

## Measuring Bargaining Power Through Grievance Outcomes : Results from an Ontario Steel Mill

Peter Suschnigg

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Résumé de l'article

Le projet d'accord de libre échange (ALE) avec les États-Unis présenté par le gouvernement Mulroney a provoqué un débat national eu égard à ses avantages et inconvénients économiques et sociaux. L'ont supporté ces organisations et compagnies représentant le grand capital au Canada. Parmi elles, on retrouvait les propriétaires et dirigeants de compagnies d'acier primaire. Après avoir souffert de la dépression du début des années 1980, le monde de l'acier était convaincu que sa reprise à court terme et, de façon plus importante, sa viabilité à long terme passait par un plus grand accès aux marchés américains de l'acier. Donc, leur support pour l'ALE était basé sur leurs perceptions de leurs propres intérêts économiques. Il était également basé sur une adhésion idéologique à l'agenda économique et politique néoconservateur présenté par les organisations d'affaires représentatives et par le Parti progressiste-conservateur fédéral. Alors que l'élection fédérale de 1988 approchait, les hauts dirigeants de la Steel Company of Canada (Stelco) à Hamilton, Ontario, ont envoyé une lettre à leurs employés les prévenant de la perte possible de marchés, et donc d'emplois, si l'accord de libre échange n'était pas implanté.

Les métallurgistes canadiens et leur syndicat, les Métallurgistes unis d'Amérique (MUA) s'opposèrent décidément à l'ALE. Dans sa campagne contre l'ALE, les MUA ont présenté en détail les problèmes et obstacles que les métallurgistes canadiens rencontreraient en accédant aux marchés américains et que le résultat serait à l'opposé des prétentions courantes, c'est-à-dire que les importations au Canada d'acier fabriqué aux États-Unis s'accroîtraient. Ils ont également prédit d'importantes pertes d'emploi dans l'industrie de l'acier, dans l'industrie manufacturière reliée à l'acier et dans les industries secondaires canadiennes, suite à la décision des américains de fermer leurs filiales canadiennes et de retourner chez eux où le climat était meilleur pour les investissements. Finalement, les MUA considéraient l'ALE comme une application des politiques de l'aile droite du gouvernement progressiste conservateur fédéral, concentrées sur les intérêts comparatifs aux dépens des travailleurs.

Quatre ans après l'entrée en vigueur de l'ALE, l'industrie canadienne de l'acier primaire est dans un état de crise continue. Dans un contexte de surcapacité mondiale, au lieu de permettre un plus grand accès au marché américain, la circulation nord-sud de l'acier a été obstruée par les aciéries américaines et le gouvernement américain qui accusaient les producteurs d'acier canadien de faire du dumping et de diverses contraventions à l'ALE. Ces difficultés ont engendré colère et frustration chez les dirigeants d'aciéries canadiennes, eux qui se présentaient comme des échangistes honnêtes.

Les dirigeants locaux et nationaux des MUA place l'ALE au centre de leur analyse de la crise prévalant dans l'industrie canadienne de l'acier. En résumé, ils prétendent que leurs prédictions eu égard à l'accès aux marchés et la perte consécutive des manufacturiers secondaires ont agi ensemble pour produire de massives pertes d'emplois chez les métallurgistes et ainsi causer une préoccupation réelle quant à la viabilité de l'industrie canadienne dans sa forme actuelle. En réaction, les dirigeants nationaux et locaux des MUA et les dirigeants des compagnies d'acier se sont joints pour faire pression sur le gouvernement canadien ou bien pour forcer le gouvernement américain de respecter l'ALE ou bien pour établir des barrières légales similaires à celles érigées par les américains. En même temps, ils réclament un accord commercial sectoriel pour l'acier similaire à celui de l'automobile. Finalement, ils ont entrepris une campagne visant à convaincre les employeurs de l'importance de la qualification et du perfectionnement de la main-d'œuvre permettant alors de produire de l'acier à plus haute valeur ajoutée dans des marchés hautement compétitifs des années 1990 et au-delà.

Cet article conclut en affirmant qu'évaluer le nombre d'emplois perdus dans l'industrie de l'acier primaire dû à l'ALE est un exercice difficile, sinon impossible. Les technologies modernes et la machinerie implantée à la fin des années 1970 et durant les années 1980 ne visaient pas à accroître la capacité de production de l'acier. C'est plutôt aux changements technologiques et aux transformations organisationnelles qu'ils ont provoqués (v.g. l'élimination de divisions complètes, fusions d'emploi, la formation d'équipes, etc.) qu'il faut imputer la plus grande partie des emplois perdus pendant cette période. Cependant, comme le démontre la décision récente de deux compagnies de bâtir des usines aux États-Unis, le contexte politique et économique plus large et les changements reliés à la « nouvelle économie globale » qui affecte l'industrie canadienne de l'acier sont de plus en plus reliés à la réalité du libre échange.

En résumé, le libre échange — avec les États-Unis et le Mexique — sera le contexte le plus important pour l'industrie canadienne de l'acier dans les années à venir. Si tel est le cas, alors non seulement plus d'emplois seront perdus, mais la viabilité même de l'industrie de l'acier primaire au Canada sera en jeu.

# *Measuring Bargaining Power Through Grievance Outcomes*

## *Results from an Ontario Steel Mill*

Peter Suschnigg

*Using data from a large Ontario steel mill, it is argued that grievance outcomes provide a useful proxy to measure bargaining power. Three independent variables are constructed: the match of a complaint with a specific grievable category in the collective agreement (the complaint/grievance category match); the general grievance type; and the work site (works division). Various hierarchical log-linear/logit models are fitted to estimate grievance outcomes. The model that best fits the data is one that includes the interaction between the complaint/grievance category match and grievance type as well as the interaction between the complaint/grievance category match and works division. The results show that under most conditions bargaining outcomes favour management. Under a specific constellation of conditions, however, bargaining outcomes favour labour. Thus is it only under this specific set of conditions that labour has greater bargaining power than management.*

This paper proposes a method of measuring bargaining power that uses grievance outcomes as indicators of bargaining power. Since bargaining power is still poorly conceptualized the burden of this paper is fourfold: 1) to operationalize the concept of bargaining power, 2) to suggest indicators to predict bargaining outcomes in the firm-specific case, 3) to show some conditions

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\* SUSCHNIGG, P., Department of Sociology and Anthropology, Laurentian University, Sudbury, Ontario.

