INDUSTRIAL RELATIONS RESEARCH ASSOCIATION SERIES

Proceedings of the Forty-Fourth Annual Meeting

JANUARY 3-5, 1992 NEW ORLEANS

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INDUSTRIAL RELATIONS RESEARCH ASSOCIATION SERIES

Proceedings of the Forty-Fourth Annual Meeting

January 3-5, 1992 New Orleans

JOHN F. BURTON, JR., EDITOR

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PREFACE

The Forty-Fourth Annual Meeting of the Industrial Relations Research Association was held in New Orleans, Louisiana from January 3-5, 1992. (Because the Forty-Third Annual Meeting was held from December 28-30, 1990, there was no IRRA Annual Meeting in 1991.)

The sessions reflected the wide range of interests of the members of the Association. Trade unions and labor relations have long been a central concern of many IRRA members, and 1992 sessions included "Industrial Relations in the Arts and Entertainment Industries" and "Strategic Evaluations of Union Political Activities." Throughout the 45 years of the Association, labor economics has been the discipline with many adherents. This year sessions using this approach included "Perspective on the Rising Inequality of Wages in the United States" and "Internal Labor Markets and Work Arrangements: Beyond the Industrial Model." The longstanding interest in comparative and international topics was represented by sessions on "Lessons from Abroad: Comparative Political Economy and the Contemporary Study of Industrial Relations" and "Human Resource Management Policies and Practices in Developing and Developed Countries: A Comparative Perspective."

Newer "traditions" were also reflected in the 1992 sessions. The recent growth of interest in human resource management (nee personnel) was reflected in the comparative session just mentioned as well as in the session on "Human Resource Management Is for Unions Too." Another practice of recent years is the use of "Contributed Papers" sessions, where the papers are selected on the basis of competition open to all members. This year three such sessions were held: "Collective Bargaining," "Human Resources and Organizational Behavior," and "Labor Economics and Labor Markets." Still other recent traditions included the Dissertations Session, where the papers were derived from recent theses in industrial relations, and the Poster Sessions, where papers are selected from manuscripts submitted to a screening committee. Although only abstracts from the Poster Sessions are included in the *Proceedings*, several of the most outstanding papers are available from the Madison office. (The table of contents

lists the participants in the Poster Sessions, with an indication of which papers are available as "IRRA Working Papers.")

The Annual Meeting also included several special sessions that are included in this volume, including the IRRA Presidential Address by James L. Stern. Professor Stern proposed reforms of the Association that some might consider radical, including the renaming of the IRRA and the curtailment of Association publications!

The papers in this year's *Proceedings* have been subject to a screening procedure that has been in place since 1990 in order to ensure high quality of the published version of the papers. I reviewed each paper for substance and, in several instances, the authors were required to revise their papers before they were published. In addition to this substantive review, the papers were carefully copyedited for style and form by Kay Hutchison, IRRA Administrator, and by Jeanette Zimmerman, IRRA Editorial Assistant. The multistage review and editing process required more time than in years before 1990, which delayed somewhat the publication dates for the 1990 and 1992 *Proceedings*. I hope that the improved overall quality of the papers is adequate justification for the delay.

There are numerous individuals who were critical to the success of the 1992 Annual Meeting and these *Proceedings*. The IRRA Program Committee, chaired by James L. Stern, deserves credit for the interesting programs. I would also like to express the gratitude of the IRRA Executive Board to all staff members of the national office. This was the first year that Kay Hutchison, IRRA Administrator, was primarily responsible for the arrangements for the meeting, and she did an excellent job.

> John F. Burton, Jr. Editor-in-Chief

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I. PRESIDENTIAL ADDRESS

Whither or Wither IRRA¹

JAMES L. STERN University of Wisconsin-Madison

Selecting a topic for a presidential address was difficult for me as I am sure it was for my predecessors. I felt that I needed help, and since I was scheduled to attend the meeting of the International Society of Labor Law and Social Security in Athens, it seemed logical to seek the advice of the Greek deities. Therefore, I went to Delphi where I consulted the oracle about what I might say here.

The oracle responded by asking me about the audience and the circumstances surrounding the talk. When I said the audience would be mainly jaded academics who had just finished a large and sleepinducing lunch, the oracle said, "Keep it short and talk to them about whatever it is that brings them together." With this advice in mind, my remarks today will focus on changes that need to be made in our association.

The Kerr/Dunlop report and the IRRA committees created to implement it have started us in the right direction. However, much more needs to be done, and, based on the wisdom that I have distilled from you during my more than two and one-half decades of membership and service as a chapter officer, national coeditor, president-elect and president, today I offer you an agenda for further change.

The IRRA structure must be drastically overhauled in order to resolve two entirely different problems. First, we need to make the IRRA more responsive to scholars in the discipline we have created. Second, we must make it more attractive to the thousands of local chapter practitioners who have not joined the national association. Let me start with the first problem.

Author's Address: 7321 Social Science Building, University of Wisconsin, Madison, WI 53706.

We fail to recognize the consequences for the IRRA of creating its own discipline. The scholars who founded this organization in 1947 did not have PhDs in industrial relations, nor could they have had one as no such discipline existed at that time. These founders were mainly labor economists along with a sprinkling of sociologists, psychologists and lawyers. Now the scholars who dominate the IRRA are those who have received their graduate education in the field of industrial relations, either at one of our freestanding institutes or in industrial relations programs located within business schools.

We can be proud that we have turned out more than 500 PhDs and about 10,000 MAs. However, we should recognize that our organization must meet the needs of IR grads whose degrees now set them apart from the traditional disciplines. Industrial Relations PhDs are not finding employment in economics, sociology, psychology, law or history departments, the disciplines that spawned their older teachers and major professors. Free standing IR departments, institutes and schools hire some of them. Most are joining the faculties of graduate schools of business. A few find jobs in labor studies programs, government agencies, businesses, or unions.

As the professional association in the IR field, we should be concerned about changes in the educational content of graduate study. We should actively oppose the deemphasis of union-management and employer-employee relations in business school curriculums, and we should also promote the creation of courses about the many new laws regulating the employment relationship. Along with other organizations in our field, we should persuade the business school accrediting agency to require the continued study of the employment relationship in the undergraduate and graduate business school curriculums. Just as economists use their association to protect the integrity of their discipline, so also should industrial relations scholars look to the IRRA to further the development of the industrial relations discipline.

Most of the MAs are finding employment in the human resources departments of large firms. A minority are working for government or unions. As the proportion of unionized employees decreases, the proportion of our graduates working at unionized firms also falls. Knowledge of collective bargaining, labor law, and labor history also declines in relative importance as the potential employers emphasize knowledge of affirmative action, OSHA, compensation, organizational behavior, and staffing in their recruiting. Our curriculums and our program should reflect these changes. At this point, before talking about other matters on my agenda, I want to jump to the second problem I mentioned at the outset of my remarks, namely, the relationship between the national organization and its chapters. I do this because many of the other changes I'll be suggesting affect both the local-national relationship and the role of the IRRA in our discipline.

Two characteristics of our organization make it unique. First, we are a tripartite association composed of management and union leaders as well as academics. Second, is the fact that from its beginning, our organization promoted the formation of local chapters. I think we should preserve these two attributes. They add greatly to our knowledge and broaden our perspective.

We have 60 chapters with 9,000 members. About 5,000 of these local chapter members are not members of our national organization. Actually, local chapter members outnumber national members. This situation, which has developed over the past 43 years, was not envisioned by our founding fathers and now presents a problem that I believe should be resolved.

I propose that our Executive Board, after consultation with chapter officers, prepare the necessary bylaw changes that will gradually end this split. Practically speaking, I believe that we need to grandfather current chapter members. However, all individuals who join in the future will join one organization, the IRRA, and automatically become members of the national organization and local chapters where they exist.

As part of our efforts to move toward this goal, we should ask our chapter advisory committee and a committee of our national executive board to develop a new dues structure, which will provide a financial incentive for current chapter members to become members of the national organization. As most of you realize, our current national dues are lower than those of most other professional associations. At present, we are just breaking even but have no reserves for contingencies. Unification of chapter and national membership should improve our financial status.

Now, having set forth recommendations for the basic structural change in our organization, I'll proceed with my recommendations for actions by the IRRA, which will strengthen our discipline and at the same time integrate local chapter practitioners into our national association.

I propose that we hold our major annual meeting by ourselves that is, separate from the meetings of other professional associations. I think that the meeting should be three or four days long, including Saturday, and should be held in early summer in an attractive location. Essentially, I would move our current spring meeting to early summer and make its program attractive to both academics and practitioners nationally. Although local chapters will be asked to handle local arrangements and will participate in the development of the program, the national organization will assume the primary role and responsibility for this national meeting.

I believe that our national meeting program should focus on public policy problems and should include formal paper sessions and discussion workshops. We should repudiate the unexpressed but underlying assumption that nonacademics don't have the time to prepare papers and that, if by chance they did, the papers would not meet professional standards. This may have been the case many years ago but is no longer true. If we were to organize sessions on such topics as affirmative action, the Disabilities Act, healthcare cost containment, and sex, race, or age discrimination, we would find that professional staff working for government, management, and unions are equally, if not more, informed about these problems than academics.

In addition to our major summer meeting, we should host a second meeting jointly with another professional association. Rather than meeting annually with the economists and other ASSA affiliates, we should rotate our second meeting, joining the ASSA in some years but arranging to meet in other years with other organizations such as the Academy of Management, the American Sociological Association, the History Association, the Labor Law Section of the American Bar Association, the University and College Labor Education Association and the National Academy of Arbitrators. For some years, David Lewin has advocated and has taken responsibility for organizing joint sessions with such organizations. We should build on those efforts.

I believe that papers which fall into the category of "science building" should be delivered at the meetings held jointly with one of the other professional associations. "Science building" is a term that I have taken from Bruce Kaufman's intriguing manuscript about the rise and decline of the field of industrial relations and the IRRA. For the most part, papers on public policy issues would be presented at our national summer meetings and the "science building" papers at our joint meetings.

We should maintain two advances made in recent years, namely, the competitive paper sessions and the poster sessions. These were designed to open up opportunities for young scholars to present their ideas, and so far as I can determine, are widely regarded as excellent program innovations. Perhaps we can add another session topic or two to the refereed paper competition that we have already established in the areas of organizational behavior, labor markets and collective bargaining. Also, we should continue to advertise these opportunities widely and make sure that the referee process for paper selection continues to be fair.

Another change that I favor is a radical revision of our current publications. I have three objectives in mind—to make some of our publications more attractive to local chapter practitioner members, to raise the quality and prestige of our science building articles, and to keep costs in check.

Costs are increasing rapidly and dissemination of proceedings by electronic communication is almost upon us. I suggest that, instead of publishing our proceedings, we keep the total record on tapes and arrange to publish the best articles and discussions in special issues of leading journals in our field, such as the *Industrial and Labor Relations Review* and *Industrial Relations*.

Inclusion of output from our meetings in prestigious journals would add to scholars' incentive to improve the quality of the submissions. This may require us to modify our rules on length of papers and develop a procedure for joint refereeing. Also, we might select symposium topics, such as health care costs, and request submissions from distinguished scholars working in the area.

We should maintain our relationship with the Labor Law Journal as a publication outlet, but change the material we submit for publication. If we expand the number of competitive paper sessions, as I suggested, and/or no longer limit the length of papers, these might be published in the Labor Law Journal.

One or more of our quarterly newsletters should be changed from the current primarily bulletin board function it serves to include discussions of current employment relations policy issues that will be of interest to practitioners and scholars alike. I have in mind a publication similar to the Industrial Relations Report that Cornell used to publish.

My last change is one that I propose with some trepidation—to change the name of our organization. To young academics, practitioners, and the general public alike, the term "industrial relations" conjures up a vision of blue-collar workers in factories. We know that this is not true, and the founders also knew it was not true when they chose our name at the December 1947 meeting "in the belief that the term 'industrial relations' is rapidly gaining acceptance as the all-inclusive term to denote the entire field." However, times and perceptions have changed and, just as we pioneered a new name in 1947, so also should we demonstrate our flexibility and wisdom today by modifying our name to reflect the changes that are occurring in our field. Personally, I think the name Employment Relations Research Association is appropriate because we are interested in any and all aspects of the employment relationship. Another possible name for our organization would be Industrial Relations and Human Resources Research Association.

The term "human resources" is widely used as the name of a corporation's department that handles such functions as staffing, compensation, fringe benefits, affirmative action, OSHA, antidiscrimination of all sorts, as well as arbitration, negotiations and labor law. Industrial relations is no longer thought of as the all-inclusive term. Therefore, I believe that a name change is in order and suggest to our Executive Board that they ascertain the wishes of our membership and boldly (following the polls) select another one.

Having completed my list of recommended changes in our organization, I turn now to topics that deserve greater attention and about which symposiums can be organized. I have already mentioned Health Care. Papers could include the politics of national health care plans, the macroeconomic effect of rising health care costs, and the relative value of different managed health care plans.

Another topic is changes in the welfare of workers in industrial societies. I am under the impression that in the United States and in many other advanced societies, the real wages of workers have declined in the past 10 or 15 years. The potential decline in family income has been offset in many instances by the greater labor force participation of women. I would like to see a session that clearly identifies the economic trends and their effects on job satisfaction and on the mental health of wage and salary workers.

This last topic was dear to the heart of one of our charter members, Arthur Kornhauser, the distinguished social psychologist who died last year (December 11, 1990). In a letter to his daughter, Ruth Zubrensky, which she passed on to me, and which I will read to you in part, Arthur talked about the mental health of working people. He said that job satisfaction is not an acceptable measure of the overall well being of working people:

Surely, contentment with dull routine jobs does not signify good mental health; indeed the fact that so many employees report themselves satisfied is itself a *negative* indication reflecting dwarfed desires, an absence of goals and lively interests apart from the job.

Now, almost 35 years later, we are talking about job redesign and employee involvement as a means of improving productivity and worker well-being. Is it improving worker mental health? An analysis of whether modern management techniques improve the well-being of workers strikes me as a worthwhile topic.

As a semiretired academic who is expanding his practical dispute resolution activities, I am personally interested in alternative dispute resolution procedures. We in industrial relations have shown little interest in techniques used in other fields, perhaps because they are not applied to employment related problems. It is quite possible that analysis of the procedures used elsewhere will identify techniques that are transferable to our field.

Another understudied element in the dispute resolution area is the use of labor courts or arbitration as a means of providing protection against unfair discharge of workers not covered by collective bargaining agreements. Our 1983 President, Jack Stieber, in his presidential address to this group, raised the question of extending arbitration to cover the discharge of unorganized workers. However, nonlawyer IR academics have not given this topic much thought. Perhaps, we should encourage our lawyer members, such as Ted St. Antoine, who gave our distinguished speaker address, to propose a session at our next meeting on the Uniform Termination Act, which he and others are drafting.²

Since the oracle at Delphi told me to keep it short, I'll conclude my remarks at this point. I recognize that I have been speaking to academics about the need to make our organizations more practitioner friendly but I believe that by doing so, we need not dilute our professional standards. In fact, my suggested revisions of our publications program are designed to enhance our professional prestige.

Let me summarize the changes I have proposed. Membership should be unified for future members so that over the years we will no longer have chapter members who are not members of the national organization, and vice versa. We should hold our major meeting for three or four days in the summer, independent of any of the other professional associations.

Public policy issues should be emphasized at our national meetings and papers submitted by practitioners should compete equally with those submitted by academics. Papers featuring methodological innovations will normally be presented at our joint meetings with other associations. We should expand the number of joint sessions currently conducted with other professional associations and in the next few years rotate our joint meetings among the various professional associations with which we feel some kinship.

We should develop arrangements to publish public policy symposiums in leading academic journals and publish the winners of the competitive paper sessions in the *Labor Law Journal*. We can discontinue the publication of our proceedings, and articles that are not published can be stored and made available electronically.

And, let us not forget to change our name to either the Employment Relations Research Association, the Industrial Relations and Human Resources Research Association, or some other name that correctly identifies our activities and captures the broad scope that our field encompasses.

The agenda I have outlined is not one that will be accomplished overnight, nor do I know whether a majority of you agree with some or all of the changes I have suggested today. Personally, I believe the highest priority should be assigned to holding our main meeting alone in early summer, creating unitary membership for future members of our organization and working with the accrediting agency on behalf of our discipline. I will urge the Executive Board to start immediately on these projects. With their adoption as a start of a series of carefully considered changes, I hope that our organization will continue to grow, to increase in vitality, and to make a contribution to our discipline and to our society.

Endnotes

¹ I wish to acknowledge the comments, criticisms and editorial changes suggested by Lee Hansen, David Johnson and Barbara Dennis—and to absolve them from any blame for the proposals I made.

 2 By the time this address was delivered, the Denver chapter had already arranged a session on this topic for the Spring 1992 meeting, a meeting which will have been held before these proceedings are published. 1 am pleased that progress along the lines I suggest has been made so rapidly.

II. IR IN THE ARTS AND ENTERTAINMENT INDUSTRIES

Introduction

Jack Golodner, Chair AFL-CIO

We are not here to study the stars—performing or otherwise—but to look at labor relations practice in one of the country's most dynamic and successful industries, the arts, entertainment and media industry. By doing so, we avail ourselves of an opportunity to investigate how unions and employers in a mature relationship stretching back many years have managed to cope with issues and problems that are only now beginning to confront other sectors.

Some of these issues concern: (1) the impact of managing organizations that are growing rapidly in size and scope and the consequent entry of governments, here and abroad, as players in the sector; (2) the revolutionary effect of technological changes occurring in an industry which still must produce essentially custom-made products that are dependent on highly unique skills and talents; (3) changing patterns in the management and union representation of a work force which was once fairly stable and bound to each employer but is now comprised almost entirely of contingent workers—parttime, temporary and highly mobile; and (4) the need to constantly and rapidly adapt to changing consumer preferences.

The challenges inherent in these issues are present in varying degrees in all sectors of our economy today. And they pose problems for both management and labor. But in no other sector have these issues arisen with such speed and force as in entertainment and mass media. The manner in which the unions and management in this sector—together and apart—confronted and are continuing to confront these changes holds lessons for us all.

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The Origins of Fragmented Bargaining Power in Entertainment Media Industries

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The fragmentation of what was once a reasonably coherent industrial relations system based in managerial capitalism is among the most significant questions facing analysts of American industrial relations. This fragmentation is manifested in declining labor bargaining power in some industries, decentralization of the bargaining process, and diversification of negotiated employment contracts across and within industries. Not surprisingly, an effective interpretation of why fragmentation is occurring has been hampered by the continued acceptance of central assumptions that underlie the managerial industrial relations tradition. First among these assumptions is the existence of a division of labor in which labor and management are definable entities with distinctive and adversarial interests. Second, it is generally assumed that the interests of union members are representative of all people employed in the occupation or industry the union represents, that is, that unions represent the interests of "labor." This assumption is central, for example, to analyses which posit that unorganized labor may be "free riders" on union negotiated contracts. The third assumption is that collective bargaining is antithetical to individual contract bargaining.

Case studies in a variety of industries, especially service industries employing highly skilled workers, suggest that these assumptions are problematic. In particular, they describe situations in which collective identities and interests are quite diverse and may move across boundaries of "labor" and "management." They also suggest that interests and collective identities are not static but have been reformed over time with changes in the organization of production, the division of labor, and the labor supply.

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A new way of interpreting the fragmentation of industrial relations is presented using the motion picture and television industries as a case. This approach differs from the conventional industrial relations systems approach (Lipsky and Donn, 1987) in some important respects. Drawing from the relatively new field of evolutionary economics (Nelson and Winter, 1982), as well as from the renewed field of economic sociology (Block, 1990), industrial relations in the media industries is analyzed in relation to the development path of these industries. This understanding of industrial relations has much in common with "strategic" approaches to industrial relations (Kochan, Katz and McKersie, 1986). The strategic approaches, however, are consistent with the systems tradition in assuming that the substantive identities (and therefore the interests) of labor and management remain essentially static, that unions represent labor (as opposed to their membership), and that the role of unions is exclusively oriented to collective bargaining. The developments in media entertainment industries belie these basic assumptions.

Since the 1950s the media entertainment industry has developed institutions that enabled individual contract bargaining. And collective bargaining agreements structured individual bargaining rights as well as providing more traditional collective "goods," such as wage floors. The gradual but decisive orientation of labor institutions to the external labor market has contributed to a lack of cohesion among segments of the labor force and bargaining organizations. The ability to take positions that require solidarity has become increasingly problematic as labor market conditions change for one group vis-a-vis another. At the same time both the functional roles and substantive identities of important segments of the labor force have changed over time blurring the boundaries between occupations and between labor and management.

In conjunction with the redefinition of interest and collective identity, distinctly different objectives have emerged both among and within unions and between the organized and unorganized work force, making cross-industry and occupational collective action more difficult to achieve. In the contemporary media entertainment industries, labor strife is as likely to involve internecine battles among segments of labor as actions against management.

To illuminate the sources of fragmentation, labor institutions are examined to show how they adapted to the vertical disintegration of production and employers' demands for flexible labor inputs. The forms of adaptation have contributed to the increasing fragmentation of interests among segments of the work force and, in the contemporary economy, to the reemergence of conflictual industrial relations, albeit in new forms.

Adaptations to the Loosening of Employment Ties

From the 1950s onward, vertical disintegration of the motion picture industry and the organization of production on the market produced a set of concomitant changes in the relationship between workers and firms. The loosening of ties between the work force and the major firms also occurred in television but more slowly and less evenly than in motion pictures. The networks continued to make a large portion of their programs in-house and to use cost efficient series formats. Consequently, they needed a stable work force under longterm employment contracts. In some types of programming, subcontracting to independent producers did increase the use of flexible labor inputs but, in many cases, labor contracts tended to be long term because of the series nature of television programming. By the 1970s the transformation in the motion picture industry was much more complete with the majority of production activities being organized through the subcontracting market rather than within the firm

As the major studios shed labor and subcontracted production, the institutionalized mechanisms that maintained a skilled work force were jeopardized. These included access to health and pension benefits, skill acquisition tied to apprenticeships in firms, and certification of experience and skill. In response, unions created and negotiated for new institutions, which made it possible for these critical functions to be carried on outside the firm and which indirectly enabled the flexible use of labor inputs. These institutional adaptations included the development of a roster system to maintain seniority lines and to certify skill and experience: a health and pension benefit system independent of any particular employer, and a system of supplementary payments, connected to the profit life of the product. These "residual" payments not only established claims to compensation for profits made in ancillary markets but also, very significantly, established a connection between the work to make an entertainment product and property rights in that product.

The roster system established in the 1950s was of critical importance to the development of a form of production organization that used labor inputs flexibly but still required signalling devices to ensure skill and experience. Under the roster system the major studios and independent producers sign contracts with the craft union federation whose members are placed on rosters according to the amount of seniority they have obtained in the industry rather than in a single firm. The major studios supported the development of the roster system in the 1950s because it served as a certification and screening device, thus reducing labor market uncertainty while allowing firms to shed overhead. The craft unions supported the roster system because it allowed them to maintain control of the labor supply and seniority rights.

Another flexibility-driven institution, the Motion Picture Health and Welfare Fund, was also set up in the 1950s by the unions in response to a need to provide benefits to workers hired on limited duration contracts. The system requires employers to pay an amount equal to 12.5 percent of total wages into a health and pension benefits fund administered by the unions for each worker under union contract. This system provided the unions with a new raison detre in the increasingly contractualized industry. It also made individualized employment contracts easier to accomplish. These two successful adaptations to the labor-shedding practices of the large firms worked because they served the interests of the membership of existing labor organizations as well as being in the interest of management. They also shaped the long-term paths of these industries—the choices available to firms as market conditions changed—by making it possible to maintain and reproduce a skilled and specialized labor force without long-term employment contracts. In the tradition of American industrial relations, these adaptations were local and industry specific. They represented the first phase of the contemporary fragmentation of industrial relations strategies; that based in sectoral strategies.

The Second Wave of Fragmentation

As the motion picture and eventually television industries carried out more production on the market, however, a set of broader developments occurred which changed "the rules of the game" for both labor and management and affected the viability of the flexible yet cohesive institutions that had evolved in response to vertical disintegration. These developments gradually transformed the nature of the work process and the culture of these industries. Among these developments were technological changes that made the production processes in television and film more similar to each other, and which allowed much production to take place outside the studio facility. In Los Angeles this meant that the city became, in effect, the "back lot" for productions of all kinds (Christopherson and Storper, 1986). A second important change grew out of the entrepreneurial character of production in a vertically-disintegrated industry. Possibly the most important of the developments to occur in conjunction with the vertical disintegration of production, however, was a dramatic expansion in the size of the labor force. This expansion in labor supply was related to the ability to obtain necessary production skills outside the union apprenticeship system or the firm and to the relative ease of entry into the production side of these industries.

By the mid-1970s what had been a relatively small labor force in motion pictures and allied services began to expand dramatically. While output in 1982 was 63.9 percent of total output in 1958, employment was 237.5 percent of the 1958 total. There was differential growth in union membership during this period with the talent guilds showing explosive growth while the membership in "below-the-line" craft unions remained stable or even showed a decline (Gray and Seeber, 1991). Between the early 1970s and the mid-1980s the Writers Guild grew from 800 to 6000 members and the Screen Actors Guild from 13,000 to 54,000 members (Christopherson and Storper, 1989; Writer's Guild of America, 1989). The membership ranks of talent guilds continued to grow in the late 1980s as exemplified by the Writers Guild membership which grew about 7 percent per year (Writers Guild, 1989).

The composition of the work force and union membership also altered beginning in the mid-1970s. Since talent guilds are inclusive (allowing anyone practicing the occupation to join), their membership statistics are quite good indicators of employment trends in these occupations. Screen and television writing, as is the case with all but a few occupations in the entertainment media, is dominated by white men. Beginning in the late 1970s, however, the gender composition of the occupation began to change. Women accounted for approximately a fourth of the newly admitted members to the Writers Guild each year. In addition there was a small but perceptible increase in the percentage of minority members of this guild. Although minorities constituted between only 2 percent and 3 percent of total membership between 1982 and 1988, and women members increased from 18.8 percent to 21.5 percent from 1982 to 1988, a relatively higher percentage of minority and women members were admitted to Guild membership during this period of rapid expansion in total membership. The spurt in minority and female representation began in the early 1970s, coincident with the vertical disintegration of the

media entertainment industries, and leveled off in the late 1980s (Writers Guild of America, 1989). Although more female writers were employed at the end of the 1980s, the earnings gap between female and male writers had considerably widened. In 1982 women writers earned 73 cents for each dollar earned by white males; by 1987 women were earning just 63 cents for each dollar earned by white males (Writers Guild of America, 1989).

These figures from a Writers Guild study are suggestive of trends in the industry toward labor force expansion and the changing composition of the talent work force beginning in the 1970s. The talent work force became more heterogeneous with respect to gender and (to a much lesser extent) race and access to work and property rights. For example, a split emerged between "writer-producers" with entrepreneurial skills and property rights in the film or tape product and a vastly increased pool of writers with dramatically varying access to work. This heterogeneity is contained within the talent guilds leading to serious differences in interest between segments of the work force whose primary interest is access to work and those whose interests focus on property rights in the form of residual payments.

In contrast with the talent work force, the below-the-line work force remained overwhelmingly dominated by white males. While the labor force expanded, union membership remained static. The work force became more heterogeneous but the major differentiation was between the organized and unorganized segments of the work force. The density of craft union membership fell dramatically in the 1970s and the number of nonunion productions rose from around 50 percent in the 1970s to between 60 percent and 80 percent in 1990. This decline took place during a period when profits in these industries rose dramatically.

Despite the apparent decline in collective bargaining power for all people employed in craft occupations, there were increases in individual bargaining power within the craft union membership. A small but significant portion of the unionized craft work force, particularly in high prestige occupations such as cinematography, was able to use individual contract bargaining to obtain property rights and more lucrative employment contracts. Thus two different patterns of increasing heterogeneity emerged, one of heterogeneity within the occupational unions and the other between an organized and unorganized work force.

As portions of the work force became more heterogeneous and skill acquisition occurred outside the context of union apprenticeships and outside firms with a deep division of labor and clear hierarchies, the culture of production in the industry began to change. Three features of this new culture are especially noteworthy: (1) the breakdown of clear occupational identities and of the boundaries between management and labor, (2) the emergence of collaborative, entrepreneurial production processes, and (3) increasing proprietary attachment to skills and to the entertainment products. The new culture also broke down older forms of solidarity and produced contradictory interests within the work force and even within occupations.

Conclusion

In response to vertical disintegration, unions and employers negotiated a resolution that provided flexibility to employers and protected union bargaining power. These institutions created on the external market a parallel to the institutions which had been embedded in the relationship between labor organizations and large firms. This resolution of the problems of industrial relations in vertically distintegrated industries came out of the experience and expectations of labor and management as they developed in the studio "system" and in network television.

They also took shape in response to the particular regulatory environment in the United States. These adaptations were local and industry specific. Another set of alternatives, another path, would have been followed where a national labor movement or national labor laws constrained the prerogatives of firms and imposed a measure of consistency across industries, firms, and places. The idiosyncracy of responses to sectoral transformation is the primary basis for fragmentation in U.S. industrial relations.

The second level of fragmentation is attributable to heterogeneity of opportunity and interest within the work force. The flexible institutional innovations designed by the unions of the 1950s worked in an industry in which production was carried out primarily by large firms, that is until the early 1970s. They began to come apart with increased vertical disintegration of production in the motion picture industry and television production in the 1970s and into the 1980s. The industrial relations system that had emerged in response to vertical disintegration was undermined by the inability of unions to control the labor supply. This failure was a consequence of: (1) the demand for new skills, both technical and entrepreneurial, outside traditional occupational definitions; (2) the development of alternative training

programs outside union control and jurisdiction, and (3) labor market pressure created by large numbers of labor force entrants with skills obtained outside the union context.

Finally, there has been a continual fragmentation of interests among differently positioned segments of the work force because of the diversification of working conditions, types of employment contracts (union and nonunion) and along the lines of race, gender and age. The homogeneity that underlay the solidarity of the pre-1970s work force has been broken and, along with it, particular definitions of collective interest.

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Bases of Member Attachment to Unions in Arts and Entertainment

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In this paper we suggest the strategically important variables that aid the unions listed in Table 1 to maintain membership support and that underpin their ability to be effective in their representational function. This analysis will not apply in equal measure to every union and guild, but we believe that it addresses the situation in arts and entertainment as a whole. Although we join arts and entertainment for purposes of this paper, there exist important underlying differences. The arts, for example, include the notion of creating art for art's sake, in contrast to the largely commercial objectives of the entertainment sector. Yet, there also exist many points of overlap. Both sectors draw from the same talent pool, and many of the professionals and craftspersons cross between the two sectors in their struggle to earn a living and gain the professional recognition that can ensure a secure future. In both sectors, average income is low and unemployment is high, notwithstanding the public perception of these industries. The bulk of arts and entertainment activity is impermanent and underfunded, and employment relationships are temporary and project oriented.

There are no published studies that document membership trends of arts and entertainment unions. Any attempt to do so must deal with the fact that many individuals belong to more than one union and that these unions are characterized by multiple membership categories. Our own research indicates that between 1970 and 1988 the proportion of union members increased, although not every union shared in this growth. Unions in the performing arts—theater, dance, symphony, opera—mostly originated as part of the general expansion of craft unionism during the period of their formation (see Table 1). Although no definitive historical studies have been done, we can assume that

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they formed for many of the same reasons, dismal working conditions and arbitrary treatment, that prompted unionization of other crafts. In entertainment—defined here as encompassing mainly broadcasting, motion picture, and television production—unions came later, following closely on the emergence of the requisite technologies. There is no significant occupational group—professional or craft—in arts and entertainment that has not been touched by a union, a guild or, at the very least, a nonbargaining quasi-union. The organizing impetus and present-day leadership for most of the unions come from the elites within the covered occupations. Although most of the unions fall under national jurisdiction, in practice, they adapt union rules and methods to the circumstances of particular occupational specialities and geographic areas.

Our working hypothesis is that employee attachment to unionism and union effectiveness in arts and entertainment rest on the institutionalization of certain strategic practices and concepts that (1) respond to practical needs of employees, (2) generate interdependence between unions and employers, and (3) serve to sustain the arts and entertainment industries as a whole. We suggest that the unions' ability to maintain membership support and ensure their own effectiveness in the industry primarily results from their activities in respect to the issues of (1) compensation arrangements, (2) cooperation in bargaining, (3) career protection, and (4) contingent membership.

Miles (1989) uses the term "new age business unionism" to refer to a system of industrial relations that can deal with the challenges emerging from contemporary systems of production. Among the characteristics Miles lists as hallmarks of successful unionism in the 21st century are geographically based unions, wage bargaining that focuses on obtaining a reasonable minimum wage, and fringe benefits that unions negotiate directly with benefit providers. Unions would work to cushion the effects of labor turnover by making benefits portable across jobs and by providing relocation loans, housing assistance, and retraining. Insofar as several of these features have been developing in arts and entertainment unions over the past three or four decades, we suggest that labor relations in the arts and entertainment industries are a forerunner of the sort of system Miles envisions.

In addition, the unions in arts and entertainment have responded creatively to many of the conditions suggested in an AFL-CIO report by the Committee on the Evolution of Work (1985) as root causes for decline of employee interest in unionism and deterioration of the

TABLE 1			
The Core Unions in Arts and Entertainment			

Core Unions	Primary Jurisdiction	1970	Membership [•] 1988
Above-The-Line Unions: Professionals/Performers			
American Federation of Television and Radio Artists (AFTRA/1937)	Performers in live and taped radio and television	24,000	63,000
Actors' Equity Association (Equity/1913)	Performers and stage managers in live theater	15,000	37,000
The American Federation of Musicians (AFM/1896)	Live and recorded performers on musical instruments and live vocalists who sing in nightclubs	300,000	209,088
American Guild of Musical Artists (ACMA/1936)	Live performances of opera, dance and choral music	3,500	5,600
American Guild of Variety Artists (AGVA/1939)	Variety artists in musical and industrial shows, ice capades, cabaret, theme parks, travelling shows, and night-clubs	3,012	5,500
Directors Guild of America (DCA/1959)	Directors, assistant directors, unit production managers in films and in live and taped television	3,650	8,680
Screen Actors Guild (SAC/1933)	Individuals whose performances are recorded on film and all performers in made-for television films and music videos	25,000	69,000
Writers Guild of America-East (WGA-East/1954)	Radio, television and film writers who live east of the Mississippi	1,500	3,030
Writers Guild of America-West (WGA-West/1954)	Radio, television and film writers who live west of the Mississippi	2,846	6,200

The Core Unions in Arts and Entertainment			
Core Unions	Primary Jurisdiction	Membe 1970	rship° 1988
Below-The-Line Unions: Craft and Technicians			
International Alliance of Theatrical and Stage Employees & Motion Picture Machine Operators (IATSE/1893)	Support personnel in film, television, theater, and other live performances, including concerts	63,000	60,000
National Association of Broadcast Employees and Technicians (NABET/1933)	Technical and related personnel in radio and television broadcasting, video and sound recording, and film	8,640	12,000

TABLE 1—(Continued)

• Membership figures were obtained directly from the unions, and wherever possible checked against studies conducted by government or private research agencies. For additional details, please contact the senior author.

union role. The generally favorable appraisal that we give to these unions does not derive from evidence that these unions are powerful in the traditional sense of exercising control over work rules and job opportunities, or from their having negotiated pattern setting salary rates for their members. Perhaps two or three of the unions in Table 1, SAC for example, might fit the definition of a powerful union in its jurisdiction. Unions in arts and entertainment are effective, relevant, and valued by the workers in the industry without being powerful in the sense of being able to impose their will on employers through strikes.

The industry leadership in arts and entertainment that guides relations with unions may be portrayed as a set of concentric circles. In the center stand the major employers (major studios in film and TV, Broadway producers in the theater, etc.), companies whose economic success and artistic leadership make them the leaders of the industry. Although the composition of the inner core changes over time because of mergers and takeovers, it remains remarkably stable in terms of size and the percentage of artistic or entertainment product. These core organizations dominate the industry trade associations and negotiate the collective contracts that set the pattern for the industry. Although contract negotiations may be contentious, the major employers accept the unions as an integral part of the industry governance structure.

