actor (employee, employer) adopting four tactics: self-enhancement, coalition, threat to leave, and conflict avoidance. The results of one experiment show that an actor's own dependence, rather than his opponent's dependence on him, is the primary basis for his evaluation and selection of tactics, and also that decisions regarding different tactics are determined by different dimensions of dependence. The results of the other experiment indicate that the opponent's initial tactic affects the links between dimensions of dependence and an actor's tactics, and the dimensions of dependence affect the propensity toward "tactic matching."

BARGAINING behavior is typically preceded by an evaluation of the available tactics and of the power relationship between the bargainers. Indeed, it would be foolhardy to adopt a particular bargaining stance without a careful evaluation of the power and tactics available to oneself and to one's opponent. An analysis of this process, to have both theoretical and practical import, must therefore specify the dimensions of employee and employer power, classify the relevant tactics, and relate the power dimensions to the evaluation and selection of tactics. This research develops such an analytical framework and tests some major implications of the framework under highly controlled conditions.

The studies of Chamberlain and Kuhn, Stevens, and Walton and McKersie present

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theoretically illuminating and empirically insightful analyses of bargaining tactics.[1] These authors fail to relate the tactical aspects of bargaining, however, to an explicit theory of bargaining power. The link between bargaining power and bargaining tactics is simply assumed and left undeveloped on a theoretical and empirical level. The failure to articulate the connection between power and tactics is partly due to the fact that students of collective bargaining adopt a nonanalytic approach to power. As noted by many writers, power has remained a blurred analytic construct in the collective bargaining literature.[2]

We have argued that a theory of bargaining tactics must be based on an explicit, multidimensional conceptualization of power and that the parties' selection of tactics is ultimately based on their evaluation of the dimensions of power.[3] The evaluative process that underlies tactical action in bargaining can be divided into three steps. First, bargainers evaluate their own power capability and that of their opponents. Second, given these perceptions of power, bargainers consider the likelihood that the power capability will actually be used. Third, in the context of their power situation, bargainers evaluate their own tactical options and attempt to anticipate their opponent's tactics. The first two issues were examined in prior research by the authors;[4] the third step is the key tactical dilemma confronting bargainers and the prime concern of this paper.

Power as Dependence

We have argued that the notion of power embedded in power-dependence theory provides a flexible and insightful backdrop for both researchers and practitioners to deal with the power and tactical aspects of bargaining.[5] First of all, the theory offers a multidimensional conceptualization of power that identifies and differentiates the specific bases of employee-employer power; second, the theory provides a foundation for identifying broad tactical options and for positing empirical links between bases of power and the tactics an actor may select in a bargaining situation. Each of these advantages is developed in the following pages.

Power-dependence theory stipulates that one party's power is a function of the other's dependence, which varies directly with the value the second party attributes to the outcomes at stake (outcome value) and inversely with the availability of the same or better outcomes from alternative sources (outcome alternatives).[6] Outcome value is viewed as the "importance of" or "need for" the outcomes in question, rather than outcome magnitude.[7] Take an employee-

[1]Neil W. Chamberlain and James W. Kuhn, *Collective Bargaining* (New York: McGraw-Hill, 1965), Carl M. Stevens, *Strategy and Collective Bargaining Negotiation* (New York: McGraw-Hill, 1963), and Richard E. Walton and Robert B. McKersie, *A Behavioral Theory of Labor Negotiations* (New York: McGraw-Hill, 1965).

[2]See, for example, Charles E. Lindblom, "'Bargaining Power' in Price and Wage Determination," *The Quarterly Journal of Economics*, Vol. 62 (May 1948), pp. 396–417; Robert Dubin, "Power and Union-Management Relations," *Administrative Science Quarterly*, Vol. 2, No. 1 (June 1957), pp. 60–81; and Gerald G. Somers, "Bargaining Power and Industrial Relations Theory," in Gerald G. Somers, ed., *Essays in Industrial Relations Theory* (Ames, Iowa: Iowa State University Press, 1969), pp. 39–53.

[3]Samuel B. Bacharach and Edward J. Lawler, *Power and Politics in Organizations: The Social Psychology of Conflict, Coalitions, and Bargaining* (San Francisco: Jossey-Bass Publishers, 1980), and Edward J. Lawler and Samuel B. Bacharach, "Power Dependence in Individual Bargaining: The Expected Utility of Influence," *Industrial and Labor Relations Review*, Vol. 32, No. 2 (January 1979), pp. 196–204.

[4]Samuel B. Bacharach and Edward J. Lawler, "The Perception of Power," *Social Forces*, Vol. 55, No. 1 (September 1976), pp. 123–34, and Lawler and Bacharach, "Power Dependence in Individual Bargaining."

[5]Bacharach and Lawler, *Power and Politics in Organizations*.

[6]Richard M. Emerson, "Power-Dependence Relations," *American Sociological Review*, Vol. 27, No. 1 (February 1962), pp. 31–40; Richard M. Emerson, "Exchange Theory Part I: A Psychological Basis for Social Change," in Joseph Berger, Morris Zelditch, Jr., and Bo Anderson, eds., *Sociological Theories in Progress*, Vol. 2 (Boston: Houghton Mifflin, 1972); and H. Andrew Michener and Robert W. Suchner, "The Tactical Use of Social Power," in James T. Tedeschi, ed., *Social Influence Processes* (Chicago: Aldine-Atherton, 1972), pp. 239–86.