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under which the balance of power between labour and management shifts, and 4) to demonstrate that log/linear logit modelling provides a straight-forward way of achieving the third objective. The paper concludes that labour's ability to change initially ill-defined complaints into successful grievances is a neglected area in the study of labour-management relations.

### OPERATIONALIZING THE CONCEPT OF BARGAINING POWER

Among social scientists there is no consensus on how to conceptualize bargaining power (Bacharach and Lawler 1981:220). Moreover, while some attention has been paid to the conceptualization of bargaining power (Leap and Grigsby 1986), far less attention has been paid to the operationalization of the concept (Armstrong *et al.* 1977; Rubin and Brown 1975:233). One of the major reasons for this lacuna in the empirical development of the concept is the existence of two major, fundamentally contradictory, ways of viewing power (Edwards 1978).

The first, based on Weber's (1978:53) definition of power holds that "power is the probability that one actor within the social relationship will be in a position to carry out his own will despite resistance." A conceptualization of bargaining power based on this postulate will focus on "trials of strength" — those aspects of bargaining where manipulation and persuasion have failed.

The second view focuses on control. The proponents of this position (Bacharach and Baratz 1962; Fox 1974; Lukes 1974), drawing on Marxist theory, argue that no conceptualization of bargaining power can be limited to encompass only manifest conflict between management and labour. Those exercising power, this argument runs, will define which issues are "legitimate" sources of conflict and thus suppress the manifestation of issues that are not legitimated. If this is so, those who exercise power will be able to realize their own interests by the simple expedient of defining the interests of both parties — those of the excluded as well as their own — as being in harmony. Indeed, Fox (1974:276) argues that "it is precisely in the power relationships where power disparity is greatest that its active exercise is least necessary." Bargaining power in this view is based on one party's ability to assert control over resources and ideology, or both. It is assumed that management, as a rule, has greater control over resources than does labour while management's control over ideology is less secure.

Edwards (1978:1) concludes from this that "it is apparent that 'power' has several dimension or faces and it would be futile to attempt to encapsulate these complex processes in one measure." She then suggests that those researchers who wish to pursue the empirical study of comparative bargaining power adopt a more modest goal and focus on the measure of bargaining

decision outcomes. Edwards proposes that this be done by investigating whether a decision is made jointly, unilaterally, or not at all. While this is a valid point there is, however, another thread to the power-control argument that needs to be unravelled.

Both, the seeming simplicity of a concept based on power, and the subtlety of another based on control, paints the powerless (or excluded) as essentially passive. It matters little for our argument whether that passivity is seen as being rooted in powerlessness or "false consciousness." While it may be true that those in power will get their way in the last instance, and those in control are at most times able to define the legitimacy of goals and values, those who lack relative power or are being controlled to varying degrees also resist more or less directly. Labour whether organized or not engages in strikes, slowdowns, restricts output, and attempts to redefine and reconstruct power relations in the work place. Thus, neither power nor control are absolute.

The specific form power relations take in a work place are subject to a bewildering variety of exogenous as well as endogenous factors. Political culture and social structure set the external parameters while the "internal work place climate" is shaped by management-labour relations. Where labour is organized these relations have been cast into a mold represented by a collective agreement. While both parties agree to abide by the provisions of that document, collective agreements typically contain mechanisms for grieving putative violations of clauses in the agreement. Of additional interest, in terms of the research presented below, are grievances concerning matters that are only poorly or not at all defined in a collective agreement. This line of reasoning suggests that it is advantageous to assess relative bargaining power by measuring grievance outcomes rather than the results of collective bargaining although there are certain advantages in operationalizing bargaining power in terms of collective agreement bargaining.

To operationalize bargaining power in terms of collective agreement bargaining has serious limitations. Such an approach gives a series of static "snapshots" and, therefore, fails to record the continuous contest for control (Edwards 1979) that goes on between management and labour. Contract negotiations, moreover, are extraordinary periods in the ongoing process of labour-management relations. In brief, bargaining power may vary over time but retain some stability between contiguous collective bargaining events. What is needed, then, are indicators of bargaining power that permit the measurement of labour-management relations during the "normal" periods of jockeying for power.

The clearest observable manifestation of the ongoing contest between management and labour is embodied in grievance processes (Gandz and Whitehead 1982; Gandz 1979). While grievances are lodged for many and

varied reasons, every grievance represents a more or less direct challenge to management prerogatives. Once a grievance has reached a certain level of seriousness it becomes a matter of record; grievance records make it possible to measure grievance rates and grievance outcomes.

Although grievance rates are a barometer of labour-management conflict, they reveal little about the relative strength of the parties to the grievance. Grievance outcomes, on the other hand, can provide a measure of this relative strength; grievance outcomes expose the balance of power between labour and management. The problem, however, is how best to articulate this link.

Some social scientists have used data on wage settlements to estimate whether management or labour has the greater bargaining power;<sup>1</sup> others have used the demand for labour as a measure.<sup>2</sup> Both approaches are of limited usefulness in firm-specific situations: in the first case, wages are usually the main bone of contention during bargaining over collective agreements — an event that occurs infrequently; in the second case, demand for labour is difficult to measure for specific firms and, as the state of Canada Post's labour relations indicates, low demand for labour does not necessarily mean low bargaining power for labour.

One possible, but hitherto neglected factor, in labour's struggle to resist management and to assert its own power is its ability to create grievances from complaints. While some complaints are clearly related to violations of a clause in a collective agreement, others are less easily linked to such a breach. The pursuit of such mismatched claims may therefore be seen as a union strategy to increase control over the work place as well as reinforcing the union's influence over its members.<sup>3</sup> While it may be thought that complaints that are clearly linked to breaches in contract language are more amenable to settlements favourable to the union than complaints that fail to match contract language squarely, we have no empirical evidence to support this hypothesis. Indeed, there appears to be no previous research addressing this issue. This gap in our knowledge is all the more surprising as grievance officers are routinely exhorted to "grieve when in doubt."

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<sup>1</sup> Chamberlain and Kuhn (1965), for example, use wage settlements as an indicator of bargaining power. If wage settlements exceed inflation rates, labour is assumed to have greater power than management.

<sup>2</sup> Dubin (1969), for example, uses the demand for labour as an indicator of bargaining power. This author argues that when the demand for labour goes up, then so does the bargaining power of labour.

<sup>3</sup> One of the problems every union has to face is how to maintain its own legitimacy, that is, how to demonstrate that it is representing the true interests of its membership (Freeman 1982:204-211).