The core employers and the unions negotiate collective agreements that articulate the basic standards; these contracts that provide a significant role for unions in both scope and depth of participation in decision making. At the same time, the unions realize that they must adjust the industry standards as they interact with the many marginal producers in this industry. The unions, in turn, devote substantial energy and resources to dealing with disputes involving these fringe operators and use the experience to impress on their members the value of a union to ensure employer adherence to minimum employment standards. Out of this practice come such things as agreements which tie compensation at least in part to the size of the employer's budget, or to the number of seats in a theater, variances that are proxies for ability to pay. It means that workers in marginal organizations may receive reduced wages, but at least they retain health insurance and the marginal producers are prevented from going into bankruptcy.

The unions in Table 1 have a finely honed responsibility toward their members. They were established to deal with real work problems and that has remained their preoccupation. In their early days the unions were preoccupied with jurisdictional issues and with gaining basic protections for members: health and medical protection, grievance procedures, job security. These bread and butter concerns have remained core functions. After basic protections were obtained, the unions representing professional employees quickly sought ways to deal with such concerns as creative control over product, opportunities for professional growth, and protection from over or abusive exposure.

While devoting their attention to solving practical membership problems, the unions have not shied away from entering into arrangements that link their interests and those of management. This interdependence is not synonymous with such fashionable terms as unionmanagement cooperation, win-win bargaining, and the like. Strikes and conflict, as well as cooperation and harmony, have been hallmarks in most segments of arts and entertainment. By interdependence we mean that there exists a web of relationships and governance activity between unions and employers that would make it difficult for major employers to function at all without the union as an active participant. Although this role is not performed to an equally important degree by every union in Table 1, it is characteristic of unionism in arts and entertainment as a whole. It can be seen in such activities as administration of compensation, the audition and casting process, the roster system, merging of the employee and managerial roles (e.g., the dancer who is also the choreographer; the actor who is also the producer or director; and the role of agents in individual contract negotiations). Compared with many other industries, the traditional union-management divisions have become blurred.

Much of the arts industry—as distinct from entertainment, which is predominantly commercial—operates in the nonprofit and public sectors. In the nonprofit arts, a constant problem for employers and unions alike is the income gap made famous by the pioneering studies of Baumol and Bowen (1966) and the shifting and uncertain role of government, and foundation support. The unions join in common cause with employers to expand the volume of arts activities, and in that way expand the revenue base. In the commercial sectors, changing technology and keeping American entertainment product dominant in the global market are key contemporary challenges for the unions and employers.

By and large the unions no longer fight new technology; they seek to gain a share of the revenue for their members from expanded markets made possible by technology. Unions and employers cooperate in such areas as popularizing arts and entertainment through trade shows, honors, awards, and the like. They also cooperate in education and programs to promote marketing. The trust fund pioneered by the American Federation of Musicians provides paid job opportunities for musicians, but it also enlarges the public appreciation of the classical arts and in that way expands the opportunities for paid employment.

Institutionalization of Practices and Concepts

Arts and entertainment generate an extraordinarily diverse range of economic circumstances and organizational product that shape the structure and behavior of the unions. Table 2 summarizes the institutionalized effects of the strategies unions have adopted in four areas. They help to keep each generation of new entrants into the labor force committed to unionism, generate interdependence with the employers, and promote industry growth.

Compensation

Negotiated pay packages are complex and tailored to the specific circumstances of relatively small categories of workers. They suggest a deliberate attempt to shape compensation arrangements to the needs of a diverse membership in a decentralized industry structure. Each union has its philosophy of compensation. We can illustrate their overall thrust by examining the entertainment industry pay arrangements which the Alliance of Motion Picture and Television Producers negotiates with the DGA, WGA, SAG, and IATSE. A threetiered compensation system operates to provide a basic minimum pay rate; a framework for negotiation of personal services contracts; and an industry-wide system of supplemental payments, i.e., residuals.

At the center of every basic agreement is a schedule of minimum compensation rates. Generally speaking, once a worker has been hired, payment of the minimum compensation is not contingent on the quality of his or her contribution, or on the success of the final product in the marketplace. This is part of the front-end money that all producers must have available. Most below-the-line workers are paid at the minimum wage rates, which constitute the industry's standard "union scale." For the above-the-line workers, however, only the entry-level workers receive the minimum scale.

Personal service contracts between individual artists and employers recognize that certain individuals have market value greater than the collectively defined standards even though their productivity depends on the collaborative efforts of their coworkers (Jones, 1991). The negotiation of personal service contracts is the highly practiced domain of the artists' agents and producers' attorneys. It is the ultimate symbol of having made it in the industry, and the details are highly individualized.

Personal service contract provisions take three main forms. First, a fixed compensation element typically replaces the basic agreement's minimum rates with rates that reflect the worker's higher market value. Second, producers frequently must also offer contingent compensation, usually in the form of a percentage of net profits, gross receipts, merchandise sales, and the like, or as a promise to hire the worker in a similar capacity for any sequels. Perquisites are a third form of compensation. These most commonly take the form of "location amenities," such as special travel and housing provisions when working away from the studio.

The third element in this three-tiered compensation system is residual compensation. Residuals are additional payments to workers for the exhibition of an entertainment product in a medium other than the one for which it was originally created, or for its reuse within the same medium. Residuals (also known as "reuse fees," "new use fees," "rovalties," or "supplemental contributions") became a major bargaining issue in the 1950s, when commercial television created the possibility for the transfer of theatrical motion pictures to a new medium. While television offered producers a new market for the sale of existing products, workers viewed the transfer of existing entertainment products as an alternative to the production of new material and contemplated a potential loss of employment opportunities. Actors also feared that widespread reuse of their images would devalue those images in the public eye and so reduce demand for their individual talents. Similar arguments have been advanced with each new technological advance (such as cable television or videocassette).

The unions have two fundamental objectives in bargaining over residuals: (1) to obtain residual payments for each new market into which entertainment products are transferred, and (2) to obtain the most generous compensation possible for that transfer. But negotiating the residual entitlements is just the beginning of the unions' involvement—they also assume the major responsibility for administering the highly complex residual payment provisions, including researching, auditing, and enforcing payments by producers inclined to defraud workers. The complaints of some employers that residuals constitute an attack on private property rights and an unacceptable incursion into

Bases of Member Attachment	Respond to Practical Needs of Members	Promote Union-Management Interdependence	Sustain Arts and Entertainment as a Whole
Union Concepts and Practices			
Compensation	-Basic minimum wages -Portable benefits -Pay augmentation through individual bargaining	-Joint administration of compensation system	-Waivers for marginal producers -Performance trust funds -Pay tied to product revenues
Cooperation in bargaining	-Ad hoc resolution of work problems	-Peer relationship and shared governance	-Joint union-employer programs to address threats to productivity
	-Reciprocity agreements	-Generous use of sidebar agreements to accommodate special cases	and competitiveness -Educational and research programs
		-Full financial disclosure	-Expand industry revenue base

TABLE 2
Effects of Union Concepts and Practices on Member Attachment

Effects of Union Concepts and Practices on Member Attachment			
Bases of Member Attachment Union Concepts and Practices	Respond to Practical Needs of Members	Promote Union-Management Interdependence	Sustain Arts and Entertainment as a Whole
Career protection	 Protection of creative and intellectual property Talent development and showcasing Protection of creative standards Bundling of talent 	 Apprenticeship programs Encouragement of "hyphenation" Tenure and peer review committees Adherence to labor standards (e.g., education of child actors) Credit committees 	 -Honors and awards to highlight achievements -Waiver of union rules for benefit performances (e.g., comic relief) -Affirmative action programs and research
Con ting ent membership	-"Honorable withdrawal" -Multiple union memberships -Dues based on earnings		-Student memberships

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TABLE 2—(Continued)

managerial prerogatives are muted by the reality that the industry has lived with and thrived on residuals for almost 40 years.

Examination of the compensation arrangements negotiated by the entertainment unions leaves little doubt that, despite their elitist pretensions, they are as oriented toward the bread-and-butter issues as any AFL-CIO affiliate. What distinguishes them is that they have seized the opportunity to enlarge the parameters of bargaining over pay and have been willing to share in the risks of the entertainment industry by not requiring all compensation to be loaded at the front end. Union members invest substantial personal capital in the products they create and, like other professionals, they want to participate in the economic gains that are the fruits of their labor.

Cooperation in Bargaining

Unions in arts and entertainment are seldom in a position to use the strike weapon effectively, but this has not kept them from being successful in the union-management relationship. They cooperate among themselves to gain leverage in their individual bargaining with employers and to deal with problems that transcend the capacity of a single union to deal with effectively. The Department of Professional Employees (DPE) has made notable contributions in these regards.

Sharing in the gains of new technology provides a case in point of how cooperation has served the interests of both employers and employees. Instead of merely fighting over the distribution of additional revenue sources created by the technology, unions and employers, with considerable assistance from the DPE, are jointly addressing the problem of misappropriation of technology made possible by the vastly increased capacity to copy valuable TV programs and prerecorded videocassette tapes. The industry as a whole loses many millions of dollars annually through uncompensated copying. Accordingly, if unions tried to make up for reduced incomes and lost opportunities simply by gaining concessions from employers, they would meet with strong resistance from an industry also deprived of its rightful revenues. Unions and employers, therefore, have joined together to uncover and police this unauthorized infringement and to lobby Congress for protective legislation. Although the DPE does not engage directly in collective bargaining, its communications, research, and advisory roles serve to a considerable extent as an augmentation of individual union bargaining and supplement it on matters that concern arts and entertainment as a whole.

A distinctive feature of the arts is that most of the performing groups are nonprofit organizations. In this sector, and in public sector arts organizations as well, it is not always clear who the real, ultimate management is (Faine, 1986). Increasingly it is necessary for unions and management in the nonprofit arts sector to cooperatively approach boards of directors or other ultimate funding sources to conclude contracts that the principal negotiators, because of shared experiences and artistic values, are able to agree on but cannot fund. In a sense it puts management and labor on the same side of the bargaining table. In the commercial sectors of arts and entertainment there is also growing evidence of increased cooperation between unions and major employers in bargaining, not because there is uncertainty about where ultimate management authority resides, but because of foreign competition and the proliferation of operators who wish to remain nonunion.

Career Protection

Few individuals in arts and entertainment spend an entire career within the industry; even fewer devote an entire career to a single organization. (Exceptions would be such professionals as symphony musicians and museum curators.) In many respects the union is the most durable attachment that members have to the industry. It was not always so. For example, until about 1950, the film industry followed a mass production method with most employees—top to bottom under contract to a single studio.

Career patterns for above- and below-the-line workers have many similarities. Above-the-line workers are characterized by a highly developed professional identity as performers, directors, writers, and so on. And the notion of craft is still deeply imbedded in the belowthe-line workers. The casual nature of the labor market for most jobs in arts and entertainment focuses the attention of unions on career development. It is quite common, for example in commercial theater, for organizations to be formed to produce a particular play or to make a particular film or video. They often disband as soon as the play closes or business associated with production is completed. Jobs tend to be of an ad hoc and short-term nature. Performers and supportive personnel rarely work for the same organization for an extended period of time. The constant changing of jobs places employees in a vulnerable position.

Thus unions, in collaboration with employers, have assumed responsibility for providing a broad range of services to members that protects them against various hazards of the labor market and enhances their attachment to the union and to the industry: job referrals, assistance in establishing eligibility for unemployment insurance or other benefits, transitional loan fund programs, job placement activity including auditions, training programs, and so on. For many of these reasons, as Moskow (1970, p. 68) has pointed out, "... most unions in the performing arts rarely try to organize new members; instead the potential member seeks out the union." Unions have all adopted programs to encourage access of newcomers to gain experience, and for the exceptionally talented to move to the head of the line when the most desirable work opportunities are handed out.

Contingent Union Membership

In industries characterized by frequent shifts in the volume and type of employment, unions cannot be credible representatives of worker interests unless they can facilitate workers' mobility within the labor force. The unions representing stage, screen, and television workers have developed several institutions and practices toward this end.

Chief among these is a dues structure where payments are indexed to income. Dues for DGA and WGA members, for example, are levied as a flat percentage of their annual income from union-covered employment (between 1 and 1.5 percent). In practice, this leaves the cost of union activity to be borne mainly by the cadre of successful workers, imposing only a small burden on the many marginal workers. All of the unions also have simplified the procedures for "honorable withdrawal" of membership, which allows suddenly unemployed workers to pay nominal or no dues until they are rehired, at which point the full rights and obligations of union membership may be automatically reinstated. The AFM also has a membership category for music students which allows neophytes to begin their working careers under the union banner, and the DGA has a mentoring program aimed at film school students. This system responds to the practical needs of employees for a dues structure that fluctuates with their employment fortunes.

The fact that many creative workers seek employment in a variety of venues and even in a variety of positions engenders another set of institutions and practices that generates significant union-employer interdependence. Because many workers hold membership in more than one union (Ruttenberg et al., 1980), the unions and employers must cooperate to determine which contract and working rules will be administered and by which union: this has even led to joint collective bargaining in the case of SAG and AFTRA for television actors. Also, the various guilds must cooperate to apportion dues for workers who perform multiple tasks on a project.

Finally, the pension funds and health and welfare funds are managed such that interruptions of employment are treated liberally with respect to vesting and benefit eligibility. Moreover, unemployed workers' access to health insurance is guaranteed through selfpayment provisions that are written into the collective bargaining agreement. This contributes to the overall vitality of the arts and entertainment sector as a whole by promoting a healthy work force and by encouraging workers to continue seeking even marginal employment as a way of renewing their vestment in the special benefit funds

In sum, unions in arts and entertainment have learned that serving the practical day-to-day interests of their members and maintaining member support are enhanced when they and the employers have a strong joint governance system, and when both parties view their own interests as closely linked to the well-being of the arts and entertainment industry as a whole.

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New Collective Bargaining Strategies for the 1990s: Lessons from the Motion Picture Industry

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The motion picture industry is perhaps the most heavily unionized industry in the United States today. Laborers, carpenters, electricians, drivers, technicians, sound mixers, cinematographers, art directors, editors, actors, writers, and directors are represented by unions and guilds and are covered by industry-wide collective bargaining agreements.

Likewise, the motion picture industry has the most extensive history of collective bargaining on an institutionalized basis dating back to the '30s and '40s. In light of the extent and duration of its collective bargaining history, the motion picture industry can certainly be said to provide a laboratory environment for techniques of collective bargaining.

From time to time, the industry has experienced its share of disruptions and major strikes. Like other industries, the motion picture industry had its share of organizational and jurisdictional strikes in the early days when unions were fighting for representation and jurisdiction. Those strikes were ultimately settled in the '40s with the emergence of the International Alliance of Theatrical Stage Employces (IATSE) as the collective bargaining representative for most of the crafts and technicians employed on motion picture productions. The IATSE contracts were later extended to television programs produced by the motion picture studios (as distinguished from the networks).

Perhaps the most notable of those strikes occurred in 1960 when both the writers and actors engaged in strikes that shut down the industry. One important result of the 1960 strikes was the establishment of industry-wide pension plans that gave a predominantly freelance work force the ability to work for several employers in a

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given year and yet qualify for pension benefits based upon all of those earnings.

The impetus for finding new strategies for collective bargaining occurred in the 1980s. In 1980 and 1981, the industry experienced three major strikes—first, by the actors, followed by the musicians and finally the writers. For a period of almost a year the industry had to deal with a strike by a major guild representing employees industrywide.

One important result of those strikes was the formation by management of a new collective bargaining association, the Alliance of Motion Picture and Television Producers (AMPTP). The alliance was formed as a trade association in 1982 for the express purpose of unifying the major studios and independent producers in their approaches to collective bargaining. Management felt that unification would strengthen its hand, thereby making strikes less likely in the future.

The lack of unity in the preceding decade had certainly hurt the industry in reaching contract settlements. At one point in the mid- to late '70s, there were two "competing" industry groups bargaining with the same unions at the same time. One group was headed by the Association of Motion Picture & Television Producers, which represented Twentieth Century-Fox Film Corp., Warner Bros., Columbia Pictures Industries, Metro-Goldwyn-Mayer Film Co., and Walt Disney Productions. The other group, "the Alliance," was comprised of companies that had formerly been a part of the association, but who had split off in the mid-1970s as a result of disagreements over bargaining strategies. (Universal City Studios, Lorimar Productions, Paramount Pictures Corp. and MTM were among the companies in the latter group.) Since the two groups' bargaining objectives were neither identical nor coordinated, the guilds found themselves in the happy position of securing different concessions from the two groups and then returning to each group to seek agreement on the concession the other had made. This proved to be a successful bargaining strategy for the guilds. since neither of the industry groups was in a position to refuse to grant a concession made by the other for fear that the group that refused would be struck while the other group reached an agreement that enabled it to continue production of motion pictures.

By the time the negotiations with the Screen Actors Guild commenced in 1980 the association had been further fractured. Both Disney and MGM had withdrawn from the association after the 1978 negotiations with the Directors Guild of America. Thus when the industry appeared at the bargaining table in 1980 and 1981, it did so on a coordinated basis but with no commitment to unity by the various companies.

The notion that sparked the creation of the alliance-that unification would strengthen the industry and make strikes less likely-turned out to be valid at least until 1988.¹ In retrospect 1988 will be viewed as the turning point leading to new approaches to collective bargaining in the motion picture industry. More than six months of that year were consumed by strikes, first, by the Writers Guild from March until August and then by the Teamsters and other basic crafts unions during the month of October. Needless to say, the damage from these strikes was felt both inside and outside the industry, not only by those directly involved, but by others who suffered lost employment or whose projects were abandoned because of the strike. The loss of income and contributions to pension and health plans was enormous. A multitude of small businesses that supply materials and goods to the major studios also suffered and some have never recovered. The networks were forced to delay the start of their fall season. While there were other contributing factors. the delay in the fall season and more reruns certainly added to the decline in the audience watching network programs.

Those strikes thus became the catalyst for new laboratory experiments for collective bargaining in the motion picture industry.

New (and Some Old) Approaches to Collective Bargaining in the Motion Picture Industry

Early Warning Bargaining

Negotiations well in advance of the contract expiration dates have resulted in peaceful settlements for all of the industry-wide collective bargaining agreements negotiated in the motion picture industry since 1988. The agreements covering the technicians and crafts represented by the IATSE and basic craft unions were settled two months in advance of their respective expiration dates. The agreements with the actors and directors were reached five months in advance and the agreement with the Writers Guild was reached over a year in advance of the expiration date.²

These early settlements were caused by two main factors. First, labor and management representatives on both sides of the table recognized the need for continuity of production and the irreparable damage that could result from more strikes in the industry. The second main cause for these early settlements may be unique to the motion picture industry, but its underlying premise has application to other industries. This is the phenomenon which has become known as the "de facto strike" and which results from the lead time necessary to avoid exposing a motion picture production to a shutdown due to a strike. The work required to plan and produce a motion picture takes about five months from the start of preproduction to the end of photography.³ Thus when the industry is facing a June 30th contract expiration date, the decision whether to commence preproduction must be made in February. Since producers are not willing to risk a shutdown of a \$20,000,000 or \$30,000,000 production, production starts grinding to a halt in March unless a settlement is reached prior to that time.

Obviously, a production slowdown or even the prospect of a slowdown provides a powerful incentive for the parties to reach an early agreement. While this might appear to be unique to the motion picture industry given the high stakes that are involved, the principle would seem to have application to other industries where prestrike planning takes place as part of the bargaining process. An early agreement also avoids the costs attendant to prestrike planning as well as disruptions or rushes in the normal flow of production.

The key element needed for an early contract resolution is to convince both sides that the cost of prestrike planning can be avoided with early warning bargaining. This also avoids "eleventh hour" bargaining mistakes and failure to obtain a meeting of the minds on all points, which often result when confronted with a last-minute strike deadline.

Cooperative Committees

Labor-management cooperative committees have long been recognized as a valuable tool in fostering better understandings between the bargaining participants, which can pave the way to peaceful settlements at contract expiration time. The idea is that differences over the interpretation or application of the contract can be resolved or compromised in a forum where the parties candidly discuss their problems with the other side's position. In the motion picture industry these committees were established many years ago but had fallen into disuse. At least part of the reason was the fact that the AMPTP represents a group of many different employers with many different interests and concerns.⁴ Thus, not all of them may be willing to compromise a given point in midterm of a collective bargaining agreement. Similarly on the union side, the interests are often disparate and fragmented. For example, the IATSE, which represents the various craftspersons and technicians who are employed on movie and television production crews, has 23 different local unions in Los Angeles alone. There are separate locals for highly-skilled positions such as cinematographers, editors, and sound mixers, along with separate locals representing traditional crafts such as carpenters and electricians. Biannual election of business agents can also be a political impediment to the effectiveness of cooperative committees.

Even so, the AMPTP and the IATSE have found that an expanded version of the old cooperative committee system can work even in a multiemployer, multilocal union context. Patterned after the successful CBS and IBEW model, AMPTP company representatives and representatives of the international and local unions of the IATSE meet on a quarterly basis to discuss issues of mutual concern. Each side makes presentations as to matters that affect the industry such as the economic state of the business, status and changes in the industry-wide pension and health plans, and new contracts and organizing efforts by the IATSE.

As a result of the last round of negotiations, the subject matter for these quarterly meetings has been expanded to include issues that were raised in the collective bargaining negotiations and then deferred to the quarterly meetings. Rather than reaching potential loggerheads at the bargaining table, the parties decided to discuss these issues further in the cooperative committee context. As a result, changes in past practice satisfactory to both sides were achieved as a result of rational discussion as distinguished from the demands and posturing of collective bargaining.

Beyond Cooperative Committees to Contract Adjustments

As mentioned above, the Writers Guild and the AMPTP have agreed to an extension of the 1988 Guild Agreement to May 1, 1995. This historic contract extension was agreed to more than a year in advance of the contract expiration date. (See endnote 2.)

The primary ingredient that allowed for this unique extension was an alternative bargaining technique proposed by the Writers Guild. This proposal, which was embraced by the AMPTP, established a Contract Adjustment Committee that provides an alternative forum for bargaining during the term of the agreement without the threat of either a strike or lockout hanging over the parties. To ensure that the Contract Adjustment Committee will work, the parties agreed upon several procedural mandates. First, the committee, which is comprised of representatives of the guild and the companies, is required to meet to discuss amendments to the contract each year of the agreement. Each side is required to bring at least two proposals to the committee meetings. Target dates are established for the purpose of completing committee deliberations. Any amendments agreed upon by the committee are subject to ratification by the membership of the guild.

The underlying theory for the workings of the committee is akin to win-win bargaining. Each side presents its proposals outside of the normal rhetoric and posturing of collective bargaining. The proposals are handled as discussion items and are backed by rational arguments as to the need for the changes sought. The other side is then compelled to deal with the facts as presented and respond accordingly.

The first step is to determine where there are any solutions that will benefit both sides. If only one side stands to benefit, it is then determined whether the basis for the proposed change is so meritorious as to warrant agreement without any *quid pro quo*. Realistically speaking, given the mature bargaining agreement that the parties are addressing, this is likely to be a rare event.

Nevertheless, it is in this mutual problem-solving context that other alternatives are pursued and possible trade-offs are discussed. Thus, the relative merit of the proposals becomes the measuring stick rather than the relative strength or power of the bargaining parties.

As of this writing, the AMPTP-WGA Contract Adjustment Committee deliberations are ongoing with a target date for agreement on this year's issues of May 1, 1992. While it is premature to predict the ultimate outcome of those deliberations, it is clear thus far that the parties are making a sincere effort to address the issues on the merits rather than on the basis of bargaining strength, actual or perceived, of either side. At a minimum, a better understanding as to the needs and concerns of the respective parties will be achieved.

Conclusion

The seminal lesson is that the losses inflicted on all parties by strikes and lockouts can never be recouped and therefore practitioners must find alternatives that preserve the integrity of the bargaining process and achieve agreements by mutual consent. The suggestions described above are designed for that purpose. They are presented here to stimulate further exploration and innovative solutions.

Endnotes

¹ Between 1982 and 1988, the AMPTP negotiated over 150 industry-wide collective bargaining agreements without any major disruptions. During that period there were only two strikes of limited duration (two weeks): one by the Writers Guild in 1985 and the other by the Screen Extras Guild in 1987.

² The AMPTP-WGA Agreement that settled the 1988 strike was not scheduled to expire until May 1, 1992. In December of 1990 the bargaining parties reached agreement to extend that contract until May 1, 1995. That extension agreement was overwhelmingly ratified by members of the WGA in March of 1991.

³ Preproduction work on a theatrical motion picture generally starts with the hiring of the director and includes breakdown of the script, casting sessions, hiring the principal and supporting cast, scouting locations for shooting and selecting the crew. The preproduction phase usually takes one to two months; principal photography takes on average about three months.

⁴ Besides the dichotomy between theatrical motion pictures and television programs, there are variations in the type of entertainment programs that are produced for television. For example, producing a comedy-variety show such as "Saturday Night Live" is substantially different from producing a dramatic program such as "The Commish" or "The Trials of Rosie O'Neill." Production has also expanded into many new markets, including basic cable, pay television, foreign television outlets and videocassettes.

DISCUSSION

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Despite the importance and visibility of arts and entertainment, surprisingly little is known about labor relations in these industries, outside their inner circles, and little has been written or published. One of the reasons for this neglect is implicit in the question that Susan Christopherson raises in a footnote, "Is the AEEM industry *sui generis* or does it have enough in common with other sectors to have something to tell us about industrial relations in the economy as a whole?" Does what happens in arts and entertainment (AE) really matter to the ILR field?

Members of our panel answer this question in the affirmative. Each believes that AE experience has something to teach us, but they differ about what the lessons are. To begin with, panel members have divergent viewpoints on the climate of labor-management relationships-whether the trend is toward conflict or cooperation. Archie Kleingartner and Alan Paul contend that one of the key attributes of unions in AE is their cooperative, interdependent relationship with employers and their continuing support for the welfare of their industries. Susan Christopherson, in contrast, sees conflict as unions decline in power in response to adversarial organizational pressures from increasingly powerful employers. While Nick Counter acknowledges a recent history of conflict, with strikes on the rise in the 1980s running counter to the national trend, he assures us that the parties have learned from this experience to avoid the attendant risks and are currently moving toward consultative win-win strategies toward their mutual advantage. Professors Kleingartner and Paul point to AE unions as prototypes for "new age business unionism"-models whose practices could revitalize the role of unions in our society by surmounting many of the problems which are leading to decline in other sectors of the labor movement. Christopherson, on the other hand, sees growing

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fragmentation in the AE work force and declining solidarity among the unions. These contrasting descriptions of the same industry remind us of the classic parable of the blind men and the elephant. Each reflects a different perspective-Kleingartner and Paul judge by results-high union density and continuing growth: Christopherson focuses on the threatening direction of changes in demographics and organization, and Counter is pleased with progress in the process of settling labor-management disputes. In addition, these comparisons reflect the hazards of generalization about the complex set of players in arts and entertainment, players who differ among themselves almost as much as they differ from unions and employers in other sectors of the economy. While AE employers have such common characteristics as growth, risk, globalization, overlapping markets, and increasingly interrelated ownership, they have many competing interests as well. AE unions are even more heterogeneous, with structures varying from industrial (i.e., the National Association of Broadcast Employees and Technicians, which organizes wall to wall) to crafts (i.e., Screen Actors Guild, which represents only the performers in films, and the International Association of Theatrical and Stage Employees, which is segmented into locals with narrowly defined jurisdictions). Some unions are centralized in jurisdiction and bargain on a national basis: others negotiate locally and sometimes conflict even with the bargaining strategies and objectives of other locals in the same international and the same work jurisdiction (as evidenced in the shutdown of the New York film industry last year when the New York City camera locals refused to accept the bargaining settlement that had been agreed to by their IA counterparts on the West Coast).

AE unions also differ dramatically in practices and policies that impact on labor-management relations outcomes. While most talent unions have accepted the introduction of new technology and concentrated their efforts on achieving a share of the revenue, the American Federation of Musicians and the unions representing crafts and technicians have mostly resisted changes that threaten their jobs. Thus, the picture drawn by Kleingartner and Paul is primarily based on talent unions which are expanding and prospering in this era of rapid technological and organizational change, while Christopherson's more pessimistic view reflects the negative experience of craft and technical unions that are losing membership and bargaining power as a result of these same forces. Needed are in-depth studies of each of the sectors, and an interchange of experience and viewpoints concerning these industries which are so important to our national economy. These papers constitute an important contribution toward this objective.

III. GENDER DIFFERENCES IN EMPLOYMENT OPPORTUNITY: OCCUPATIONS, PROMOTIONS, AND POSITION CONTENT

The Relative Attractiveness Theory of Gender Segregation: The Case of Physicians

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The usual "person-on-the-street" or even "social scientist-on-thestreet" explanation of gender segregation is a supply-side explanation: women are or are not found in occupation "X" because of some characteristic women are thought to have (or lack). For example, the story goes, women are not found in "X" because they are not muscular enough, or smart enough, or educated enough, or don't like the occupation enough, or aren't willing to work the long hours that the occupation entails, etc. The implication is that the system of occupational segregation could (and would) change if only women could (or would) change. The human capital, status attainment, and socialization theories are merely sophisticated versions of this type of supply-side explanation for occupational segregation.

The relative attractiveness theory that I have been developing over the past ten years challenges this supply-side mentality (Strober and Tyack, 1980; Strober, 1984; Strober and Lanford, 1986; Strober and Arnold, 1987; Strober, 1988; Strober and Catanzarite, 1989; Strober, 1990). It argues that the determination of the gender composition of an

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occupation depends upon the demand side of the market as well as on the supply side and, equally saliently, upon the power relations between men and women in the society at large. The theory argues that for the system of occupational segregation to change, much more than simply women's characteristics and tastes would have to change.

Interest in gender segregation results from concern about both efficiency and equity. By inhibiting people from working in occupations that match their skills and talents, occupational segregation lessens both potential economic output and individual satisfaction. Moreover, the system of segregation contributes to a differential in earnings between women and men that further distorts both efficiency and equity (Blau and Beller, 1988; England et al., 1988; Fields and Wolff, 1991).

The purpose of this paper is to further our understanding of the process of gender segregation by (1) summarizing the theory of relative attractiveness, and (2) introducing some recent data from medicine to further illustrate the operation of the relative attractiveness framework.

The Relative Attractiveness Theory

The theory of relative attractiveness is motivated by five questions about the processes of gender segregation: (1) How is it decided which gender will be incumbents in particular occupations? (2) What forces keep the gender composition of occupations stable? (3) How and why do occupations change their gender designation? (4) What happens to the relative pay and status of occupations when they change their gender composition? (5) What is likely to happen in the future to the *system* of gender segregation? This paper deals with questions 1 and 3.

Briefly, the theory's argument is as follows: The factors that affect demand and supply in the labor market are embedded in societal power relations that include racism and sexism. Because of these power relationships, women and men have unequal access to occupations. In particular, unequal power relations in the society at large is reflected in the labor market by employers' giving white men first choice of relatively attractive occupations.

There are four elements of occupational attractiveness, all of which are relative to workers' human capital: (1) the monetary return on workers' investments in human capital; (2) the working conditions of the occupation; (3) the degree of power, prestige, and status the occupation holds in the society at large; and (4) the potential for future rewards in the occupation. Certainly it is not the case that any white man can find employment in any occupation he fancies; job offers depend not only on race and gender, but also on having the requisite skill to perform the job (or at least the requisite educational credential to be trained to perform the job) and may also depend upon age and other factors such as social class.

In deciding which occupations to inhabit, white men choose those occupations that are most attractive to them, leaving available for the other race-gender groups those occupations that white men find less attractive. Nonwhites and white women, like white men, attempt to maximize their "utility," but they make their occupational choices subject to the constraint that white men have been permitted to choose first.

Occupations rarely change their gender designations. When they do, as in elementary school teaching and bank telling, it is because the occupation has become less attractive to white men.

The metaphor of queues is useful for understanding the processes of occupational segregation (Strober, 1988; Reskin and Roos, 1990). In this metaphor the labor market is the meeting ground for two queues: a labor queue with white men at the front of the line and an occupation queue in which occupations are arrayed in order of their attractiveness to white men. Obviously, the metaphor should be seen as heuristic; in particular, the constructs of a single labor queue and a single occupation queue are oversimplifications.

The theory is meant to apply widely, wherever sexism exists, across all industrialized societies and in the modernized sectors of industrializing societies. Legal mandates for equal employment opportunity and affirmative action complicate some of the processes of segregation, but they do not change the basic theory.

Recent Developments in Medicine

Increase in the Proportion of Women and Decline in Attractiveness

Over the past 20 years, women have considerably increased their representation among physicians, from 7.5 percent in 1970 to 16.4 percent in 1989 (AMA, Physician Characteristics, 1990). Moreover, women are continuing to increase their representation in medicine. For the year 1989-90, women were 28 percent of residents, 34 percent of MD graduates and 38 percent of the entering class of medical students (JAMA, 9/15/90, p. 791). The relative attractiveness theory

suggests that women's increased representation in medicine occurred because of a decline in the attractiveness of the occupation to white men. It also suggests that if medicine continues to decline in attractiveness, it will become increasingly female.

One measure of an occupation's relative attractiveness to men is the number of men that apply to enter the occupation. In medicine, male applicants to medical school peaked in 1983 at 25,456 (JAMA, 9/15/90, Tables 4 and 10). After that, the number of male applicants declined steadily to 16,369 in 1989-90 and then increased slightly to 17,458 in 1990-91, the last year for which published data are available. During that same period, 1980 to 1990, the number of *women* applicants remained approximately constant (10,644 in 1980-81, 10,546 in 1989-90, and 11,785 in 1990-91). As a result, women increased their percentage of all medical school applicants by about 11 percentage points, from about 29 percent to about 40 percent. It is difficult to know where those men who might have entered medicine in an earlier generation are now seeking employment, but I would guess that they are taking MBA or JD degrees or otherwise entering business careers.

What might have lessened the relative attractiveness of medicine for potential male applicants to medical school? In Carter and Carter's words: "autonomy, remuneration, and satisfaction" (1981, p. 486). Although income of physicians remains high (the American Medical Association, 1990-91, reports median net income for physicians of \$125,000 in 1989), change in real income for physicians declined for much of the 1980s and was negative for 1984 to 1985 and 1988 to 1989 (AMA, 1990-91, p. 9). And while physicians continue to increase fees, higher fees are increasingly "offset by third parties' reluctance to pay them" (Owens, 1991, p. 120).

Of course, it is true that real income declined for the male labor force as a whole during the 1980s, but physicians and potential physicians probably don't determine the relative attractiveness of their occupation by comparing it to average real income. Rather they compare their incomes to those in the upper echelons of the income distribution. And those were precisely the incomes that did not drop in real terms during the 1980s. Physicians were working hard to maintain their incomes while their reference group appeared to be gaining on them. In that sense, medicine became a less attractive occupation.

In order to maintain their incomes, physicians have had to work harder (see more patients, put in more hours or increase the number of procedures performed) all of which has added to the stress of their jobs (Owens, 1991). Moreover, physicians have lost a good deal of their former autonomy. Medicare and other third-party payers have increased reporting requirements, placed ceilings on reimbursable fees, and regulated care practices, for example, by mandating the maximum number of days of hospital stays for particular diagnostic related groups (DRGs).

Horizontal Segregation Among Specialties

There are three noteworthy aspects of occupational segregation by gender among physician specialties. First, women are more concentrated than are men in the seven largest specialties. Of the 36 medical and surgical specialties listed by the AMA for 1989, the top seven account for 63 percent of male physicians, but they account for 75 percent of women physicians. In order of size, these specialties are: internal medicine, general and family practice, pediatrics, general surgery, psychiatry, obstetrics/gynecology (ob/gyn), and anesthesiology. (All data on specialties are for 1989 and are from AMA, 1990, Tables A-2 and A-5.)

Second, two specialties have a particularly high representation of women (given that women are 16.4 percent of all physicians). These are pediatrics (37.6 percent) and child psychiatry (33.6 percent). At the same time, surgical specialties, except for ob/gyn, have a particularly low representation of women: plastic surgery, 6.4 percent; general surgery, 5.9 percent; orthopedic surgery, 2.1 percent; urology, 1.3 percent; neurological surgery, 2.9 percent; thoracic surgery, 1.1 percent; and colon/rectal surgery, 2.7 percent.