[7]Bacharach and Lawler, *Power and Politics in Organizations;* Peter M. Blau, *Exchange and Power in Social Life* (New York: John Wiley and Sons, 1964); Emerson, "Power-Dependence Relations"; Kenneth

employer conflict as an example. Power-dependence theory suggests that the employee is dependent on the employer to the extent that the employee has poor alternatives and values the outcomes at issue highly while the employer is dependent on the employee to the extent that the employer has poor alternatives and values the outcomes highly. Overall, the employees' dependence on employers is determined by their own situation (the employee's own alternatives and outcome value), and the employers' dependence is determined by their own situation (the employer's own alternatives and outcome value).

The power-dependence perspective implies a variable sum approach to power, in contrast to the conventional zero-sum approaches that prevail in the bargaining field. A zero-sum approach stipulates that an increase in one party's power, by definition, implies a decrease in the other's power; this assumes that there is a finite, unchanging level of "total" power in the relationship. Zero-sum conceptualizations focus on *relative* power and assume constant *total* power. This is an important distinction, because if we apply the zero-sum assumption to the dependence relationship of parties, it leads us to conclude that any change in one party's dependence will have an equal and opposite effect on the other's dependence. On the other hand, a variable sum approach recognizes that total as well as relative power may vary and treats the relationship between the two parties' power (dependence) as an empirical question.

Total power refers to the sum total of dependence in the relationship: the dependence of A on B *plus* the dependence of B on A. Relative power is the ratio of one party's dependence to the other's dependence: A's relative power refers to the ratio of B's dependence on A to A's dependence on B, while B's relative power is the ratio of A's dependence on B to B's dependence on A. These ratios are the reciprocal of one another and, therefore, relative power is inherently zero-sum. However, the fact that total power is analytically distinct from relative power means that there is no a priori connection or relationship between relative and total power. Total power can change with or without a change in relative power and vice versa.

To exemplify the relationship between total and relative power, consider a situation in which the ratio of A's power to B's power is 2 to 1. Assume the "resources" that constitute power in the context can vary from 0 to 20 on some hypothetical continuum and that the maximum total power in the relationship is 20. Given this total power, the same relative power (2 to 1 ratio in favor of A) could occur under different levels of total power: A = 4 vs. B = 2 or A = 10 vs. B = 5, for example. Thus, the total power can change while the relative power remains the same. Next, let us see how changes in relative power can affect total power. Take the situation in which A controls 4 units of some power resource while B controls 2 units. If A increases his resources from 4 to 6 by developing access to more of the total power theoretically available in the relationship, then there would be a slight increase in total power (from 6 to 8) and a shift in the relative power to a ratio of 3:1. However, a simultaneous or sequential accumulation of resources by B could maintain the original 2 to 1 ratio and produce an even larger increase in total power. Finally, relative power can also shift while maintaining the same level of total power, as it would if A moves to 5 and B to 1. Overall, this conceptualization leads to the conclusion that the two parties can simultaneously increase in power just as they can simultaneously experience a reduction in power. An increase in one party's power does not necessarily (and certainly not by definition) lead to a reduction in the other's power.

Applied to power-dependence theory, a variable sum approach suggests that the

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J. Gergen, *The Psychology of Behavior Exchange* (Menlo Park, Cal.: Addison-Wesley, 1969); John W. Thibaut and Harold H. Kelley, *The Social Psychology of Groups* (New York: John Wiley & Sons, 1959). Outcome alternatives represent a notion that is virtually identical to Thibaut and Kelley's "Comparison Level for Alternatives." It is the level or quality of alternatives that is important, not the number. It takes only one good alternative to enhance the power of a party; the number of alternatives is only important insofar as it enhances the probability of getting better outcomes elsewhere.

interrelationships among the four dimensions of dependence—employee's outcome alternatives, employee's outcome value, employer's outcome alternatives, employer's outcome value—are important tactical questions confronted by actors in a bargaining situation. On an "objective" level, there may be a zero-sum relationship among some aspects of the dimensions. For example, an increase in the wage rate may affect the employee's and employer's outcome value in an equal but opposite way; or a slack labor market may mean few alternatives for the employee and many for the employer. However, the relationships among these dimensions of dependence are not necessarily that simple. While an increase in the wage rate may be highly important to the employee, it may be irrelevant to an employer who can easily pass on the cost of the wage increase to customers; similarly, a tight labor market for the employer might make alternative jobs available to the employee while advances in technology might minimize the employer's need for the employees; or a slack labor market for the employer could decrease the employee's alternatives while high training costs could counterbalance the effects of the slack labor market on the employer's alternatives. The point is that the "objective" relationships among these dimensions of dependence are very complex and that point, combined with the fact that parties typically have only imperfect information on the pertinent social, economic, or political conditions, make the "subjective" or perceptual aspects of these relationships of prime concern to an analysis of tactics.

Overall, the dimensions of dependence provide actors a shorthand way to summarize and synthesize the power implications of the social, economic, and political conditions. In this sense, the dimensions of dependence are as much a perceptual phenomenon as they are "objective" features of the bargaining context. The interrelationship of the dimensions of dependence is primarily a matter of perception, especially as they relate to the tactical decisions in bargaining. It would not be appropriate to *assume* that parties will treat the dimensions in a zero-sum manner even if that were the nature of the relationship on an "objective" level. It is just as reasonable, given our distinction between total and relative power, to assume that actors will treat the dimensions of their own dependence and of their opponents' dependence in a distinct and independent manner. We make neither assumption and suggest that this is an open question.

Power and Tactical Action

The tactical implications of the power-dependence theory vary somewhat with how one interprets the connection between dependence and power. The foregoing discussion represents a strict interpretation of the theory. It indicates that the power of a party is determined, not by the party's own dependence, but by his opponent's dependence. Consistent with the variable sum elements of the theory, each party's power is independently determined by the other's dependence on him, and a decrease in one party's dependence does not automatically increase the other's dependence. Our interpretation suggests a further distinction—between tactics that deal with one's own dependence and tactics that deal with the opponent's dependence, in other words, between the opponent's power over oneself and one's own power over the opponent. This distinction may be especially important in the evaluation of tactics, and we will return to it later.