A number of other factors affecting grievance outcomes have already been identified. Ng and Dastmalchian (1989) and others (Knight 1986; Muchinsky and Maassarani 1980) found that grievance type influenced grievance outcomes. These studies indicate that grievances over working conditions (most often physical conditions) held the best hope of success for labour, while grievances over assignments of duties were least likely to be successful. Craig (1988:35) notes that "grievances involving discharge are taken up to higher steps in the grievance procedure than other types of grievances." Peach and Livernash (1974), Muchinsky and Maassarani (1980), and Wynne (1978) reported that the type of environment, particularly workplace organization, also affected grievance outcomes.

These studies on grievance outcomes tend to obscure the finer differences that occur between and within firms. The fact is, for example, that while grievances regarding disciplinary matters may be strongly fought by management in one company, the same management may take a "softer" position on grievances concerning the scheduling of vacancies. And while grievances over working conditions may be strongly resisted by one company's management they may be more readily conceded by another's.

While it is quite conceivable that the party with more control will concede a particular grievance for strategic reasons, grievance outcomes over time will reflect comparative bargaining power rather well. If one party concedes or withdraws the bulk of grievances over time one can reasonably ask whether that party's bargaining power is real. If, for instance, management conceded most grievances over a period of one year few would dispute that management control was weak. The same may be argued for labour. If, over the course of one year, a union withdrew most of the grievances it lodged it could hardly claim to possess more bargaining power than management. Indeed, a proportion of grievances are considered so pivotal for power relationships in the workplace that neither party is willing to forego its claim. Grievances that cannot be resolved by the two parties to the dispute are then submitted to a third party for arbitration. The high cost of arbitration in terms of time, finance, and labour-management relations for both parties makes it a last resort for settling their disagreements. For the researcher who is interested in the empirical study of bargaining power, arbitration introduces additional complications: the intervention of a third party and the lapse of time between the lodging of the original grievance and its resolution through arbitration.

Given these problems, this study restricts itself to the more modest goal of measuring bargaining power through an analysis of grievance bargaining outcomes between management and labour in one workplace during the course of one year.

To summarize: it has been argued that the theoretical complexity of bargaining power makes it unlikely that a single measure could encapsulate the concept; but that grievance outcomes are valid empirical indicators of bargaining power; that bargaining power is not absolute but comparative; that labour resists management power; that grievance outcomes are mediated by, among other factors, the fit of the original complaint to a grievable category, by the grievance type and the work environment.

Given the power conferred on management by a management rights clause in this (as in virtually every Canadian) collective agreement we should not expect the union to be stronger than management. While previous research leads us to expect labour to have relatively more bargaining power in grievances over working conditions and discipline, management would be stronger in grievances concerning questions of policy and tenure. What is at issue here is the relative bargaining power of the two parties to the grievance.

Drawing on these propositions, the categories of the dependent variable for this study — grievance outcome — are constructed in the following way:

### **Grievance Outcome**

- a) Arbitration: grievances not resolved between labour and management are sent to arbitration
- b) Conceded: management concedes the grievance
- c) Withdrawn: the union withdraws the grievance.

The predictors — the match between complaint and grievance category, the grievance type, and work site — are constructed in the same manner.

#### **1) The match between complaint and grievance category<sup>4</sup>**

Categories of the first independent variable — *match of grievance* — are constructed in the following way to capture the possible effect of mismatching grievances.

- a) Aberrant: initial complaint fails to match an established grievance category.
- b) Matching: initial complaint matches an established grievance category.

Based on the findings of previous research, the categories of the second and third independent variables are constructed as follows:

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<sup>4</sup> In this context a “grievance category” simply refers to an issue that is covered by a clause in the collective agreement.

## 2) The Grievance Type

- a) Working Conditions: Grievances concerning questions of safety, training, pay, and scheduling.
- b) Discipline: Grievance concerns questions of disciplinary actions by management, such as charges of poor work performance, tardiness, and dismissals, as well as worker charges of harassment by management.
- c) Policy: Grievance concerns charges that company policies were breached, including claims that foremen were doing bargaining unit work, and that workers were required to exceed their job descriptions.
- d) Tenure: Grievance concerns matters relating to questions of seniority rights, improper recalls, posting of vacancies, lay-offs, cut backs, and denials of employment.

## 3) The Work Site

Categories for this variable are constructed as follows (for explanation, see below):

- a) Division One
- b) Division Two
- c) Division Three
- d) Division Four

## METHODS AND DATA

This study is based on a sample of 1027 grievances that were settled in one plant of a major Canadian steel-mill during 1985. The data were gathered from the records of 1750 grievances kept by the union local. All grievances that were not settled by the end of the calendar year were excluded from further analysis because the outcome was still uncertain. Following this constraint 722 cases were omitted because they were still active by the end of the year and one case was dropped because it was filed on behalf of all workers in all departments.

The collective agreement stipulated that any grievance had to pass through three levels of resolution before being allowed to proceed to arbitration. The first level of grievance was to consist of a verbal complaint to a superior. As these verbal, day-to-day complaints were recorded only occasionally,



this study is limited to grievances that attained formal status at the second and third levels.

For each case, the available data included the works division, the grievant's department, the month the grievance was formally dealt with,<sup>5</sup> the grievance type, a brief description of the initial complaint, the step at which the grievance was reviewed, and the disposition of the grievance.

At the time the data were gathered the plant was organized into four divisions. Division One included the Steelmaking, Blast Furnace, Coke Ovens, Sinter Plant, and Ore Dock departments. Division Two was comprised of Rod, Bar, Bloom, the 10-9, and the 12-10 Mills, the Conditioning and the Bar Processing Departments, as well as the Universal Slab Mill. The Cold Mills, the Tin Mill, the Spike Mill, the 20'' Mill, the Galvanizing, the Plate and Strip Departments, and the Sheet Service formed Division Three. Division Four was made up of the various Yard Services, the Civil Engineering, Electrical, Mechanical, Metallurgical, and Utilities Departments, as well as the Roll Shop, Stores, and Pattern Makers.

Division One accounted for 357 or 34.8 percent of all grievances included in this study, Division Two for 141 (13.7 percent), Division Three for 230 (22.3 percent), and Division Four contributed 299 (29.1 percent) to the total.