Third, because both women and men are concentrated in a relatively few large specialties and because the surgical specialties from which women are virtually absent employ only 17 percent of male physicians, the index of segregation across medical specialties is relatively low. In 1989, it was 24.4.

The pattern of women's entry across specialties provides an opportunity to test some of the predictions of the relative attractiveness theory. The theory suggests that (1) women's representation across specialties will be negatively correlated with the relative attractiveness of the specialties, and that (2) changes in women's representation across specialties will be negatively correlated with changes in the relative attractiveness of specialties. We shall use median income as a measure of relative attractiveness. This is not an ideal measure, however, because the length of training differs across specialties, and because to test the relative attractiveness hypothesis it would be better to use data on median income of men only (data which are not available). Table 1 presents data on nine specialties for which the AMA provides median income for 1989. Seven of these specialties are the largest in the profession. Of the other two, pathology ranks ninth and radiology ranks sixteenth. (It is not clear why the AMA chose to provide income data for pathology and radiology along with the seven largest specialties.)

Table 1 also provides data on the proportion of women in each of these nine specialties. For 1989, a rank correlation of -.53 was obtained by comparing the median income rankings of the nine specialties with their percentage female rankings. Although this coefficient is not statistically significant (the sample size is small), it nonetheless provides support for the hypothesis that there is a negative correlation between attractiveness of specialty and representation of women.

Obstetrics/gynecology constitutes an interesting exception to the findings; that specialty had the fourth-highest income in 1989 and was 21.3 percent female. The increase in the percentage of women in that specialty is of recent origin; in 1970, ob/gyn was only 7.1 percent female. It may be that by its nature, it became more open to women when women increased their representation in medicine as a whole and patients began to prefer female gynecologists.

However, it may also be that despite its relatively high income, ob/ gyn became less attractive to men because of its exceedingly high

	Percentage Women	Median Net Income	
All Physicians ^a	16.4	\$125	
Pediatrics	37.6	93	
Psychiatry	22.6	100	
Pathology	22.4	148	
Obstetrics/Gynecology	21.3	164	
Internal Medicine	18.7	120	
Anesthesiology	17.5	180	
General/Family Practice	14.2	90	
Radiology	9.1	180	
Surgery	5.9	180	

TABLE :	1
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Percentage of Women Physicians and Median Physician Net Income (Thousands of Dollars) After Expenses and Before Taxes By Specialty 1989

Notes: ^a Includes physicians in specialties not listed separately.

Sources: Percentage of women: American Medical Association, Department of Physician Data Services, Physician Characteristics and Distribution in the United States. Milwaukee: 1990. Table A-5, p. 26.

Median income: American Medical Association, Center for Health Policy Research, Socioeconomic Characteristics of Medical Practice, 1990/1991. 1991, Table I, p. 10. incidence of claims for professional liability (malpractice). In 1989, ob/gyn had the highest rate of professional liability claims of any specialty (13.5 per 100 physicians versus an average of 7.4 for physicians and surgeons as a whole). Moreover, during their careers, 60.2 percent of ob/gyns have at least one professional liability claim as compared to 37.8 percent of all physicians (AMA, 1991, p. 16).

Anesthesiology is also anomalous from the point of view of the theory. However, unlike ob/gyn, anesthesiology had a relatively high proportion of women (14.0 percent) even in 1970.

To further examine the relative attractiveness hypothesis with respect to medical specialties, I calculated a rank correlation coefficient across the nine specialties listed in Table 1 between change in median income between 1981 and 1989 and change in the percentage of women. The rank correlation coefficient was -.72 and was significant at the 5 percent level. The largest increases in income were for radiology, surgery and anesthesiology; the largest increases in women's representation were in pediatrics, obstetrics/gynecology, and psychiatry.

One could, of course, make a supply-side argument to explain women's entry into medicine and their entry into particular specialties: with the advent of the women's movement, women became more career-oriented, and more willing to undertake the long training involved in a medical career, and so they began to apply to medical school in larger numbers. As soon as their numbers increased, they were admitted. What had been blocking their entry earlier was their own lack of interest. Similarly, one could argue that the specialty pattern in Table 1 is a result of women's own preferences: for example, women have no interest in surgery, but are very much drawn to pediatrics.

To argue in this way, however, fails to recognize the importance of the demand side of the labor market and the importance of male/ female power relations in medicine. For example, women are probably drawn to pediatrics in part because pediatrics is particularly welcoming to women. A case in point: the entry for pediatrics in the description of residency programs put out by the Council of Medical Specialties Societies (1990, pp. 66-67) reads as follows: "... demographic changes have inspired many pediatricians to explore new options in pediatric practices—practices that will accommodate family obligations as well as new lifestyles."

Surgery, on the other hand, appears most unwelcoming to women. In a study of specialty choices among students in a prestigious medical school, Stansbury (1988) found no gender differences in medical specialty choices prior to their clerkships. But she found that the process of professional socialization, and in particular the lack of support in developing mastery in surgery, was an important factor in women's decisions not to apply for surgical residencies. Another type of evidence on the inhospitability of surgery for women comes from a recent survey on sexual harassment reported by the members of the Massachusetts chapter of the American Medical Women's Association. The highest reports of harassment were among respondents in general surgery: 50 percent of general surgeons reported being sexually harassed in the previous year. Among psychiatrists, on the other hand, the reported rate of sexual harassment was considerably lower, 12 percent (Clark, 1991, p. 62).

Conclusion

For those interested in the dynamics of gender segregation, changes in the medical profession continue to be intriguing. In 1990, 30 percent of all residents were women. And the percentages of women in several specialties were close to or greater than 50 percent: 54.3 percent in pediatrics, 46.9 percent in ob/gyn, 42.9 percent in psychiatry, and 50 percent in child psychiatry. On the other hand, women's representation in some of the surgical specialties (other than ob/gyn) remained quite low: thoracic surgery, 3.9 percent; urology, 5.3 percent; orthopedic surgery, 5.3 percent; and neurological surgery, 7.6 percent. Yet, in other surgical specialties, women's representation among residents was rising: colon and rectal surgery, 13.0 percent; plastic surgery, 13.8 percent; and general surgery, 14.1 percent (JAMA, 1991).

What will happen to the gender composition of these specialties in the future? And what will happen to the gender composition of the medical profession as a whole? It is possible to answer these questions by referring to women's tastes and abilities. I prefer to stay tuned to indices of relative attractiveness.

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Promotion, Reward, and Selectively Measured Performance

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Few still assert that differential treatment by sex in hiring and pay does not, or cannot, exist: early theories of the "cleansing" effect of competitive markets, where discriminating firms are washed out by their more efficient nondiscriminating counterparts, have been largely refuted by consistent empirical findings to the contrary (Cain, 1986; Blau, 1984; England, Farkas, Kilbourne and Dou, 1988; Gill, 1989). A somewhat more tenacious assertion, however, surrounds responsibility for promotion. Women experience promotion significantly less than do comparable men (Spurr, 1990; Olson and Becker, 1983; Konrad and Cannings, 1990; Hartmann, 1987; DiPrete and Soule, 1988), even when firm-specific productivity is controlled (Cannings, 1988). Women experience a lower incidence of training as well (Kochan and Osterman, 1990; Bergmann, 1989; Rosen and Jerdee, 1974), and the duration of the on-the-job training they receive is significantly less than that provided to comparable employees who are men (Altonji and Spletzer, 1991).

Training and promotion outcomes are often attributed to an inferred lower productivity of women, an inferred voluntaristic choice, their supposed greater propensity to leave (but see Viscusi [1980] for evidence to the contrary), or all three employers are assumed to behave indifferently with respect to employee sex, so that responsibility for lack of advancement is referred back to the demographic group associated with that advancement lack.

Queuing theory (Strober, 1990a, 1990b; Reskin and Roos, 1990) questions exclusive focus on labor supply; as Strober (1990a) points out, managers make choices in hiring, too. If managers make social choices in hiring so that occupational segregation cannot be attributed entirely, or even primarily, to women's choices in labor supply, then

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managers are likely to make socially influenced choices in selecting employees for promotion and training programs within the firm as well: "promotional segregation" can be attributed to employee choice, especially among the full-time applicant group, no more than can segregation at the point of hire.

Skipping over high-ability women for selection into high-visibility jobs may benefit the profit-maximizing firms through systematic underpayment of this group (Milgrom and Oster, 1987). Selection may be made on the basis of managerial or coworker preference as well (Kanter, 1977; Becker, 1957): to the extent that managers include social criteria or gender reputation in their hiring or promotion decisions, beliefs about relative productivity or propensity to leave can exert a significant influence even in the absence of supporting evidence (Viscusi, 1980). Moreover, if occupants of advanced positions perceive an encroachment by those holding lower status, closure of training or promotional paths can be seen as an instrumental and efficient mechanism of protection (Blalock, 1967).

This paper explores criteria used for selection in promotion and training programs among supermarket employees in a modern, unionized, Northern California chain. The main result is that employee selection for training shows substantial managerial choice: a pattern of differential selection criteria by sex emerges analogous to queuing. Identical accomplishments with respect to performance are weighed heavily for men, discounted for women, while areas of performance at which female employees excel are trivialized, leading to no rewards. Finally, controlling for both aspects of measured performance, a significant residual gender effect on incremental promotion remains.

The Task Assignment Model

Prior research using a new model of task assignment (Figure 1) shows significant managerial influence on measured employee performance in a supermarket chain (Spitz, 1991). Managers assign workers in this model to high- or low-productivity tasks; this assignment is made at least partly on the basis of employee sex (path 1). Male employees, assigned high-productivity tasks, demonstrate high performance; female employees, assigned low-productivity tasks, not surprisingly demonstrate performance that is poor (path 2). When assignment to tasks is controlled, however, no performance differential by sex remains (Spitz, 1991). In the model of task assignment, measured performance is hypothesized to affect future reward—pay, selection for training or promotion, and the like (path 3)—but also to affect

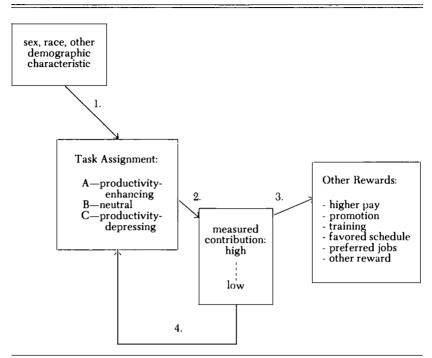


FIGURE 1 The Task Assignment Model

future assignment to high- or low-productivity tasks (path 4). To the extent that evaluations of current job performance significantly correlate with assessments of promotability (Greenhaus, Parasuraman and Wormley, 1990), measured performance in one period should predict training and/or promotion in periods later on.

Data and Methods

Data were collected in 1987 from 25 stores in a Northern California modern, unionized supermarket chain. For tests of promotion and training, the sample was limited to full-time employees; all hold the title "food clerk." This minimizes the probability of including casual labor uninterested in longer-term employment and higher pay; managers are excluded from the sample as well. Virtually all clerks hold a high school degree. Food clerks perform an assortment of both stock work and checking tasks, including incidental cleanup, at managerial discretion. Because clerks begin their grocery career operating the check-out register—a task which is physically limiting, has low autonomy, and affords no opportunity to learn new skills subsequent assignment to stock work is seen as a promotion. Stocking affords the opportunity to take inventory, arrange inventive displays, interact with salespeople and accept deliveries, complete work autonomously, and generally develop low-level managerial skills; the career path is through the stock work task, and training for this position takes place on the job.

Individual performance was measured as checkers' scanning speed at the check-out lane—the number of items per hour drawn across the scanning plate. As a measure of performance, scanning speed is imperfect: it is a simple summary measure that fails to control for time of day or night, store volume overall, or differences associated with lane (i.e., regular versus express lane, check cashing versus cash only, the presence of baggers, and the like). Nor does it reflect food clerk performance elsewhere in the store, for example, stock work. However, scanning speed has the advantage of being a reasonably objective measure, unaffected by managerial favoritism or dislike; it has the additional bonus of being believed, by store managers, to reflect employee productivity and performance all-around. Raw, or unadjusted scanning speed lists are posted for employees to see, and used by managers to assess relative food clerk performance.

Training was measured as employee rank on daily checker call sheets, lists of the order in which clerks are interrupted from stock work to operate a register in a check-out lane. Because stock work training takes place on the job, a low rank means frequent training interruptions; an employee assigned a high rank on the checker call sheet receives more training than does a clerk assigned a lower rank.

Promotion was measured as any increase in time spent off the register at the stock work task. Unfortunately, the period of data collection was only six weeks, so that given average employee tenure of nearly 12 years, the chance of seeing any change in a period of a month or so is not large.

Simple t-tests are used to test differences in means of selected variables by sex (Table 1). Ordinary least squares regression is used to estimate the paths of the task assignment model; all regressions control for tenure, tenure squared, age, night work, and store. Results are shown as standardized coefficients in Figures 2 and 3, with each path estimated three times: first for all clerks; second and third, in brackets, are the standardized estimates for male and female clerks respectively; significance is noted at the .05 and .01 levels.

Results

Previous findings that sex but not race significantly contributes to task assignments are substantiated by this analysis (see Table 1, task assignment variables, and Figure 2, standardized coefficients on path

TABLE 1

Means (standard deviations) and number of cases for selected variables, by sex (values are truncated).
1987 supermarket data from 22 stores in a N. California unionized chain. Sample constrained to clerks working 35 hours or more per week.

	All food clerks ¹	Male	Female	t-test of the difference, m – f
average pay/week	569.04 (72.67) n=411	583.38 (78.29) n = 263	542.89 (52.76) n=146	m>f, p<.01
average hours/week	39.16 (2.61) n=411	39.66 (2.70) n = 263	38.24 (2.17) n = 146	m>f, p<.01
average pay/hour	$ \begin{array}{r} 14.50 \\ (1.16) \\ n = 411 \end{array} $	14.66 (1.22) n = 263	$14.19 \\ (0.99) \\ n = 146$	m>f, p<.01
items/hour scanned	423.17 (100.81) n=411	424.87 (109.86) n = 263	419.25 (82.72) n = 146	m = f, n.s.
sales/hour scanned	$ \begin{array}{c} 629.65 \\ (151.82) \\ n = 411 \end{array} $	635.06 (166.10) n=263	618.79 (122.67) n = 146	m = f, n.s.
corrected error rate	$ \begin{array}{r} 1.19 \\ (1.16) \\ n = 411 \end{array} $	$ \begin{array}{r} 1.20 \\ (1.09) \\ n = 263 \end{array} $	n = 146 1.16 (1.27)	m = f, n.s.
tenure		n = 260 12.68 (6.57)	11.92 (6.66) n = 145	m=f, n.s.
age	36.95 (9.61) n = 404	35.82 (9.44) n = 259	38.97 (9.62) n = 145	m <f, p<.01<="" td=""></f,>
female	0.35 (0.47) n = 409	0.00 n = 263	n = 146 1.00	
nonwhite	0.25 (0.43) n = 375	0.24 n = 236	n = 1.38 0.26	
average night hours	n = 403 11.38 (11.43)	n = 255 12.71 (11.77) (11.77)	9.11 (10.53) n = 146	m>f, p<.01

¹ The number of total food clerks exceeds the sum of male and female clerks due to missing data on demographics for some employees.

TABLE 1—(Continued)

Means (standard deviations) and number of cases for selected variables, by sex (values are truncated).

1987 supermarket data from 22 stores in a N. California unionized chain. Sample constrained to clerks working 35 hours or more per week.

	All food clerks ¹	Male	Female	t-test of the difference, $m-f$
task assignments:				
express lane	0.17 (0.22) n = 326	0.11 (0.18) n = 201	0.25 (0.26) n = 123	m <f, p<.01<="" td=""></f,>
rank on call sheet	9.24 (4.76) n = 327	10.29 (4.64) n = 201	7.51 (4.48) n = 124	m>f, p<.01
percent work- time on register	$ \begin{array}{r} 13.11 \\ (11.02) \\ n = 407 \end{array} $	9.52 (8.83) $n = 260$	19.65 (11.61) n = 145	m <f, p<.01<="" td=""></f,>
training (rank2 — rank1)	0.053 (2.337) n = 265	0.116 (2.031) n=164	-0.045 (2.798) n = 99	m = f, n.s.
pay increase	-3.83 (63.69) n=379	-5.77 (63.07) n=240	-0.90 (65.21) n = 137	m = f, n.s.
promotion -(reg2-regl)	0.066 (4.835) n = 341	0.160 (4.671) n=212	-0.103 (5.125) n = 128	m = f, n.s.

¹ The number of total food clerks exceeds the sum of male and female clerks due to missing data on demographics for some employees.

1 of the Task Assignment Model). In particular, female clerks are assigned disproportionately to tasks that both negatively impact measured performance (path 2) and are inherently unpleasant in and of themselves: the express lane (to which women are assigned more than twice as often as men [Table 1]), commonly referred to as "the penalty box."

Identical accomplishments in measured performance were acknowledged and rewarded for male, but not for female clerks, in terms of both subsequent assignment to favored tasks (the performance-to-express lane path, Figure 2) and incremental promotion from the starting position of register operator to a position where a greater portion of time is spent in the autonomous stock-work task (the performance-to-register path).

The idea that dimensions at which women excel are trivialized was supported by the lack of visible rewards to cooperation, as evidenced by willingness to staff the unwanted job of manning the express lane of the store. Performing such a task is no doubt a combination of assignment and choice. Whatever the reason, this area in which female clerks excel was ignored in selection for training or incremental promotion: time on the express had no effect on subsequent promotion to the stock-work task or to greater training opportunity in terms of rank (Figure 3). Nor did cooperation lead to higher pay, but this outcome is constrained by the union contract operating in this supermarket chain.

Perhaps the most significant finding of this analysis is that nothing predicts reward for women except high-measured performance which results in higher pay (Figure 2). That is, although high performance does not lead to subsequent assignment to the high-performance tasks (path 4, Figure 2) for women, higher-measured performance is required for higher pay. Except for a regression-to-the-mean effect for all employees, where time spent in a task in period 1 negatively predicts time spent in a task in period 2, nothing observable predicts training or promotion for women: incremental promotion to stock work is predicted only by their sex (Figure 3), which exerts a negative effect. In this sample of 25 northern California supermarket stores, there were no female managers, two female assistant managers, and no women in the position of "third man," a secondary assistant manager in larger stores.

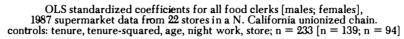
No measured variable except employee sex showed a significant effect on promotion for any group, a result probably attributable to the short interval between the first and last measure, which was only one month. Given the long tenure of the clerks (an average of 12 years), change in a single month is hardly likely in any event. What is needed are data over the longer term.

Conclusion

Training and promotion appear elusive for female clerks in this supermarket chain. Male clerks receive some rewards for high performance in the form of preferred assignments to tasks that contain greater autonomy and provide opportunities for training, while high performance for female clerks results only in pay. While pay is not an inconsiderate reward, it does not provide the same opportunities for growth as do training and promotion; and the recognition that training and promotion are unlikely events no matter how well one performs can lead to the undervalued-based quitting found in other research (Viscusi, 1980).

FIGURE 2

The Task Assignment Model Applied



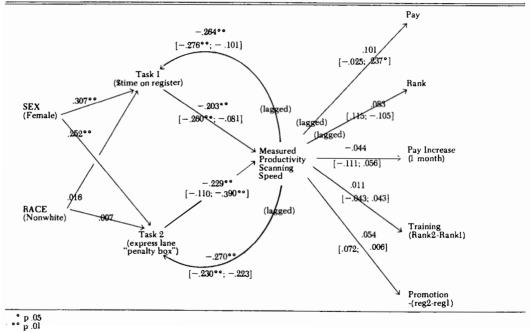
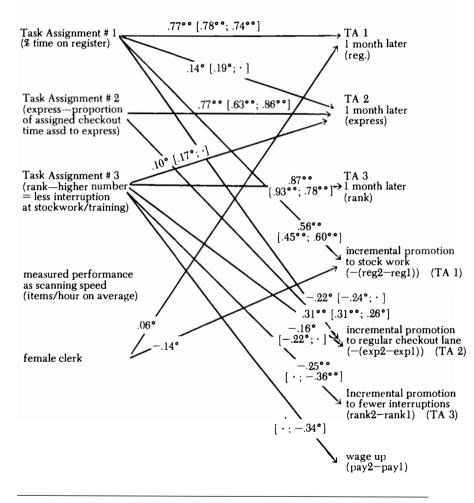


FIGURE 3

Promotion Paths

OLS standardized coefficients for all food clerks [males; females], 1987 supermarket data from 22 stores in a N. California unionized chain. controls: tenure, tenure-squared, age, night work, store; n = 233 [n = 139; n = 94]¹



¹ Only significant paths are shown.

Most female food clerks in this sample of Northern California unionized stores stay, however. An unanswered question asks, if their work is uniquely undervalued and under-rewarded, then why? One possible explanation rests with self-image: Walsh and Charalambides (1990) find that individuals high in public self-consciousness who are exposed to discrediting information are likely to change their beliefs. If so, under-rewarded clerks may "learn" from unadjusted productivity information that they get no less than they have earned: they may want more training, promotion, or better rewards, but the data they are shown inform them that they do not deserve it.

Restricting this sample to full-time, year-round workers minimizes the chance that female clerks systematically preferred to exclude themselves from the training and promotion pool of labor supply. Nonetheless, some probably do, as do some clerks who are men. Because female clerks' accomplishments remained selectively discounted, however, while the accomplishments of their male food clerk counterparts were "overcounted," results of this analysis suggest that these employees encountered an evaluation mechanism operating differentially on the basis of their sex. The notion of efficient free market exchange suggests that responsibility for attainment rests largely in the labor supply. Results found in these data, however, support Lott's (1985) finding that when there are real consequences for the evaluator or manager of viewing employee accomplishments objectively (to wit, permitting encroachment of an outgroup into a currently male domain), the devaluation of accomplishments of competent women suggests that at least part of the explanation rests in labor demand.

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Occupational Demographics, Position Content, and Productivity

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The persistence of gender differences in employment outcomes is leading to more detailed appreciation of work at the occupational level, with particular reference to gender composition. Carried out in the context of academic work, this study examines disciplinary gender composition and discretionary research activities in relation to research productivity.

In his controversial study of women in science, Cole (1979) concluded that there is little evidence of discrimination against women. His research indicated that the lower earnings and professional rankings of women are attributable to lower productivity. He concluded that affirmative action programs had effectively eliminated discrimination against women in science and that "reverse discrimination" was now a realistic prospect. Since then efforts to understand gender differences in higher education employment outcomes have focused on determinants of research productivity. The "cumulative advantage" thesis which dominates this literature takes the position that while women may have comparable human capital and initial researchoriented placements, they tend to be treated differently within (maledominated) faculties (Merton, 1957; Zuckerman, 1977; Clark and Corcoran, 1986). Women are thought to be socialized into accepting limited success and generally excluded from the "invisible colleges"-social networks comprised of prominent researchers and those most likely to join them (Fox, 1983). While the behavioral consequences of these practices are left unspecified, it is plausible to expect that female scholars differ from males in their research activities and that such choices are predictive of productivity. Due to poor information, if not active isolation by men, women would be less likely to engage in productivity-maximizing activities.

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Inspired by organizational demographics theory (e.g., Kanter, 1977), the cumulative advantage thesis suggests that women's research productivity will improve with greater representation. Cole, by contrast, argues that women will be less productive in fields in which they become sufficiently well-represented to form a visible economic threat to men. Further, he argues that sex discrimination in promotion would be more likely to occur in situations that offer less clear criteria for performance evaluation.

These points invite a gender-specific analysis of research activity and productivity in various academic fields. The questions to be addressed are: (1) Do female faculty differ from males in terms of research activities? (2) What are the productivity implications of various research activities? and (3) Do these effects vary by gender?

The demographics/cumulative advantage position suggests that women's activities are more likely to differ from men's in fields with lower levels of female representation. In such fields men will be more likely to engage in those research activities that are most conducive to productivity. By contrast, Cole's economic competition argument suggests that any male-female activity differences (and productivity differentials stemming from same) would be greater in fields in which women are better represented.

Data

The data used in this study were collected in 1980 by the UCLA Higher Education Research Institute (HERI). The survey instrument consisted of closed-ended questions concerning individual characteristics, attitudes, behaviors, and research productivity. Faculty at 98 colleges and universities were surveyed, with a response rate of 30%. Objective measures of institutional characteristics were then added to the data set. The sample is generally representative of U.S. academic institutions and the faculty population (Astin, 1984; Rebne, 1989b). However, there may be a slight underrepresentation of women (Ottinger, 1987), a factor which has not been adjusted for in the present analysis. The present subsample excluded faculty whose educational backgrounds (baccalaureate only), institutional placement (two-year colleges), or present duties (administrative) militate against research productivity (N = 6587). While somewhat dated, these data offer an exceptional combination of individual characteristics, research activity and productivity measures, and objective institutional characteristics.

Faculty were grouped according to Biglan's (1973) empiricallyderived classification of academic occupations, under which disciplines are grouped on three bipolar adjective sets: hard versus soft (H,S), pure versus applied (P,A), and nonliving versus living subjectmatter (N,L). The resulting disciplinary groups correspond quite well to typical university organization: (1) physical sciences (HPN), biological sciences (HPL), applied sciences (engineering and agriculture) (HAN-HAL), humanities (SPN), social sciences (SPL), management (and economics) (SAN), and education (SAL).

The hard-soft and pure-applied dimensions are particularly relevant to the present study. Biglan's hard-soft distinction is analogous to Kuhn's (1962) distinction between strong- and weak-paradigm disciplines. Researchers in hard- or strong-paradigm sciences (e.g., mathematics) maintain high levels of theoretical and methodological consensus, as well as perceptions of important problems. Therefore, research activity in strong-paradigm fields should be less diverse than in weak-paradigm fields (e.g., social sciences). The pure-applied distinction should be predictive of the extent to which variants of applied research (e.g., action, policy) are undertaken.

Research productivity was measured by self-reports of total articles, books and monographs published or accepted for publication during the previous two years (1978-80). Three-fourths of the sample produced at least one publication during that time while half produced one or more annually. While quality is not considered, simple publication counts have been found to covary with perceived quality of a scholar's work (see Rebne, 1989b).

Job and Position Content: Research Activities

Academic jobs vary in terms of the relative importance of responsibilities in the roles of research/scholarship, teaching, and service. Most faculty have a great deal of control over both the time devoted to these roles and the means by which they will be fulfilled. While institutional guidelines often exist (e.g., 60-40-20% for research, teaching, and service), the influence of such weightings on discretionary activity is probably weak since behavioral implications are so ambiguous. For example, time spent advising students may serve research as well as teaching if the student conducts a research project suggested by his/her advisor.

Perhaps the only formally prescribed duties lie in the areas of scheduled teaching, prescribed student advising (*viz.*, "office hours"), and some committee work. There may also be constraints on consulting and other external activities if this is viewed as incomesupplementation rather than support for other tasks (Rebne, 1989c). Therefore, prior to considering differences in discretionary activities within the research role, we must account for research time and constraints on same. This is done by including controls for time spent on teaching and preparation, administration, committee work, consultation, and research (self-reported weekly averages for the previous term). Formal requirements of a job may be quite comparable across the positions held by individuals, but faculty have a great deal of discretion in their research in terms of methodology used and topics examined. This should be reflected in the types of research undertaken. In the HERI survey meaningful possibilities include not only the common distinction between (1) "pure"/basic and (2) applied research but also (3) non-empirical literary/expressive research, (4) "action" research (in which client/subject problems are the immediate concern) and (5) research undertaken with policy-oriented guidance in mind. HERI respondents were asked to characterize their recent research or scholarship in each of the terms highlighted above [as well as (6) "other"] via dichotomous (yes-no) response categories. While the pure-applied distinction appears to be universally meaningful to faculty (Biglan, 1973), there may be much less agreement concerning the other activity characterizations. Further conceptual development and construct validation would be useful. Also, where more than one type of research is indicated by the respondent, the relative emphasis and impact on productivity is unknown.

Analysis

Table 1 reports, by disciplinary group, the percentage of males and females engaging in each of six types of research. Levels of female representation are also shown. The pure and applied characterizations encompass most activity, with half of the respondents conducting one or the other type of research. Across disciplinary groups, patterns are consistent with Biglan's classification scheme. Pure/basic research is heavily reported in "pure" fields (physical and biological sciences, humanities). Applied research is much more prominent in the "applied" fields (applied sciences, management, and education). Only in the social sciences do faculty report a balanced characterization in these terms. Only one-quarter of the sample use other descriptors to characterize their research.

Women (in 1980) tend to depart from these norms. In five of seven disciplinary groups, men are more likely to cite the adjective most

	Physical Sciences	Biological Sciences	Applied Sciences	Humanities	Social Sciences	Economics & Management	Education	Overall Sample	
Biglan Attributes:	Hard Pure Nonlife	Hard Pure Life	Hard Applied	Soft Pure Life	Soft Pure Nonlife	Soft Applied Nonlife	Soft Applied Life		
RESEARCH ACTIV	'ITY				· · · · ·		-		
Pure % of Males	78	82	31	55	57	17	14	50	
% of Females	70	84	46	37	53	10	14	32	
Applied % of Males	32	35	88	24	49	86	73	50	
% of Females	40	27	64	27	50	70	64	49	
Literary/ Expressive % of Males	4 •	2	2	47	7	4	10	15	
% of Females	10	6	0	49	10	10	9	18	
Policy % of Males	4	5	9	7	39	43	23	16	
2 of Females	8	6	18	6	33	40	16	14	

 TABLE 1

 Research Activities of Male and Female Faculty, by Occupational Group (Percentages)

	Physical Sciences	Biological Sciences	Applied Sciences	Humanities	Social Sciences	Economics & Management	Education	Overal Sample
Biglan Attributes:	Hard Pure Nonlife	Hard Pure Life	Hard Applied	Soft Pure Life	Soft Pure Nonlife	Soft Applied Nonlife	Soft Applied Life	
Action % of Males	6	5	21	.7	20	45	51	19
% of Females	20	5	18	11	24	70	42	26
Other % of Males	3	1	1	5	2	2	3	
% of Females	3	0	0	6	4	10	5	
n % Female	805 5%	639 13%	632 2%	1040 19%	961 18%	179 6%	494 33%	6587 18%

TABLE 1 (Continued)
Research Activities of Male and Female Faculty, by Occupational Group (Percentages)

• = p < .10; •• = p < .05; ••• = p < .01 (two-tailed Chi-square)

Source: 1980 UCLA HERI Faculty Survey, compiled by the author.

closely associated with the group by Biglan's subjects, significantly so in four instances (applied sciences, humanities, management, and education). Women are significantly more likely to undertake less common types of research, including literary/expressive, actionoriented, and the residual category ("other"). There is no overall gender difference in terms of a tendency to undertake policy-oriented research. However, the pattern across groups is consistent with a characterization of women as being more likely to diverge from disciplinary activity norms. Women report doing policy-oriented research more often than men in the natural sciences but do so significantly less often in the social sciences and education, where we would expect such research to be more central to a field's mission.

Relationships between research types and productivity were examined on the basis of OLS regressions. The regressions included a fairly comprehensive set of controls for individual-difference and situational factors known to influence research productivity (Rebne, 1989b). Individual-difference variables included education level and quality, socioeconomic background, marital status, and experience. Also included were indexes of individual attachments to academic work that are related to productivity (Rebne, 1989a). Controls for institutional/organizational factors included institutional type (graduate-degree granting versus four-year colleges), size, student and faculty quality, and resources. (Details concerning these measures are available from the author.)

Table 2 reports the main effects of research types as well as interaction terms involving gender (female) and each of the research activities. The model for the overall sample accounts for 35% of variance, while subsample models range from 21% (humanities) to 45% (physical sciences). While generally modest, these equations are comparable or superior to the strongest models of individual research productivity produced to date (e.g., Blackburn, Behymer, and Hall, 1978). The magnitude of the single-term main effect coefficients in Table 2 must be interpreted cautiously wherever significant interactions with gender are present. However, the sign can be accepted with some confidence since males constitute a strong majority of all subsamples.

For the sample as a whole, only the pure and applied research characterizations have a significant main effect on productivity. Within each disciplinary group, one or more departures from the most common activities are associated with higher productivity. Literary/ expressive research is positively associated with productivity in the social sciences, management, education, and the physical sciences. Action and policy-oriented research have significant positive effects in hard-science fields (e.g., applied sciences) but not in fields in which such research is more prevalent (e.g., management, education).

In 1980 women's productivity in normal/dominant research activities was lower than men's in the strong-paradigm/hard-science fields. While the main effects of pure research are positive and significant, the coefficients for females are negative and nearsignificant in the physical and biological sciences. This is also true of applied research in the biological sciences. Conversely, the main effect of conducting applied research in the physical sciences is negative, while being female and doing so has a positive, near-significant effect.

With respect to alternative activities, main productivity effects vary between the physical sciences on the one hand and the biological and applied sciences on the other. Literary/expressive research is associated with higher productivity in the physical sciences alone. Action research also has a positive sign in the physical sciences but is negative in the biological and applied sciences. In contrast, policy-oriented research appears to enhance productivity in the biological and applied sciences, but not in the physical sciences. Thus, while the incidence of alternative research types is relatively low in strong-paradigm fields, productive activity is by no means restricted to the common pure and applied characterizations.

Outcomes for women, who are generally more likely to engage in alternative research, remain distinctive but not consistently negative. Higher female productivity is associated with policy-oriented research in the physical and applied sciences, and such research also has a positive main effect in the applied fields. However, results for the other alternative research types indicate that, as for normal/dominant research, higher female productivity is only associated with activity that is negatively related to performance in the field generally (e.g., action research in the biological sciences). With the exception of policy-oriented research, women are generally less productive in those alternative activities which appear to be effective for the disciplinary community as a whole (e.g., literary/expressive in the physical sciences). If the relationships are, in fact, causal, the picture that emerges in the strong-paradigm fields is one of women finding it difficult to produce on even terms with men in the traditional activities and thus gravitating towards other forms of research. Alternatively, women may tend to have different views on important problems of the field or appropriate methodologies, irrespective of the implications for their careers.

TABLE 2

Unstandardized Coefficients for Gender (Female), Research Activities, and Interaction Terms, by Occupational Group (OLS Regressions: Dependent Variable = Publications, 1978-80)

	Physical Sciences	Biological Sciences	Applied Sciences	Humanities	Social Sciences	Economics & Management	Education	Overall Sample
Biglan Attributes:	Hard Pure Nonlife	Hard Pure Life	Hard Applied	Soft Pure Life	Soft Pure Nonlife	Soft Applied Nonlife	Soft Applied Life	
VARIABLE			·····	HF				, , , , , , , , , , , , , , , , ,
Female	.20	.64	-1.51	.28	45	1.27	45	10
	(.16)	(.44)	(60)	(.59)	(82)	(.24)	(94)	(53)
Pure	.52°	1.08 ••••	.57 °°	.25	.06	2.14°°°	.34	. 64°°°
	(1.48)	(2.07)	(1.87)	(1.19)	(.25)	(3.35)	(.90)	(6.94)
imes Female	-1.47	-1.69	—.60)	28	.21	.19	47	71°°°
	(-1.19)	(-1.19)	(—.25)	(60)	(.69)	(.05)	(73)	(-3.42)
Applied	−.44°	.91 ***	30	.37 °°	.05	04	.14	.35 °°°
	(−1.49)	(2.48)	(70)	(1.63)	(.20)	(05)	(.49)	(3.94)
imes Female	1.34	-1.73°	61	82°°	.06	-1.78	.02	38°
	(1.07)	(-1.47)	(25)	(1.59)	(.12)	(42)	(03)	(-1.90)
Literary/	.75 °	.74	.56	.18	.60°	2.79°°	1.30°°°	.03
Expressive	(1.31)	(.80)	(.61)	(.88)	(1.59)	(2.20)	(2.91)	(.24)
imes Female	$-4.12^{\circ\circ}$ (-2.00)	95 (41)	_	20 (42)	15 (18)	-5.13 (86)	18 (23)	.19 (.77)
Policy	33	1.58 °°°	.60 °	.09	.08	33	.26	.001
	(55)	(2.25)	(1.45)	(.23)	(.71)	(68)	(.83)	(.94)
imes Female	5.78 °°	61	5.08°	.73	43	3.89	54	09
	(2.02)	(35)	(1.52)	(.77)	(.38)	(1.20)	(90)	(.73)

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TABLE 2 (Continued)

Unstandardized Coefficients for Gender (Female), Research Activities, and Interaction Terms, by Occupational Group (OLS Regressions: Dependent Variable = Publications, 1978-80)

	Physical Sciences	Biological Sciences	Applied Sciences	Humanities	Social Sciences	Economics & Management	Education	Overall Sample
Biglan Attributes:	Hard Pure Nonlife	Hard Pure Life	Hard Applied	Soft Pure Life	Soft Pure Nonlife	Soft Applied Nonlife	Soft Applied Life	
Action	.61 (1.20)	76 (-1.14)	57° (-1.67)	.13 (.33)	.14 (.56)	.03 (.06)	.18 (.69)	05 (50)
imes Female	. 28 (.16)	2.72° (1.36)	94 (32)	46 (61)	.12 (.00)	-2.65 (63)	.36 (.78)	.07 (.75)
Other	63 (.90)	29 (21)	-1.21 (-1.10)	.76• (1.83)	.32 (.47)	3.68°° (2.07)	.17 (.24)	02 (07)
imes Female	-5. 79° (-1.37)	—	_	95 (1.03)	1.79 ° (1.59)	-4.76 (77)	.47 (.21)	10 (22)
Constant	.65	68	-1.08	47	34	-2.41	-3.63	38
R-square	.45	.40	.28	.21	.30	.39	.36	.35
n	805	639	632	1040	961	179	494	6587
Percentage Female	3%	13%	2%	19%	18 %	6 %	33 %	18 %

• p < .10; •• = p < .05; ••• = p < .01 (t statistics in parentheses)

One- or two-tailed test as appropriate.