This research will examine specifically the impact of the four dimensions of dependence on parties' evaluation and prediction of tactics. Two experiments are presented. The first experiment is concerned with three interrelated issues: (1) whether parties (employees and employers) use dimensions of their own or the other's dependence to evaluate their own tactical options, (2) whether parties use these same dimensions of dependence to predict the other's tactics, and (3) whether the role (employee, employer, or observer) of the parties alters their use of the dimensions of dependence to evaluate and predict the tactics of the employee and employer.

A second experiment in this paper carries the analysis of tactics one step further. The first experiment deals only with the

initial or first tactic. The second deals with the question of how dependence affects the prediction of tactics at the next stage in the conflict, after one of the parties has adopted a given tactic. Specifically, experiment 2 is concerned with: (1) what dimensions of dependence will parties use to predict the other's countertactical response and (2) will the dimensions of dependence affect the extent to which employees and employers anticipate tactic reciprocation, that is, apply a "tactic matching" principle.

In an earlier study, we attempted to deal with the first issue specified above—whether parties use dimensions of their own or the other's dependence to evaluate their own tactical options.[8] The primary import of that study was that it established the empirical relevance of the tactics incorporated in the present research. As in that study, this research is concerned with an employee-employer situation in which the conflict is over a specific temporally bound issue (a pay raise). Within this context, the employee and employer have at least four options: (1) coalition (joint action with others in similar positions); (2) threat to leave the relationship (for employee, a threat to quit; for employer, a threat to replace the employee); (3) self-enhancement (persuading the other than one's inputs to the relationship warrant the outcomes at stake); and (4) conflict avoidance (resigning oneself to do without the outcomes at stake).[9]

In line with our approach to power-dependence theory (discussed above), we will distinguish between those tactics that are based on a party's own dependence on the opponent (that relate to the other's power); and those tactics that are based on the opponent's dependence on self (that relate to one's own power). We will refer to the first set as "direct" tactics and the second set as "indirect" tactics. "Direct" tactics are grounded in a party's *own* dependence on the other. These tactics include a threat to leave the relationship and conflict avoidance. A threat to leave uses the party's own alternatives and conflict avoidance uses the party's own outcome value. In contrast, "indirect" tactics manipulate the opponent's ability to use direct tactics by altering the opponent's dependence (hence, the label, "indirect"). A coalition can reduce or blunt the alternatives available to the opponent and thereby alter the opponent's ability to use a threat-to-leave tactic. Self-enhancement, if successful, alters the value the other attributes to the outcomes at stake by emphasizing that one's own inputs to the relationship compensate for the other's loss of the outcomes at stake. In sum, two tactics use a party's own situation (threat to leave and conflict avoidance) and two tactics are directed at the opponent's situation (coalition and self-enhancement).

Hypotheses

We expect different dimensions of dependence to affect different tactics. This expectation is based on two assumptions. First, persons will use the level of alternatives and the value of the outcomes at stake to identify points of strength or weakness in each other's situations. Second, different tactics can deal with different sources of strength or weakness. An actor with good alternatives, for example, should perceive a threat to leave as a more viable strategy, and lower levels of outcome value should make conflict avoidance more palatable. The basic implication of the foregoing assumptions is that different tactics deal with different dimensions of dependence and, therefore, persons will use different dimensions of dependence to evaluate different tactics.

Our expectation can thus be defined in four basic hypotheses. (In each one, the dependent variable is a tactic available to an "actor," as distinguished from an "opponent"; the "actor" can refer to either the employee or employer.) (1) The better an *actor's* perceived alternatives, the greater the likelihood of a threat to leave by the *actor;* (2) The lower the value an *actor* ascribes to the outcomes at issue, the greater the likelihood of conflict avoidance by the *actor;* (3)

[8] Lawler and Bacharach, "Outcome Alternatives and Value as Criteria for Multitactic Evaluations."

[9] It is quite possible that changing the unit of analysis from individual to collective bargaining would alter the links between dependence and tactical options examined in this research. While we are convinced that the same *framework* applies to both individual and collective bargaining, we reserve for the future the question of how the two might be qualitatively different.

The better the *opponent's* perceived alternatives, the greater the likelihood of a coalition tactic by the *actor*—since a coalition can reduce the opponent's ability to use his alternatives; and (4) The lower the *opponent's* outcome value, the greater the likelihood of self-enhancement by the *actor*—since a relatively soft strategy, such as self-enhancement, becomes more effective if the other attaches low value to the outcomes. Each hypothesis indicates that *one* tactic should be especially sensitive to variation in *one* of the dependence dimensions. The hypotheses suggest where we should find the *strongest* links between the dimensions of dependence and the tactics, but they do not preclude the possibility of other unpredicted effects.

Experiment One

Method

Subjects and procedures. The data for this study were collected along with the data for an earlier paper.[10] A role-playing simulation manipulated the four dimensions of dependence in a 2 x 2 x 2 x 2 factorial design. A total of 528 undergraduates from two Northeastern universities were randomly assigned in equal numbers to one of the sixteen experimental treatments. The role (employee, employer, observer) adopted by the subject was counterbalanced within each experimental condition to assure that the effects of dependence could not be attributed to the particular standpoint (role) of the subject and to permit an analysis by role.