Thirty-one different grievance types, based on the collective agreement, were dealt with during the year. These grievance types were, however, very unevenly distributed. While discipline related grievances occurred more than 300 times, five types were recorded less than ten times each. Careful analysis revealed that, for analytic purposes, many types could be considered related; the original categories were recoded into four broad types: grievances related to 1) working conditions, 2) discipline, 3) policy matters, and 4) job tenure.

Grievance descriptions, based on the worker's initial complaint, frequently showed little regard for categories the union considered "grievable." A worker might have felt that he (at the time of the study all workers in the sample were male) had a justifiable grievance or dispute but may not have been able or willing to frame his complaint to fit a contractually sanctioned category of grievable matters.<sup>6</sup>

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<sup>5</sup> It was not possible to control for monthly fluctuations in grievance resolution since no meetings between management and the union were held in May.

<sup>6</sup> The word 'complaint' will be used to denote the worker's initial verbal notification of dissatisfaction. The term 'grievance description' will be used to denote the union's written record of the worker's complaint. The term 'grievance category' is that category of the collective agreement into which the grievance description best fits. The term 'grievance type' is used to denote a particular grouping of grievance categories.

Preliminary analysis and a summary of worker grievances compiled by the union yielded 108 types, more or less matching the categories found within the collective agreement. The union had the task of placing each grievance description in a particular grievance category, as per the collective agreement. Since a major question of this study was whether the transformation of the original complaint into a grievable category affected the ultimate disposition of a grievance, grievance descriptions were compared to the 31 grievance categories actually lodged by the union. A computer-generated comparison between grievances presented by workers and grievances lodged by the union achieved a match in 322 or 31.4 percent of the cases, while 705 or a surprising 68.6 percent failed to match. This matching procedure yielded a dichotomous variable (Match of Grievance) where (1) a complaint corresponded to a legitimate grievance category (i.e. matching) or (2) a complaint diverged (i.e. aberrant) from established grievance categories.

In contrast to previously reported research which found that only two or three percent of grievances reached the arbitration stage (Ichniowski 1986:78), at this plant 213 or more than 20 percent of grievances had been referred to that level. Thirty-one percent ( $n=318$ ) of grievances were conceded by the company at the second or third stage, while more than 48 percent ( $n=496$ ) were withdrawn by the union at one of these two stages. In light of the surprisingly large proportion of grievances that were submitted to arbitration, grievance outcome (withdrawn by the union, conceded by the company, or sent to arbitration) was further partitioned into two nested dichotomies. The first dichotomy discriminates between grievances that were sent to arbitration<sup>7</sup> and those that were settled internally; for those grievances that were settled internally, the second dichotomy distinguishes between grievances that were withdrawn by the union and those conceded by the company. The results of the first dichotomy will be displayed but not extensively discussed as the focus of this enquiry is the expression of differential bargaining power in the workplace.<sup>8</sup>

Since the independent, as well as the dependent variables, measured categorical frequencies rather than rates, a number of log-linear/logit models for the entire dataset as well as for the partitioned datasets arising from the two nested dichotomies were fitted (Fox 1984:347-348).<sup>9</sup> The resulting logits

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<sup>7</sup> Grievances that are sent to arbitration tend to represent cases that are regarded as critical by both management and labour; these are grievances in which neither side is willing to concede to the other.

<sup>8</sup> Grievances that are sent on to arbitration reflect a stalemate in labour-management relations. By definition, then, grievances that are about to be sent on to arbitration reflect a balance of power between the two parties at that point in time.

<sup>9</sup> This is roughly analogous to the methods employed in linear models. In the case of linear models too, the level of measurement and the research problem determine whether to use regression, ANOVA, or a related method.

— or log odds — are the natural logarithms of the odds of one outcome relative to another. Log odds, in turn, are readily re-expressed as probabilities; log-linear/logit modelling therefore provides an intuitively sensible way to assess relative bargaining power. As the odds are expressed as ratio, they are multiplicatively symmetric about 1: odds of .25 (“1 to 4”) and 4 (“4 to 1”) are equally extreme, but in opposite directions. Models for the odds therefore have a multiplicative form. Taking the log of the odds results in an expression that is additively symmetric about zero. Models for the log odds therefore are linear. Odds of .25 and 4, for example, correspond to log odds, or logits of  $-1.386$  and  $+1.386$  respectively. Logits may consequently be re-expressed as proportions or probabilities of an outcome since the logits are monotone transformations of the proportion. Following Friendly and Fox (1991) graphical displays are presented to aid in the interpretation of adjusted parameters.

## RESULTS

A number of models were fitted to the full dataset as well as to the nested dichotomies.<sup>10</sup> Tests for logit-model parameters shown in Table 1 show that the Grievance Match main effect fails to reach statistical significance. The Grievance Type and Work Site main effects, however, are both statistically significant. These findings are amplified, and to some extent moderated, when interaction effects are taken into account (See Table 1).

The interaction between Grievance Match and Grievance Type and the interaction between Grievance Match and Work Site are both highly statistically significant. This demonstrates that the grievance outcome was affected jointly by two interactions: 1) the interaction between the Grievance Match and Grievance Type and 2) the interaction between Grievance Match and Work Site. This model achieves excellent fit, accounting for 87 percent of the  $G^2$  value of the baseline model for the full dataset. The parallel models account for 97 percent of the Arbitration vs. Conceded or Withdrawn nested dichotomy and 96 percent of the Conceded vs. Withdrawn nested dichotomy.

The overall picture of labour-management relations that emerged from the results shows that in the case studied the union could be expected to withdraw three grievances at various stages of the process for every two grievances the company conceded (logit=.44). Labour resistance would be stronger, however, where the initial complaint did not fit an existing grievance category (logit=.34) then where it did (logit=.69).

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<sup>10</sup> For detailed analyses and data contact the author.