Blank cells indicate variable not used.

All regressions include controls for individual, situational, and job context factors discussed in text.

In the "soft" or weak-paradigm fields, men are again more likely to engage in research activities that are normal for a disciplinary group (e.g. pure/basic research in the humanities, applied research in education). However, in keeping with Kuhn's (1972) conceptualization of weak-paradigm fields, aggregate patterns of activity are more diversified, as are relationships with productivity. Thus, the distinction between normal and alternative research practice is generally less useful and there is some support for Cole's argument that performance appraisal conditions are more ambiguous in these fields. In weakparadigm fields very few of the gender-activity interaction terms are significant or near-significant, the exceptions being applied-by-female in the humanities (negative) and, in the social sciences, a term involving the definitive alternative research type—"other"—which is positive. Thus, the broader scope of normal research activity in these fields does not work to women's immediate disadvantage in terms of productivity.

Conclusions

Women's research activity patterns differ from those of men. Female researchers are generally more likely to undertake activities outside disciplinary norms. Research activities are themselves predictive of productivity. Divergence from disciplinary activity norms appears to have negative consequences for women in strongparadigm fields such as the physical sciences, where norms are stronger and women have lower levels of representation. This is not the case in the weak-paradigm fields, where activity is generally more diversified and (with the exception of management and economics in 1980) women are better represented.

The results are not consistent with the economic competition argument. This position would anticipate greater activity differences and negative productivity effects in the weak-paradigm fields. Here women's higher levels of representation increase the economic threat to men. Performance appraisal conditions are also more ambiguous, since norms concerning appropriate research activities are weaker. While both the motive and means for discrimination exist, neither are reflected in differences in productivity (i.e., publishing records).

As the demographics/cumulative advantage view would anticipate, negative productivity effects associated with specific research activities undertaken by women are largely restricted to the occupational groups with lower female representation. This is consistent with Kanter's (1977) finding that female performance among professional managers is adversely affected by extremely low levels of representation. Kanter concluded that performance differentials would be ameliorated, if not eliminated, when women comprised a strong minority (15-35% being indicated by her work).

However, the demographics argument would not predict significant differences in research activities, per se, once women reach at least moderate levels of representation (e.g., humanities, social sciences, and education). Here it is assumed that integration into professional activity norms is central to the higher performance observed once women achieve something other than "token" levels of representation (e.g., Kanter, 1977). If there is no disincentive to undertake normal/dominant research activities in such fields, why would women still be more likely to pursue alternative types of research? Conceivably, strong minority representation produces new subgroups of the "invisible college" that coalesce around specific disciplinary topics or types of research activity. Women might comprise the majority of certain disciplinary subcommunities and thus influence both aggregate patterns of disciplinary activity and the productivity effects of various types of research. Future research on demographics theory and productivity in highly discretionary occupations should consider this possibility.

This study has not addressed the likelihood that productivity associated with different types of research varies in terms of its impact on merit-related earnings and career progress (e.g., tenure decisions). Presumably, lower earnings and promotion rates could be expected for all but exceptional contributions stemming from research activities that lie outside disciplinary norms. While the demographic theory suggests that such sanctions would not be applied inequitably, women would suffer more from them due to greater activity in these areas.

The study of discretionary activities and position content adds analytical value to models of gender-based differences in productivity. The approach could be extended to other professional occupations in which "glass-ceiling" effects are an issue. To do so, analysis of formal or D.O.T. job descriptions must be supplemented by an appreciation of activity differences within ostensibly identical jobs. Such activities must be assessed in terms of the degree of voluntarism involved (i.e., position versus job content).

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DISCUSSION

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The papers by Myra Strober and Janet Spitz explore gender differences in employment opportunity in two very different occupations. Strober considers the medical profession, both as a whole and in terms of gender differences in specialties. Spitz looks at food clerks in supermarkets and finds a rather analogous pattern of gender differences in task assignments within that job. These papers are of considerable interest in light of recent decreases in occupational segregation by sex.¹ Since both papers focus to a considerable extent on gender inequities *within* occupations, they bring to the fore problems that will remain even as occupations become more integrated.

I liked both of these papers and am in sympathy with their emphasis on the demand side of the picture. While I believe that supply-side factors are also important, as both authors point out, the demand side of the equation is often overlooked. Moreover, these papers illustrate the usefulness of case studies of specific occupations in complementing and extending more traditional analyses based on aggregate data.

Strober makes the general argument, which she has developed in previous work, that white men tend to be the preferred workers and that women and minorities tend to get the "leavings." In this paper, she presents evidence that women are entering the medical field at a time when men are finding it less attractive, and further that women tend to be concentrated in the less desirable specialties (defined in part in terms of income).

While I found Strober's paper of considerable interest, I would caution that her claim that women enter the lower-paying specialties cannot be fully supported by the data that she presents. Unfortunately, she was only able to obtain average income within each specialty

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for male and female doctors combined. Thus, she may simply be documenting a gender pay differential within the medical profession such that specialties with a higher proportion of women have lower overall average income. In general, I found her argument more persuasive when she was able to point to specific mechanisms that channel women into different specialties, e.g., a greater flexibility for family obligations in pediatrics residency programs than in surgery residency programs.

I would also note that following Strober's argument to its logical conclusion-and I hasten to add that Strober does not do so-would in my view give an overly negative view of recent strides toward occupational integration. If women are seen as only successful in entering areas men no longer find desirable, then what currently appears to be occupational integration, might simply arise because we are in the middle of a process whereby jobs are changing in gender composition from male to female. Such changes have always occurred to some extent. Historical examples include school teachers and bank tellers, two occupations Strober has previously examined. But is such a transitory process-a way station in the development of new female occupations-all that is going on currently? While I grant that it may indeed be part of the story,² I doubt that it is the whole story. This is suggested by Strober's own speculation as to where the men who used to go to medical school are now going-MBA programs and law school. Yet these are also areas where there have been large recent increases in female representation.

Turning to the Spitz paper, we find some intriguing evidence of large gender differences in tasks within the food clerk occupation, although the extent to which these differences represent workers' choices or managers' assignments is, as Spitz notes, impossible to say. Looking at the means presented in her paper, I was interested to see that despite these differences in tasks, the unadjusted gender wage difference was very small, less than \$.50/hour or about three percent. Since men do more night work than women—13 versus nine hours per week—this small difference might represent a premium for night work. Nonetheless, it may be the case that, while gender differences in tasks do not result in a large current pay differential, they do, as Spitz claims, cause differences in the promotion rates of men and women and thus, long term differences in occupations and earnings. However, the evidence presented in this paper is not conclusive in that regard. While sex does exert a significant negative effect on promotion, no variable except employee sex was found to be a significant determinant of promotion for any group. This suggests that the promotion process is not understood well enough to allow strong conclusions as to the effect of gender. Spitz speculates that the short time span of the study, one month, is the reason for the poor performance of the promotion analysis. What are needed, as she suggests, are data over a longer period.

Endnotes

¹ Between 1970 and 1989, the index of segregation fell from 67 to 55 percent. The index of segregation gives the proportion of women (or men) who would have to change jobs for the occupational distribution of men and women to be the same. See Blau (1988) for data on trends; the figure for 1989 reflects my recent updating of the data in that paper.

² Reskin and Roos (1990) also present examples of the limited nature of some of women's recent occupational gains.

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DISCUSSION

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Much of the literature on sex discrimination seeks to determine the effect of gender on experience in the labor market with highly aggregated, heterogeneous data. The papers by Douglas Rebne and Janet Spitz avoid the serious difficulties caused by the use of such data, since they each analyze a very homogeneous sample of workers. Rebne's data involve men and women in academic positions, while Spitz's paper considers employees of a supermarket chain in California.

Previous research has found that on average females in academic positions publish less frequently than men, that women are less likely to achieve a given academic rank, and that it takes women twice as long to attain the rank of associate or full professor (Johnson and Stafford, 1974; Farber, 1977; Weiss and Lillard, 1982). However, these studies are based on relatively old data. Moreover, they have generally not controlled for differences among individuals and among academic institutions that might explain differences in scholarly productivity. If, as one might expect, women have historically been consigned largely to institutions on the teaching end of the teaching-research continuum, much of the difference between men and women in research productivity might be explained by differences in responsibilities. To the extent that a difference remains, it would be interesting to learn whether it has been diminishing over time.

If women still publish less than men, the question arises whether this is a consequence of discrimination, and if so, by whom. For example, is there discrimination by academic journals against papers submitted by women? On the other hand, perhaps the discrimination

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begins at an earlier stage, if women are excluded from the highestranking graduate programs.

The topic of Douglas Rebne's paper is interesting and neglected. He does take into account differences among individuals and among institutions that might account for differences in research productivity. For example, he includes a variable indicating whether or not the institution grants a graduate degree, and another indicating the average entering SAT score of the institution's students. This paper should provide a frequency distribution of the answers in the various categories: no publications, between one and two publications, etc., given the findings of others that of those scholars who publish at least once in their careers, many publish only once.

A major shortcoming of this paper is its reliance on Biglan's disciplinary classification scheme, which does not seem to be designed or particularly well suited to an analysis of differences among demographic groups in research productivity. Thus the distinction between "pure" and "applied" research is too subjective, and it's not at all clear what it means in certain fields, like history. Rebne's tentative conclusion, that women tend to work in nontraditional areas that are not conducive to promotion, strikes the reader as an *ex post* rationalization of the regression results. Also, since the dependent variable is not continuous, estimates obtained from ordinary least squares will be biased and inconsistent. The appropriate specification would be an ordered probit or logit.

We know that incentives to publish differ at different stages of an individual's academic career. Thus one would think that the best type of data for this type of study is longitudinal, showing all publications by an individual from her first academic position to the end of the period of observation.

The paper by Janet Spitz is interesting and innovative in that it analyzes a homogeneous group of workers, employees of a supermarket, and includes a measure of performance, scanning speed, the number of items per hour drawn across the scanning plate. This paper would be considerably strengthened if it were possible to obtain data on individuals from the date of hire to the end of the period of observation, and data on individuals relevant to their promotion, especially their level of education and prior experience. Spitz finds that women tend to remain at the cash register rather than being assigned to stock work. If, as she suggests, this is a consequence of discrimination, one would like to know whether the discrimination is by customers or by the managers of the firm.

This paper would benefit by considering the implications of an alternative hypothesis. Some have suggested that women are not promoted as frequently as men because their commitment to the labor. force is weaker. According to this view, it is rational for women to exert less effort than men in the competition for promotion because for women the rewards of promotion are less, given that their careers will be shorter. This hypothesis could be refuted by evidence that female workers remain on the job as long as males, holding constant promotions, which would be treated as different "states" in a competing risks framework.

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IV. POSTER SESSION I

Do Union Effects Differ Across Federal, State, and Local Government Employees?

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Relatively few studies have compared the effect of collective bargaining in the public sector relative to that in the private sector. This study attempts to fill this gap in the literature by calculating separate estimates of the union wage premium for federal, state and local government workers, and then compares these estimates with that for private sector employees. Relatively new data from the 1987 *Panel Study of Income Dynamics* is used for this study. It is found that private sector unions lead to larger wage gains for their members than do public sector unions.

Industrial Relations in the Nonunion Sector: Prospects & Problems

FRANK BORGERS & MILAN LINT The Ohio State University

In response to a general stagnation concerning the industrial relations (IR) discipline, several scholars have recently emphasized the need for new directions in IR research, directions that more closely parallel the contemporary employment relationship. One route to the reinvigoration of the discipline is through the extension of IR into the nonunion sector. This paper evaluates the feasibility and utility of such an extension. The authors discuss areas of the employment relationship that are within the purview of IR, examine the unique perspective that IR offers, and carefully consider the opportunities and constraints involved in extending IR to the nonunion sector. Finally, the authors discuss the substantive topic areas of employee voice, employment law, and union avoidance, which might be addressed within such an extension, providing exploratory answers and provoking some new questions in this regard.

Who Joins Labor Unions? The Agency Shop Experience

KAREN E. BOROFF Seton Hall University

Given the decline in union membership in the United States, coupled with judicial rulings that pose financial liabilities to labor organizations for nonunion employees covered under an agency shop provision, it becomes important for unions to understand the determinants of union membership under this union security arrangement. Relying on the constructs of union instrumentality and the voice/monopoly face of unions, the author develops a model of the probability of union membership in an agency shop. Using a unique data set, she finds that instrumentality is not a predictor of union membership but belief in a union's voice benefits is positively associated with it.

The Effects of Corporate Strategic Policy on Unionization: A Case Study

LLOYD BUCKWELL AND ROBERT A. FIGLER University of Akron

STEPHEN J. HOLOVIAK Shippensburg University of Pennsylvania

This case, by use of traditional industrial relations case study methodology, provides a detailed description of how a company develops, implements, and continues a union-avoidance strategy. The strategy evolved from top management in the formation of the company and has been successfully carried through two different managerial structures (acquisitions by other firms). Currently, the philosophy has evolved into a strategic policy that strongly adheres to a participative management style as the "optimal" way to utilize the firm's human resources.

Public Sanitation Unions and the Privatization of Municipal Sanitation Services

TIMOTHY D. CHANDLER Louisiana State University

> Peter Feuille University of Illinois

Four hundred forty-three cities were analyzed to determine the extent to which they considered and adopted contracting out of their sanitation collection service. The authors found that the presence of a city sanitation union is negatively associated with the probability of contracting being adopted, but only in those cities that have cooperative relations with the union.

Multitiered Wage Structures: A Test of Alternative Hypotheses

CHRISTINE L. COOPER AND NEALIA S. BRUNING University of Manitoba

The increased incidence of tiered wage structures has led to questions about their effects on employees' work attitudes and behaviors. Using survey data collected from an Ohio United Food and Commercial Workers (UFCW) local, the authors contrast traditional hypotheses based on equity theory with alternative hypotheses recently proposed by Cappelli and Sherer (1990). The results generally support the traditional equity theory propositions for dependent variables relating to commitment to the firm and the union, and satisfaction with pay. The results also provide support for a hypothesis regarding job security that was based on Cappelli and Sherer's alternative propositions.

Wage Negotiation After the Fort Stewart Decision: An Opening for Federal Employees or a Mirage?

MICHAEL J. DOUGHERTY AND HARSH K. LUTHAR Virginia Polytechnic Institute and State University

On May 29, 1990, the Supreme Court unanimously ruled in Fort Stewart Schools v. Federal Labor Relations Authority that certain federal employees are not prohibited from wage negotiations. The decision potentially breaks new ground in the area of public sector collective bargaining. Results of interviews with management and union officials suggest that wage negotiation is becoming increasingly common in the Department of Defense Dependents Schools. Similar results can be expected in other federal agencies where wages are not set by statute. Such opportunities have come the way of some federal employees before, but union leadership has not always taken advantage of them.

Individual Support for Union Mergers: An Examination of the Determinants

Adrienne Eaton Rutgers University

JILL KRIESKY University of Alabama at Birmingham

> JOHN McClendon Temple University

Understanding determinants of individual voting behavior in union merger referendums is important to unions expecting to expand membership and bargaining power through affiliations. This study investigates the voting behavior of independent union members who voted in an actual referendum to reject a proposed merger with a large, national union. Five categories of variables chosen to explain individual voters' behavior include satisfaction, instrumentality, social support, campaign effects, and union image. The overall findings provide strong support for the influence of the utilitarian assessments, the influence of coworkers, and the influence of a campaign by the current bargaining unit on voters' choices.

Modeling Anti-Right-to-Work Voting: The Case of Missouri

GILBERT J. GALL Pennsylvania State University

From 1944 to 1986, 19 states held 27 referendums on right-to-work legislation, with 22.5 million people voting on the issue. Despite its prominence as a public issue, most research on right-to-work laws focuses on their industrial relations impacts. This study seeks to draw attention to the need for empirical research into right-to-work voting. In particular, it proposes a hypothesis that "anti-" (i.e. pro-labor) rightto-work voting is positively related to the variables of union membership, working-class economic status, race (Black), lower income agricultural residence, political liberalism, and religion (Catholicism). It then tests that hypothesis by conducting a multiple regression analysis on the 1978 Missouri right-to-work election results at the county level. The study then concludes by discussing the results of that analysis and suggests a future agenda for research into right-towork voting patterns.

The Effects of Work Values on Job Choice Decisions

TIMOTHY A. JUDGE AND ROBERT D. BRETZ, JR. Cornell University

Work values have been receiving increased research attention. Work by Ravlin, Meglino, and associates has recently conceptualized, and provided measurement for work values. These values have been applied to job satisfaction, commitment, and individual decision making. However, values have not been linked to job choice decisions. Using a sample of professional degree students, the influence of work values in the context of other job attributes was investigated using a policy capturing design. Work values were found to exhibit significant effects on job choice decisions. Further, individuals were more likely to choose jobs whose value content was similar to their own value orientation. Implications of the results of the study of work values and job choice are discussed.

Human Resource Managers' Motives and Their Organizational Commitment

DANIEL J. KOYS DePaul University

Organizational commitment is hypothesized to be positively related to the degree to which a fairness motive is perceived to underlie human resource activities. Regression analysis of survey data from 83 human resource managers supports this. Further, their organizational commitment is not related to the degree to which a legal compliance motive is perceived to underlie human resource activities. Nor is it related to the degree to which an organizational performance motive is perceived to underlie the activities.

Arbitration of Sexual Harassment Disputes: Case Characteristics and Case Outcomes In Public vs. Private Sector Cases

HELEN LAVAN DePaul University

In this comparison of 86 published arbitrated sexual harassment cases in the public and private sectors, the following was found: affected individuals are less likely to be involved in the arbitration stage in the public sector. Third-party involvement, which is less manageable, is more prevalent in this sector. Discharge is less likely to occur in the public than in the private sector.

Displaced Workers and Small Business: A Viable Reemployment Strategy?

STEPHEN L. MANGUM The Ohio State University

JUDITH W. TANSKY University of Wisconsin-Milwaukee

This paper sets small business initiatives within the structure of efforts to serve displaced workers in the United States and evaluates a recent program of this type. The authors conclude that displaced workers in a Title III-JTPA-funded, small business initiative program in Ohio were successful in creating and maintaining a significant number of businesses. Participant outcomes were comparable to the experience of displaced workers served by other intervention strategies. However, the results add little to our ability to predict who will be successful in starting a business. Small business training appears to be a viable employment generation option for some individuals.

Average Pay Level and the Supply of Labor to New Firms

CHERYL L. MARANTO, TIMOTHY J. KEAVENY AND PAUL DAVIDSON REYNOLDS Marquette University

This study seeks to identify variables related to the average wage level of firms and to the supply of labor to the firm. The data for this investigation is from a sample of new firms established in Minnesota between 1981 and 1985.

Firm wage level was positively associated with a competitive strategy that stressed product/service quality, average wage rates in the local labor market, and the percent of professional workers in the firms' labor force. Firms' average wage level was negatively related to importance the firm placed on labor costs. The incidence of problems in hiring workers with the desired qualifications was positively related to the importance of skill availability to the firm and the presence of problems in compensating employees of the firm. Average wage level was not related to the incidence of hiring problems.

Local Labor Market Characteristics and the Election of a Union

DAVID G. MEYER The University of Akron

The relationship between environmental, worker power, and wage and employment opportunity variables and which union ran in elections from 1979-1981 was tested. Employment and wage data (aggregated by county and two-digit SIC) from the BLS, product market characteristic data from Industrial Census, and right-to-work and southern location were used. AFL-CIO affiliates ran in large units with the greatest wage and employment opportunities. Teamsters ran in smaller units of part-time employees with poor wage opportunities. Independent nationals ran only in their product market niche. Independent locals ran in the smallest units with the worst wage and employment opportunities.

PAC Influence on COPE Votes in the U.S. Senate, 1978-1988

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THOMAS D. CURTIS University of South Florida

DAVID GORDON University of Illinois—Chicago Circle

The authors establish a voting model based both on the economic theory of regulation and on public choice theory, then use it to analyze individual senator voting behavior on votes chosen as important by the AFL-CIO Committee on Political Education (COPE) in the U.S. Senate over time. Constructing three voting indexes following the Freeman and Medoff framework—narrow union, general labor, broad social—it was found that labor PAC contributions are important in explaining COPE votes during our observation period for all three types of legislation. Although the study did not find own corporate PAC contributions to have a significant influence on COPE votes, corporate PAC contributions to the opposition do matter.

Bargaining Unit Factionalism Among Airline Pilots After Mergers: The Case of Republic Pilots

KATHRYN J. READY University of Wisconsin-Eau Claire

Deregulation of the airlines led to an oligopolistic industry characterized by frequent mergers during the late 1980s. As the number of mergers increased, bargaining unit factionalism increased. The merger of Republic Airlines with Northwest Airlines is examined to explain the effect on one airline employee group—pilots. Airline pilots are a unique group because their skills are not transferable to other industries and there is only one major union (ALPA) in the industry that represents them. As more time passed without a merged agreement or a decision on the merging of the seniority lists and management purchased new equipment and phased out inefficient equipment, interim agreements resulted in bargaining unit factionalism becoming more pronounced.

Decertification Strategies and Tactics: Management and Union Perspectives

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Management and union respondents completed a questionnaire that addressed several issues related to decertification campaigns: causes of decertification, campaign tactics, campaign strategies, outcomes of decertification campaign, and certification/decertification campaign differences. Questionnaires were mailed to a random sample of 385 union and management representatives who had been involved in decertification elections during the fiscal years 1985-1987. The differences were related to whether the respondent was a member of management or a union leader. Union officials indicated their preference for the use of handbills, personal visits, and discouraging members from signing decertification petitions, while managers preferred legal counsel and small group meetings.

Correlates of a Multiunion Representation Election in the Federal Service

CHARLES SMITH Niagara University

HUGH HINDMAN Appalachian State University

The study of union certification elections is well advanced in the academic literature. However, this paper hopes to make two advances

on prior work. First, there exists little academic work on determinants of union certification outcomes when there exists more than one union on the ballot. That which does exist takes a macro-level approach. Our approach uses a micro-level approach with the unit of analysis the individual employee. Second, we extend the analysis of union certification elections to the federal service. Three sets of variables are posited to influence federal workers' selection in certification election. These are the investment model of Farrell and Rusbult, demographic variables including sex, race, job tenure and education, and job facet satisfaction. Data were collected via a mail survey from 268 civilian federal employees who had recently participated in a multiunion election. The analysis uses regression analysis to investigate correlates of a federal sector union election and discriminant analysis to study the impact of multiple unions on the ballot. The data reflect that the federal workers in our survey were more inclined to support unionization when they had positive feelings about unions in general, made behavioral commitments to a union, and were dissatisfied with supervision. These same variables were strong discriminant variates in assigning the sample to one of four groups reflecting union voting behavior.

The Capital Market Response to Wage Concessions in the Airlines

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Deregulation and concomitant industry entrants, rising fuel costs, and the air traffic controllers' strike combined to create an instability in the airline industry that threatened the airlines' viability in the 1980s. These threats, combined with a decentralized bargaining structure, contributed to extensive labor concessions. This paper addresses the effect of the announcement of various concessionary collective bargaining outcomes—wage increases, wage freezes, wage cuts, and two-tier wage structures—on airlines' stock market value. The results show that the capital market responds to wage cuts with significant positive cumulative abnormal returns in the period following their announcement. The authors found no significant market response to wage freezes or two-tier collective bargaining agreements. These results vary somewhat by craft, however, indicating that the market interprets each craft's settlements in a different manner.

Employee Work Autonomy: Is It a Unidimensional or Multidimensional Construct?

ROBERT B. TIEGS, YFIZHAK FRIED AND THOMAS NAUGHTON Wayne State University

Several psychometric properties of Breaugh's (1985), workmethod, work-scheduling, and work-criteria autonomy scales were evaluated in a sample of middle-level managers (n = 90) of a large "Fortune 500" company. Confirmatory factor analyses revealed that the *a priori* three-factor model fit the observed covariance matrix better than did the one-factor model. Yet, these analyses also suggest the possibility that the three latent autonomy factors are related to a more global (higher-order) factor. The three autonomy scales were also found to be differentially related to a number of theoreticallyrelevant outcome variables, hence providing evidence for their discriminant validities. Taken together, these results add support for conceptualizing and measuring different facets of work autonomy.

Union Commitment: A Comparison of Methodologies

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> SATISH P. DESHPANDE Western Michigan University

This paper examines the determinants of union commitment using correlation, regression, and path analysis techniques. Emphasis is given to the potential differences that may stem from the use of alternative empirical techniques. Given increased use in industrial relations of regression methods, and more recently of path analysis methods, it is important to understand the extent and nature of differences that may be methodology-related. For the particular model and data analyzed, differences in inferences from the alternative methods are relatively minor when comparing the regression and path analysis results, but these two methods yield results substantially different from those generated by correlational methods. Notably, although union socialization experiences are found to have a significant positive bivariate relation with union commitment consistent with prior studies, such experiences show no direct effect on union commitment in the regression or path analysis results.

Determinants of Managerialism: An Empirical Investigation

CHOCKALINGAM VISWESVARAN AND STEVEN L. POPEJOY University of Iowa

> SATISH P. DESHPANDE Western Michigan University

Empirical evidence exists that the implementation of progressive human resources management (PHRM) policies by management reduces the desire for unionization among the employees, but both union and nonunion organizations have been found to have equal probability of implementing such policies. This paper examines the thesis that the adoption of PHRM policies is a market determined (not a strategic choice of management) course of action. Empirical results indicate that neither market determinism nor cultural voluntarism could explain, individually, the adoption of such PHRM policies.

An Examination of the Relationship Between Union Status and Organizational Characteristics and Constraints

TERRY H. WAGAR St. Mary's University

KENT F. MURRMANN Virginia Polytechnic Institute and State University

The data for this study were based on survey responses from 378 major U.S. firms. Approximately 46 percent of the firms were unionized. The probability of a firm being unionized was greater if the firm was larger, had a greater number of managerial, professional and supervisory jobs, and had introduced new technology. Unionized firms had a greater perceived commitment to job security and were less likely to have participated in a merger/acquisition. Percentage of the work force unionized was positively related to the number of days devoted to training and the number of years the firm had been in operation, and negatively related to involvement in a merger/ acquisition, operating in the manufacturing sector, and job structure.

An Empirical Investigation of Employer Unfair Labor Practice Cases

TERRY H. WAGAR St. Mary's University

This paper reports the results of an analysis of 230 Canadian unfair labor practice (ULP) cases in which the employer allegedly committed a ULP. Employers were successful in 30.4 percent of the decisions. Just over 30 percent of the cases involved negotiation of a collective agreement, 36 percent occurred during the life of the agreement, and 34 percent concerned union organizing and recognition. In terms of the type of ULP, employer interference/discrimination for union activity accounted for 54 percent of the cases. Employers were more successful in cases occurring during the negotiation and administration stages or involving the alteration of working conditions.

V. DEMONSTRATING STRUCTURED WORK-BASED LEARNING IN NONTRADITIONAL OCCUPATIONS

Skill Upgrading in a Labor-Management Context: Experience in Manufacturing and Health Care Industries

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The topic of ongoing skill training for currently employed workers, and the relevance of the apprenticeship model for service and manufacturing occupations, has attracted increasing attention in recent years. Starting in 1989, with funding from the U.S. Department of Labor, the AFL-CIO Human Resources Development Institute designed and implemented five demonstration projects that developed jointly-administered skill training programs in aerospace, industrial 1.1anufacturing and health care industries. A number of lessons emerged from this experience, with important implications for program structure, the career aspirations of front-line workers, and the connection between skill formation and work reorganization efforts. This paper will discuss three of the most important lessons, comparing and contrasting the findings of different demonstration efforts.

Background: The Sites

As the employment and training arm of the AFL-CIO since 1968, the Human Resources Development Institute (HRDI) has conducted a

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wide variety of activities to serve the employment-related needs of disadvantaged persons, ex-offenders, young people, the disabled, veterans, Native Americans, and others. In the 1970s, the institute worked with building trades councils and community organizations nationwide in outreach campaigns that brought more than 10,000 women and minorities into apprenticeship programs. Following the passage of the Job Training Partnership Act in 1982, HRDI operated a number of training programs for dislocated workers, efforts that clearly showed the capability of union members to excel in peer counseling, client recruitment, and job search assistance (McMillan, 1991).

Throughout its history, HRDI has been keenly aware of the effectiveness of apprenticeship, especially in the building and construction industry. Apprenticeship combines structured on-the-job training, under the supervision of a mentor or journey-level worker, with related theoretical instruction delivered in the classroom. A joint administrative structure, where union and management representatives serve on joint apprenticeship committees (JACs), helps to ensure that workers obtain the broad-based, flexible skills that will serve as the basis for career progression. In the construction industry alone, it is estimated that joint apprenticeship trust funds provide about \$500 million worth of training annually (U.S. Congress, 1990).

Although the Apprenticeship 2000 Initiative, launched by the U.S. Department of Labor (USDOL) in late 1987, recognized the potential of the "broad concept" of apprenticeship to serve the work force needs of industry, its guiding principles failed to encompass significant union involvement, the importance of joint administration, or a worker-centered approach to program development (U.S. Department of Labor, 1989). As it followed the evolution of the initiative, HRDI provided input to USDOL and worked with AFL-CIO affiliates to respond to issues raised in several focus papers. When demonstration project funding was announced. HRDI responded with a proposal based on the conviction that "workers and their unions must fully participate in the design, implementation, and administration of continuous learning systems based in the workplace" (Marschall, 1990). In early 1989 the Institute obtained a \$500,000 grant to implement an Upgrading and Career Ladder Program (UCLP) based on this approach.

To ensure that government funds leveraged the maximum amount of private sector investment, HRDI worked with international unions and individual employers to identify demonstration projects where labor and management appeared committed to continuing joint training activities beyond the grant period. This process resulted in the selection of five sites. The first involved The Boeing Company, the world's dominant aerospace firm with main operations in the Seattle area of Washington state, and Aerospace Machinists Industrial District Lodge 751, which represents some 56,000 hourly Boeing workers. Following a 1989 strike, union and management agreed to a contract that established the Joint IAM/Boeing Quality Through Training Program (QTTP), which accumulates about \$12 million yearly for skill upgrading and continuous improvement of the company's hourly workers. HRDI worked with QTTP staff, consultants, and a joint committee of workers and supervisors to develop a training program for two highlyskilled electronic maintenance technician job classifications.

The next cluster of demonstration projects, involving three health care institutions and two unions, was also located in Seattle. At Group Health Cooperative, HRDI worked with the Service Employees International Union (SEIU) Local 6 and company officials to develop training for medical assistants, a job category of growing importance in clinics and outpatient facilities. SEIU Local 6 also was involved in a demonstration project at Swedish Hospital Medical Center, where the target occupation was medical transcriptionists. The third medical care site, whose hourly workers are represented by United Food and Commercial Workers (UFCW) Local 1001, was the Laboratory of Pathology, a full service, highly automated facility employing more than 500 persons. Prior to HRDI's contact with the laboratory, it had started a training program for Laboratory Technician II, a position involving the performance of routine tests, evaluation of quantitative data, and troubleshooting (Solomon, 1990). An HRDI consultant analyzed the task content of several related positions and the results were utilized to revise the LT II program in ways that broadened the skills obtained by trainees.

The fifth demonstration project focused on machine tool equipment operators at the Engine Compressor Division of Dresser-Rand, which manufactures sophisticated, customized compressors for a variety of applications. Hourly workers at the plant in Painted Post, New York, are represented by Local 313, International Union of Electronic Workers (IUE). A full-time HRDI staff person worked with an existing joint training council (JTC) and a special joint committee to develop a self-paced program to enhance workers' machine operation skills.

Though the demonstration projects spanned service and manufacturing occupations in very different institutions, they shared several characteristics. (1) Each project was spearheaded by a labor-management committee of some sort, either preceding HRDI's intervention or formed specifically to oversee the demonstration effort. (2) In accordance with the distinctive aspects of apprenticeship, each workbased learning program integrated on-the-job training, mentorship, and classroom instruction.

The status of the training programs varied as of January 1992, three months before the conclusion of the grant. Trainees had graduated at Group Health Cooperative (June 1991) and the Laboratory of Pathology (May 1991), with both institutions committed to program continuation. At Boeing, 23 workers had started a program to qualify as electronic maintenance technicians. A group of five trainees were continuing their self-study medical transcriptionist program at Swedish Hospital. In December 1991 at Dresser-Rand, labor and management officials agreed to an implementation proposal for machine tool operator training. In its ongoing assessment of the projects, HRDI has drawn upon third-party evaluation reports and its past experience to identify several important lessons.

Empowerment Through Authentic Joint Structure

Though all of the HRDI projects involved unionized workplaces, the labor-management structure varied at each location. The ramifications were most evident at the manufacturing sites, leading to the *first lesson*: training programs will function more smoothly, and are more likely to be successful, if structured in a manner that complements the official union structure. Programs that are separate from union structures, not directly involving elected union officers, will become bogged down in miscommunication, confusion and suboptimal results.

Union structures dovetailed the new training program most precisely at Boeing, where the QTTP is governed by a six-person, joint training policy board that includes District Lodge President Tom Baker. This board provides overall direction to the QTTP and oversees a ten-person, full-time joint administrative staff that handles day-to-day operations. When the policy board agreed to work with HRDI on the electronic maintenance technician (EMT) program, it set up another joint committee of three incumbent EMTs and three shop floor supervisors.

The new EMT committee, working with a consultant and a curriculum designer, met weekly to oversee all aspects of program development: detailed job analysis, curriculum design, application procedures, screening, participant selection, and training on-the-job coaches. The involvement of union members in matters traditionally reserved for human resources personnel was very unusual for Boeing, so the EMT committee received little guidance about how to proceed. Because the program structure ensured worker input and was closely linked to union structures-two union workers on the EMT committee were shop stewards-committee members became progressively empowered to take initiative, demand resources from both company and union, grapple with budgets, and develop administrative expertise. "Given initial assistance," reported University of Washington Professor Vandra L. Huber, "the program administration skills of joint board members will increase over time and will evolve into self-management" (Huber, 1991). Over 18 months, the EMT committee designed a 3.900-hour training program that incorporates extensive OIT, documentation of skill competencies, guidance from job coaches, customized classes on company time, and off-hour classes in interpersonal skills and writing effectiveness. It is seen as a model for the entire company. OTTP staff, who made a significant commitment of time to oversee the program, are now applying its lessons to a basic skills effort

At Dresser-Rand, a joint training council (JTC) was formed in 1987 as an informal, voluntary organization. Union and management officials agreed to keep it outside the union structure, without the benefit of collective bargaining language. The president of IUE Local 313 is not a JTC member, and union representatives are volunteers selected by seniority after indicating their interest by responding to a bulletin board posting. The company provides staffing for the JTC, with its budget derived from state grants and company resources. In public presentations, JTC members distribute material stressing "voluntary participation" in the council and stating, "It is important to avoid having company or labor leaders actively participate as members of this group" (Bacon et al., 1990).