Before responding to a questionnaire, subjects read a description of a situation in which the employer (manager-owner of a clothing store) was in the process of deciding whether to increase the pay of some or all salespersons.[11] The employer had told the employee that he is currently against giving pay raises but will make the final decision in about two weeks. In this context, the "description of the situation" stated:

> [The employee] is faced with deciding whether to try to influence [the employer] before he makes the final decision. [The employee] has the following options: 1) as an individual, [the employee] could threaten to find another job; 2) . . .try to persuade [the employer] . . . by pointing to his good sales performance; 3) . . . join with other sales personnel and, as a group, attempt to pressure [the employer] into giving pay raises; or 4) . . . accept present pay and not try to influence [the employer]. Your task is to predict what options [the employee] will select.

The description then indicated that the employer could respond to the action of the employee in a number of ways and listed the same set of options, adjusted, of course, for the employer role.

The description also contained information that manipulated the dimensions of dependence. The availability of alternative jobs for the employee and alternative sales workers for the employer manipulated the two outcome-alternative variables. Specifically, the manipulation of the employee's alternatives indicated that there was a 10 percent or a 90 percent chance that [the employee] could find a better job, while the manipulation of the employer's alternatives indicated that there was a 10 percent or a 90 percent chance that the employer could hire another person with the employee's qualifications. Outcome value was manipulated by varying the importance of getting a pay raise (for the employee) or avoiding a pay raise (for the employer). In brief, the manipulations stated the employee considered a pay raise as very important or not at all important (employee outcome value), and the employer considered it very important or not at all important to avoid pay raises (employer outcome value).[12] Subjects were informed that both the employee and employer had this information on each

[10] See Lawler and Bacharach, "Outcome Alternatives and Value as Criteria for Multitactic Evaluations," for a more complete description of the methodology and a discussion of the advantages and disadvantages of our role-playing method.

[11] We did not specify how much of a pay increase the employee was asking for in the study. While this is not a trivial issue, we felt that it was better to leave this ambiguous. The reason is that our outcome value manipulation deals with the importance of the outcomes at stake. If we had included some specific amount of pay, this could have weakened the outcome value manipulation and undermined our ability to test the effects of outcome value.

[12] For the exact wording of the manipulations, see Lawler and Bacharach, "Power Dependence in Individual Bargaining."

other's outcome alternatives and value, that is, both parties had information on all four dimensions of dependence.[13]

Dependent variables. Separate questionnaire items for each of the four tactics asked subjects to (a) estimate how likely the *employee* would be to adopt the tactic, and (b) estimate how likely the employer would be to use each tactic *in response to an influence attempt by the employee.* Subjects responded on nine-point scales, labeled "not at all likely" at the low end and "highly likely" at the high end.

The four questionnaire items, measuring subjects' evaluation of the employee tactics, took the following form. "How likely is it that the employee would (a) "threaten to leave the store and find another job?" *(threat to quit);* (b) "try to persuade the employer . . . by pointing to his good sales performance?" *(self-enhancement);* (c) "organize with other sales personnel and, as a group, pressure the employer to give pay raises?" *(coalition);* (d) "decide to accept his current pay and not try to influence the employer?" *(conflict avoidance).* Items on the tactical response of the employer asked subjects to estimate the employer's response to an influence attempt, in general, without specifying the specific type of employee action (tactic) taken: "If the employee tries to influence the employer, how likely is it that the employer will . . . ." The same items were included, with appropriate adjustments for the employer position.[14]

[13]It should be noted that we are not assuming that bargainers in real world settings have complete information but that such persons will make subjective judgments about all four dimensions of dependence even in the face of inadequate and very sketchy information. To summarize, we believe that the information provided in the description is comparable to the overall subjective estimates that people might make in real settings and that if we did not provide information on all four dimensions, it would actually be more unrealistic because parties do make these kinds of judgments.

[14]Additional items asked them how confident they were in their estimates and how easy (or difficult) it was to understand the description of the situation. Subjects responded on nine-point scales, with higher numbers indicating greater confidence or understanding. On a nine-point scale, the mean confidence was 6.1 and the mean level of understanding was 7.0, suggesting considerable confidence and understanding.

Results

There were two steps to the analysis. First, a multivariate analysis of variance (ANOVA) was used to determine whether dimensions of dependence significantly affect multitactic predictions. Second, multiple regression was used to test the hypothesized effects of outcome alternatives and value on particular tactics.

Multivariate ANOVA. Consider the multivariate ANOVA for the *employee's* tactics (Table 1) first. The multivariate analysis of variance revealed significant main effects for employee's alternatives ($F = 56.67$, $p < .001$, canonical $R = .55$) and employee's value ($F = 18.92$, $p < .001$, canonical $R = .36$). There was no main effect for employer's value ($F < 1$) or employer's alternatives ($F = 3.17$, $p < .01$, canonical $R = .16$). None of the interaction effects between the dimensions of dependence were statistically significant; and a 2 x 2 x 2 x 2 x 3 multivariate ANOVA with the subject-role (employee, employer, observer) as a factor revealed that the role occupied by the perceiver did not interact with or specify the dependence effects. In sum, the multivariate ANOVA for the employee's tactics shows that individuals (regardless of role) use the employee's *own* dependence (employee's alternatives and value), and not the other's (employer's) dependence, to predict the multitactic inclinations of the employee.