TABLE 1  
Tests for Logit-Model Parameters

Source	Nested Dichotomies									Sum		
	Full Table			{A, CW}			{C, W}			G <sup>2</sup>	df	p
	G <sup>2</sup>	df	p	G <sup>2</sup>	df	p	G <sup>2</sup>	df	p			
Fit of Grievance	3.9	2	.11	1.5	1	.22	2.5	1	.11	4.0	2	.13
Type of Grievance	21.7	6	.00	11.7	3	.01	10.1	3	.02	21.7	6	.00
Division	71.8	6	.00	54.6	3	.00	16.7	3	.00	71.3	6	.00
Fit x Division	21.6	6	.00	11.8	3	.00	14.2	3	.00	26.0	6	.00
Type x Division	17.3	18	.50	10.3	9	.33	7.1	9	.63	17.4	18	.50
Type x Fit	39.8	6	.00	10.2	3	.02	29.9	3	.00	40.0	6	.00

Note: {A, CW} Sent to Arbitration vs. Conceded-Withdrawn Dichotomy  
{C, W} Conceded vs. Withdrawn Dichotomy

The interaction between the Grievance Match and Grievance Type is less favourable to the union than it is to management. In the case of the Conceded vs. Withdrawn nested dichotomy, controlling for the interaction between Grievance Match and Work Site the odds that the union withdrew the grievance were double the odds of the company conceding a grievance. The effect of the Grievance Match and Grievance Type interaction yielded a logit of 1.258. Thus, the odds of a grievance being resolved internally were about three-and-half times those of a grievance being sent to arbitration. But while there was an overall preference for settling grievances in-house, because of the interaction effect the odds varied according to Grievance Match and Grievance Type.

These relationships are displayed in Table 2 and can be more clearly observed in the graphed results shown in Figures 1 and 2. The relationships displayed in the graphs are based on log odds (logits). As discussed above, the use of logits yields a linear model through the transformation of the multiplicative odds.

### Aberrant vs Matching Grievances

#### *Grievances Sent for Arbitration or Resolved Internally*

Figures 1a to 1d show fairly clear patterns. In grievances related to working conditions, policy, or tenure aberrant grievances originating in Divisions 1, 2, or 3 were more likely to be sent for arbitration than matching ones. This pattern did not hold for grievances regarding discipline and for Division 4. Matching grievances from that Division, irrespective of their type, were

TABLE 2  
**Grievances Conceded by the Company or Withdrawn by the Union  
 by Fit of Grievance, Type of Grievance, and Division in an Ontario Steel Mill, 1985**

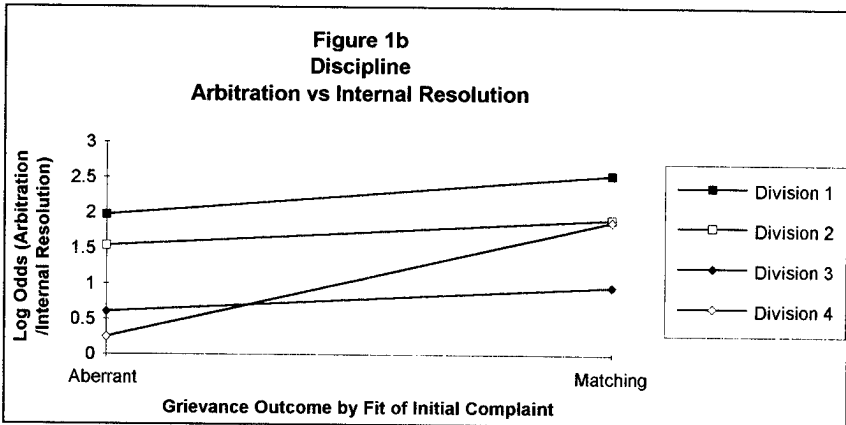
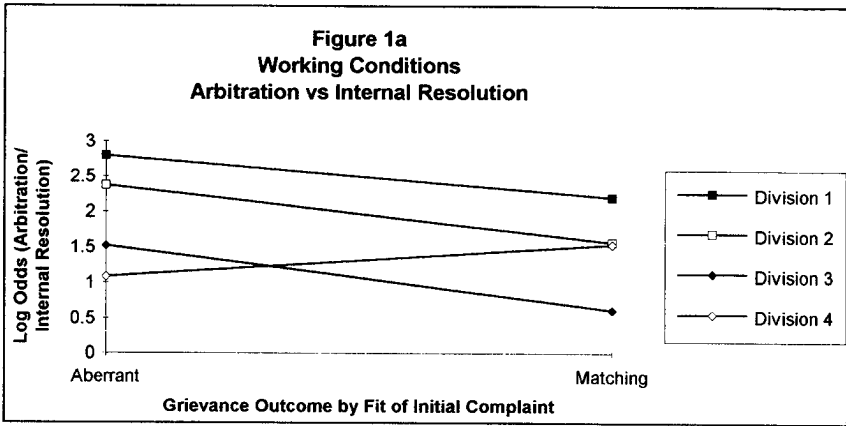
<i>Fit of Grievance</i>	<i>Type of Grievance</i>	<i>Division</i>	<i>Outcome</i>			
			<i>Conceded</i>	<i>Withdrawn</i>	<i>Logit</i>	<i>Probability of Outcome</i>
Aberrant	Working Conditions	1	15 (13.79)	25 (26.21)	.51 (.64)	.65
		2	4 (2.02)	11 (12.98)	1.01 (1.86)	
		3	5 (7.08)	16 (13.86)	1.76 (.68)	
		4	5 (6.12)	29 (16.93)	1.76 (1.52)	
	Discipline	1	35 (33.77)	38 (39.22)	.08 (.15)	.54
		2	3 (4.26)	18 (16.24)	1.79 (1.37)	
		3	11 (10.90)	13 (13.10)	.17 (.18)	
		4	6 (6.08)	17 (16.93)	1.04 (1.02)	
	Policy	1	32 (35.15)	22 (18.87)	-.37 (-.62)	.35
		2	12 (10.30)	17 (18.69)	.35 (.60)	
		3	12 (13.50)	9 (7.50)	.29 (.59)	
		4	20 (17.05)	19 (21.94)	-.05 (1.29)	
	Tenure	1	27 (26.30)	23 (23.70)	-.16 (-.10)	.48
		4	4 (6.42)	22 (19.57)	1.70 (1.16)	
		34	34 (30.52)	25 (28.47)	-.31 (-.07)	
		9	9 (10.76)	25 (23.24)	1.02 (.77)	