The JTC oversees a comprehensive program that includes confidential testing and assessment, basic skills instruction, and more than 30 technical classes, many held on company time. Union and management agreed to form a new joint committee for the demonstration project, and HRDI signed a letter of understanding saying that the committee would function "under the umbrella of the JTC." Despite the presence of full-time HRDI staff with extensive apprenticeship experience, the "HRDI Committee" never functioned smoothly. After the target occupation was identified, a year was consumed in wrangling over the content of training. Nontraining issues, including shop-floor conflicts, constantly intervened to disrupt committee deliberations. A third-party evaluation reported that the committee never developed a unified vision or common conception of program development: some members looked to adopt model training from other firms, while others had a problem-centered approach that focused on resolving day-to-day problems (Meridian Corporation, 1991).

The entire initiative almost collapsed in February 1991 when the union boycotted all joint training meetings after the company had violated the confidentiality of an employee's test scores. The local union president, attempting to use this incident as leverage to increase union identification with training, proposed that the JTC be restructured with a policy board of union and management officials who would jointly select a full-time educational director. His proposal was rejected by "shocked" company officials who remain committed to a voluntary JTC. The crisis passed when the union's executive board accepted the status quo by signing a memo of understanding assuring confidentiality.

The contrast between Boeing and Dresser-Rand highlights the critical nature of authentic joint structure in which elected union officials have direct, policy-making input into training efforts. The representative structure of the QTTP sets the organizational foundation for a win-win situation: management obtains a more highly skilled work force, while the union delivers additional benefits to its members. Elected union officers view joint training as a clear advantage in this setting, with their members progressively empowered to fulfill roles ordinarily performed by nonunion personnel. In a noninstitutionalized structure, activities will inevitably undercut the identification between members and their unions, leading to periodic disruptions and chronic instability.

The Career Development Connection

Writing and practice in the career development field traditionally has focused on professionals, technicians, white collar employees and managers. In accordance with the tenets of Taylorism, production workers and their service sector counterparts were valued mainly for their willingness to take orders and defer the creative thinking to others. Job satisfaction was not a consideration. It was presumed ordinary workers desired well-paying "jobs" not meaningful "careers."

In its dislocated worker programs, HRDI has found that production workers are very receptive to career counseling, especially if it is delivered by peers sensitive to their needs. This perception was reinforced in the UCLP demonstration projects, leading to the *second key lesson*: workers are keenly interested in career advancement and highly committed to work-related training, especially if it is developed jointly.

Faced with changing work methods and new technology, many workers are eager to utilize their skills, abilities, initiative, and creativity in the pursuit of job satisfaction and employment security. When the EMT training program at Boeing was announced through union and management channels, more than 1700 individuals inquired about it and 810 persons completed applications.

The response was similarly overwhelming at Group Health Cooperative (GHC) where more than 120 persons—far more than the employer had anticipated—applied for medical assistant training. The 16 trainees enrolled in the GHC program displayed tremendous commitment, attending two three-hour evening classes per week and spending all day Saturday in clinical work. They formed ad hoc study groups and provided personal support to those who considered dropping out. Family members took up the slack at home. The program boosted the morale of trainees, increasing their commitment to quality services at GHC, and led many to look forward to future career advancement (Cohen and Owens, 1991).

Skill Training and New Work Systems

A third important lesson emerging from the UCLP is the interdependence between work reorganization and continuous skill training. The implementation of "high performance work organization," with its emphasis on broader job categories and acute concern for quality, tends to cause great anxiety among workers accustomed to Tayloristic production methods. Ongoing skill training programs help to cultivate a supportive atmosphere where workers have access to the resources needed to maintain their employment security.

With more than 106,000 workers spread out over dozens of facilities in the Puget Sound region of Washington state, Boeing represents a virtual coalition of companies striving for greater cohesiveness. Its hourly work force is divided into as many as 1,800 job classifications. Company and machinists union officials participate in a joint corporate jobs committee that is combining related job classifications, but the process has gone slowly. QTTP efforts are now helping to speed up work reorganization activities by reviewing similar classifications, identifying job families, and developing customized programs to train for greater job responsibilities.

At Dresser-Rand, the company is installing new computerized machine tool equipment and transforming the organization of work into a cellular manufacturing system where equipment is grouped together for the efficient machining of parts (Huber and Brown, 1990). There is neither collective bargaining language to regulate the speed and direction of the new work system nor has the ITC developed special training programs. Hourly workers tend to feel very insecure about these changes, mainly because they will eventually be required to operate all of the machines in their particular cell. The ITC focuses on classroom instruction. The absence of a mechanism to integrate both systematic on-the-iob training and classroom education has hampered the company's ability to make optimal use of cellular manufacturing.

The immediate outcome of the Dresser-Band demonstration project is a prospective machine tool operator program that combines existing company-sponsored classes with "hands-on" laboratory experience and an unspecified amount of on-the-iob training. As of this writing, it is too early to determine whether this new program will take hold. Company and union remain committed to the existing model of a voluntary ITC.

The interrelationship between skill training and new work systems will be a prime subject of research and practice in the years ahead. The AFL-CIO Human Resources Development Institute is contributing to this process through the development of a participatory model of "structured work-based learning" that balances the productivity requirements of leading edge firms with the career aspirations of workers. The hallmark of this model: a reliance upon the skills. knowledge, and creativity of workers in the design and implementation of all phases of workplace training. Skill training programs will attain their full potential if individual workers and their unions feel a sense of ownership over those programs, and are progressively empowered by them to become engaged in many aspects of company decision making.

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Expert Performance: Demonstrating Structured Work-Based Learning in Three Industries

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The Job Performance Learning Project

In recent years, employers and policymakers have increasingly come to view a skilled work force as essential to economic success. They believe new training strategies are needed for the current and entering work force if our nation is to strengthen its position in the world economy.

As part of this effort to develop new training strategies, the National Alliance of Business (NAB) developed the Job Performance Learning (JPL) project, beginning in July 1989, with support from the U.S. Department of Labor. The project demonstrates structured work-based learning (SWBL) in four diverse industries. SWBL (used here interchangeably with JPL) provides a single comprehensive approach to preparing skilled employees through a combination of onthe-job learning and formal instruction. This approach to training draws on many of the principles of traditional apprenticeship, but generally requires on-the-job learning based on performance criteria rather than time-based systems requiring three to four years under traditional apprenticeship; is more flexible in order to meet the changing skills requirements of the work force; and may include more formal instruction by the employer or by educational institutions than traditional apprenticeship.

In undertaking the project, NAB agreed to develop guidelines for the JPL model, select employers in service or high technology industries to implement the model, provide technical assistance, evaluate the implementation, and review policy implications (Fisher and Syrek, 1990). NAB contracted with organizations in four diverse

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industries: Motorola University of Motorola, Inc., the American Bankers Association, and Southern Maine Technical College in cooperation with Maine environmental services employers. The fourth site at Eastman Kodak Company was in the design stage at this writing and is not included in this paper. Evaluations of the projects were conducted by a third party, Meridian Corporation.

The JPL Model is innovative because it focuses on expert worker performance by integrating learning that occurs on the job with that which occurs away from the job and by systematically structuring the on-the-job experience to provide efficient, effective attainment of skills and knowledge. The model is based on eight principles: (1) Learning must be treated as an integrated whole; (2) Instruction must support the employer's strategic goals; (3) Instruction is used to address skill and knowledge deficiencies; (4) A Job Performance Profile is developed for each job; (5) From this profile, performance criteria (or competencies) are determined; (6) Mastery of these skills is the ultimate test of learning; (7) A single learning plan should be developed for each individual; and (8) Learning becomes a continuous process, as the learning plan is adjusted to changing job conditions.

Parameters for NAB's JPL demonstration projects were: (1) Major job duties constitute a commonly defined occupation; (2) Substantial job specific learning beyond a high school education is required; (3) The trainee is expected to continue working for the organization after successful completion of the program; (4) Job related basic skills (literacy, math, etc.) are offered as needed; (5) There is an understanding between employer and employee/trainee about the conditions of training; (6) Certification of skills is provided to the trainee; and (7) Participating employers should address the potential for certification by an external body (e.g., industry association or community college). The last two parameters relate to the development of industry-wide standards for jobs or job clusters. These will be discussed further in the final section of the paper.

NAB facilitated project development through site visits and the production of two guides (Komatsu, May 1990 and September 1990). These guides reinforced the importance of performing a job analysis before designing the learning program, and suggested various job aids that could be used with trainees by mentors or coaches as a means of structuring the on-the-job learning.

Motorola's Technician Education Network (TEN)

In recent years, Motorola has had difficulties hiring qualified electro-mechanical technicians (who repair, maintain, and support equipment that tests and packages microprocessors to provide efficient production flow) in its semiconductor manufacturing operations. TEN training was developed in response to this need. The pilot phase, started in the fall of 1991, provided training for electromechanical technicians at the Semiconductor Products Sector plant in Austin, Texas. Full training, expected to take one to two years, is scheduled to start in June 1992.

The TEN project plan was developed by several committees (steering, subject matter experts, design, and Austin Community College). The plan involved a job analysis of electro-mechanical technician jobs throughout the company. A DACUM (Developing a Curriculum) process was used, consisting of workers, supervisors, and managers meeting in focus groups to determine job tasks, skills, and responsibilities for each specific job. Electro-mechanical technicians were found to require similar skills across the company. Job progression requirements were developed; a curriculum based on a skills hierarchy, which details in hierarchical order the skills and tasks needed to maintain equipment, was designed; and the program design—learning objectives and instructional strategy (training, education, relevant experience, and mentoring performance) was laid out.

The skills hierarchy analysis included knowledge/skills (e.g., electronic terminology, statistical process control), tools (e.g., power tools, oscilloscopes), and attitudes (e.g., teamwork, motivation). For each skill, the program design provided an objective, training activity, and source. For example: "describe function of parts," the objective was, "Given a list of (equipment) assemblies and subassemblies, the participant will describe how they work." The training activity was on-the-job training (OJT) and the source was "Trainer/Technician/ Mentor."

Seven job performance objectives were identified and formed the foundation for the training model implemented during the pilot phase of the TEN project. These were operate and set up equipment, perform preventive maintenance, perform limited range of equipment repair, troubleshoot to board level, read and interpret equipment blueprints and schematics, collect data and carry out experiments using statistical methods, and participate on a problem-solving team (Meridian, December 1991).

These job objectives were met by participation in eight areas of study. Pilot participants took (or tested out by passing a competency test) units on cardiopulmonary resuscitation, computer literacy, and computer use (introduction, word processing and spreadsheets). They also chose one unit of the following: effective presentation or meeting skills, interpersonal skills, or listening skills; participated in a problemsolving team that met for two hours weekly over a four-week period; and took two courses offered by Austin Community College (ACC), Electronic Systems, and Mechanical Systems I. A prerequisite to Mechanical Systems I was structured OJT on machine parts at Motorola.

In addition to OJT on machine parts, most of the other modules involved OJT to complement the classroom training. The OJT is provided by technician advisors (TAs), senior technicians trained to work with trainees on an individual basis. The responsibilities of the TAs were defined as: train/support acquisition of new skills; evaluate performance; provide feedback, coach, advise/counsel; and act as a role model. Motorola made it clear that for attendance or discipline problems, trainees should be referred to their own supervisors or managers. The TAs received a TA training workbook and participated in a four-day training program.

A lengthy manual, *Technician Advisor Training*, was developed to cover instructional analysis, performance objectives, instructional strategy, roles and responsibilities of the TA, adult learning theory, instructional techniques, and coaching concepts. This guide is interactive, asks the TA to respond to questions and think about how he/she has dealt with similar problems.

A course map was developed that showed how each module related to other modules and the course as a whole. Trainees had some choice in deciding the order in which modules were studied. TAs retained all course-related material and released it to trainees when the trainees indicated they were ready to start a particular module.

The TEN pilot project recruited candidates from four departments within semi-conductor operations. Applicants for the pilot training were selected according to their ability to set up and operate equipment, complete Motorola's Gateway Literacy test, and their years of experience. The same selection process is expected to be used for future TEN training, although the project team felt that employees with less experience may be able to participate at their manager's recommendation (Meridian, December 1991).

Four employees were selected to go through the pilot program together. The project team felt that there was value in groups of four to eight going through the program together, but believe the program is flexible enough for people to be slotted in on an individual basis if necessary.

Formal mechanisms to monitor the program include competency tests, participant and TA progress summaries, trainee evaluations of each class, ACC tests, regular telephone contact with ACC instructors, separate meetings with trainees and TAs, and a TA and trainee survey (Meridian, December 1991). Motorola is writing a guide for using the JPL model in training for other jobs across the company.

The Motorola TEN demonstration meets most of the principles and parameters of the JPL demonstration guidelines described above. For example, learning is integrated with formal classroom instruction at both Motorola and ACC, combined with structured work-based learning under the guidance of a TA. Learning is performance driven, based on the DACUM analysis approach and regular reviews provided by Subject Matter Expert and Design Committee meetings. Skills learned are certified through competency tests, and trainee and TA progress summaries. Motorola is exploring external certification of TEN, possibly with the International Society of Certified Electronic Technicians.

Some other preliminary lessons learned are (1) Having multiple committees work on designing, developing and implementing the training program is effective, and particularly helpful in "selling" the programs to all stakeholders; and (2) Completing a job analysis provides a solid foundation for the program design, and makes other activities (e.g., identification of performance objectives and development of competency tests) relevant to the actual job requirements. A link was established with the Business Technology Center (BTC) of ACC rather than with a credit-granting department because BTC was more flexible in tailoring courses to meet the needs of the TEN.

The American Bankers Association (ABA) Performance 2000 Project

Designed for newly hired tellers, Performance 2000 was seen as a means of addressing skill deficiencies in the bank teller applicant pool, and for some banks, as a way of reducing turnover. This project was implemented in 12 banks located in five cities across the country, under the direction of the American Institute of Banking (AIB), the training and education division of ABA. Local site coordinators met three times with the Washington-based AIB to guide program implementation. Due to the limited authority of the AIB over the sites, Performance 2000 did not follow all of the guidelines for the project.

Performance 2000 had three components: basic skills, classroom training in technical skills, and structured on-the-job training. Six modules of a newly developed basic-skills curriculum, Strategic Skill Builders for Banking (SSBB) (Mikulecky and Philippi, 1990), designed for employees with marginal skill deficiencies in computation, communication, etc., were used for the basic skills component. Unlike the IPL model, the technical component was not based on job analysis of the teller position, but was the technical teller training (TTT) normally used at each bank, and covered the core job functions such as balancing the cash drawer, transaction processing, customer service, security, cross-selling products and services, and communication. The third phase consisted of structured OJT under the guidance of mentors, who provided planned exercises, experiential learning activities, and feedback for participants. A Teller Mentor's Guide, written by an expert on bank mentoring, with input from the Performance 2000 site coordinators, provided checklists to be used by mentors to ensure the satisfactory completion of each task by trainees.

Thirty-nine participants were enrolled in Performance 2000, and 32 completed the training; seven were terminated before reaching the mentoring phase. Two terminations were unrelated to performance; five people failed to maintain the required average test scores during the TTT phase.

The trainees were selected differently at each site. Three sites used their normal hiring procedures, placing new hires during a certain period in the program. But changing economic conditions, which lowered demand for new hires, led two sites to include tellers already on board who were deemed "at risk" of maintaining their jobs.

With the exception of one bank, the SSBB screening and placement measures were not used for selection purposes, but were administered after enrollment in the demonstration. The SSBB modules were referred to as "boring" and "easy" by many participants. This was predictable since two-thirds had some college and almost half had prior banking experience, but at the same time trainees agreed it was a good refresher course. The slow pace of SSBB did not prepare students for the demanding TTT (average test scores must be maintained) component that followed the basic-skills phase (Meridian Corporation, August 1991).

The mentoring component was generally regarded as successful. Trainees and mentors noted that some skills, such as effective use of body language, and completing two or more functions simultaneously, are learned more effectively on the job than in the classroom. Mentoring can also improve new employee confidence and motivate them to succeed. Providing training for the mentors proved to be critical to their success. The mentoring component was implemented in different ways across sites. It seemed to be most effective when the mentoring was conducted by experienced tellers rather than the head teller (due to heavy daily workloads), the *Teller Mentor's Guide* was *customized* by the bank, the mentors received training in the mentoring process, and the mentors were given adequate time to work one-on-one with the trainee assigned to them.

As a voluntary program with few specific requirements of participant banks. Performance 2000 did not closely follow the IPL model: thus generalizations from this demonstration are limited. For example, due to the recession, hiring was limited, and several trainees were already experienced tellers. Also, banks were given much leeway in implementing the three components described above. The level of authority of the site coordinator was important in persuading bank staff (both supervisors and senior management) to support Performance 2000. Generally programs suffered from lack of communication between senior management and operational staff. Since the roles of managers were not always spelled out. at some sites mentoring was given a low priority compared to the day-to-day pressures of serving customers (Meridian Corporation, August 1991). Nevertheless, judging from interviews with bank staff, the key lesson learned is that when the mentoring component is implemented using a customized Teller Mentor's Guide, which incorporates the findings of Expert Performance: Designing On-the-lob Learning (Komatsu, September 1990), it increases the value added to the overall training program.

Southern Maine Technical College (SMTC)

SMTC, in conjunction with private and public environmental services employers, is demonstrating JPL as part of a new associate degree in the applied science program in environmental technology. The curriculum provides students with the fundamental skills required for entry-level employment in existing and emerging careers in the environmental sciences. The project originated in the spring of 1989 when SMTC formed an advisory committee of employers in the environmental services area to identify job opportunities and/or employment needs. It was agreed that the classroom/laboratory instruction should be supplemented by a summer internship between the first and second years of the program. Involvement in NAB's JPL project allowed the internship concept to expand to become a work-based partnership model.

For the 1990 summer, SMTC developed cooperative agreements with nine small employers who either could hire an intern that summer, or would be willing to do so in the future. Eight students were placed with four employers, and another student, working full time in the environmental field, fulfilled the internship requirement by preparing curriculum materials in her field of expertise. Other students fulfilled internship requirements during the 1990-91 school year or during summer 1991.

SMTC has compiled documentation on which skills are learned through coursework and reinforced during the internship (or visa versa), and those that are learned only through the work experience. The latter skills include using proper procedures to clean up oil and chemical spills, safely operating power and hand tools, operating and navigating small boats, and using proper traffic control procedures around work areas. Internship position descriptions include activities involved, and reference the skills described in the documentation.

SMTC developed an informal assessment survey of the internship program to be completed by both the employers and the interns. The results indicated that the cooperating employers were satisfied with the interns' entry-level skills, their performance on the job, and the value the intern contributed to their operations. One employer noted, "Jay worked extensively in the QC lab and the maintenance department. His efforts were invaluable during a busy time." The students were generally favorable, with one writing, "The internship program is a great learning experience. I was able to contribute what I learned during the summer to the third and fourth semesters."

The formation of an advisory committee of cooperating employers ensured that the program was directed toward fulfilling labor market needs, and laid the groundwork for a thorough DACUM analysis which formed the basis for both classroom and on-the-job components. This analysis strengthened the classroom instruction of SMTC's environmental technology program and reinforced the caliber of the instructors, most of whom had prior industry background. Another asset of the program was that SMTC had an instructor who provided OSHA safety training and certified students in this area. This certification permitted students to participate in a wider variety of projects during their internships. Although both students and cooperating employers were enthusiastic about the internship project, it seems clear that not all students received a guided SWBL experience. There were no standard training procedures for job supervisors, nor were there guidelines, manuals, or checklists to guide the on-the-job learning. However, SMTC is in the process of developing training and materials to be used in the future.

The program design (advisory committee and DACUM process) and the training model, which includes an on-the-job component, are elements of SMTC's program that could be replicated by other colleges. However, as noted above, the internship needs to include a more structured learning process in order to maximize its benefits for both students and employers.

Lessons Learned

Given that NAB's JPL principles and parameters were designed as guidelines rather than requirements, it was not expected that each demonstration would meet all guidelines. Generally, Motorola probably developed the most complete model because it developed an integrated approach combining SWBL, guided by a technical advisor, with classroom training. The Performance 2000 sites included basic skills, classroom training and SWBL, but the classroom training was not based on job analysis, and the SWBL varied across sites. However, the SWBL was successful when the *Teller Mentor's Guide* was customized and managers gave mentoring a high priority. While SMTC used a DACUM process to guide course development and write position descriptions of the internships, the degree of structure in the internship depended on supervisors, who received an informal orientation but were not trained as advisors/mentors in any structured way.

Because the Motorola and SMTC programs were developed through a job analysis/DACUM process, each included learning objectives and skill competencies that could be certified. For those banks customizing and using the *Teller Mentor's Guide*, competencies achieved could also be documented. In terms of formal recognition, SMTC provided the OSHA certification in addition to the associate degree, and Motorola is looking into certification by the International Society of Certified Electronic Technicians. Although the competencies or standards developed in the three projects could be reached in different ways, judging from the interviews conducted by Meridian with JPL participants and program staff, the merits of combining SWBL with classroom training are well worth the extra effort.

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DISCUSSION

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Today I'd like to talk briefly about these three demonstrations by putting them into a broader context. There are some key elements and lessons learned from our experiences here, which have been mentioned already. I'll talk about some of the barriers to wider replication. But most importantly, I'd like to put these skills upgrading efforts into the context of what is happening in some American institutions—call it total quality, the development of high performance work organizations (HPWOs), whatever you want. How do these demonstrations relate? My premise is that fundamental structural changes of this nature must occur widely in private firms, in our schools, and in government itself. This way of thinking about learning must become the norm, rather than simply an exemplary model.

Barriers to Replication

From the Department of Labor's (DOL) point of view, these demonstrations failed if we developed successful projects with a limited number of firms, learned a few lessons, and it ended there. It's important to promote these models as part of the rethinking of work processes, and how people fit into the planning, the restructuring of the American workplace. Interestingly, each of the three demonstration projects is predicated on a different avenue for replication.

The joint labor-management efforts that Marschall discussed are nice because successful models can be incorporated into subsequent collective bargaining contract negotiations. There's an opportunity for widespread impact. NAB's demonstrations used world class firms that are industry leaders, so there was a natural attraction to copy what those who are most successful are doing. For instance, Motorola is part of a network of semiconductor firms in Austin, and they are now

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working within that network to share information about the model. WAVE used the industry association approach, traditionally focused on lobbying for its members, with its child care project, which many have suggested as a vehicle relatively untapped in this country.

So what are the barriers? The biggest obstacle is that these projects were forcing cultural change within their organizations—change in the way that training was viewed and delivered. They didn't fit into the traditional framework for training, where employees sign up for a course from the training catalog, go off and sit in a classroom learning material that may have some relevance to the job, then go back to real work. In these cases, it involved working through existing institutions, and often creating new structures to develop a new method for addressing skills upgrading needs. It also requires patience to obtain agreement and buy-in from those used to providing training in a different manner.

It takes a tremendous commitment of time and money by the employer to initiate this kind of effort. Large, successful employers did it, and it was difficult; small employers face additional obstacles. The time to perform serious job analysis, to determine the skill requirements necessary and the sources/ways to meet skill requirements, how to involve employees, etc. make for quite an undertaking.

For small firms, there's the issue of expertise. We've talked to lots of small employers who are interested in making these kinds of investments, although less so with the recession, but don't know where to begin. How do you sort out the vast array of available resources, government programs, and educational materials that best meet your needs? How do you get beyond the daily "fire fighting" so that you can do long-term planning?

Finally, there are the problems of defining and measuring on-thejob training (OJT) and its impact. Any effects observed could be due to so many other factors; how do you quantify and assign a cost to training time, for instance, when some of the learning is informal, some of it occurs during work hours, and some of it occurs on the employees' time? Outcome measures are likely to differ largely from one firm to the next.

Broader Context

Why are these models important in a broader context? It seems that there is consensus building around the country that the new world order will be determined largely on economic grounds, not on the basis of military strength alone. Traditionally, we've thought of access to capital for investment, access to new technologies, and even wellrun companies as critical to productivity growth and maintaining our quality of life. These assets and characteristics will obviously continue to be of great importance.

But this emerging world economy moves money and machines across borders in a manner unimaginable just a few years ago. Large corporations are spread across the globe. I read a telling illustration in the paper last week of some South Korean computer makers using state-of-the-art German technology to design systems for a narrow segment of the American market. In this kind of economy, and where any developed country can purchase another's resources, those assets that we *don't* share with other countries (workers, infrastructure, and public resources) are what will set apart those who are most successful. Government and business must ascertain how to best support and deploy these resources in ways that promote quick and clever responses to rapidly changing markets.

What we've heard about today are some model programs, programs that enable workers to systematically increase skill levels through a combination of work, mentoring, classroom training, and OJT. So we're focusing on the first of the three nontransferable assets. They were initially funded as a way to expand an effective method of training—apprenticeship—to new industries and occupations. We called this work-based learning. These projects have evolved as our thinking at DOL and nationally has evolved re: the importance of training and indeed, lifelong learning.

As research has been done on the role and impact of training, it has become increasingly evident that a critical element is the context in which training occurs. It makes no sense to invest heavily in training and to put those highly skilled employees into a routinized, mass production environment. You have to ask the question: "Training for what purpose?" These projects become an important component in that broader context of the HPWO. The upgrading in these projects is exactly the kind of upgrading that needs to go on to support the move to HPWOs in America by building the capacity of our work force. Their importance is recognized by employees. Look at the demand to get into these pilot skills-upgrading programs. At Boeing, Marschall mentioned that 804 employees applied for 24 available slots. I think this reflects a recognition that our traditional notion of job securitythat you hook up with one employer for the majority of your careeris changing. (It would be unrealistic not to change, in the face of the magnitude of the blue collar layoffs that occurred during the 1980s;

and now we're seeing layoffs and significant restructuring in white collar jobs as well.) "Job security"—attachment to one job—is evolving into "employment security," with the critical distinction being that each employee must have sufficient skills that they are employable throughout their careers, usually with a series of employers in related jobs.

It is from this base that you hear people in Washington today discussing the need for employees to have opportunities to certify their skills and to obtain portable credentials. Think about the advantages of this scenario, where the individuals completing the kinds of upgrading programs that have been discussed today, and demonstrating certain skill competencies, would receive a credential that was recognized throughout the industry. The credential would be recognized because it had been developed jointly by employers in the industry and, where appropriate, labor representatives as well.

To accommodate this broader vision, we have adapted our understanding of work-based learning. The National Advisory Commission on Work-Based Learning at DOL has been pursuing a broader definition of work-based learning in their contacts with leading edge firms. This definition recognizes that there are elements of the following when people talk about work-based learning: 1) workplace literacy, 2) apprenticeship, and 3) training. It is becoming evident that each element of this definition is important, necessary, but not sufficient. Each element alone is incomplete.

Leading edge firms have a much broader perspective on the learning process, one that attempts to transform the firm into a learning enterprise to continuously improve technology and work processes. Improving the skills of the work force is thus important mainly because it promotes constant innovation in work processes and technology.

We use this broader definition, incorporating the elements of skills, training, technology, and work organization. There is a strong relationship among these elements found in successful companies. They will tell you, over and over again, that the integration of these factors leads to significant productivity gains.

Conclusions

It would be a mistake to think about these models only as programs that worked. I think there is an increasing realization that successful changes within companies must be embedded into the fabric of the company. Training and lifelong learning and commitment to the people as a valued resource must be incorporated into the philosophy of the way work is done and organized. We need to figure out how to make this type of effort commonplace.

As we in government wrestle with these issues, there are some key questions. What is the appropriate government role? How do you target the limited federal resources? To potential growth industries? Failing industries? Individual companies? Small firms? Individual workers' skills? How do you encourage firms to think beyond "today's problems" to recognize the challenges of this new economy? What organizational structures within government can make this happen most effectively? How do you do this without inviting the charge of engaging in industrial policy? We look forward to resolving these questions with you as we proceed.

VI. KEEPING AND BREAKING PENSION PROMISES

Pension Terminations and Implicit Contracts

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The Employee Retirement Income Security Act (ERISA) of 1974 sought to clarify employee rights and employer obligations for defined benefit (DB) pension plan assets and promised benefits (liabilities of the plan). ERISA established minimum vesting standards, increased fiduciary responsibility for plan management, and required insurance for benefit payments through the Pension Benefit Guarantee Corp. (PBGC), a federal agency. In addition, ERISA gives employers the right to reclaim assets in excess of termination benefits from the plan via "termination and reversion." Termination benefits are vested and unvested accumulated benefits. which reflect wages and tenure as of the termination date. If the plan were not terminated, participants could expect to receive projected benefits at retirement, reflecting retirement-age wages and tenure. Hence termination and reversion allows employers to capture excess assets (assets in excess of termination benefits) or the difference between projected and termination benefits, whichever has greater value.

Though ERISA establishes the legal basis for terminations of pension plans, employees may expect pension plans to continue until they retire, so that sponsors benefit at the expense of employees. Several previous articles explore terminations in the context of an

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implicit contract where risk-neutral firms fully insure projected pension benefits to risk-averse employees. In such a model, a change in the level of projected benefits (even if legal) indicates a breach of the implicit contract. This paper examines the implicit contract under an alternative model that assumes that employees prefer to accept lower pension benefits when the firm does poorly, rather than insist on payment of projected benefits and thus risk driving the firm into bankruptcy and losing all future compensation. In this model, termination may be the realization of one contingency of the implicit contract, rather than representing a breach of contract.

Background and Previous Research

With the stock market rise and high interest rates in the early 1980s, many DB pension plans became overfunded relative to liabilities for termination benefits. In that period both the number and value of terminations rose dramatically (Mitchell and Mulherin, 1989). Firms with overfunded plans began to exercise the legal right, under ERISA (Section 4041), to reclaim excess assets by buying annuities that covered termination benefits, terminating the plan, and reverting the assets to the employer.

Significant research has been directed at understanding the causes and consequences of terminations for reversion. Among the factors found to cause the termination decisions are financial distress, tax incentives, proximity to takeovers, and wealth transfers from employees to shareholders. Thomas (1989) provides a good discussion of these issues.

Recent work on breach of implicit labor contracts (Shleifer and Summers, 1988) has focused attention on possible transfers of wealth from employees to shareholders. Papers that examine the share price response to terminations typically find statistically significant stock price increases of 1 percent to 4 percent over short periods (one to five days) around the date when knowledge of the termination becomes public. The best readily available proxy for this date appears to be the filing date (when the PBGC receives the application for termination). Mitchell and Mulherin (1989) summarize the findings regarding stock returns. The stock price response results indicate that transfers of wealth from employees to shareholders are possible.

Lazear (1979) gives a motivation for implicit contracts. If wagetenure schedules are steeper than value of marginal product (VMP) schedules, the employee effectively posts a bond early in tenure to be repaid later. Hence expected employment duration is likely to increase. The implicit contract allows investment in human capital beyond what the spot market for labor would permit and creates a rent to be split between employees and firms. This arrangement also may require incentives for retirement, as wage exceeds VMP late in life. Pensions fit into this framework well, as pension formulas can be manipulated to both increase the slope of the compensation schedule during most of the employee's career and to encourage retirement at the appropriate time (Kotlikoff and Wise, 1987). Firms have incentives not to break the implicit contract because, if they do, they suffer a reputation loss and employees impose a penalty by demanding higher wages early in tenure.

Ippolito (1985) provides a model where employees and firms are jointly better off with an implicit contract which essentially promises to pay projected benefits. Ippolito refers to this as a "real" pension, as final wage estimates embedded in projected benefit estimates reflect real wage growth. Employees implicitly contribute to pensions at a rate commensurate with accumulating real benefits. In this model, termination of the pension plan (even without reversion of excess assets) breaches the implicit contract by reducing the value of the pension plan to termination benefits rather than projected benefits. The model assumes that the firm is able to fully insure the employee, as no allowance is made for benefit adjustments if the firm does poorly.

Terminations, Reversions, and Explicit and Implicit Contracts

I consider two extensions to Ippolito's model. First, the implicit contract may provide for a contingency where, under certain conditions, the parties agree that termination benefits will be paid rather than projected benefits. That is, the explicit contract may grant the legal right to terminate, but the implicit contract may provide contingencies for when that right may be exercised. Second, the implicit contract may cover plan assets in addition to benefits, as employees may believe that they will receive any excess assets in case the plan is terminated. That employees expect to receive excess assets under the implicit contract seems unlikely for two reasons. First, funding status primarily depends on factors other than employee performance and tenure (such as securities markets performance). Hence an ex post claim to assets does not provide *ex ante* incentives necessary for the implicit contracts to work. In contrast, tying benefits to wages and tenure provides these incentives. Second, if sponsors are partly liable for funding shortfalls but do not benefit from excess assets, they may

prefer defined contribution (DC) pension plans, where their risk is less than in DB plans.

Ippolito and James (1990) and VanDerhei (1987) point out the importance of distinguishing the type of successor pension plan in determining the consequences for participants. Those with DC or no successor plans (called "true terminations" by Ippolito and James) leave employees worse off when terminations occur. However, other than losing a claim to excess assets, spinoffs and terminations with DB successor plans are often structured to leave employees as well off after the termination as before. I refer to these as "re-establishments," though the term is technically incorrect for spinoffs.

Consider two types of implicit contracts that, jointly with the explicit contract, govern the pension benefits employees receive when a pension plan is terminated. First is the full insurance case, where the firm unconditionally promises to pay projected benefits. The other case is characterized by risk sharing between employees and employers so benefits are contingent. Hart (1983) examines these cases in the context of implicit contracts including wages and employment in a two-period model. He shows that the full insurance case arises when firms are risk neutral and employees risk averse. If firms are risk averse, then employees and employers will share risk, and wages can vary with the state of the world, with higher wages paid in the good (G) state and lower wages paid in the bad (B) state, conditional on the satisfaction of incentive compatibility constraints. In the risk-sharing case, employees accept lower wages when B occurs rather than forcing the firm into bankruptcy.

I apply the Hart model to terminations. First consider the case of true terminations. For these, the risk-sharing case requires poor firm performance (B) before benefits can be lowered through pension plan termination. Since shareholders value firm performance, one sign of B is abnormally bad stock price performance before the termination. In contrast, the full insurance case does not predict that terminations are preceded by poor stock performance, as there is no provision for lower benefits resulting from termination. Since the implicit contract operates via incentive compatibility constraints that make the firm worse off if it breaches the contract in B as well as in G, the firm should not be more willing to incur the penalty for breach in B than in G. Hence with full insurance there is no prediction that poor stock performance will precede true terminations.

For re-establishments (terminations that do not adversely affect employees), implicit contract-based predictions of abnormal stock performance preceding terminations depend, in part, on whether excess assets are covered by the contract. If employees have no right to excess assets under the implicit contract, then share price need not decline before re-establishments, as employee benefits are not reduced. If employees believe they will receive any excess assets, then (as for true terminations) negative excess stock returns before terminations are predicted by the risk-sharing arrangement, but not by the full insurance case.

To summarize, the risk-sharing implicit contract model predicts (1) poor stock performance before true terminations, and (2) poor stock performance before re-establishments if excess assets revert to employees. Alternative models that characterize terminations as breach of implicit contracts may make similar predictions. However the meaning of "implicit contract" is unclear in these models since, in the presence of implicit contracts, other factors that influence the probability of termination must be conditional on the satisfaction of the incentive compatibility constraints. For example, a finding that the probability of a pension plan termination increases with its value to shareholders (Petersen, 1990) is not evidence of a breach of the implicit contract, but rather may show that, contingent on satisfaction of incentive compatibility constraints allowing termination, firms are more likely to take actions that pay more.