Next, consider the multivariate ANOVA for the employer's response to the employee (Table 2). This analysis showed a main effect for employer's alternatives ($F = 12.93$, $p < .001$, canonical $R = .30$) and employer's value ($F = 8.78$, $p < .001$, canonical $R = .25$), but no effects for the employee's alternatives ($F < 1$) or employee's value ($F = 2.21$, *ns*). None of the interactions were significant, and an analysis with role as a factor showed no interactions by role. These results are consistent with the findings for the employee's tactics. Just as persons use the employee's dependence to predict the employee's multitactic tendencies, they use the employer's dependence situation to predict the employer's response.[15]

[15]It should be noted that the overall tactic rankings are consistent with an earlier study (Lawler and Bacharach, "Outcome Alternatives and Value as Criteria

Table 1. Main Effects of Dependence Dimensions on the Subjective Likelihood of the Employee Adopting Each of the Four Tactics.

Dimensions of Dependence / *Employee Tactic*	*Employer's Alternatives*		*Employer's Value*		*Employee's Alternatives*		*Employee's Value*	
	Low	*High*	*Low*	*High*	*Low*	*High*	*Low*	*High*
Threat to quit	3.98	3.61	3.83	3.77	2.66	4.94	3.48	4.11
Conflict avoidance	3.47	3.86	3.53	3.81	3.98	3.36	4.28	3.05
Self enhancement	6.56	6.11	6.41	6.21	6.33	6.34	5.89	6.77
Coalition	4.83	4.73	4.83	4.72	4.63	4.92	4.38	5.19
Multivariate ANOVA	ns		ns		$p < .001$		$p < .001$	

Table 2. Main Effects of Dependence Dimensions on the Subjective Likelihood of the Employer Responding with Each of the Four Tactics.

Dimensions of Dependence / *Employer Tactic*	*Employer's Alternatives*		*Employer's Value*		*Employee's Alternatives*		*Employee's Value*	
	Low	*High*	*Low*	*High*	*Low*	*High*	*Low*	*High*
Threat to replace	3.66	4.66	4.13	4.19	4.08	4.24	4.06	4.26
Conflict avoidance	4.02	3.63	4.22	3.42	3.73	3.91	3.65	3.99
Self enhancement	6.13	5.42	5.45	6.07	5.81	5.74	5.67	5.88
Coalition	3.39	3.28	3.25	3.42	3.29	3.37	3.23	3.44
Multivariate ANOVA	$p < .001$		$p < .001$		ns		ns	

for Multitactic Evaluations"). Self-enhancement is perceived as the most preferred tactic across experimental conditions, followed by coalition, threat to leave, and conflict avoidance. The overall rankings are of minimal importance, however, because they are likely to be a function of such constant aspects of the social situation as the employee-employer relationship and conflict of interest. Moreover, the hypotheses predict changes in tactic predictions, not in the ranking of tactics.

Table 3. Regression of Dimensions of Dependence on Subjective Likelihood of Employee and Employer Tactics (Separate Equations for Each Tactic).[a]
(Unstandardized coefficients are in parentheses)

Dimensions of Dependence / *Predicted Variables (Tactics)*	*Employer's Alternatives*		*Employer's Value*		*Employee's Alternatives*		*Employee's Value*		*Equation No.*
Employee Tactics									
Threat to leave	−.08	(−.37)	−.01	(.06)	.52*	(2.29)	.14*	(.63)	1
Conflict avoidance	.09	(.39)	.07	(.28)	−.15*	(−.62)	−.30*	(−1.23)	2
Self-enhancement	−.10	(−.44)	−.03	(−.16)	.00	(.02)	.21*	(.88)	3
Coalition	−.02	(−.10)	−.02	(−.11)	.06	(.29)	.17*	(.80)	4
Employer Tactics									
Threat to leave	.25*	(.99)	.02	(.07)	.04	(.15)	.05	(.20)	5
Conflict avoidance	−.10	(−.39)	−.21*	(−.79)	.05	(.18)	.09	(.34)	6
Self-enhancement	−.16*	(−.71)	.14*	(.59)	−.02	(−.07)	.05	(.21)	7
Coalition	−.03	(−.11)	.04	(.17)	.02	(.09)	.05	(.21)	8

[a]Hypothesized relations are underlined.
*$p < .001$.

Table 3 contains the standardized (and unstandardized) regression coefficients from separate equations for each tactic. Comparing coefficients for each tactic separately (across each row of the table), we find that all hypotheses regarding power dependence effects on *direct* tactics (threat to leave and conflict avoidance) were supported. As hypothesized, *employee's alternatives* had the largest effect (compared to the other independent variables) on an employee threat to leave (Equation 1); and *employer's alternatives* had the largest effect on the threat to leave response by the employer (Equation 5). *Employee's value* had the largest effect on conflict avoidance by the employee (Equation 2); and employer's value had the largest effect on the perceived likelihood that the employer would respond with conflict avoidance (Equation 6).

The importance of these results is further documented by comparing the effects of each independent variable down the columns of the table. Across the various equations (down each column), the employee's alternatives affected the employee's threat-to-leave tactic more than any other tactic, and the employer's alternatives affected the employee's threat-to-leave tactic more than any other tactic. The same patterns exist for the links between each party's outcome value and conflict avoidance. Furthermore, the direction of all these effects (lower value, greater likelihood of conflict avoidance; higher alternatives, greater threat-to-leave likelihood) is in accord with the hypotheses. In sum, data on *direct* tactics consistently provide support for the hypotheses.

In contrast, the data on *indirect* tactics (self-enhancement and coalitions) do not support the hypotheses (see Equations 3, 4, 7, and 8). The opponent's (employer or employee) alternatives were not used to predict an actor's inclination toward coalitions, and

the opponent's value was not used to make self-enhancement predictions. In fact, the opponent's dependence does not affect decisions regarding any of the specific tactics. All significant effects on specific strategies (see upper right quadrant and lower left quadrant of Table 3) involve the actor's (whether employee or employer) own dependence situation.