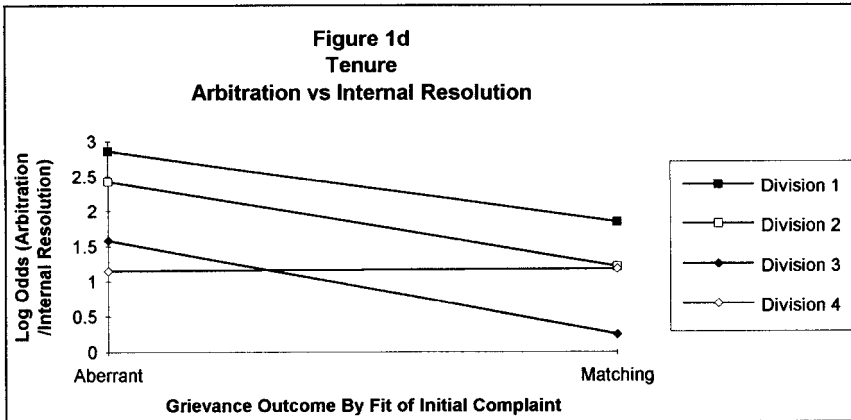
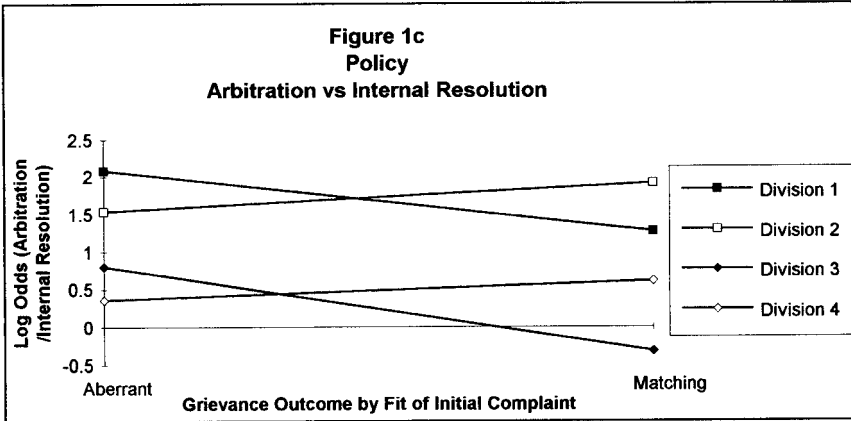
TABLE 2 (continued)

**Grievances Conceded by the Company or Withdrawn by the Union  
by Fit of Grievance, Type of Grievance, and Division in an Ontario Steel Mill, 1985**

<i>Fit of Grievance</i>	<i>Type of Grievance</i>	<i>Division</i>	<i>Outcome</i>				
			<i>Conceded</i>	<i>Withdrawn</i>	<i>Logit</i>	<i>Probability of Outcome</i>	
Matching	Working Conditions	1	11 (12.72)	30 (28.28)	1.00 (.80)	.69	
		2	3 (4.28)	9 (7.72)	1.10 (.59)		
		3	7 (5.14)	8 (9.86)	.13 (.65)		.66
		4	10 (8.86)	11 (12.14)	.10 (.31)		
	Discipline	1	9 (8.99)	11 (11.01)	.20 (.20)	.55	
		2	4 (3.51)	3 (3.49)	-.29 (-.01)		
		3	2 (3.40)	5 (3.60)	.92 (.06)	.51	
		4	14 (13.11)	9 (9.90)	-.44 (-.28)		
	Policy	1	1 (.94)	8 (8.06)	2.08 (2.15)	.90	
		2	2 (.50)	2 (3.50)	0 (1.95)		
		3	0 (.36)	3 (2.46)	.92 (1.99)	.88	
		4	2 (3.19)	18 (16.18)	2.20 (1.66)		
	Tenure	1	10 (8.34)	24 (25.66)	2.40 (1.12)	.75	
			1 (1.71)	5 (4.29)	1.61 (.92)		
			4 (4.10)	11 (10.90)	.92 (.98)		
			4 (4.84)	10 (9.16)	.92 (.64)		
			4 (4.84)	10 (9.16)	.92 (.64)		

*Note:* Estimated expected frequencies are shown in parentheses.







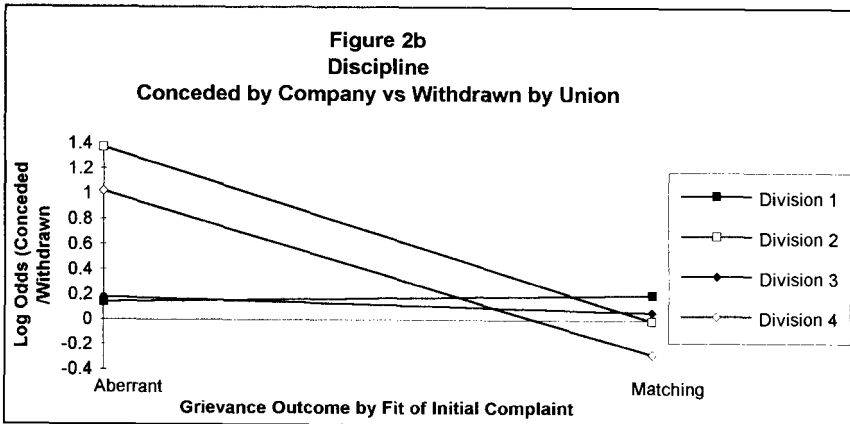
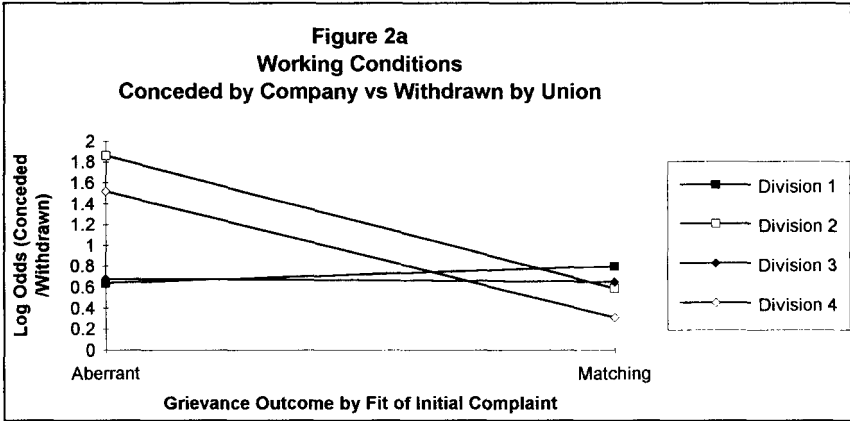
always more likely to be sent to arbitration. Overall there was a wide spread in bargaining power between Divisions: Division One's aberrant grievances were more than five times more likely to proceed to arbitration than were Division Four's. In Division One, matching grievances were almost five times more likely to proceed to arbitration than were Division Three's.