Data and Empirical Results

I test the model using data on pension plan terminations supplied by the PBGC. The full data set includes all 1972 terminations with reversion values over \$1 million from May 31, 1980 to January 31, 1989. PBGC variables include plan assets, termination benefits, date of termination, and (for subsets) termination filing date, and successor plan type. I gathered additional information on NYSE or AMEX stock values and control events such as takeovers. Reversions with the same sponsor, filing date, and successor plan type were aggregated. All information needed for the tests is available for a sample of 37 true terminations and 59 re-establishments undertaken by employers traded on the NYSE or AMEX. For all 1,972 plans, total plan assets are \$47 billion, and total reversion values are \$21 billion. For the 37 true terminations, assets and reversions are \$1.4 and \$0.4 billion respectively. For 59 re-establishments, the values are \$7.5 and \$4.5 billion. Both samples contain larger than average plans; unfortunately the sample sizes are rather small

Tests of the stock market returns preceding terminations are based on a market model. For firm i, let a_i and b_i be OLS estimates for α_i and β_i in $R_{it} = \alpha_i + \beta_i \times R_{mt} + \epsilon_{it}$, where R_{it} is the stock return for firm i month t, R_{mt} is the value-weighted market index (including dividend distributions) in month t, and ϵ_{it} is assumed to be distributed normal $(0,\sigma_i^2)$. I estimated a_i and b_i using 60 monthly stock returns starting 85 months before the termination filing date. Let s_i be the standard deviation of the residuals; then estimated abnormal returns for the 24 months before the filing are prediction errors, $e_{it} = R_{it} - (a_i + b_i \times R_{mt})$. Define the cumulative standardized abnormal return (CSAR) for months t_1 to t_2 as

$$CSAR_i(t_1, t_2) = \sum_{t=t_1}^{t_2} \frac{e_{it}}{S_i \times C_{it}}$$

where C_{it} is a correction for out-of-sample prediction (see Patell, 1976). Then $Z_i(t_1,t_2) = CSAR_i(t_1,t_2)/\checkmark(t_2 - t_1 + 1)$ is distributed approximately normal (0,1). Summing over N companies, $Z_N(t_1,t_2) = \Sigma Z_i(t_1,t_2)/\checkmark N$ is also approximately normal (0,1). Hence Z_N gives a measure of the collective abnormal stock return performance for the N firms.

For the 24 months ending one month before the termination filing, $Z_N(-25,-1) = -3.03$ for the true terminations, with a p-value of 0.002 in a two-tailed test. Thus, for the true terminations subset as a group, stock prices suffered highly statistically significant negative abnormal returns over the two years before the termination. This finding is consistent with the risk-sharing implicit contract prediction for true terminations. As evidence that these results are economically significant, I also calculated (nonstandardized) cumulative abnormal returns, CAR_i(t₁,t₂) = $\Sigma_t e_{it}$ over the 24-month window. The mean CAR for the true termination sample is -0.29. In the sample the average firm undertaking a true termination lost more than a quarter of its market value due to negative abnormal performance over the two years before the termination.

For the 59 re-establishments, $Z_N(-25,-1) = -1.92$, which has a pvalue of .055, nearly significant at the 5 percent level. These results are consistent with the implicit contract covering excess assets held by the plan, though the results are weaker than for true terminations. For this sample, the mean CAR is -0.15. Again the average firm lost a fair portion of its market value through negative abnormal stock price performance over the two years before the termination.

The difference in statistical and economic significance of the abnormal stock returns between the true terminations and the re-establishments deserves some attention. First, as Petersen pointed out in comments on this paper, the PBGC classifications of successor types are not always accurate. If some are misclassified, any difference between the stock price effects would be reduced. Hence the negative stock performance for re-establishments, which is marginally significant, may in fact be insignificant. This would be consistent with implicit contracts covering only benefits, not excess assets. Second, if excess assets are covered by implicit contracts, the apparently smaller stock losses required before the termination in the case of re-establishments is consistent with relative termination values. That is, re-establishments recover only excess assets, while true terminations transfer excess assets or the difference between projected and termination benefits, whichever is larger.

Conclusion

This paper shows that firms undertaking pension terminations for reversion are, on average, in poor condition before filing for termination. Firm condition is measured by abnormal stock returns over the two years before the termination. These findings are consistent with the existence of incentive compatibility constraints for implicit contracts characterized by risk sharing between employees and shareholders. Hence, rather than interpret termination as breach of implicit contract. I interpret it as a realization of one contingency of the contract. Though the results are strong for true terminations, small sample sizes and potential problems with successor plan identification call for further investigation to corroborate these results.

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Public Sector Pensions: Benefits, Funding and Unionization

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This paper analyzes the effects of unionization on benefit levels and funding adequacy in public sector pension plans. Our purpose is to distinguish between those effects associated with higher pay and those that can be attributed to some dynamic in the collective bargaining process. In so doing, light is shed on how the continued growth of collective bargaining in the public sector may affect the welfare of both public sector workers and taxpayers.

Public sector unionization has grown substantially over the past two decades, in contrast to its decline among private sector workers. This trend focuses attention on some special characteristics of the public sector not commonly found among private sector workers. First, most (but by no means all) states permit public employees to collectively bargain but typically do not permit public sector workers to strike. Second, unlike in the private sector, there are often many restrictions on which elements of public sector compensation packages are subject to collective bargaining. A third characteristic unique to public sector labor relations is the potential for unions to exert political clout within both state and local governments. Because of such political strength, well-organized public sector employees can sometimes obtain through the legislative process what cannot be won at the bargaining table. Finally, industrial relations in the public sector differs from the private sector because governmental employers operate under different constraints than do private employers.

The above differences between public and private sector industrial relations raise questions about possible differences in collective bargaining outcomes. Because public sector pensions are often not the subject of collective bargaining agreements, but rather are determined

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through the legislative process, and because there are no federal requirements to fully fund state and local pension promises, it appears likely that if there are outcomes unique to public sector collective bargaining, they would be especially prominent in the important area of employee pensions. Various hypotheses concerning public sector collective bargaining and pension outcomes are discussed in the following section.

Hypotheses Regarding Public Sector Unions and Pensions

Benefits: Public sector unions raise the salaries of their members above those of comparable public workers whose employment is not governed by a collective bargaining agreement (Ehrenberg and Schwarz, 1986). Because public sector pensions are tied to salary levels, higher pay will directly increase pension benefits. Pay, of course, is not identical to total compensation, and there are also reasons to hypothesize that unionized public sector workers might have relatively generous employee benefits as compared to their nonunion counterparts, even if pay were similar.

Three hypotheses may be advanced to explain why public sector unionization might increase the ratio of pension benefits to salary costs for any given level of overall employee compensation (Epple and Schipper, 1981; Inman, 1985). First, because benefits are less visible to voters than salaries, it may be politically easier for government officials to make concessions on benefit items than on salaries. Second, the cost of increased salaries must be borne in the present, but the costs of improved pension benefits can often be deferred to the future—an attractive option to a politician concerned primarily about the next election. A third reason why unions might increase the ratio of pension costs to payroll (at any given compensation level) is that unions provide a mechanism through which workers' preferences for benefits can be more effectively communicated. There is evidence from the private sector that unionization does increase the mix of employee benefits in the compensation package (Freeman, 1981; Alpert, 1982). Evidence from the public sector on this topic is similar, though less conclusive (Ehrenberg and Schwarz, 1986; Freeman, 1986). Hence one objective of this paper is to provide additional information on the relationship between unionization and measures of promised pension benefits.

Funding adequacy: Pension funding and how it varies with public sector unionization are also examined. Pension funding refers to the

setting aside of sufficient monies to meet current and future pension obligations. As demonstrated below, some state and local jurisdictions treat funding requirements as current fiscal obligations to be fully met, while others regularly defer to the future part of their current obligations. These latter jurisdictions are said to engage in "underfunding." (Only private sector pensions are currently covered by Federal legislation regulating funding practices, though many support extending such regulation to the public sector.)

Funding is worthy of analysis here because it is central to a discussion of proposed policy changes and because it yields insights about public sector unionization itself. Two opposing hypotheses about the effects of public sector collective bargaining are examined. On the one hand, unions can play an important role in gathering and disseminating information, particularly in the case of benefits as complex as employee pensions. Union analysts may have opportunities and incentives to investigate actuarial adequacy of pension funding. Hence, this hypothesis suggests that unions might reduce public employers' tendencies to underfund pension promises.

On the other hand, one could imagine that union leaders, who are also subject to the political need to "deliver" enough in the short-run to win their own elections, might also feel pressured to emphasize pay and promised pension benefits while discounting funding adequacy. The question is whether unionization, on net, affects pension funding practices and, if so, in what direction. In doing so, we also control for other factors affecting funding adequacy.

Data Sources

The primary data source for our analysis is a 1989 compilation of pension statistics collected by the National Association of State Retirement Administrators (NASRA) and National Council on Teacher Retirement (NCTR). This survey consists of a nine-part questionnaire completed by pension plan administrators containing descriptive data on plan administration, active and retired member information, evidence on actuarial and investment performance, and other material on current and pending legislation affecting each plan. Data on 58 public sector pension plans were substantially complete. These were allocated among plan types according to the following categories: state only: 14 percent of plans (N = 8); state and local: 17 percent of plans (N = 10); state, teacher and local: 29 percent of plans (N = 17); teacher only: 33 percent of plans (N = 19); local only: 2 percent of plans (N = 1); state and teacher: 5 percent of plans (N = 3). Since the NASRA/NCTR survey does not contain the fraction of pension-covered employees who are unionized, pension plan sponsors were contacted to ascertain the fraction of members covered by collective bargaining. The percent covered by collectively-bargained contracts ranges in our data set from 0 to 100 percent, with the average being 41 percent (some states legislatively prohibit collective bargaining among public sector employees).

Empirical Findings

Two key pension outcomes were considered: benefit measures. and funding patterns. Benefit promises are best measured by examining the pension plan's computed normal cost, which reflects the funds necessary to cover pension promises made to active workers currently accruing benefit promises under a pension plan. An obvious first goal is to establish whether unions affect the generosity of public employee pension benefits. A positive relationship between unionization and pension promises might arise because unions increase pay, and because pension benefits in the public sector are usually tied to pay. However, once pay is controlled for, there may be no additional effect of unionization. On the other hand, unions and public employers may prefer to grant increases in pension benefits instead of salaries because of the possibility of deferring these costs through underfunding, because pension increases may be harder for the public to observe, or because unions offer a more efficient means of communicating employees' preferences for pensions. Hence, this hypothesis would be supported if union effects on promised benefits persisted even when pay is controlled.

In our data set the normal cost per employee for highly unionized public sector plans exceeds those of the less unionized (see Table 1). Among plans in which unionization rates are over 50 percent (44 percent of the jurisdictions in our sample), the average normal cost per employee was \$2,024. In the jurisdictions in which unionization rates were at or below 50 percent, the average normal cost per employee was \$1,086. However, simple averages do not reveal whether increased normal pension costs associated with unionization are a function of higher pay alone, or whether they represent an increase in the ratio of benefits to pay. To separate these two effects, we estimate the impact of unionization on the ratio of employer normal cost to pay while controlling for both the level of pay and the level of unionization. Ordinary least squares regression relates this ratio to both the percentage of employees covered by a collective bargaining agreement

TABLE 1

	Full	Low Union	High Union
	Sample	Sample	Sample
	Average®	(≤ 50%)	(> 50%)
Average Employee Pay (\$)	22013	19598	25912
Annual Pension Benefit/Retiree (\$)	7196	6777	7772
Normal Cost Per Employee (\$)	1491	1086	2024
Normal Cost as % of Pay	7.0	5.7	7.4
Stock Funding Ratio (%)	86.9	93.5	78.5
Flow Funding Ratio (%)	99.5	109.8	86.5
Stock Fund/Employee (\$)	—10683	4444	18383
Flow Fund/Employee (\$)	—229	46	677

Public Sector Pension Benefit and Funding Patterns by Unionization Status

• Full sample averages include pension plans for which no unionization data were available.

Variable Definitions:

Flow Funding Ratio: Actual/required employer contributions.

Stock Funding Ratio: Market value of pension assets/total pension obligations.

Flow Fund/Employee: \$ difference between actual and required funding per employee.

Stock Fund/Employee: difference between market value of pension assets and total pension obligations per employee.

and to the level of pay. The results (see Table 2) show that the ratio of pension costs to pay rises with the level of pay. However, the effects of unions on the pension-to-pay ratio prove to be solely related to their ability to raise employees' salaries. Put differently, once pay is controlled for, public sector unions do not seem to increase the employer normal cost of pensions.

Pension plan funding can be analyzed various ways. A "stock" funding measure refers to the ratio of a pension plan's total assets to obligations (assets are valued at market value for our analysis). Table 1 shows that pension assets as a fraction of liabilities differed by union status; in jurisdictions where unionization rates exceed one-half, the market value of assets was about 79 percent of pension liabilities, while in the sector with less unionization, the market value of assets was about 94 percent of pension obligations.

Though the stock measure of funding adequacy is interesting as a snapshot, it has one serious shortcoming: it reflects past shortfalls in funding practices and does not precisely represent current practices. Moreover, it may be past pension underfunding that induced public sector employees to join unions. If so, lower funding levels in the

TABLE 2

	Dependent Variable: Normal Cost/Pay			
	(1)	(2)		
\$CB	0.04° [0.02]	0.03 [0.02]		
AvEePay [°10°°–3]		0.0002 [0.0001]		
Plan Type Controls	yes	yes		
R ²	0.18	0.25		
Ν	52	49		

Determinants of Employer Contributions for Normal Cost (Standard Errors in Parentheses)

Notes:

•• t ≥ 1.96

• $t \ge 1.65 \ (< 1.65)$

Variable Definitions (also see Table 1):

%CB: Proportion of work force covered by collective bargaining agreements.

AvEePay: Average employee pay (Payroll/Employees).

Plan Type Controls: Indicator variables controlling for whether the pension plan covered teachers only, state and local employers only, or all three groups.

unionized sector might be a cause, rather than an outcome, of higher unionization levels. To assess this concern we also focus on a better measure of current practice, obtained from a "flow" funding concept: this is the ratio of actual to actuarially required yearly employer pension contributions. The data reveal large differences between the highly unionized and the less unionized sector. Among employers with fewer than half of their workers covered by collective bargaining, funding totalled almost 110 percent of required contributions, while in the highly unionized sector, employers funded only 87 percent of required contributions. Almost half (47 percent) of employers in the latter sector were funding less than 90 percent of required contributions. Table 3 reveals funding differences across jurisdictions while controlling other factors, including stock funding, payroll per employee, employer normal cost per employee, plan type controls, and the percentage of workers covered by a collective bargaining agreement. Clearly, funding was less adequate when pay was relatively higher and when stock funding (past funding) was less adequate; however, unionization rates bore no independent relationship to current funding practices. Thus, the evidence suggests that the lower

	Dependent Variable: Actual/Total Employer Contributions								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
% CB	-0.30 (0.19)		-0.21 (0.19)	-0.25 (0.20)	-0.35 (0.24)	-0.20 (0.23)	-0.10 (0.25)		
Stock		0.84 °° (0.25)	0.90 °° (0.26)	0.87 °° (0.31)		0.93 °° (0.27)	0.85 °° (0.29)		
NormCostEe					-0.001 (0.01)	-0.003 (0.01)	0.001 (0.01)		
AvEePay							-0.002 (0.002)		
Plan Type Controls		yes							
R²	.05	.20	.27	.28	.07	.30	.31		
N	47	45	44	44	43	41	41		

TABLE 3

Determinants of Pension Flow Funding Patterns (Standard Errors in Parentheses)

Notes:

•• t ≥ 1.96

• $t \ge 1.65 \ (< 1.96)$

Variable Definitions (also see Tables 1 and 2):

Stock: Market value of pension assets/total pension obligations.

NormCostEe: Normal pension cost per employee.

current funding rates observed in the highly unionized sector were mainly related to historic funding practices and to fiscal pressures coming from generally higher pay, rather than to an independent effect attributable to the collective bargaining process itself.

Conclusions

This paper analyzes the links between unionization of public sector employees and the performance of public sector pension plans, focusing on promised benefits and levels of pension funding adequacy. Using recent data from public sector pension plans covering a variety of employees including state and local employees, as well as teachers, we examine empirically several different hypotheses about the possible effects of public sector unions on pension plan performance. Our preliminary analysis suggests the following conclusions:

1. Pension costs among highly unionized employees exceed those in the low-union sector. This effect appears to be mainly due to unions' ability to raise pay. Comparing a highly unionized public sector employer with a less highly unionized one paying the same salary, both have similar pension benefits.

2. Pension underfunding in the public sector appears to be a problem concentrated in plans of highly-unionized employees. However, this is mainly due to historic funding practices and higher pay levels and apparently not due to some independent effect of collective bargaining per se. Comparing a union and nonunion employer with the same level of pay and past funding behavior, both would be predicted to exhibit similar current funding patterns.

Research in progress is seeking to disentangle the differential effects of unionization and other factors including fiscal distress, on the separate determinants of funding patterns, including actual and required contribution levels (Mitchell and Smith, 1991).

Acknowledgments

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Federal Pension Insurance: Is It the S&L Crisis of the 1990s?

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This paper examines some parallels between the United States government system for guaranteeing pension benefits and the failed system for insuring savings and loan associations (S&Ls). The government agency that insures private defined benefit pension plans was created in 1974 and is called the Pension Benefit Guaranty Corporation (PBGC); the agency that insured the S&Ls, until it was replaced in 1989, was called the Federal Savings and Loan Insurance Corporation (FSLIC). In FSLIC's case, well-intended but poorly structured public policies ultimately led to unintended and undesirable taxpayer subsidies and misallocation of economic resources (e.g., Benston and Kaufman, 1990; Kane, 1990; Mayer, 1990; White, 1991). In the case of the PBGC, there is in my opinion a growing body of evidence that public policy is leading us in a similar direction.

Among the similarities I see the following: (1) the existence of multiple and conflicting goals of the guarantee program; (2) failure on the part of many in the legislative and executive branches of government to fully recognize or disclose the true costs, benefits and incentives of the guarantee program; (3) a tendency to interpret losses to the guarantee fund as the result of abuse or incompetence rather than as a predictable response to the incentives built into the system; and (4) failure to act promptly to limit such losses because of fragmentation and conflict of interest within the government regulatory apparatus. In this paper, I will briefly explore these similarities and present my interpretation of their implications for public policy.

Background

Pension plans have become a very important part of the United States financial system since the end of World War II. Between 1950 and 1989, pension funds' holdings of U.S. financial assets rose from 5

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percent of total assets held by all financial intermediaries to 23 percent. Today they rank just below commercial banks and are a close second.¹

Pension plans in the United States are classified into two types: defined contribution and defined benefit. As the names suggest, in a defined contribution plan a formula determines contributions (e.g., 15 percent of annual wages), whereas in a defined benefit plan a formula defines benefits (e.g., 1 percent of final pay per year of service). In a defined contribution plan much of the task of achieving the income replacement goal falls on the employees. Often they must choose both the level of contributions and the way the defined contribution account is to be invested. The employee bears all the investment risk, and the firm has no formal obligation beyond making its periodic contribution. In a defined benefit plan, the employee's pension benefit is determined by a formula that takes into account years of service for the employer and, in most cases, wages or salary. The plan sponsor or an insurance company hired by the sponsor guarantees the benefits and thus absorbs the investment risk.

As measured both by number of plan participants and total assets, the defined benefit form dominates in the United States, although the trend since the mid-1970s is for sponsors to choose the defined contribution form when starting new plans. But the two plan types are not mutually exclusive. Many sponsors adopt defined benefit plans as their primary plan, in which participation is mandatory, and supplement them with voluntary defined contribution plans.

With defined benefit plans, there is an important distinction between the pension *plan* and the pension *fund*. The plan is the contractual arrangement setting out the rights and obligations of all parties; the fund is a separate pool of assets set aside to provide collateral for the promised benefits. In defined contribution plans, by definition, the value of the benefits equals that of the assets, so the plan is always exactly fully funded. But in defined benefit plans, there is a continuum of possibilities. There may be no separate fund in which case the plan is said to be unfunded. When there is a separate fund with assets worth less than the present value of the promised benefits, the plan is underfunded. And if the plan's assets have a market value that exceeds the present value of the plan's liabilities, it is overfunded.

The system of guarantees of pension benefits in the United States is a mixed government-private system. Under the law, a private defined benefit plan sponsor can contract with a private insurance company to assume all or part of its pension obligations. The sponsor then pays premiums to the private insurance company, and the insurance company becomes the guarantor of the pension benefits. Since almost all 50 states in the United States have state-sponsored insurance company guaranty funds, these state funds become the ultimate guarantor of the pension benefits. Under current law, the federal government does not assume any responsibility for guaranteeing these benefits.

Defined benefit plan sponsors who do not choose to insure their pension plans in this way must participate in the federal program of pension insurance by paying premiums to the Pension Benefit Guaranty Corporation (PBGC). The PBGC was created under Title IV of the Employee Retirement Income Security Act of 1974 (ERISA) to guarantee only *basic* retirement benefits. There is, therefore, a ceiling on guaranteed benefits (\$2,352 per month in 1992). In 1991, it insured about 40 million people in more than 95,000 single-employer and multi-employer pension plans.

Problems Faced by the PBGC

The PBGC actually has two different pension guarantee programs: one for single-employer plans (established in 1974) and another for multiemployer plans (established in 1980). Since it was created, the PBGC's single-employer guarantee program has faced an everincreasing actuarial deficit (see Ippolito, 1989; and Utgoff, 1991). Despite attempts to eliminate this deficit through legislation and administrative reform, it continues to grow. The actuarial present value of this deficit is now estimated by the PBGC to be over \$2 billion (see Lockhart, 1991b). That number can quickly become much larger if pending legislation to have the PBGC assume responsibility for some other liabilities is passed.

But even if its current deficit could be wiped out immediately by a one-time grant from some external source, the new system—if operated under current procedures—would not be economically viable. If the only goal of the PBGC were to operate a system of default-risk insurance according to sound economic principles, then there are a number of alternative ways to efficiently manage the guarantee function through some combination of monitoring, asset restrictions, and risk-based premiums (see Bodie and Merton, 1992). To maintain economic viability without creating undesirable side effects, the guarantor must employ some feasible combination of the three methods, regardless of whether it is a private-sector or governmental entity.

The difficulty, however, is that the PBGC has other goals that are perhaps even more important in practice. While the manifest purpose of establishing the PBGC was to insure a minimum level of promised defined benefit pensions against default risk of the plan sponsor, some well-informed observers claim that it also had as an important latent function the revitalization of some depressed industries through assumption of part of the burden of providing pension benefits to workers.² If firms can transfer their pension obligations to the PBGC, then the government winds up paying part of the workers' compensation.³ Moreover, those directing the PBGC view it as having as an additional purpose the preservation of defined benefit pension plans in the face of the trend to replace them with defined contribution plans.⁴ Thus, there are three different goals: 1) to provide default-risk insurance of basic pension benefits to participants in private defined benefit pension plans on a sound actuarial basis, i.e., without taxpaver subsidies and without cross-subsidies among plans; 2) to encourage the continuation of the defined benefit form of pension plan; and 3) to provide subsidies to firms and/or workers in distressed industries.

Fragmentation of the regulatory authority and conflicts of interest among government departments are also serious problems. ERISA determined that three governmental bodies should regulate private defined benefit pension plans: 1) the Department of Labor, Pensions and Welfare Benefits Administration, which oversees the maintenance of *minimum* funding and investment standards; 2) the Internal Revenue Service (IRS), which sets *maximum* funding standards to prevent abuse of the tax advantages of pension plans; and 3) the PBGC, which collects premiums and pays benefits but has few enforcement powers.

Note the inherent contradiction between the objectives of the IRS and the PBGC. The IRS would like to see minimal funding to prevent the loss of tax revenue to the U.S. Treasury; the PBGC would like to see maximum funding to prevent large insurance claims. Under ERISA, the IRS has the right to grant combination waivers to plan sponsors in financial distress. From the PBGC's perspective, these are precisely the plans for whom funding is most important.

The PBGC's efforts to limit its losses have been hampered by the ineffectiveness of minimum funding rules. In December 1987, as part of the Omnibus Budget Reconciliation Act (OBRA), major revisions were made to ERISA. The new law imposes stricter minimum funding standards on underfunded plans, but ironically it undid much of the

good by enacting tough new *maximum* funding rules. The new maximum funding rules prevent over half of all pension sponsors from contributing anything to their plans for several years. Inevitably, some of these plans will become underfunded in years to come.

In recent testimony before a Congressional Task Force, James B. Lockhart, Executive Director of the PBGC, described what he viewed as the major problems faced by his agency (Lockhart, 1991b). Lockhart explained that PBGC experience shows that plan funding deteriorates substantially as it approaches termination. Typically, a plan is 40 percent funded when it terminates but had been reporting 60 to 80 percent funding five years before. The two direct causes for this deterioration in funding are:

1. Financially pressed companies tend to minimize pension contributions to conserve corporate assets. The law gives a company considerable latitude in the interest rate, retirement age, and mortality assumptions it uses to determine its required contributions.

2. Distressed companies often encourage early retirement to cut their payroll. They may also close plants and lay off employees, triggering special subsidized early retirement benefits, which are rarely, if ever, funded in advance.

Another conflict within government is the one between the PBGC and the courts. In addition to its claim to the pension fund assets, the PBGC also has a priority claim on part of a sponsoring firm's other assets if the pension plan is underfunded. This would seem to indicate that even if a plan is underfunded the PBGC is protected against losses, since it can be reimbursed out of the sponsoring firm's other assets. However, recently the courts have decided that the claims of the PBGC on the assets of a bankrupt firm with an underfunded pension plan are to be treated *pari passu* with those of other creditors (under Chapter 11 of the federal bankruptcy code.) Thus, unless the bankruptcy laws are changed, the PBGC has less protection than the pension laws would suggest.

The LTV Case

To illustrate the problems inherent in our current pension policies, I present a single but very important precedent-setting case: the *PBGC* vs. LTV. Here, in brief, are the facts for those who have not been following it in the press:

In 1986, LTV Corporation filed for bankruptcy under chapter 11 of the bankruptcy code. It is still trying to come up with an acceptable reorganization plan. When it filed for bankruptcy it dumped four defined benefit pension plans on the PBGC with unfunded liabilities totalling \$2 billion in present value. This single claim doubled the PBGC deficit to \$4 billion. (It also probably helped to get the Pension Protection Act included as part of OBRA in 1987.)

In June 1987, after unloading its old plans, LTV agreed to provide its employees (both hourly and salaried) follow-on plans offering substantially the same kinds of benefits they were earning under the old plan. In July 1987, the bankruptcy court approved the follow-on plans over the PBGC's objections. The PBGC restored three of the LTV plans to their pretermination status in September of 1987 on the grounds that since LTV established follow-on plans, it evidently was willing and able to fund retirement programs. LTV opposed the restoration in the courts. LTV won the case at the level of the lower courts, but lost on appeal to the Supreme Court. But the fight is not yet over. In the latest round, it looks as though the lower-level courts may yet put victory in the hands of LTV's other creditors.⁵

Regardless of how the fight in the courts is ultimately resolved, one of the four plans, the old Republic Steel plan for salaried employees, is terminated and the PBGC is paying the guaranteed benefits. This plan saw virtually all of its assets depleted several years before the bankruptcy because retiring employees (of Republic Steel) with large nonguaranteed benefits exercised their cash-out option *en masse*. The senior management of Republic Steel, some of whom were themselves approaching retirement age, actually changed the terms of the cashout option so as to make it particularly attractive. Largely as a result of these lump-sum payments, the plan at termination was left with \$230 million in liabilities and \$7,700 in assets. They were able to do this legally because their consulting actuary approved the action. Both the PBGC and the Department of Labor investigated the incident and concluded that there was no violation of the law.

The LTV case illustrates at least three important points. First, a substantial taxpayer subsidy to highly compensated executives with nonguaranteed benefits (a subsidy that was probably not intended by lawmakers and is surely socially undesirable) was provided through the PBGC. Second, people in the private sector will unapologetically pursue their own and their clients' advantage at public expense if it is legal to do so. Some of these people are highly paid professionals who are good at their jobs and are therefore likely to find ways to locate the inevitable "loopholes" in the law.

The third point is mostly conjecture on my part. I believe that the public is unaware of the size of the subsidy paid by the PBGC in the

LTV case. While most taxpaying citizens are aware of deposit insurance, not nearly as many even know that the U.S. government guarantees private pension benefits, much less that the agency that provides those guarantees has a deficit. Moreover, the public seems to have difficulty in understanding that subsidization can take place without any actual cash flows occurring immediately.

Reform Proposals

There is one encouraging difference between the PBGC and FSLIC situations. In the case of FSLIC, the senior government officials in charge of the guarantee program did little to alert the public to the perverse incentives caused by the structure of the deposit insurance program. In the case of the PBGC, the past and current executive directors have vigorously led the effort to educate the public and to restructure the government's pension guarantee program on a more sound basis (Utgoff, 1991; Lockhart, 1991a, 1991b).

As part of its program to achieve solvency, the PBGC recently proposed a series of legislative changes designed to eliminate its actuarial deficit, or at least to prevent it from growing. The main thrust of these proposals is to increase the priority of the PBGC's claims on a sponsor's nonpension assets in the event of bankruptcy. In my view, these changes are clearly in the right direction. All branches of government must recognize the problems of moral hazard and adverse selection faced by any insurer and set in place (politically) credible rules to minimize the resulting losses or to charge for them correctly in advance. To be viable without resorting to taxpayer bailouts, the system must employ some combination of the three methods of control of the guarantee business: monitoring, asset restrictions, and risk-based premiums.

But at a deeper level, there is another disturbing similarity between the situation of the PBGC and FSLIC. FSLIC came to play a role it never should have been given by policymakers. S&Ls were created specifically to take deposits from small savers and to lend the money so deposited to residential mortgage borrowers. They therefore had two basic economic functions: (1) to provide a riskless, liquid, shortterm saving vehicle for large numbers of small savers; and (2) to provide long-term financing for residential homeowners at fixed interest rates. These are separable functions that need not be performed by the same intermediary. Whether or not there were historically some synergistic benefits from combining these functions, the trend in the United States starting in the early 1970s has been for these two functions to be performed separately by a wide array of institutions. The long-run solution to the problem of the S&Ls may simply be to allow those trends to continue. By providing federal guarantees of S&L deposit liabilities, FSLIC may have become profoundly dysfunctional.

Similarly, some in government have come to see the PBGC as defender of the defined benefit form of pension plan in the face of contrary trends in the provision of retirement income. While I see a positive role for government to play as ultimate provider of guarantees against default-risk of retirement annuities, I see no reason to use such guarantees to encourage defined benefit plans over defined contribution plans. Both plan types have advantages and disadvantages, and there is no clear economic reason (or official public policy decision) to favor one type over the other (see Bodie, Marcus, and Merton, 1988; Bodie, 1989). I also see no reason to use pension guarantees to subsidize firms or workers in distressed industries. Indeed, whatever the merits of helping distressed industries through government subsidies. there are good reasons not to use "cheap" pension guarantees as the way to subsidize. They are less visible to the public than other subsidies, they can lead to serious distortions in resource allocation, and they can result in a socially undesirable redistribution of income.

Endnotes

¹ Figures are based on Board of Governors of the Federal Reserve System, Balance Sheets of Financial Institutions, October 1990.

² For example, Michael S. Gordon, one of the key architects of ERISA has written that the actuarial soundness of the PBGC was deliberately sacrificed at its inception in order to gain political support for passage of ERISA. In his "Dissenting Comments" on Ippolito's *The Economics of Pension Insurance* (1989), Gordon writes: "The supposition that Congress was prepared to accept loss of jobs and further industrial decline in return for sound insurance principles is preposterous and is why, even today, there will be stiff resistance to redesigning pension insurance along the lines he (Ippolito) proposes."

³ Utgoff (1991) documents the sizable government subsidies that have taken place through the PBGC. See her footnote 14.

⁴ James Lockhart, the current Executive Director of PBGC, in referring to the growth in the premiums charged by the PBGC, has said in a 1991 speech before the National Employee Benefit Institute: "We have to slow this growth, or we stand a good chance of killing the very thing we were created to protect—the defined benefit pension system."

⁵ See Statement by the Secretary of Labor at a Press Conference on November 21, 1991. (USDL 91-608)

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DISCUSSION

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Olivia Mitchell and Robert Smith examine whether public sector unionization affects the benefit generosity and funding levels of public sector defined-benefit pension plans. It is well known that private sector unions raise both relative wages and fringe benefits (Lewis, 1986; Freeman, 1981). Currently about 40 percent of public employees are unionized, versus 17 percent for private sector workers, so unions have a great potential for influencing public sector pension costs. Mitchell and Smith use actuarial information from a survey of 58 state, local, and teacher pension plans that allows them to compare standardized funding levels across plans. This is a vast improvement over past analyses of public pension funding.

Mitchell and Smith conclude that, apart from their influence on wages, unions do not affect the generosity of defined-benefit pensions or their level of funding. This is a surprising result given the private sector evidence. I believe that it is also a premature conclusion. In my comments below, I detail my reservations about their analysis and offer alternative approaches.

How should the generosity of benefits be measured? The authors use the ratio of employer normal cost to payroll, where normal cost the employer contribution required to fund the currently accruing obligation—includes projected benefits from continued employment. The projected benefit obligation does not reflect benefit generosity for several reasons. First, the calculation requires assumptions about salary growth rates, investment rates of return, turnover, mortality rates, and retirement ages. The accrued benefit obligation more precisely measures the cost of benefits owed to date, and requires only interest rate and mortality assumptions.

Second, the use of a single year's ratio of benefits to wages is inadequate. Public pension plans have two features that directly affect

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benefits but which will not be reflected in this ratio. Most public pension plans are contributory, that is, employees are required to contribute anywhere from five to 15 percent of salary to the plan. In addition, most plans have either automatic or frequent ad hoc post-retirement cost-of-living increases (COLAs). These plan characteristics may be a better measure of benefits. For example, differences in the required contribution rate or the presence of automatic versus ad hoc COLAs could be analyzed.

Mitchell and Smith regress the normal cost-payroll ratio on the percent of the work force covered by collective bargaining agreements (CB) and on average employee pay. Collective bargaining is illegal in many states, suggesting that in these states different mechanisms determine the level and composition of public employee compensation. For that reason, it would be useful to add a dummy variable, CB0, which takes on the value one when collective bargaining is illegal, and zero otherwise. The coefficient on a second variable, (1-CB0)CB, then measures the effect of collective bargaining. It would also be informative to interact the plan type dummies with CB to see if union type influences benefit generosity.

The estimated coefficient on CB is .03 with a standard error of .02, and the authors conclude that unionization has no effect on benefit generosity. In my view, a t-statistic of 1.5 for a clearly one-sided alternative is statistically significant, especially with 49 observations. Evaluated at the means, it suggests that a one percent increase in covered employment raises the ratio of normal costs to pay from 7.0 to 7.03. It is difficult to interpret the magnitude of this change in benefit levels, since the standard deviations of the dependent variable and CB are not reported in the paper.

In the second half of the paper, Mitchell and Smith relate a flow funding measure to the degree of collective bargaining. In the private sector, unionized defined benefit plans are less well-funded than nonunionized plans (Papke, 1992). I assume that benefit security is the issue underlying this analysis. However, the link between pension prefunding and benefit security is less direct in the public than the private sector since governments can levy taxes. The government's general obligation bond rating may be a better indicator of benefit security than a single year's ratio of actual contribution to actuarial accrued obligation.

Particularly in the public sector, a stock measure of funding is more representative of fiscal responsibility than a flow measure, since any year's contribution may reflect that year's fiscal difficulties. The authors are concerned that a stock measure may be endogenous, that is, workers may have unionized because of low funding levels. This could be remedied by excluding from the sample those plans whose unions had formed recently, say within the last ten years.

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Perceived Union Instrumentality and Employee Reactions to Permanent Layoffs

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This study investigated the relationship between layoff survivors' perceptions of union instrumentality and their reactions to a work force reduction. The participants were 200 technicians at a U.S. telecommunications facility and 74 production workers in a Canadian manufacturing firm. With tenure controlled for, survivors with high perceived union instrumentality reported higher job security, greater perceived fairness related to the layoff, higher company commitment, as well as higher union commitment (measured only for the production workers) than survivors with low perceived union instrumentality. Compared to one year ago, survivors reported a deterioration in commitment to both the company and the union.

The Effects of Industrial Relations Systems on Training

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The demand for broadly trained workers has increased as more manufacturing firms pursue greater organizational flexibility in response to intensified international competition. However, the extent to which broad general skills training is supplied by firms depends on structures and institutions that surround the work process and influence individual and group behavior. These institutional structures can either inhibit or encourage flexible skills training.