Discussion

The findings can be understood in the context of our interpretation of power-dependence theory presented in the introduction. Recall that the dependence of the *employee* on the employer (in other words, the employer's power) is determined by the *employee's* own alternatives and outcome value; whereas, the dependence of the *employer* on the employee (or the employee's power) is determined by the *employer's* own alternatives and outcome value. The most general implication of the first experiment is that individuals will use the employee's own dependence (or employer's power) situation to evaluate and predict the *employee's* multitactic decisions, and the employer's own dependence situation (or employee's power) to evaluate and predict the *employer's* multitactic decisions. Given that the power is based on the other's dependence, this means that individuals perceive an actor's tactics (whether the employee or the employer) to be based primarily on the opponent's power.

Within the foregoing constraint posed by the dependence structure (and reflected in the multivariate ANOVAs), the results affirm the notion that different dimensions of dependence affect different tactics. A threat to leave is perceived as more likely when the actor (whether employee or employer) has high rather than low alternatives, and conflict avoidance is perceived as more likely when the actor attaches low rather than high value to the outcomes at issue. Tactics that are based on the actor's own dependence situation (direct tactics) are evaluated and predicted from different aspects of the actor's dependence (alternatives vs. value). In contrast, tactics that attack the opponent's dependence situation (indirect tactics) are not consistently predicted from any of the dimensions of dependence. The data reveal a few other relationships as well, but these are minor. It is noteworthy that the role standpoint (employee, employer, observer) does not qualify the results for dependence. It appears that individuals use the same criteria to predict *others'* tactics (whether from an opponent or observer standpoint) as they do to develop their *own* action plans, to predict their own behavior.

This first experiment examined how individuals in an employee-employer context use dimensions of dependence to evaluate and predict the tactics of the employee as well as the employer. The second experiment focuses on the countertactics of the employer (target of influence). Unlike the first experiment, the next one provides respondents information on the particular tactic adopted by the employee (as well as the four dimensions of dependence) and considers the effect of the employee's specific tactic on the individual's use of dependence to anticipate the employer's (target) response.

Experiment Two

The second experiment addresses two questions: First, will different employee tactics lead individuals to use different dimensions of dependence to predict the employer's multitactic response? Second, given that the employee has already adopted a specific tactic, does a "tactic-matching" principle enter into individuals' prediction of the employer's response?

Regarding the first question, we offer the following corollary to the basic assumptions in the introduction: *if the employee uses an indirect tactic (self-enhancement or coalition), individuals will use the dependence dimension that the employee attacks to predict the employer's multitactic response.* The indirect tactics attack different aspects of employer's dependence: self-enhancement is directed at the employer's value, while a coalition is directed at the employer's alternatives. Therefore, if the employee adopts self-enhancement, individuals will predict the employer's multitactic response from the employer's own value; on the other hand, if the employee

selects a coalition tactic, the employer's alternatives will be used to predict the employer's response. In sum, although the first experiment failed to observe any effects of dependence on indirect tactics, the second experiment determines whether the employee's use of these indirect tactics affects the employer's response. No hypotheses for the direct tactics are offered because these tactics do not attack the employer's dependence situation.

The second goal of this experiment is to determine whether and how individuals use a "tactic-matching" principle. Experimental research in a variety of contexts indicates that actors often match their opponent's tactics. Threats often lead to counterthreats, cooperation to cooperation, and concessions to concessions.[16] Matching on a behavioral level is well documented, at least in bilateral-power contexts, but the present research is concerned with whether individuals cognitively use the "matching principle" to aid the subjective prediction of tactics.

The tactic-matching principle is a rather strict variant of the reciprocity notion. The reciprocity principle suggests that people benefit those who benefit them and harm those who harm them. The matching principle, more specifically, suggests a tit-for-tat form of reciprocity whereby parties engage in behavior that is as comparable as possible to the other party's behavior. The comparability of the behaviors may vary across different social contexts, and the potential for precise or exact matching requires that both parties have similar behavioral repertoires. The present study provides actors (employees and employers) with the same options and thereby permits the strictest possible application of the matching principle. In this context, support for the matching principle is suggested to the extent that individuals expect the employer to adopt the same behavioral option as the employee (such as a threat to replace by the employer in response to a threat to quit by the employee).

An application of the power-dependence notion further suggests that the dimensions of dependence will modify expectations of tactic matching. Individuals should perceive a greater tendency toward tactic matching when power-dependence conditions are favorable to the particular tactic. Specifically, they should expect the employer to match (1) a threat to quit with a threat to replace especially when the employer has good alternatives, (2) conflict avoidance with conflict avoidance when the employer attaches low value to the outcomes, (3) a coalition with a coalition when the employee has good alternatives, and (4) self-enhancement with self-enhancement when the employee attaches low value to the outcomes. In sum, the second experiment will determine whether individuals expect a matching response and whether the dimensions of dependence modify these expectations.

Method

The design and procedures were identical to the first experiment. The same number of subjects (528) were randomly assigned to conditions, but none of these subjects had participated in the first experiment. The questionnaire items (tactics) were identical except that the subjects estimated the likelihood of the *employer* adopting the four options in response to *each* of the four employee tactics. That is, for each employee action, subjects estimated the likelihood of the employer responding with a threat to replace the employee, self-enhancement, coalition, and conflict avoidance (a total of 16 items, 4 in response to each employee tactic).

Results: Multivariate ANOVAs

Multivariate analyses of variance were run to determine which dependence dimensions are used to evaluate and predict the employer's multitactic response to each of the four employee tactics.