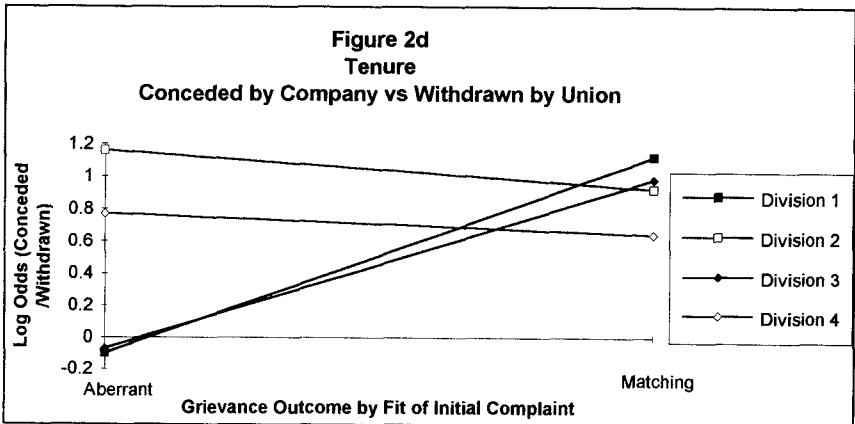
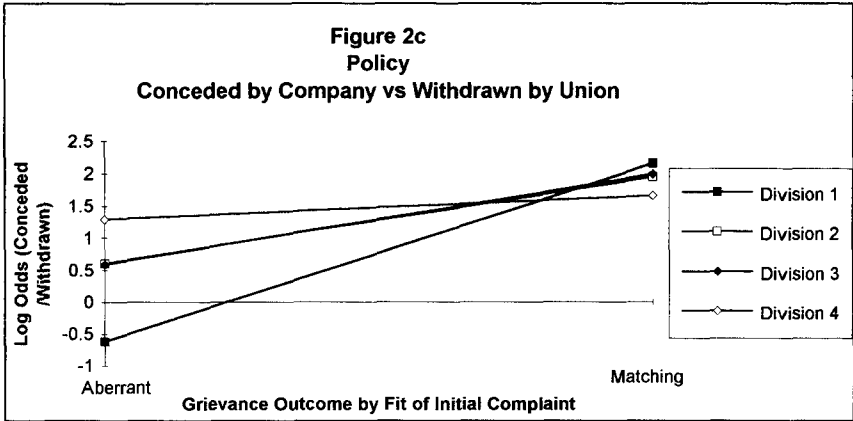
### *Grievances Conceded by the Company or Withdrawn by the Union*

Figures 2a to 2d also show remarkably stable results. Where the initial complaint was aberrant, overall there was considerably greater difference in bargaining power between divisions than when initial complaints matched categories in the collective agreement. With one exception, the spreads in bargaining power within each condition were almost identical. In aberrant grievances, except those over policy, bargaining power in Division 1 was approximately four times as strong as in Division 2 (differences in logits = 1.35 and 1.32). For matching grievances, bargaining power for Division 4 was about one-and-a-half times as strong as for Division 1 (differences in logits = .48 and .49).

The greater spread in bargaining outcomes over aberrant grievances is not entirely surprising: there is a greater risk of failure for the union in lodging such a grievance than in pursuing a matching grievance. Indeed the union gained virtually nothing from aberrant grievances over working conditions and discipline emanating from Divisions 1 and 3 and lost considerable ground vis-à-vis management with such grievances from the other two divisions. Management and union bargaining power were fairly closely balanced in cases of matching grievances over working conditions and discipline, giving management a slight advantage overall.

In policy and tenure related grievances the picture was less favourable to the union. While the spread in relative bargaining power was considerable between divisions, matching grievances showed management to be clearly stronger. The exception to this pattern was found in grievances over policy matters (Figure 2c). Here the contest between management and labour is most clearly evident. The spread between aberrant and matching grievance outcomes is the widest, with union bargaining power being reduced by more than three times (logit difference = 1.17) in the matching condition. As Figure 2c demonstrates, in terms of policy grievances, the union was always better off with aberrant grievances than with matching ones. Indeed, given the imbalance in bargaining power between management and the union, this strategy, deliberate or not, would have contributed to tensions in labour-management relations.





## Grievance Type and Division

### *Grievances Sent for Arbitration or Resolved Internally*

Figures 1a and 1b show that, for all grievance types, grievances originating in Divisions 1 and 2 were more likely to be resolved internally than grievances emanating from either of the other two divisions. Division 3 is unusual in that matching grievances over policy matters were slightly more likely to be sent to arbitration than to be settled internally (logit  $-.32$ ). Indeed, grievances from this division were overall more likely to be submitted for arbitration.

### *Grievances Conceded by the Company or Withdrawn by the Union*

Union bargaining power went up for Divisions 2 and 4 in the case of matching grievances for working conditions, discipline, and tenure: bargaining power for Division 2 grievances over working conditions was about three-and-a-half times greater for matching grievances than for aberrant ones (difference in logits = 1.27) while the increase in bargaining power for Division 4 was almost as great (difference in logits = 1.21). But in the case of matching grievances over discipline, labour bargaining power was approximately equal to that of management.

For Divisions 1 and 3 the differences in bargaining power in grievances over working conditions and discipline were negligible between aberrant and matching conditions (Figures 2a and 2b). In tenure-related grievances, however, both these Divisions showed marked declines in bargaining power where grievances matched: the union moved from having slightly superior bargaining power to a position in which management had about three times as much bargaining power (Figure 2c).

## CONCLUSION

The results of this study clearly reveal the ebb and flow of bargaining power in one large enterprise during the course of one year. It also demonstrates that the factors determining grievance outcomes combine in complex patterns even if only a minimal number of predictor variables are used. Most simply put, the separate interactions of Grievance Match with Grievance Type, and of Grievance Match with Work Site, exerted a strong effect on the disposition of grievances. These results point to a union that chose its issues pragmatically and that frequently asserted its strength in situations that were sometimes poorly specified. Indeed, we have seen that a majority of initial complaints did not readily fit an established grievance category. By skilful transformation of grievances that initially diverged from established

categories, the union showed that it could resist management dictates to some surprising extent. With the exception of a few instances, however, management had the overall upper hand in its contest with labour.

We discovered, moreover, that union bargaining power was often weakest in a situation where the initial complaint matched a grievable category, concerned a question of policy and where the grievance emanated from a division that was of central importance to the steel making enterprise (that is, Division 1). The odds in this case could be expected to be eight-and-a-half times in management's favour (logit = 2.15). Since questions of policy are considered to be at the heart of management prerogatives (Perline and Poynter 1991) it is not surprising that management would resist union demands most strongly in work sites that are considered pivotal to production.