This paper examines how differences in the industrial relations systems of the U.S. and Germany affect the types of training provided by firms. POSTER SESSION II

Using the automobile industry as an example, the paper shows that the emphasis of U.S. industrial unions on job control and rules of procedure inhibit flexible skills training. In contrast, the corporatist industrial relations environment and system of codetermination in Germany provide a set of incentives that encourage broad general skills training.

Determinants of the Labor Supply of Registered Nurses: Do Nurses Work for Love or Money?

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The choice to work as a registered nurse or work at another profession was estimated using a structural probit model as part of a three-stage estimation approach. Estimated coefficients for the determinants of the decision to remain working as a registered nurse offer information that may be useful in formulating policy in an attempt to alleviate the current nursing shortage.

Relative predicted wage (nurse wage/other wage) has a highly significant, positive effect on the likelihood that an individual will work as a registered nurse. Those individuals whose initial nursing degree was associate level (two year) are significantly more likely to remain working as a nurse than individuals with a diploma, baccalaureate, or graduate degree. Attainment of a nonnursing degree significantly decreases the likelihood of working as a nurse; attainment of an additional nursing degree has no effect on the likelihood of remaining in nursing. The more experience an individual has had working as a nurse, the less likely they are to remain in nursing. This may indicate a job matching effect. Females are significantly less likely to work as registered nurses. Individuals with preschool children are significantly more likely to choose nursing. Individuals living in urban areas are significantly less likely to work as registered nurses.

Estimation of the hours equation offers two unexpected results. Predicted nurse wage has a highly significant and positive effect on the number of hours an individual nurse works. Those individuals whose initial degree was a diploma degree work significantly fewer hours than those with associate degrees; those with an additional nursing degree work a significantly greater number of hours.

Displaced Workers: Help Offered and Help Taken, the Whirlpool Experience

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A number of studies have tried to either estimate the costs associated with a job loss for displaced workers or evaluate programs designed to help them. Many of these studies attempted to identify the type of worker who will suffer the greatest harm from displacement or will be helped by various policies (i.e., training). In general, these studies have found that workers with longer tenure in their displaced jobs fared worse in their postdisplacement employment situation than other workers. However, these studies rely on data sets that do not include information on whether the displaced workers received any assistance with reemployment. The Department of Labor estimates at least ten percent of displaced workers receive such assistance. If the participation of workers in these programs is not a random event, then the estimates from these studies may suffer from omitted variable bias and/or self-selection bias. This paper examines the responses of a group of workers, following a plant shutdown, to a variety of services that assist in reemployment. Probits were estimated on six different job search assistance programs and on a planned retraining variable using demographic characteristics of the workers as explanatory variables. An ordered probit was also run on the number of job search services taken by the workers. As hypothesized, workers differentially sorted into various services due to their age and tenure. Job search help is preferred by workers in their 40s, while those 60 and over reject both basic job search help and training programs. Another expected result was that training programs were in general preferred by workers younger than 35 years old. However, the coefficient for those 40 to 49 years old, although negative, was not significantly different from those under 35 years old for their plan to take retraining. Across all job search services those with education were more likely to take a variety of services, especially those that required the use of computers. The other major factor in services taken was tenure. Workers with longer tenure were more likely to participate in job search services but less likely to plan on retraining. If longer tenure workers are more likely to receive job search assistance, then estimates of their wage losses or reemployment probabilities not controlling for this help may underestimate their losses due to displacement.

Compensation for Permanent Impairment and the Duration of Work Absence

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Data before and after four different legislative changes in Workers' Compensation benefits are used to examine the effect of benefit changes on the duration of work absence in cases where a work injury results in a permanent impairment. The legislative changes create a natural experiment because a control group of workers unaffected by the change can be isolated and compared to a treatment group with higher benefits. The results indicate that, in general, workers with severe impairments are more responsive to benefit changes than those with minor impairments. Duration/benefit elasticities for minor permanent impairments are similar to previous estimates for severe impairment cases are greater than those for minor impairments and in the same range as those in the one other study of the duration of severe permanent impairments.

Drug Testing as a Strategy to Reduce Occupational Accidents: A Longitudinal Analysis

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OSHA recordable accident and illness rate data were collected from 48 Wisconsin business facilities for the 1984 to 1988 period. The 12 locations that installed a drug testing program during this period did not experience a significant reduction in accident and illness rates compared to the 36 nontesting facilities. However, a pooled timeseries regression analysis of the 12 drug testing facilities revealed that postaccident drug testing was significantly related to a decrease in the accident and illness rates compared to their pretesting period and to facilities using only preemployment testing. Reasonable cause drug testing was not significantly related to the change in the facility accident and illness rates compared to their pretesting period and to facilities using only preemployment drug testing. This outcome may be a function of reasonable cause drug testing being more subjective than postaccident drug testing and only administered when extreme symptoms of drug usage are present. Future studies should attempt to replicate this study and to expand into the effectiveness of random drug testing programs.

School Dropout Rates and Local Labor Market Conditions

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This paper examines the relationship between school dropout rates and local labor market conditions, as measured by unemployment rates and employment growth rates. Using Pennsylvania counties and cities as my observational units, I regress labor market and other control variables on dropout rates, as compiled by the state's Department of Education. My findings suggest that strong local labor market conditions contribute to increased dropout rates, controlling for racial and ethnic enrollment patterns and the local population's historical level of educational attainment. These findings are consistent with the incompletely substantiated suspicions of individuals seeking to address the dropout problem.

The Impact of Union Membership on Perceptions of Procedural Justice of Injured Workers

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The differences between union and nonunion workers' perceptions of the fairness of the workers' compensation claims process are examined. The hypothesis tested is that union members should perceive this process as more fair due to union "voice." The data analyzed were collected in a survey of injured workers in Michigan who had filed a workers' compensation claim. The empirical results indicate that unions have little impact on the perceived fairness of the claims process. The main contribution of unions is the provision of a complaint mechanism. The implications of these findings for union growth strategy are discussed.

Using Film to Teach Labor Relations

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Films can be used as an instructional tool by labor relations professors in both undergraduate and graduate classes. This paper discusses the advantages of using commercial films in the classroom, explains the effective use of films, and reviews films (all of which are available for VCR use) that can be used in labor relations courses; it presents information concerning copyright laws and accurate citation in the use of films and lists sources for locating films and film reviews.

The Virginia Governmental Employees Association: From Association to Union Behavior?

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The Virginia Governmental Employees Association (VGEA) is an employee representation group that presents the needs of state workers to the state through traditional lobbying techniques. It has been in existence for 31 years and has never unionized or affiliated itself with a union.

The study investigates factors in the three environments within which the VGEA operates that act to prevent unionization from occurring. The first is the external environment, regulated by legal and social issues. The second is the internal environment, controlled by the policies of the association. The third environment is governed by the membership and their needs, desires and perceptions. Through literature reviews, personal interviews and a survey tool, factors in each area are substantiated.

The Mandatory-Permissive Controversy and A Model for Two Legal Frameworks

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This paper reviews the mandatory-permissive (M-P) distinction controversy in the subject matter of collective bargaining and presents a model to measure the relative beneficiality, to both union and management, of two legal frameworks: the existing legal framework, in which lawful bargaining issues are categorized as mandatory and permissive, and the hypothetical legal framework in which the M-P distinction is abolished. (All lawful issues are subject to mandatory bargaining, as proposed by some labor scholars.) It is hoped that the model and its suggested empirical research will throw some light on the M-P controversy and will also lend some guidance for lawmaking in collective bargaining.

Determinants of Strike Activism: Individual Militancy in a University Faculty Strike

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In recent years, several studies have examined determinants of individual willingness to support a strike. Although fundamental, willingness to support a legally sanctioned strike is not the only form of strike participation that is important to strike success. Using a sample of university faculty union members, this research examines individual participation in strike-related activities (such as picketing) that occurred during a faculty strike. Multiple regression results suggest that strike activism or militancy is influenced by union commitment, social support, attitudes toward participation in demonstrative militancy activities, and strike instrumentality perceptions.

The Structure of Labor Disputes in South Korean Industrial Relations

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In 1987, the period that is commonly called the great labor struggle, the total number of labor disputes skyrocketed to 3,749 from 276 in the previous year. However, the figure has decreased to 1,873 in 1988, 1,616 in 1989, and 319 in 1990. In 1980, the most frequent dispute issue was the wage delinquency. In contrast, in 1987 the wage increase was the dominant issue. Since 1987 the most dispute prone industry has been manufacturing, followed by transportation and machinery and metal industry. Since the great labor struggle larger companies have experienced relatively more labor disputes. The intensive labor disputes in the nonunion sector in 1987 led to the subsequent unionization of those establishments. By 1988 the relative frequency of disputes in the union and nonunion sectors was reversed in all industries.

Compensating Wages for Risk of Death or Industry Rents?

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Bureau of Labor Statistics (BLS) and National Institute of Occupational Safety and Health (NIOSH) industry fatality data are used to test for compensating wages in subsamples drawn from the Panel Study of Income Dynamics. (PSID). Evidence contrary to the compensating wage hypothesis is produced. (1) Inclusion of only seven broad industry dummies critically reduces t-statistics on fatality rates in wage equations. (2) Statistically significant coefficients on death variables are obtained in virtually all subsamples of women, men, blue- and white-collar workers when only persons employed in nonmanufacturing industries are considered. Statistical significance frequently evaporates for people employed in manufacturing only. (3) This pattern across manufacturing and nonmanufacturing industries is robust for subsamples of women and men in blue- and white-collar jobs. However, men and especially women in white-collar jobs are not generally expected to receive compensating wages because death risks are so low for them. (4) Univariate correlations between industry

death rates and wages are strong and positive in samples including manufacturing and nonmanufacturing. The evidence, especially in (1), suggests that the pattern of statistically significant and insignificant coefficients could be due to industry rents, not compensating wages.

Measuring Strike Activity: Some Problems

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This paper shows that to develop a model of strike duration, we must not look at strike duration as an homogeneous population. The research with Canadian data suggests at least four types of population: 1) very short strikes during the life of the collective agreement, 2) short strikes to speed-up collective negotiation, 3) medium (normal) strikes that bring the parties to review their expectations and sign an agreement and 4) long strikes marking a structural change in the balance of power between the parties. One might wish to add very long (pathological) strikes resulting from an irrational behaviour.

A Model of Strike Crossover Intentions

MICHAEL H. LEROY University of Illinois

Six hundred fifteen unionized employees in several industries were surveyed regarding their intentions to cross their union's picket line during a strike. Respondents who reported low wages, or who stated they could forego work only a few weeks, or who stated they would seek alternative employment during a strike, were significantly more likely than others to state intentions to cross their union's picket line. A respondent's satisfaction with union representation was not significantly related, however, to a respondent's intention to cross a picket line. The study suggests that actual crossovers are financially motivated and are not necessarily opposed to their union's strike.

Canadian Affirmative Action and Ethnic Inequality

MARC S. MENTZER University of Saskatchewan

The potential impact of the Canadian Employment Equity Act of 1986 is discussed, and the U.S. and Canada are compared regarding affirmative action (employment equity). Possible weaknesses in the Canadian legislation are described, and income data from 63 Canadian ethnic groups are analyzed to determine whether the ethnic groups covered by the act are those in greatest need of protection.

What Do Japanese Workers Think of Their Unions?

Motohiro Morishima Keio University

Despite the recent observations that Japanese enterprise unions are losing membership support, very little systematic research has been conducted to investigate the factors that affect Japanese workers' evaluations of their unions. To fill this gap, using a large data set collected in 1987, this study examines correlates of members' overall evaluation of enterprise unions in Japan. A model is developed from previous research on employees' attitudes toward union organizations and on Japanese industrial relations. The results indicate that three sets of factors examined here—members' judgment of union contributions to improvements in employment outcomes, occupational differences, and employers' human resource policies—all have the potential of undermining membership support.

Perceptions of Grievance Procedure Effectiveness: Evidence from a Nonunion Company

RICHARD B. PETERSON University of Washington

This explanatory study investigated the experiences of employees and managers in a large American company concerning their use/ nonuse of the firm's nonunion grievance program. Based on a questionnaire survey received from a sample of 579 employees, some generalizations can be made. Correlations showed that employees perceive potential and real risks of grieving against alleged unfair treatment by management. Different combinations of independent variables explained from 39 percent to 86 percent of the variance in the four dependent variables (satisfaction with fairness, satisfaction with outcome, subsequent treatment of the grievant, and performance ratings). Somewhat surprisingly, grievants' responses were not significantly different from the nongrievants for the vast majority of independent variables.

Interest Arbitration in Ontario

JOSEPH B. ROSE McMaster University

Based on 3,882 settlements in Ontario, Canada (1982-1990), this paper provides a preliminary comparison between the performance of collective bargaining under arbitration systems and private and public sector bargaining systems with the right to strike. The results indicate that arbitration protects the public interest by preventing strikes. However, in comparison to bargaining with the right to strike, arbitration systems experienced substantially lower settlement rates, protracted delays in achieving settlements and higher average wage settlements. These findings suggest there is a need to reconsider the efficacy of a labor policy based almost entirely on strike prevention.

The Impact of Social Class on Attitudes Towards Strikes: A Four-Country Study

GREGORY M. SALTZMAN University of Michigan and Albion College

Leading labor experts—Lipset on the one hand, Bok and Dunlop on the other—disagreed about whether social class affects attitudes towards unions. This study addresses that debate, using U.S., Canadian, Swedish, and Norwegian survey data to analyze the determinants of attitudes towards strikes. It finds, contrary to Bok and Dunlop, that social class has a significant effect on attitudes towards strikes, even controlling for union status. Privileged groups in all four

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nations were less likely to support legislation or coercive picketing to prevent the employment of strikebreakers; and privileged Swedes were less likely to support strikers' demands.

A Robust Inference Analysis of the Determinants of Layoff Rules

JOHN F. SCHNELL University of Alabama-Huntsville

This study presents descriptions of multidimensional or complete layoff rules collected from union contracts and provides an ordering of these rules along the dimension of an employer's flexibility in making labor-force allocation decisions. A transaction cost-equalizing differences model is developed to provide a framework for testing the determinants of this ordering. The empirical model incorporates the ability to draw inferences about these determinants that are robust to misspecification. The results are consistent with the transaction cost model's emphasis on the importance of firm-specific experience—or asset specificity—in determining governance structures like layoff rules. The results also indicate that bargaining structure, enterprise size, workers' skill level, and race influence the form of the layoff rule that emerges through collective bargaining.

Stewards as Strawmen: Myth or Reality? The Autonomous Executive Authority of Union Stewards in Contract Administration

PATRICIA A. SIMPSON University of Illinois

This paper summarizes results of a research project that represents a unique empirical quantitative analysis of the behavioral context associated with steward grievance handling. Examination of behavioral data provided a means to 1) gain insight into the relative executive authority of stewards in contract administration; 2) measure the correlation between practical executive authority and prescriptive contract clauses awarding stewards formal rights and perquisites; and 3) explore the relationship, if any, between practical executive authority and select institutional, demographic, and related variables. The overarching analytical thrust of this project was to break new ground in delimiting causal factors that sustain or, conversely, undermine steward power in contract administration. Further, this line of analysis attempts to lend critical perspective to discussions of the historical trajectory of steward power in the United States in the post-World War II period and to suggest fruitful directions for further research.

Determinants of Just Cause and Reasonable Notice in the Dismissal of Nonunion Employees: Evidence from Canada

TERRY H. WAGAR AND JAMES D. GRANT St. Mary's University

This study examined 179 Canadian dismissal cases in which the employer argued the existence of just cause for termination. Employees won slightly more than 60 percent of the cases. The probability of an employee victory was greater if the employer defense was based on business reasons, the employee had obtained a new job prior to the court hearing, and the employee was facing a limited labor market. The likelihood of an employer victory was higher if the employee had a blemished work record or was a more senior employee. Employees, on average, received a notice period of about eight months with employment in a managerial/professional position, length of service, and number of mitigating factors being highly significant predictors of the amount of reasonable notice.

Profile of Employment Discrimination Experiences of Workers with Disabilities

ANN C. WENDT AND WILLIAM M. SLONAKER Wright State University

The Ohio Employment Discrimination Study contains 2,400 cases from 1985-90. Approximately 12 percent were based on a disability, with men filing 65 percent and women 35 percent. The 37 different disabilities were generally: physical (80 percent), mental (20 percent), incurred on the job (14 percent), with back problems being the most

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frequent (14 percent). Claimants with disabilities were six times more likely to not be reinstated from medical leave, as compared to nondisabled claimants. Employers most frequently gave "physical condition" as their reason for the actions taken against the disabled claimants. This project is timely as employers confront their new obligations under the Americans with Disabilities Act. Additional information is available from authors.

VIII. THE THEORY AND PRACTICE OF MUTUAL GAINS BARGAINING

Improving Negotiations: Two Levels of Mutual Gains Intervention

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A paradox in the field of principled negotiation is that it has been little applied in the most intensively studied negotiation arena of all, that of collective bargaining. Trainers and consultants have long noted a particularly strong resistance to mutual gains concepts among traditional labor negotiators, and have tended to turn their attention to the greener fields of policy and international disputes.

The labor relations arena is peculiar in that it carries a heavy weight of tradition and of social structuring. These are aspects that have been largely ignored by the line of theory stemming from *Getting To Yes*. The focus of that approach has been heavily on the *interpersonal* dynamics of the transaction, that is, how can I get the person I am dealing with to be reasonable? Within this frame it is possible to believe, as do many authors in this tradition, that power is not a critical factor. Their argument in essence is that given sufficient skill, one can *convince* the other that it is in his or her interest to adopt the principled approach rather than using available power.

For labor relations professionals this is intuitively nonsensical, despite the appeal of the claim. The flaw in the reasoning is that it

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assumes that the dialogue is an open one, with all relevant parties present and available to be convinced. But the labor world is in reality heavily constrained by factors that are beyond the reach of the actors at the table. There is, first of all, labor law which defines a narrow range of issues along with enormously technical rules for determining types of relations within each of them. There are government agencies—the Labor Department, the National Labor Relations Board, the Federal Mediation and Conciliation Service, the courts that can have unforeseen effects. There are traditions often stretching back for decades that shape the expectations of the parties.

Most importantly, there are highly demanding constituents on both sides—union members, who elect their leaders, and managers above, around, and below those who represent the company in bargaining.

On the union side the constituency problem is particularly difficult, for virtually the entire strength of the union depends on the members' willingness to take collective action in the face of serious personal risk. Thus the bargainers need their extremely active support. Bargaining must be conducted in such a way as to maximize the ability to strike in case of failure; members must be maintained in a state of high excitement and readiness. To accomplish this without closing off the possibility of agreement is no mean feat. Other typical negotiating groups, such as interest associations, do not have this problem to the same degree. They place much lower demands on their members than do unions, requiring only an occasional vote or small contribution as the price of activism.

To compound the problem, the communication between union members and their representatives is very thin. There are a few membership meetings and lots of leaflets, but no forums for real education and consensus building. Typically even stewards are poorly informed about the activities of the bargainers, and they are often not in close touch with their people. The result is that there is not a great deal of leeway. The members expect their representatives to stick quite closely to the bargaining demands, and they focus on simple measures of achievement, wage and benefit increases. Ordinarily no more than one complex "qualitative" issue can make it into the serious bargaining mix, and this issue must also have a clear "win" outcome for the members.

The problem for management is somewhat different. There may be no problem if the real decision makers, the top leaders of the organization, are actively supportive of the process. Formal authority is an effective mechanism for pushing implementation down. But more often labor relations is a relatively low-prestige function with a narrow range of action. If the bargainers in those circumstances seek, through mutual gains negotiations, to widen the arena of potential solutions, they are likely to run into resistant and uncomprehending superiors.

Thus the labor relations arena creates unusually delicate problems. In this complex context, to suggest that the two parties at the table can simply sit down and freely invent new options is unrealistic. An intervention aimed merely at changing the behavior of the parties at the bargaining table is likely to fall short.

We will call an effort aimed primarily at the bargainers a *level-one* intervention. These come in two basic subcategories: training and active facilitation. In the former case, the intervener merely conducts training in key skills and then leaves the scene, expecting that the new approach will change the outcomes. In the second, the intervener remains as an active shaper of the actual negotiation process.

Our main hypothesis is that neither of these is sufficient for longterm success. The combination of training and facilitation is better than either one alone, but both remain limited by the surrounding structures. These require a *level-two* intervention which transforms the internal relationships between bargainers and their constituents.

The evidence for exploring these relationships is scanty. There has not, to our knowledge, been a great number or variety of efforts over all, and very few of these have been reported in any careful way. Moreover, it is unwise to use second-hand reports in a field like this because there is so little agreement on terminology and criteria of evaluation, let alone what constitutes success. We therefore rely primarily on our own experience as researchers and interveners. In particular, we have examined seven cases which we have followed for sufficient time to have a sense of the outcomes—that is, at least a year or two after the development of a mutual gains approach.

Experiences with Level One and Level Two

The assumption behind a level-one effort is that the chief obstacle to win-win agreements is a lack of skill and knowledge on the part of the negotiators. There is some truth to this in labor relations, but only some.

In traditional bargaining there is a great deal more win-win activity than is generally acknowledged. The problem is rarely the classic one described in prisoners' dilemma exercises; the parties are not unconnected and unaware of their interdependence. On the contrary, where the two parties are evenly matched and neither believes it can destroy the other, there is a powerful incentive for the lead bargainers to establish a positive working relationship. Thus, they are in fact highly sensitive to the needs of the other side, and they consider their strategy in the light of a long-term future. The bargainers typically indicate in various ways their true interests behind the positional language. They treat the bargaining process as a mutual problem to be worked through, and they generate ideas in offline sessions.

But the effectiveness of such "natural" win-win behavior, in our experience, is limited by several common problems. Some, but not all, of these have to do with the attitudes, skills, and behaviors of those at the table and are therefore accessible to level one intervention:

1. One of the most frequent of these lies on the union side: it consists of a lack of skill in understanding and interpreting management's arguments. Companies typically present reams of financial data indicating their dire plight and inability to meet the union's demands. Labor just as typically discounts this information, in part because they do not have the technical skill to check it. Thus an increase in this ability may well increase union leaders' confidence in their capacity to evaluate innovative solutions.

2. Usually there is also lack of complete understanding by both parties of some of the fundamental problems facing the other side. This varies enormously. Where the bargaining teams are new, this gap can be very large, while with more experienced. bargainers it is smaller. But even in the latter case a full and open discussion of each others' interests produces surprises and revelations for the most grizzled of bargainers. In recent years, for example, management bargainers have sometimes been slow to appreciate the enormous emotional impact of health care changes on union memberships. We have seen this understanding "dawn" on management bargainers as a result of an exchange of interests.

3. There is no *systematic* process for developing and exploring new ideas. Such exploration does happen, but largely in brief side conversations. This informal mechanism is insufficient for working out complex problems. The mutual gains process structures periods of "exploration without commitment" which can expand the range of investigation. In addition, outside interveners may be able to stimulate the imagination by drawing lessons from their own experiences or by introducing techniques for fostering creativity.

4. Not infrequently there are "personal" skill or attitude issues specific to the particular bargainers or situations. In some cases a

personal relationship may have soured to the point where communication is difficult. The parties have to be helped to separate the real concerns from their personal feelings. Full and frank discussion, together with coaching by the interveners, may well help to overcome these problems and move negotiations forward.

An intervention that deals effectively with these dimensions of negotiation can develop the "natural" processes sufficiently to achieve real improvements. But even in the best cases the negotiations remain constrained by surrounding forces—the level-two factors—which have not been addressed. These derive primarily from the fact that the important constituents are not themselves party to the negotiation process. On the union side, leaders are continually aware that membership expectations closely limit them, and also that they have relatively little ability to shape those expectations. On the management side, there is frequently a higher level not at the table which is directly or indirectly calling the shots.

Thus one sees a number of common limits to level-one interventions:

1. Even if the bargainers accept the basic idea of mutual gains bargaining—whether in its "natural" or its more self-aware form—they often need to hide this acceptance from their constituents. On both sides the expectation of those watching the negotiations is that "their" representatives will fight hard for their interests. If the atmosphere appears to be too cooperative, they will suspect a sellout.

2. Even if the bargainers develop a sufficient understanding and skills to invent new solutions to their differences, they are likely to have difficulty "selling" the new ideas back home. On both sides the communications channels are too thin. The management bargainers report back to their superiors, but rarely have a chance to effectively educate them about the options considered and the arguments for the different possibilities. On the union side, there is still less opportunity for education of the membership.

The weakness of communication mechanisms on the union side in particular means that certain issues are completely undiscussible, at least in public. A common example: factory piece-work systems often turn out to be so inefficient and complex that both union leaders and managers will agree (in private) that they ought to be changed. But the union leaders dare not bring this proposal back to their memberships.

3. Even if the bargainers recognize that free exchange of information is vital for mutual gains problem solving, they may not be able to achieve it. This is most commonly a management problem, because management holds most of the information. The top levels are typically resistant to any suggestion by their labor relations staff that they release, for example, confidential productivity and profit figures to the union.

The weaknesses come from the lack of change in the constraining structures surrounding the bargaining relationship. It is generally possible, when the parties have reached the point of seeking outside help, for an outsider to bring them to agreement. It is another thing, however, for that agreement to hold up as a stable basis for the realignment of relationships. A theory focusing on the social constraints will expect a degeneration of the goodwill achieved in the facilitated process as constituents make their voices heard more clearly.

There remains the possibility of a change that extends beyond the bargaining committee, what we will call a "level-two" change, transforming the relationship between bargainers and their constituencies. It involves structural as well as strategic transformation, that is, it requires not merely a development in *personal* skills, but a new stage of *organizational* capacity. The problem is to create sufficient consensus and trust within the two sides to enable the bargainers effectively to exlore new options.

A level-two intervention is more difficult, stretching far beyond the typical training "hit." It has therefore, to our knowledge, rarely been carried out in a thorough manner. But we do have a great deal of evidence so far about the limits of level-one change, and the difficulties involved in moving to level two.

Our basic experience, which is consistent with a theoretical stance stressing the importance of context, is that level-one change, whether in the form of skills training or of active facilitation, tends to degenerate over time. The alternative view suggested by some practitioners, that a "virtuous circle" of growing trust is created once the initial hurdles have been overcome, has not been confirmed.

Our seven cases fall into three rough categories:

1. Level-one interventions (Michigan Bell and the Communications Workers of America; Northrup and the United Auto Workers). In these cases the intervention consisted essentially of two or three training sessions with the bargaining teams. There was considerable progress at level one in both instances. At Michigan, subcommittees met over several months and developed innovative solutions to some problems, and at Northrup, a previous pattern of hostility was considerably softened. But neither effort made any significant breakthroughs in the end. When the outside pressures came to the forefront, there was a clear reversion to traditional demands.

2. Mixed level-one and level-two interventions (Pacific Bell and the Communications Workers of America; the University of Cincinnati and the American Association of University Professionals; and the Flint, Michigan school negotiations with multiple unions). These interventions were somewhat more thorough, lasting (in the case of Pacific Bell) as long as six years. In all three the constituencies were more involved in the process than in the purer level-one interventions. In Cincinnati and Flint this involvement was in part due to the nature of a professional/white collar union, but it was also in part a result of explicit intervention strategies. These cases made significant bargaining breakthroughs, but they failed to transform the relationship among the parties. They have all tended to revert back towards a more traditional pattern in time.

3. Level-two interventions (Harvard University and the Harvard Union of Clerical and Technical Workers; Shell-Sarnia and the Energy and Chemical Workers). These are not, strictly speaking, "interventions" in a traditional relationship, but rather examples of conscious creation of a new pattern. They involved clear level-one training in techniques of mutual gains bargaining, but also strong level-two innovations which involved constituencies in an ongoing and active way in the negotiating process. Both have shown the capacity to generate and sustain major bargaining breakthroughs.

These cases indicate both the power and the difficulty of the winwin approach. They suggest several conclusions.

First, training in mutual gains techniques can clearly help significantly to improve relations among bargainers. Even experienced negotiators find a great deal of power and novelty in the techniques of open discussion of interests and brainstorming of solutions. In some contexts this will no doubt be sufficient to produce better outcomes.

Second, its potential is greatly affected by constituency relations. Where the constituencies are well-integrated and highly involved, the techniques of win-win bargaining help take full advantage of the opportunities, opening more room for creativity and the building of trust. On the other hand, where leaders are more "bureaucratically" distant, the interventions run into obstacles and barriers despite improvements within the bargaining team.

Third, the ability to *change* the constituency relations through winwin bargaining is still unproven. This is clearly a large and difficult task, and the cases we examined did not for the most part take it on. The more successful examples are those in which organizations were already relatively involving and nonbureaucratic before the intervention (in particular, the union at Harvard, Cincinnati, Flint, and Shell-Sarnia, and the management in the latter case). But those that began with more traditional structures generally had difficulty in implementing win-win bargaining. Even Harvard is facing difficulties because of the lack of restructuring and consequent lack of commitment to change on the management side; so is the University of Cincinnati. At Pacific Bell, there was success in spreading the circle of involvement out to local presidents in decentralized joint committees which effectively swung them from opposition to support of the effort. But it came to grief from the level beyond-that of the full membershipwhich had no ongoing connection to it.

Fourth, the nature of the constituency change appears to be more extensive than we first believed. It involves not only extensive communication, but direct and active constituent participation in an array of *ongoing* mechanisms. The Shell-Sarnia example in particular suggests this dimension; employees throughout the plant engage in continuous bargaining in many forums. Harvard/HUCTW has approached this level of involvement, at least on the union side, which has also contributed to its relative success. In some other cases, such as Cincinnati and the Flint teachers, constituents are involved actively but more informally, which seemed to work somewhat less effectively but nevertheless provided a foundation for significant changes at the table.

Thus we conclude (from these cases) that while mutual gains bargaining training of bargainers (level-one interventions) can clearly lead to an improvement of relations and the development of some novel ideas, it requires for long-term success a quite major transformation of the traditional structures of both union and management—a decentralization and "debureaucratization" of both organizations. A successful level-two intervention requires a shift from relying on individual negotiators and third-party facilitators to an organization that can accommodate changes through ongoing dialogue and joint implementation among *all* employees on a day-to-day basis.

It may be, in short, that the new techniques are able to maximize the potential of involving organizations but not to transform bureaucratic ones. In this case they would need to be seen as part of a larger process of change in labor relations.

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Mutual Gains Bargaining: The Evolution of Intervention Strategies

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"Mutual gains bargaining" (MGB) has captured the imagination of negotiators, consultants, and scholars around the country. It offers, it seems, a more sensible, productive, and rational way of negotiating over anything and everything—whether it be used cars, locating a waste disposal site, or how to determine child custody after a divorce (Fischer and Ury, 1981; Susskind and Cruikshank, 1987). It offers an alternative to traditional labor negotiations as well. The traditional approach, which includes elaborate rituals of conflict (Friedman, 1989) and only very private and subtle forms of cooperation (Friedman, 1992), does not fit comfortably with the emerging consensus that labor relations must be more cooperative if unions (and the industries they dominate) are to survive (Heckscher, 1988). A better way of bargaining is an essential ingredient in any effort to change the basic structure of labor relations.

In spite of this general interest in MGB, and its place in our hopes for a new future in labor relations, the process is proving rather difficult to disseminate to labor negotiators in an effective way. One constraint has been the ideas themselves: while they are powerful ideas that can easily capture the imagination, how they are to be applied *in practice* may be more difficult for negotiators to understand. A second constraint is cost: training may be more expensive than many bargaining units can afford. A third constraint is the structure of *labor* negotiations in particular: constituents are often highly activated, leaders are usually "professionals" who are expert in their established way of negotiating (Kolb, 1984), and labor laws place requirements on bargainers to act in certain ways.

These constraints raise the following questions: How do we bring MGB ideas successfully into the labor relations context? What are the

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choices available to interventionists and what are the implications of those choices? And, what are some of the patterns that have worked and in what contexts have they worked?

My answers to these questions are based on data from several sources: observations of three "test" cases of joint labor-management training sponsored by the Department of Labor (DOL), discussions among MGB trainers and researchers at a meeting sponsored by the Harmon program at Harvard's Kennedy School of Government (December, 1990), a survey of those seminar participants (conducted by Charles Heckscher), and more recent telephone interviews with these and other trainers.

The PON Experience: Lessons from Three Test Cases

In 1988 the Harvard-MIT Program on Negotiations (PON) received a grant from the DOL to bring MGB training to three contract negotiations. The hope, as expressed in the original proposal, was to "develop an approach to negotiation and training that can foster the needed movement from adversarial to cooperative labor relations." At the time, the DOL had developed a broad portfolio of *between-contract* services to help companies and unions in their effort to be more cooperative. What they were missing was a program that addressed the negotiation process itself.

Members of PON had developed an expertise in MGB training (covering many areas of dispute resolution) and a set of teaching techniques (primarily negotiation games and role-plays) designed to let students practice MGB in a relatively safe atmosphere. For the DOL project, these techniques would be applied to the training of labor and management negotiators just prior to their actual negotiations. First, both parties would be interviewed and a customized bargaining game would be written that would provide a realistic simulation of their bargaining problems. Second, both parties would attend a two-day negotiation workshop that included lectures, several bargaining simulations, and debriefings of those simulations. During the simulation, negotiators would reverse roles-they would be asked to take the perspective of their opponent, arguing their views, and seeing their own views from the opponent's perspective. After the simulations, trainers would debrief the exercises, and help negotiators develop their own set of rules for their upcoming negotiations—based on both the core MGB ideas and their experiences during the simulations.

If these training sessions worked, it would show that a few powerful ideas could be conveyed in a short period of time, and have an impact on actual negotiations. I will call this approach to training a "minimalist" model.

In practice, this short-term, high-impact model did not actually happen. On the front end, *entry* into the three cases was far more complex than expected. In one case, the union would only commit to the training after a day of open debate among constituents and with the PON trainer. In another case, the trainers had to get involved in extensive on-again, off-again negotiations with the company and union before they would agree to try using MGB, and they had to add, as part of those negotiations, a day of pretraining training. And in the third case, additional days of training needed to be scheduled given the large number of constituents whom the parties felt had to be involved. Even if the "training" might take only several days, the prework required to set up those several days was extensive.

I should point out that, as difficult as the entry process was in these cases, we can expect it to be even *more* difficult in other cases. This project had the advantage of full funding by a third party (DOL) before initial contacts were even made. The value of MGB is likely to be challenged even more aggressively when thousands of dollars in training costs are part of the equation; debates between labor and management over who should pay the bulk of those costs have not been uncommon in such cases. And if, as is likely, management ends up paying more than the union, the neutrality of the trainers can be called into question.

During training, PON trainers faced different problems. The simulations generally went well, but in one case it became complicated by some relatively minor, but gnawing complaints: at times the customized case was deemed too unlike their real situation, but at other times too close to the real situation. And, when it came time to do the simulation, this group refused to reverse roles. The details of the simulation became a forum for playing out conflicts and anxieties that generally made negotiations difficult for this group. These dynamics led to a second problem: while the events were designed to deal primarily with negotiations, much of the discussion inevitably drifted towards the state of the relationship, and what did or did not happen "last time." These discussions proved fruitful—they were essential in order to clear the emotional underbrush for MGB but they were not always part of the training plan; they dealt with issues beyond negotiations per se (requiring different kinds of training skills), and they occurred in spite of explicit attempts in some cases by lead negotiators to *avoid* touchy issues from the past.

After training, it was hoped that the ideas and lessons from the training session would in themselves change the negotiations process, but this was more the exception than the rule. In most cases, negotiators needed additional ongoing support, either to clarify how the ideas were to be implemented in practice, or to help them work through difficult moments when they felt stuck in spite of trying very hard to do MGB. On the first point, it appears that the transition from simulations to real negotiations is very difficult, and is inevitably fraught with unforeseen ambiguities and complexities. On the later point, even negotiators who get past the difficult starting phase can be caught off guard by constituent pressures or by an overwhelming sense of lack of time (see Ancona, Friedman, and Kolb, 1991, for an analysis of the effects of constituent and time pressure on MGB negotiations). In these instances, they called for extra help from the trainers, who were able to provide assistance, either by phone or in person.

As the PON team moved through its series of test cases, they found themselves being involved more extensively than initially anticipated—before, during, and after the training. Negotiators' actions and concerns drove trainers away from the minimalist model. These developments point to several alternative approaches to MGB training—ones that are currently emerging in practice.