Employer's response to indirect tactics. The results support both hypotheses. A

[16]For example see: Charlan Nemeth, "A Critical Analysis of Research Utilizing the Prisoner's Dilemma Paradigm for the Study of Bargaining," in Leonard Berkowitz, ed., *Advances in Experimental Social Psychology* (New York: Academic Press, 1972), Vol. 6, pp. 203–34, and Bob Helm, Thomas V. Bonoma, and James T. Tedeschi, "Reciprocity for Harm Done," *Journal of Social Psychology*, Vol. 87, First Half (June 1972), pp. 89–98.

multivariate ANOVA on the employer's response to the employee's self-enhancement tactic revealed a main effect for employer's value ($F = 12.09$, $p < .001$, canonical $R = .30$) and no effects for the other dimensions of dependence. Data on the employer's response to a coalition revealed a main effect for the employer's alternatives ($F = 6.24$, $p < .001$, canonical $R = .22$) and no effects for the other dependence dimensions. Consistent with the hypotheses, the dimension of dependence attacked by the employee's tactic was used to anticipate the employer's response.

Employer's response to direct tactics. Although no explicit hypotheses were presented for direct tactics, the results indicate that individuals use different dimensions of dependence to predict the employer's response to conflict avoidance and to a threat to leave. Subjects used only the employer's value in predicting the response to the employee's conflict avoidance ($F = 6.11$, $p < .001$, canonical $R = .21$). In contrast, when the employer was confronted with a threat to leave by the employee, individuals used three dimensions of dependence to predict the employer's response: employer's alternatives ($F = 25.27$, $p < .001$, canonical $R = .41$), employer's value ($F = 5.30$, $p < .001$, canonical $R = .20$), and the employee's alternatives ($F = 7.42$, $p < .001$, canonical $R = .23$). Based on the canonical correlations, the employer's alternatives had the strongest effect. In sum, the employer's value is used to predict the employer's multitactic response to conflict avoidance, and the employer's alternatives are given the greatest weight when individuals predict the employer's reaction to a threat to leave.

Univariate effects. The links between specific dimensions of dependence and specific tactics replicate the effects of the first experiment.

Results: Tactic-Matching

The perceived likelihood of each employer response to each employee behavior is shown in Table 4. The tactic-matching means are on the diagonal. For a given tactic, a consistent pattern toward matching is suggested if the matching mean (diagonal) is larger than any of the means down the column and across the row intersecting at the matching cell. Using a *t*-test for correlated means (see Appendix) to compare the matching cell with each of the corresponding column and row cells, we find that individuals expect the employer to match threat-to-leave and coalition responses, but not conflict-avoidance. The data for self-enhancement show only a weak tendency toward matching.

Although the perceived likelihood of matching varies for different responses, the tendency toward matching could be a function of the dimensions of dependence. To determine the effects of dependence, a matching score for each response was com-

Table 4. Mean Subjective Likelihood of Each Employer Response by the Type of Employee Tactic.[a]

Employer's Response \ *Employees' Tactic*	*Threat to Leave (T)*	*Coalition (C)*	*Self Enhancement (S)*	*Conflict Avoidance (A)*
Threat to leave (T)	5.91	4.63	2.84	1.26
Coalition (C)	3.40	5.22	2.93	1.70
Self enhancement (S)	5.36	5.05	5.56	3.57
Conflict avoidance (A)	3.91	4.52	5.31	3.59

[a] See Appendix for correlated means.

puted.[17] As in the first experiment, hypotheses regarding *direct* tactics are confirmed and those concerned with *indirect* tactics are disconfirmed. Individuals perceive a greater tendency toward matching a threat-to-leave tactic when the employer has many rather than few alternatives, and they see the employee as more inclined to match conflict-avoidance when the employer attaches low rather than high value to the outcomes at issue. These data suggest that the overall matching trend for threats to leave is accentuated when the employer has many alternatives, while the negligible overall trend for matching conflict-avoidance increases slightly under the circumstances of low employer value.

Discussion

The results indicate that the type of tactic used by the employee has a bearing on the anticipated tactical response of the employer. With regard to indirect tactics, individuals use the dependence dimension that the tactic attacks in order to anticipate the response of the employer. Specifically, individuals predict the employer's response to a self-enhancement tactic from the employer's outcome value, the dimension of dependence that the self-enhancement tactic attacks. They predict the employer response to a coalition solely on the basis of the employer's outcome alternatives, the dimension of dependence that coalition attacks. Thus, while the data from experiment one suggest that the selection of indirect tactics is not affected by the dependence dimensions, data from experiment two lead us to qualify this conclusion. Dependence criteria do affect the employer's selection of indirect tactics *in response* to the employee's use of indirect tactics.

The direct tactics also have a bearing on the dependence criteria that underlie countertactic predictions. Specifically, individuals use only the employer's outcome value to predict the employer's response to conflict avoidance; and the employer's alternatives, primarily, to predict the employer's response to a threat to leave. The overall implication is that individuals will identify the dependence dimension underlying the employee's direct tactic and use that same aspect of the employer's situation to predict the employer's response. For example, a threat to quit by an employee is grounded in the employee's own alternatives, and individuals will use an analogous aspect of the employer's dependence situation (outcome alternatives) to predict the employer's response. The reciprocal dependence dimension forms the foundation for predicting the employer's response to direct tactics.

The "tactic-matching" hypotheses are supported for the direct tactics but not for the indirect tactics. The employer is viewed as more likely to match a threat to leave when the employer has many rather than few alternatives and as more likely to opt for conflict avoidance in response to conflict avoidance when the employer's value is low rather than high. In contrast, individuals expect matching responses to coalitions regardless of the dependence conditions. The weak overall tendency toward matching self-enhancement is also not modified by dependence conditions.