The second major area of labour-management conflict was over tenure related grievances. As in the case with policy related grievances, the union fared overall more poorly than management. Indeed the best the union could be expected to achieve with matching grievances was a situation in which management had almost twice as much bargaining power (logit = .64). It should come as small surprise that the union attempted, and in the case of Divisions 1 and 3 with considerable success, to improve its situation by lodging aberrant grievances. The contest between labour and management can be expected to be fierce around questions of tenure since fewer workers and a "lean" operation are major goals of management. From a management perspective it is preferable to increase productivity by the intensification of labour (or "working smarter" in management parlance) than through an increase in the work force. Thus, while the union may have felt obliged to take up a worker's grievance, management would have been unlikely to yield to union demands concerning tenure.

In grievances related to disciplinary matters, management and union bargaining power could be expected to be closely matched if the grievance matched a recognized category. Although speculative, it is possible to hypothesize that management is more willing to concede clearly defined discipline related grievances in order to promote an ambience of "fairness" in the workplace.

Overall, these findings show that union attempts to reshape initially ill-fitting complaints to established grievance categories is a rational strategy that frequently has positive results for the union. For it is among these aberrant grievances that the contest for bargaining power is most vigorous. It also demonstrates that labour's ability to change certain complaints into successful grievances is a neglected area in the study of labour-management relations. We do not know to what degree industry, firm, or union characteristics affect these processes. Are these complaint conversion strategies widespread or limited to

certain industries or bargaining relationships? Do they fluctuate with economic conditions? These and other questions await further research.

Although the specific results of this study will not be replicated in other settings, the methods employed in this study show a relatively simple method of measuring bargaining power at the point of production. Logits yielded by hierarchical log-linear/logit models can provide a location and time sensitive measure of the relative strength of labour in its contest with management.

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### ***Mesure du pouvoir de négociation et résultats des griefs dans une aciérie ontarienne***

Cet article vise quatre objectifs. Premièrement, opérationnaliser le concept de pouvoir de négociation; deuxièmement, suggérer des indicateurs du pouvoir de négociation dans un cas très spécifique; troisièmement, montrer les conditions selon lesquelles se déplace la balance du pouvoir entre les travailleurs et la direction et quatrièmement, démontrer que la modélisation « log-linear/logit » constitue une juste façon d'atteindre le troisième objectif.

Les catégories de la variable dépendante, appelée résultats des griefs, sont les suivantes : a) arbitrage : les griefs non solutionnés entre les travailleurs et la direction qui vont en arbitrage; b) concession : l'administration concède ce qui est réclamé par le grief; c) retrait : le syndicat retire son grief.

On trouve trois variables indépendantes. Premièrement, l'adéquation de la plainte et de la catégorie de griefs; les catégories de cette variable indépendante sont l'aberration où la plainte initiale ne s'ajuste pas à une catégorie de griefs établie et l'adéquation où la plainte initiale s'ajuste à une catégorie établie de griefs. La deuxième variable indépendante est le type de griefs dont les catégories sont les conditions de travail, la discipline, les politiques, et la stabilité d'emploi. Le lieu de travail est la

troisième variable indépendante et les catégories de cette variable sont construites selon les divisions opérationnelles que l'on retrouve sur le lieu de travail, c'est-à-dire première, deuxième, troisième, et quatrième division.

L'étude se fonde sur un échantillon de 1027 griefs puisés parmi les 1750 qui ont été déposés dans l'une des usines d'une importante aciérie canadienne au cours de l'année 1985. Dans la première division, on compte 357 griefs (34,8 % de tous ceux que comprend cette étude); dans la deuxième division, 141 (13,7 %); dans la troisième, 230 (22,3 %) et, dans la quatrième division, 299 (29,1 %).

Le résultat du grief (retrait de la part du syndicat, concession de la direction ou renvoi à l'arbitrage) se scinde en deux dichotomies imbriquées l'une dans l'autre. La première dichotomie fait la différence entre les griefs qui ont été envoyés en arbitrage et ceux qui ont été réglés à l'interne; dans les griefs réglés à l'interne, la seconde dichotomie distingue ceux qui ont été retirés par le syndicat de ceux où la direction a fait des concessions.

L'hypothèse est à l'effet que les variables de l'adéquation du grief, du type de grief et du lieu de travail déterminent le résultat d'un grief particulier. Des modèles « log-linear/logit » adaptés à l'ensemble des données aussi bien qu'aux dichotomies imbriquées ainsi que les tests pour les paramètres du modèle « logit » sont présentés. Il est évident que le deuxième modèle convient le mieux aux données. Il démontre que le résultat du grief a été affecté à la fois par deux interactions : l'interaction entre l'adéquation du grief et le type de grief et l'interaction entre l'adéquation du grief et le lieu de travail. Le tableau 2 illustre les fréquences observées et estimées pour les dichotomies imbriquées d'après le second modèle. En compilant les « logits » pour la comparaison des groupes, on obtient un indicateur objectif du pouvoir de négociation selon des conditions variées. Ces relations peuvent être observées plus clairement quand on illustre graphiquement les résultats comme on le voit dans les figures 1 et 2.

Ces résultats indiquent que le syndicat fait fréquemment valoir son pouvoir dans les situations où l'adéquation entre la plainte et le grief est faible. Dans l'ensemble, le syndicat se tire moins bien d'affaire que l'employeur dans les griefs reliés à la stabilité d'emploi ou aux politiques. Dans les griefs portant sur des questions disciplinaires, le pouvoir de négociation de l'employeur s'avère à peu près égal à celui du syndicat si le grief recoupe une catégorie reconnue.

De façon générale, ces résultats montrent que les tentatives du syndicat de reformuler en des catégories de griefs établies les plaintes d'abord trop divergentes par rapport à ces catégories constituent une stratégie rationnelle qui produit des résultats qui lui sont couramment favorables.

Même si les résultats spécifiques de cette étude ne peuvent être reproduits dans d'autres analyses, les techniques utilisées ici constituent une méthode relativement simple pour mesurer le pouvoir de négociation sur le lieu de production. Les « logits » dégagés par des modèles « log-linear/logit » hiérarchiques peuvent fournir une mesure sensible de lieu et de temps du pouvoir de négociation des parties.