Summary and Conclusions

Subjectively predicting tactics appears to be an integral element of most conflict situations. As in everyday life, parties in a conflict situation will adjust their actions not only to the situational or structural context but also to their expectations of how their opponent will respond to this context. Indeed, this appears to be a critical determinant of success in conflict settings just as it is a key to maintaining harmonious relations in everyday life. A recent book on intelligence gathering in World War II, in fact, suggests that the success of the Allies was

[17] The four means within each column of Table 4 were used to construct matching scores for each tactic separately. The scores were constructed for each tactic by subtracting the average likelihood of nonmatching responses (within a column) from the mean likelihood of matching tactics (within that same column). For example, if the employee adopts a threat-to-quit tactic, a threat to replace by the employer is the matching tactic. The tendency toward matching is measured by summing the mean likelihood of the nonmatching responses within that column, dividing by three, and then subtracting this value from the mean likelihood attached to the matching response. The same procedure is used for each employer response, the only difference being that the matching and nonmatching responses change with the employee tactic.

not based simply on power or military force but also on their ability to predict the tactical moves of Germany and adjust their own moves accordingly.[18] It is clear that multiple tactic judgments and predictions are important. The present research addressed the issue of how people use information on power dependence to formulate multitactic decisions and predictions.

To summarize, the research has four implications. First, the most general implication is that individuals use an actor's (whether employee or employer) own dependence, but not the opponent's dependence, to predict the actor's multitactic behavior. Both experiments consistently affirm this notion. Second, different aspects of the actor's dependence are used to predict different actor tactics. Both experiments indicate that individuals use an actor's outcome alternatives to predict the likelihood of a threat to leave and the actor's outcome value to predict the likelihood of conflict avoidance. Third, the second experiment suggests, furthermore, that individuals use different aspects of dependence to predict the actor's response to different tactics used by the opponent. Specifically, they use an actor's alternatives to predict the actor's response to coalition and threat-to-leave tactics by the opponent, and they use an actor's value to predict the actor's response to self-enhancement and conflict avoidance. The fourth implication of the research is that the dimensions of dependence affect differentially the perceived likelihood of tactic matching. Individuals view an actor as more likely to match a threat to leave if he has good rather than poor outcome alternatives and conflict avoidance if he attaches low value to the outcomes at issue.

This paper reinforces our belief that power-dependence theory provides an appropriate framework for the understanding of the cognitive processes underlying bargaining. Combining the findings of this paper with those in previous research shows that a dependence approach to bargaining power allows us to understand three critical cognitive issues in the bargaining process: (1) how bargainers estimate each other's power capabilities;[19] (2) how bargainers assess the likelihood that each other will use his power;[20] and (3) how bargainers evaluate and select among available tactics and anticipate the likely response to available tactics.

These issues and their resolution should not be the exclusive domain of abstract theorizing; they must also be confronted on a day-to-day basis and applied to very specific contexts by practitioners. Our methodology has admittedly been artificial and removed from the "real world." However, as George Strauss points out, there are few experimentally derived hypotheses about bargaining that might not also be tested in ongoing labor-management relations.[21] On the other hand, one of the primary problems of moving from laboratory experiments to field applications is the unit of analysis. This study, like most experimental analyses of bargaining, has focused on individual bargaining, and the relationships discovered herein may differ when analyzed in the context of bargaining between collectives.

The prime importance of this paper is that it presents and empirically examines a new framework for linking the analysis of power and tactics in bargaining. The research affirms the validity of the framework in a preliminary way, and this is the primary role of experimentation in the bargaining field. Field observation may modify our basic framework, suggesting new experiments that may then suggest new ways to organize field observations. In this sense, the experiments in this paper represent not an end point but an important step in the dialectic between experimentation and field studies.

[18]F. W. Winterbotham, *The Ultra Secret* (New York: Dell Publishing Co., 1974).

[19]Bacharach and Lawler, "The Perception of Power."

[20]Lawler and Bacharach, "Power Dependence in Individual Bargaining."

[21]George Strauss, "Can Social Psychology Contribute to Industrial Relations?" in Geoffrey M. Stephanson and Christopher J. Brotherton, eds., *Industrial Relations: A Social Psychological Approach* (New York: Wiley, 1979), pp. 365–93.

Appendix

T-Tests for Correlated Means Shown in Table 4.[a]

Comparison	*Mean Difference*	*Matched t*
Threat to leave matching (TT)		
TT-CT	1.27	9.96*
TT-ST	3.07	28.12*
TT-AT	4.65	41.91*
TT-TC	2.51	19.91*
TT-TS	.54	3.47*
TT-TA	2.00	12.71*
Coalition matching (CC)		
CC-TC	1.82	18.13*
CC-SC	2.29	21.23*
CC-AC	3.52	28.62*
CC-CT	.59	4.39*
CC-CS	.17	1.23
CC-CA	.70	4.64*
Self-enhancement matching (SS)		
SS-CS	.51	4.99*
SS-TS	.20	2.00
SS-AS	1.48	11.13*
SS-ST	2.73	22.80*
SS-SC	2.64	22.33*
SS-SA	.26	2.10
Conflict avoidance matching (AA)		
AA-CA	−.93	7.33*
AA-TA	.32	2.89
AA-SA	−1.72	17.67*
AA-AC	1.88	17.69*
AA-AT	2.34	25.16*
AA-AS	.02	.11

[a] The letters identify the tactics. The first letter refers to the employee's tactic (column) and the second letter identifies the employer's response (row). For example, TT-CT refers to the upper left cell (employee uses threat-to-leave tactic and employer responds with a threat-to-leave tactic) minus the CT cell (employee coalition and a threat-to-leave response by the employer).

*$p < .001$.