Alternative 1: Expand Involvement

The PON experience points out that trainers cannot enter a situation, spend a few days, leave, and thereby change the way labor and management negotiate. They are part of a larger system of relations. This means that trainers will *have* to become involved with more people, and over longer periods of time (i.e., throughout the course of negotiations). Before negotiations, they will have to be more proactive and interact with a broader range of constituents. During negotiations, they will have to be involved in ongoing, real-time training, possibly serving as quasi-process mediators. And after negotiations, they will have to continue the relationship, helping the parties implement changes—both in content and process—that were agreed upon or proposed. This is a position expressed by Larry Susskind (one of the PON trainers) during the project debriefings (1990), and one that guides his current work.

This is indeed, an *optimal* model for MGB training. The main drawback is that this expanded model simply may not happen in any

given case. It requires far more money to cover the fees for such extensive consulting and, if labor and management have a hard time agreeing on how to manage several days of training, it will be even more difficult for them to agree on a large-scale, all-encompassing consulting project. In many cases, there may be too many barriers to entry for this more inclusive training approach, and entry may only be possible for the most prominent and established trainers in the field.

Alternative 2: Expand Behavioral Clarity

A second alternative is to expand, not the extent of trainer involvement, but the specificity of the recommendations that are provided. If it is not possible—because of political, financial, or time constraints—to be involved as extensively as would be ideal, it is important to leave negotiators with a very clear and detailed set of guidelines for conducting negotiations. While the "minimalist" approach is to let negotiators develop their *own* rules of action (so that the rules would be most appropriate to their situation and participants would be committed to those rules), Alternative 2 emphasizes the need to provide, *a priori*, a more complete behavioral roadmap for conducting negotiations.

Jerry Barrett (1991) has developed an MGB training program along these lines. In his program, negotiators are told to carry out specific "steps" and his simulations model those steps very explicitly (negotiators are moved, in a fairly structured way, through stages of issue generation, interest definition, developing options, setting standards to evaluate the options, and arriving at a settlement). The advantage of this approach is that these ideas can be taught relatively quickly and the training costs are minimal. Also, this approach will be attractive to parties who truly do not want to jointly examine their broader relationship. For these reasons, it is more likely to actually be taught to negotiators. Most importantly, unlike the minimalist model, negotiators are left with a detailed action plan that is relatively unambiguous.

The risk of this approach, of course, is that little work is done with constituents, or around problems in the relationship that tend to plague efforts to use MGB. This approach may also be *too* concise—participants may learn behaviors without mastering principles.

Alternative 3: Expand Control

In a few cases, trainers have been able to expand *both* their involvement and the behavioral clarity of their recommendations: they

have stepped in and *told* negotiators exactly what to do before or during negotiations (including how to relate to constituents) and remained available to negotiators throughout the negotiations watching and/or directing their activities. What was distinctive in these cases was the high level of *control* achieved by the MGB trainers.

Two trainers who have approached MGB training in this way are Kathryn Tooredman of the National College of Education and Don Power of the Federal Mediation and Conciliation Service (FMCS). In Tooredman's approach (1990), negotiators are required to go through a series of ten "phases," beginning with a meeting between the college president and the faculty (she works only with schools), moving through several weeks of "protocol discussions" and group "retreats," and ending in contract-writing and a "victory party." Her formula is very detailed and specific: for certain meetings the exact number of people who should attend is stated, the activity and product of each meeting or retreat is defined, and the length of time allotted for subcommittee work is specified. Most strikingly, she *requires* the key management constituency—the school's board of trustees—to be present. Some steps are left for negotiators to develop for themselves (they determine the "protocols" to be used), but much is determined by the trainer as a condition for doing the training.

Power also specifies a series of steps and requirements. Most importantly, before negotiations, he requires each side to engage in a structured issue identification process (using his forms and a computerized data "assembly" process), an issue classification process, and a data compilation and feedback process. The result is a joint bargaining manual. During negotiations, each issue is resolved separately (no trade-offs are allowed), and wages are required to be the *first* item discussed. During the ratification process, both formal and informal agreements are presented to constituents and, after negotiations, a joint contract follow-up committee is formed. Like Tooredman's model, there is room for negotiators to choose how they want to actually negotiate (he calls it their "consensus guidelines"), but much of the MGB process is very tightly controlled in Power's approach.

In both cases, the trainers maintain an extremely high degree of control: they determine much of what happens before, during, and after negotiations, and remain involved throughout. This kind of control enables these trainers to drive the process, ensure that MGB gets done, and guarantee that constituent relations are managed. There are no behavioral ambiguities. But such control depends on some structural conditions that are unique to their situations. Each is a full-time staff member of an organization that provides these training services to organizations that want them. Participants do not have to pay the trainers, so they are less likely to want (or need) to limit the time trainers spend helping them and they do not have to negotiate over who pays the costs. From the trainer's perspective, their income does not depend on generating clients so they can more easily demand that subjects follow prescribed steps and reject cases where participants refuse to follow those groundrules. Finally, both Tooredman and Power have worked primarily with relatively small units, where they are likely to have more leverage than would be true with larger clients. These structural conditions may not exist in many cases, or for many trainers.

Table 1 provides an outline of the differences between these three approaches, including their area of emphasis, costs, the likelihood of

Intervention Strategies						
<u></u>	High Involvement	High Clarity	High Control			
Helps With Constituent Problems?	yes	no	yes			
Addresses Relationship?	yes	no	maybe			
Provides <i>a Priori</i> Behavioral Clarity?	recommendations evolve	yes	yes			
Provides Guidance During Negotiations?	yes	no	yes			
Provides Support After Negotiations?	yes	no	maybe			
Costs of Process	high	low	low for clients medium for sponsor			
Likelihood of <i>Beginning</i> Training	low	high	medium			
Likelihood of Implementing MGB After Training	medium	medium	high			
Likelihood of Long-Term Impact	high	low	medium			
Trainer Skills Needed	- training - process management - reputation	- training	- training - process management - power and independence			

TABLE 1

being initiated and implemented, and the kinds of skills or background needed by the trainer. Note that this formulation does not represent all of the subtleties of each approach, or all of the ways that each *might* be enacted, but rather represents basic differences between the approaches as they have been enacted so far. Also, no attempt is made to evaluate which has done "better" in practice: as is implied by the table, the answer to that question would depend on whether "better" means more likely to be used, more readily available to a broad range of bargaining units, more likely to have a lasting impact, or some other criteria.

Areas of Agreement Among Trainers

Are there any aspects of MGB training about which trainers are agreed? Prior to the Harmon-MGB seminar, participants (including 12 people who had done training) were surveyed about various aspects of MGB training. Most agreed that (1) simulations are a necessary ingredient to training, (2) role reversals during the simulations are useful, and (3) at least some outside facilitation is needed after training. Trainers who came from a labor relations background expressed different views on two points: they, more than others, felt that training had to include constituents (not just the negotiators) and that the simulations should reflect the parties' real issues (rather than being safe, issue-neutral exercises). Trainers who had been doing short, intensive training programs believed that a few days of training could be effective (while others thought more time was necessary).

Trainers' views were even more varied regarding conditions that made MGB successful: some thought that the probability of success was increased if the bargaining unit was white collar, if participants were more highly educated, or if bargainers did not have too much experience with old bargaining traditions; others disagreed. Some thought it could be useful to train one side (if that was all that was possible); others disagreed. And, on a hopeful note, while most trainers thought that MGB could not be implemented if relations between the parties were really hostile, the few trainees in the survey stood out in their clear disagreement with that assessment.

Conclusion

The distinction between "interests" and "positions" is a powerful idea, and the core element of an MGB alternative to traditional labor negotiations. In spite of the simplicity of the idea, however, getting people to understand and use it can be daunting in its complexity. The initial minimalist model of training was based on the hope that the idea, in itself, could change the negotiation process. We know now that that is not enough. Negotiators need additional support, either in terms of more broad involvement by trainers or more clearly specified and concrete behavioral recommendations by them. Current modifications of MGB training differ in the degree to which they emphasize the former or latter form of support.

Each approach has advantages and disadvantages. Greater involvement in constituent relations and the actual negotiation process can be highly effective, but poses great risks to the parties and represents large costs so that only large bargaining units, willing to face great changes, will sign up for this training. Training that focuses on providing, up front, more concrete steps for taking action is not as likely to have as broad and sustained an impact on the parties, but is cheap enough and simple enough that many bargaining units may actually try it. Each approach may be appropriate, depending on the size and wealth of the bargaining unit, the degree of risk that is viable, and the availability of trainers with the appropriate skills and level of credibility.

It is possible to do *both*, but that is rather atypical: the trainer must have a great deal of control over the negotiators and a high degree of availability, which seemed to occur only when the trainers were fulltime staff supplied by a parent agency rather than independent consultants. This suggests that more should be done by policymakers. the FMCS, and other servicing organizations to develop a staff of fulltime MGB trainers. In the meantime, however, most trainers are outside consultants and, as such, they have to find ways to be effective within the cost, time, and political constraints they face.

Clearly, the data are not all in yet: each attempt to bring MGB into labor negotiations offers new ideas, new insights, and new opportunities for improving labor relations.

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The PAST Model of Win-Win Collective Bargaining

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This paper describes, discusses, and evaluates the PAST (Principles, Assumptions, Steps and Techniques) model of interest-based collective bargaining. In developing and testing the PAST model, a twoday training seminar was used to train 40 labor/management pairs involved in a bargaining relationship. The evaluative comments reported here are based on the training participants' impressions of the PAST model and their use of it in bargaining, as well as the author's observations of the parties during their training and in one quarter of the cases, negotiations.

The PAST Model

The PAST model is outlined in Appendix A. The principles are based on systematic observations of a variety of negotiations, conducted by the Harvard Program on Negotiations, to determine what works well and what doesn't. The assumptions about behavior and bargaining were derived from the principles and an optimistic view of the motives of other human beings. Both the principles and assumptions are intellectual and psychological in nature. They are a way of thinking about how negotiations do or should work. They constitute a new bargaining paradigm.

In contrast, the steps and techniques deal with skills and behavior. The sequential steps are the actions used to implement the principles and the assumptions in the negotiating process. The group-process techniques are the tools used to facilitate the individual steps. For example, the brainstorming technique is used in the step where options are created; the idea-charting technique is in all steps.

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Training in the PAST Model

A two-day seminar provides joint training for the labor and management negotiators on the PAST model. Ideally, the training is scheduled a month or two before the start of bargaining to afford the bargainers sufficient preparation time after the training.

The interactive training uses slides, video, flip charting, numerous handouts, paper and pen exercises, group and pairs exercises, simulations, lecture/discussion, facilitated discussion, coaching, and modeling. A book and an article are provided as additional reference material.

The goals of the training are to introduce the PAST model and provide experience with it, to challenge old assumptions and beliefs about bargaining and human behavior, to provide a successful experience with the model in a collective bargaining setting through coaching, and to provide a practical and focused discussion on applying the model to the parties' next negotiations.

Profile of Trained Groups

Management and labor from a variety of sectors and unions have been trained in the PAST model. The industries and sectors that have participated in the training include steel manufacturing, rubber, food, aluminum, electronics, machine tools, paper, military vehicles, public utilities (electric, natural gas, and telephone), mineral mining/ processing, defense, health care, federal government, municipal government, and public education (K-12, community college, and university). The unions that have participated in the training include UAW, IBEW, IBT, IAM, AFGE, AFT, NEA, USW, AFSCME, AFGM, ANA, IUOE, UPIU, URW, and a number of independents.

Other characteristics of training participants demonstrate the parties' diversity. The parties were equally divided between the private and public sector. Many were in long-term relationships, others were on a second or third contract. Most involved a single union and a single plant, but a few involved more than one union and one involved a multiplant organization. Some had no or few strikes; one had not reached an agreement without a strike in 20 years. Both very competitive and less competitive businesses were trained. A few were foreign owned. Groups were located in 18 different states, including rural and urban areas. Some were the largest facility in their area or industry. A few were trendsetters in their industry. Some participants were very experienced traditional bargainers, others had little bargaining experience.

Significant History and Motivation of Trained Participants

The history of the parties' relationship was a key factor in determining their motivation to change their bargaining process. Three distinct relationship histories were clear among the parties who were trained:

1. Recent history of cooperation: These parties had engaged in cooperative efforts in their relationship outside of collective bargaining. They had used labor-management committees, quality circles, quality of work life concepts, or other collaborative efforts to make their relationship more positive and less adversarial. Following a period of increasing cooperation in their day-to-day relationship, when the time came to start their bargaining, the parties recognized the incongruence between their bargaining relationship and their dayto-day relationship. Because of their positive attitude toward the cooperative phase of their relationship, these parties sought a change in their bargaining process to align their collective bargaining with their day-to-day relationship.

2. Negative bargaining history: These parties have survived their last collective bargaining round, or the last several rounds, convinced that they must find a better way, that they cannot continue to bargain as they have. They are not only dissatisfied with their bargaining results but also with the negative impact on their relationship. (Those parties with either a recent history of cooperation or a negative bargaining history, who feel a sufficiently intense need to change their bargaining, are most likely to succeed.)

3. Not bad enough: These parties were seeking a new and better way to bargain, but they lacked a real motivation to change. They were not sufficiently dissatisfied with their current bargaining process to make a break from their past.

Ideal Users of the PAST Model

Based on those parties who have successfully used the PAST model after training, it is possible to characterize the ideal users of the PAST model: (a) both parties are motivated to change based on a perceived need to change and a belief that they can change; (b) both parties have at least one member who is willing to urge and push their team when the bargaining gets difficult and negotiators get discouraged; these individuals are cheerleaders or true believers with credibility and a willingness to motivate their team based on their vision of a better way to bargain; (c) parties who have already done some trust building in their relationship through some form of labor-management cooperation; (d) parties with some experience in group process techniques, and problem solving; (e) parties whose market or financial environment is not at a point of desperation; and (f) parties who are willing to allow a third-party facilitation to help them during their first several negotiating sessions.

Obstacles to Using the Model

The parties who were unwilling to quit their traditional bargaining process and adopt the PAST model after training were unable to overcome one or more of the following obstacles:

1. Lack of readiness or motivation to change: The parties were not sufficiently dissatisfied with their current bargaining process and its results to make the effort to change. They were not willing to take the risk that change involves. They were not at what Kurt Lewin called the "unfreezing stage."

2. Lack of constituent support for change: One or both parties believed that their constituents did not want to change and the bargaining committee was unwilling to lead or challenge the constituents' views.

3. Too little trust by key negotiators: Based on their bargaining experience together, bargainers had lingering suspicions and doubts about the other negotiator's motives for trying the PAST model.

4. Political reasons: Some parties made their agreement to use the PAST model contingent upon the other side agreeing on a matter concerning another plant.

Introducing the Model after the Training

Following training, each group discussed how to get started using the process. Some decided to test the model before using it in their contract negotiations. A few tried the model on a few grievances. One multiplant organization had the local plant bargaining teams trained and used the model on local agreements first. A few parties identified a common problem area and tried the model on it first. One group identified a plant area with a serious group of problems. Then they appointed bargaining committees from that area, had them trained, and let them bargain their issues. In each of these situations the experiments were viewed as sufficiently successful that the trained bargaining committees attempted to use the model in collective bargaining. Most of those who used the model tried it with regular negotiations without any experimentation. Those that had the most success utilized an experienced facilitator on the first few days of their bargaining.

Full to Slight Use of PAST Model

Of the parties trained in using the model, some used it fully in their negotiations; others used it less. Four levels of utilization of the model can be identified: (a) parties used the full PAST model on all issues in their negotiations and now use it in their day-to-day relations; (b) parties used the full PAST model on many issues in their negotiations but resorted to positional bargaining on a few issues; (c) parties did not use the full PAST model, but during negotiations they were less positional than in the past, used the options step on some issues and, on most issues, talked about the need for a win-win outcome; (d) parties did not use the full PAST model but experienced a different tone in their negotiations based on the assumptions in the model. They were less competitive, less win/lose, and they talked about mutuality.

The PAST model and training anticipate the parties' need to sort out the level of utilization for which they are ready. That sorting out occurred during and after training through consultation with constituents, through examining their environment and their commitment to change, and through considering how rapidly and completely, they are capable of changing.

Other Results Reported by Users of the PAST Model

Many negotiators who used the PAST model reported that they reached a better, fairer agreement and also improved their relationship. Parties with a history in cooperation found the model compatible with their cooperative efforts outside of bargaining. One group reported that their settlement established the pattern for their industry. Several groups reported that they plan to use the model in their next negotiations.

Initial Problems in Using the Model

Users of the PAST model experienced initial difficulties, some of which were related to the nature of change: (a) before experiencing some successes with the model, it was difficult for some parties to project a vision of the model working in their negotiations; (b) while those parties that attempted to use the PAST model were motivated to change, the traditional and familiar way of bargaining and communicating were difficult to resist and avoid; (c) based on the parties' joint history, some parties found it difficult to believe the other side was sincere and did not have an ulterior motive in agreeing to use the model.

Some parties' difficulties were related specifically to the PAST model, for example: (a) for some, it was difficult to state an interest without including an option; (b) it was difficult for some parties to think of additional options once they offered their preferred option: (c) most parties had difficulty initially with standards. Once they worked through a few issues, they found standards were much easier.

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APPENDIX A

The PAST Model of Win-Win Collective Bargaining

Principles:

- 1. Focus on issues not on personalities.
- 2. Focus on interests and not on positions.
- 3. Create options to satisfy mutual and separate interests.
- 4. Evaluate options with objective standards-not power.

Assumptions:

- 1. Bargaining enhances the parties' relationship.
- 2. Both parties can win in bargaining.
- 3. Parties should help each other win.
- 4. Open and frank discussion expands the areas of mutual interests, and this in turn expands the options available.
- 5. Mutually developed standards for evaluating options can move decision making away from reliance on power.

Steps:

- 1. Preparatory steps:
 - A. Prepare for bargaining.
 - B. Develop opening statements.
- 2. Bargaining steps:

A.	Agree on a list of issues.	Ι
B.	Identify interests on one issue.	Ι
C.	Develop options on one issue.	0
D.	Create acceptable standards.	S
E.	Test options with standards	S
	to achieve a solution or settlement.	

Techniques:

- 1. Idea charting.
- 2. Brainstorming.
- 3. Consensus decision making.

Definitions

Issue:	Topic or subject of negotiations.
Position:	One party's solution to an issue.
Interest:	One party's concern about an issue.
Option:	A solution that can satisfy an interest.
Standard:	Characteristic to compare and judge options.

Mutual Gains Bargaining in Academia: Negotiations at the University of Cincinnati

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In June of 1989, the AAUP, as the bargaining agent of the faculty, and the administration of the University of Cincinnati (U.C.) entered a new phase in their relationship. They concluded an agreement utilizing for the first time mutual gains bargaining (MGB) or the win/ win approach. In prior negotiations, which had their beginning in 1975, the process was frequently accompanied by acrimony, negative publicity, and confrontations. There was even one strike. Because of MGB, the relationship improved dramatically during the last negotiations.

MGB is a method of negotiations which assists the parties to arrive at solutions that identify and recognize the interests of both sides. The MGB model attempts to create value, expand the pie, and decide issues on their merits through a process of joint reasoning and problem solving. The concepts of MGB, or principled, interest-based, collaborative negotiations, are contained in Fisher and Brown (1988); Lax and Sebenius (1986); Susskind and Cruikshank (1987); Fisher and Ury (1981). For background and earlier references, see Walton and McKersie (1965); Sherif (1962); Slichter, Healy and Livernash (1960); Golden and Parker (1955); and Follett (1942).

After the U.C. administration and the AAUP reached an agreement employing MGB techniques, the author evaluated the process by conducting an extensive field survey. For this purpose, a questionnaire was developed consisting of open-ended and quantitative questions on a five-point scale. The questionnaire was administered during lengthy personal interviews. Most of the negotiators on both teams as well as some members of both second tables (ST) were interviewed. The

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administration ST consisted of the university president and some cabinet officers, deans, and advisors. The AAUP ST included its board of directors and the bargaining council. The survey was very successful; the respondents were open, cooperative, and provided important information on many subjects.

The major objectives of this paper are to examine the factors that facilitated the implementation of MGB, assess its strengths and its weaknesses, analyze its effect on the negotiation of different contract terms, examine the level of satisfaction of various stakeholders with the settlement, and evaluate the current status of MGB at U.C. and its future prospects.

Factors Responsible for Positive Attitude of Respondents Towards MGB

All of the negotiators and most members of ST expressed a positive attitude towards MGB. Their attitude was affected by some of the following considerations. The respondents liked the sensitivity to each other's interests that the process generated. There was more tolerance and willingness to listen to opposing points of view. The process was educational-it provided an opportunity to better understand the interests and political perspectives of all parties. It also produced empathy for the interests of the other team's negotiators. Negotiators were able to "treat issues as problems rather than as trophies." Both sides had "ownership" when settling contract terms. The process provided "a rational and civil method for negotiations." The negotiators were able to work together and "discover overlaps of interests." This propelled them towards creative problem solving which was mutually productive and satisfying. They were able to invent without committing. At times, one could not tell on the basis of discussion "who represented which side."

As negotiations progressed, more trust developed and negotiators of both teams began operating on the assumption that on most topics information would be shared. This helped the parties to effectively address complex problems. Some participants liked the process because it was "more honest, there was less need to make up stories" and then back off from them or struggle with tactical decisions regarding release of information. There was less rancor and less stress. The process helped decrease confrontations stemming from the "we versus them" approach. It was also instrumental in recruiting into the negotiation arena a number of new and capable individuals who would have refused to get involved in traditional zero sum distributive bargaining. There were also some postnegotiation benefits resulting from MGB. After the settlement was reached, both sides made an effort to defuse problems in advance of any potential escalation.

Factors that Facilitated the Utilization of the MGB Approach

The question could be asked, "Why were the parties at U.C. willing to experiment with MGB?" First, because of frustrations and past confrontations, the parties had a strong incentive to support the process and wanted it to succeed. Second, the negotiation teams were very carefully selected by each side. An effort was made to recruit negotiators who could work well within the MGB framework. Third, joint training introduced the parties to the process and helped them understand its potential. One administrator stressed the importance of joint training by stating that "training the two sides together helped administrators to view faculty as colleagues rather than as adversaries." Finally, process facilitation was another important ingredient of MGB. At U.C. the facilitator helped defuse friction, clarify misunderstanding, and resolve impasses. The facilitator was a significant catalyst for moving the process toward a timely settlement.

Weakness of the MGB Process

In this section the weaknesses of the process, as perceived by the respondents, are explored. Some respondents referred to it as extended foreplay—they felt that the parties were not addressing problems quickly enough. The process was too time consuming, discussions tended to drift into too many broad areas. There were no boundaries and there was a lack of discipline. Some felt that at the beginning they lived in a fool's paradise.

MGB seems to heighten expectations that are difficult to satisfy. When teams disclose their interests, they anticipate concessions. Implicitly they assume that if the other side will understand their concerns, concessions will follow. When this does not take place, they feel disappointed and betrayed.

There was an excessive effort made to be polite and not to antagonize the opposition. Some negotiators found it difficult to be nice all the time. The two teams became too cozy with each other. As a result, they were reluctant to ask tough questions that would have surfaced in traditional bargaining. The negotiators were hesitant to push each other too hard. This aspect was recognized by Walton and McKersie who state that "... negotiators for the two parties have a relationship with each other not shared or valued by their respective principals." The MGB process seems to strengthen such a relationship.

Other weaknesses of MGB included too much focus on the process itself. There was a constant concern with doing the right thing. Participants had an inclination to get too involved with the process; the negotiators struggled in trying to formulate and define statements of interest. At U.C. most negotiators on both sides were inexperienced and did not understand the process during the first few weeks of negotiations.

In the last stages of negotiations the process has a tendency to gravitate towards positional bargaining, particularly when the parties begin to negotiate salaries.

The Impact of MGB on Negotiations of Specific Contract Terms

One of the objectives of the survey was to determine the effects of the new process on negotiations of various contract terms. According to survey respondents, MGB assisted the parties to reach agreement on such contract terms as health insurance, fringe benefits, work rules, shared governance and mediation. According to most negotiators, one area in which MGB was not helpful relative to other agenda items, was salary (see Table 1).

The survey results suggest that MGB can assist the parties in negotiating both the noneconomic as well as some economic contract terms. The survey results indicate that the MGB intervention approach seems helpful in negotiating problem areas such as health coverage, in which both sides recognize the need for brainstorming and for finding mutually acceptable creative solutions to problems.

One measure of effectiveness of the MGB process is the level of satisfaction with the settlement. Survey results indicate that on most subjects, except the agency shop, a significant majority of the AAUP respondents were satisfied or moderately satisfied with the terms of the agreement (see Table 2). A similar positive view of outcomes prevailed among the administration negotiators with one dramatic exception—merit pay. A very large proportion of the administration team (85.7 percent) was not at all pleased with the absence of merit pay from the final agreement (see Table 2). This is easy to understand; almost all administration negotiators strongly supported a merit increase, whereas many AAUP members did not endorse merit increases because of problems with the past merit allocation process. When the final agreement excluded merit, the administration team was distressed. It should be pointed out that most of the administration

TABLE 1

Percentage Breakdown of Negotiators' Perceptions of the Effect of the MGB Approach on Negotiations

Please rate the extent to which the mutual gains bargaining process *facilitated* the reaching of an agreement on each contract term listed in the left column:

Contract Terms	1°	2°	3°	4°	5°	Ā	Std. Dev.	
AAUP NEGOTIATORS:								
Salary	14.3	42.9	14.3	14.3	14.3	2.71	1.38	
Health Insurance		28.6		42.9	28.6	3.71	1.25	
Fringe Benefits	_	14.3	—	85.7	—	3.71	0.76	
Work Rules	_	_	14.3	85.7	_	3.86	0.38	
Shared Governance	_	-		57.1	42.9	4.43	0.53	
Mediation	—	42.9	—	42.9	14.3	3.29	1.25	
ADMINISTRATION NEGOTIATORS:								
Salary	42.9	14.3	14.3	28.6	_	2.29	1.38	
Health Insurance		_	14.3	14.3	71.4	4.57	0.79	
Fringe Benefits	14.3	_	14.3	42.9	28.6	3.71	1.38	
Work Rules	_	-	14.3	71.4	14.3	4.00	0.58	
Shared Governance	_	_	14.3	57.1	28.6	4.14	0.69	
Mediation	20.0	—	_	60.0	20.0	3.60	1.52	

• All responses on each contract term are equal to approximately 100%. Responses are rated on the following 5-point scale:

1 = Not at all facilitated4 = Facilitated

2 = Somewhat facilitated 5 =Greatly facilitated 3 = Moderately facilitated

team did not participate directly in the final stages of bargaining and this probably contributed to their dissatisfaction.

The Future of MGB at U.C.

The MGB model survived a variety of tests since the conclusion of the last contract. As a result of the process, the level of informal consultations between the two sides increased significantly. Better channels of communication as well as improved relationships between individual deans and the AAUP leadership helped defuse problems during the last two-and-a-half years.

Because of a major budgetary crisis, there are currently some very hard realities confronting the university. According to the administration, the 1991-92 budget showed an \$11.1 million deficit before corrective action. For 1992-93 the deficit is expected to increase to \$21.7 million.

The university president decided to address the budgetary problems by recommending to his provosts a "budget restraint" that would include cancellation of leaves, and a freeze of open positions,

TABLE 2

Percentage Breakdown of Negotiators' Responses on the Level of Satisfaction with the Settlement Achieved on Each Topic

Please rate the level of *satisfaction* with the settlement achieved on each contract topic listed in the left column:

Topic	1•	2 °	3 °	4°	5°	Ñ	Std. Dev.
AAUP NEGOTIATORS:							
Salary	_	14.3	42.9	42.9	_	3.29	0.76
Merit Pay	14.3	14.3		42.9	28.6	3.57	1.51
Health Insurance		28.6	42.9	28.6		3.00	0.82
Fringe Benefits	_	14.3	42.9	28.6	14.3	3.43	0.98
Work Rules	_	14.3	28.6	42.9	14.3	3.57	0.98
Agency Shop	33.3	16.7	33.3	16.7	_	2.33	1.21
Shared Governance	_	_	28.6	14.3	57.1	4.29	0.95
Mediation	_	—	28.6	28.6	42.9	4.14	0.90
ADMINISTRATION NEG	οτιάτο	BS:					
Salary	14.3	14.3	42.9	14.3	14.3	3.00	1.29
Merit Pay	85.7	_	_		14.3	1.57	1.51
Health Insurance		_	14.3	42.9	42.9	4.29	0.76
Fringe Benefits	_		14.3	42.9	42.9	4.29	0.76
Work Rules	_	14.3	14.3	57.1	14.3	3.71	0.95
Agency Shop		_	_	42.9	57.1	4.57	0.53
Shared Governance	_	28.6	_	57.1	14.3	3.57	1.13
Mediation		14.3	14.3	42.9	28.6	3.86	1.07

• All responses on each contract topic are equal to approximately 100%. Responses are rated on the following 5-point scale:

1 = Not at all satisfied

4 =Satisfied

2 = Somewhat satisfied 5 = Very satisfied

 $\overline{3} = M$ oderately satisfied

and may result in nonreappointments of nontenured faculty. The faculty response to these actions was to convene a special meeting of the all-university faculty at which a vote of no-confidence in the president was taken. Of the 1,005 faculty members who cast ballots, 70 percent expressed no confidence in the president and his administration in their handling of the budget. In view of these negative developments, the question has to be asked, "What is the future of MGB during the forthcoming negotiations and where do we go from here?"

There are many problems at U.C. that could undermine MGB. These are lack of trust of the faculty in the administration; the recent no-confidence vote in the president; new chief negotiators and novice negotiators assigned to both teams; opposition to MGB from some administrators, as well as from some members of the AAUP; a major budgetary crisis which will make negotiations over salaries very difficult; and the insistence of the AAUP on its right to issue antiadministration news releases during negotiations. Despite all these potential problems, both the AAUP and the administration still subscribe to the concepts contained in the MGB model. Recently, there was a meeting between the AAUP and the administration during which ground rules for the forthcoming negotiations were developed. The rules resemble those applied in the 1989 negotiations. The parties agreed "to separate invention from commitment and creation from analysis." Furthermore, for each interest the teams consented to create at least two options. The two sides also agreed to conduct joint MGB negotiation training of the teams and of their second tables.

One of the major stumbling blocks in developing ground rules was the issue of publicity. The parties agreed that, "press releases will be jointly issued as needed and agreed to by the teams. . . . Each team will have one official spokesperson." In view of recent developments, the AAUP also insisted on the freedom of the press, which may translate into negative publicity against the administration. The administration reluctantly agreed to the AAUP demand with the caveat that they should also be able to publish anti-AAUP statements. They also agreed that any AAUP news releases will be published independently of the team. Furthermore, the two chief negotiators will have a regular column in the employees' newspaper in which they will provide progress reports on negotiations. In developing these procedures, both sides recognized the new political realities and the constituency problems that necessitate this particular approach. The AAUP needs the freedom of the press in order to respond "to the behavioral expectations" of its members. For further material on the concepts of behavioral expectations and intraorganizational bargaining, see Walton and McKersie (1965).

It is too early to tell whether the teams can be insulated from the dynamics of negative publicity and whether MGB can survive and coexist with negative news releases during negotiations. How open will the teams be in inventing options and disclosing information if some of it may find its way into a news release? The current developments at U.C. present a major challenge and a test of the MGB model.

There are many serious obstacles confronting the 1992 negotiations at U.C. t is uncertain at this point in time whether the MGB process can survive the new challenges primarily because of constituency problems. Heckscher and Hall (1992) state that "The Labor World... is constrained by factors beyond the reach of the actors at the table." This statement is very applicable to the current situation at our university.

After the no-confidence vote in the president, I assumed that MGB had entered a hospice, but miracles happen. There was a major recovery; whether we are in a remission stage or on a course of true recovery only time will tell.

Conclusions

The survey provided important information about the U.C. experience with MGB. Some of the results were discussed in this paper; others will be explored in future papers and articles. The following points must be considered in any discussion of MGB: the strengths as well as the weaknesses of the process, the constituency problem, the importance of positive attitudes, team selection, the issue of trust, and the significance of training. It is important to recognize that MGB is more effective in the negotiation of some terms of the contract than of others. Furthermore, the process is vulnerable during a financial crisis. MGB is not only a technique for negotiating contracts, but a process that cannot be neglected during contract administration. It is a sensitive plant that needs continuous care, weeding, and watering-without such attention it will perish. Such care may necessitate some work on the whole organizational system as well as on the relationship between the parties. It may also require continuous consultations, joint decision making, educating the university community about MGB and training and retraining workshops for all interested parties. With sufficient effort, MGB could become part of the U.C. labor relations culture. To achieve this objective, many obstacles will have to be overcome; one of the major ones is the problem of restoring trust between the parties.

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DISCUSSION

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As a result of the papers by Barrett, Friedman, and Herman, we can focus on the elements of what has come to be called mutual gains bargaining (MGB). Fischer, Ury, Susskind, and the other luminaries associated with the Program on Negotiations, have formulated both the concepts and guidelines for more effective negotiations. They have taken the concept of integrative bargaining and operationalized it in a very imaginative fashion. The emphasis on interests, the avoidance of position bargaining, the inventing of new options, the separation of the problem from the person, and the identification of standards for evaluating results—all of these elements have been tested and found effective in a variety of settings.

Labor Management Negotiations

The papers just presented describe and analyze efforts to apply mutual gains bargaining to labor negotiations. What is needed before digging into the details of these particular stories is a "theory of the case." In other words, why worry about improving the process of labor management negotiations? Specifically, why is this treatment needed? Why can't the parties treat themselves? Are there aspects of the current industrial relations system that mutual gains bargaining could fruitfully engage? Let us look for a minute at the larger scene of collective bargaining.

In the past, calls have gone out for reexamining the process of labor negotiations when the country has experienced an upsurge in strike activity, or when the settlements appear to be out of line with national economic policies. Neither of these symptoms are present today.

Another possibility calling for some new medicine for the "patient" would be the inability of the parties to grapple with key agenda items

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and/or to adapt to new environments. From this perspective, there are major difficulties with the current system. To cite several obvious examples:

1. The costs of health care continue to be a problem that the parties have not been able to adequately address. Indeed, it appears that our leading IR professions have thrown up their hands and are prepared to toss the problem in the lap of government. This certainly is an indictment on the ability of negotiations as it is currently practiced to break new ground in this important subject area.

2. After several decades of evidence that new work systems and more flexible arrangements for the deployment of labor are desirable, given competitive pressures and the need to enhance long-run employment viability in many industries, the transformation process continues to move along at a very slow pace. From this perspective mutual gains bargaining could play a very positive role in fostering a much more vigorous adaptation process.

Why the Parties Need Help

It is easier to establish the premise that our IR system has been experiencing a sea change than the companion premise that the parties cannot make the necessary transition with their own talents and reforms.

The best answer that I can give is the following: traditional industrial relations resists pressures for change and the parties might make the changeover on their own but help from the outside can accelerate this process.

This brings us to the Level 2 analysis of Heckscher and Hall and their persuasive point that training the parties in new concepts and procedures for Level 1 negotiations will be fruitless without fundamental changes in the structure of labor management relations.

The question before us, then, is whether MGB, which focuses (at least initially) on Level 1, can serve as a powerful intervention along the way toward fundamental change at Level 2. I believe the answer is affirmative. Let me outline several reasons.

1. MGB is a "new game in town" and, as such, piques the curiosity of lead negotiators. In approaching the parties at Northrop and the UAW (a relationship that did not, on the surface, look like it was in trouble), we were able to interest the parties in a training program and the utilization of these concepts in the follow-on negotiations because

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they were convinced that there were some new ideas inherent in the approach and that they would not be any worse off for the experience.

2. Given some key dimensions of the new industrial relations, including many parties, continuous negotiations, expanded agenda, and decentralized forums, negotiations as a process has become central to all aspects of collective bargaining and not something that is just practiced at three-year intervals when the formal contract is under consideration.¹ As will be discussed in a minute, the incorporation of more effective negotiation concepts, procedures, and skills would go a long way toward enabling the parties to cope with the new environment and the many pressures that are present in today's industrial relations.

Illustrations from the Cases

The nature of the new industrial relations is amply illustrated from the cases at hand. For example, in the negotiations between the Clerical Union and Harvard University, over 50 individuals serve on the union's negotiating committee; at the University of Cincinnati, large numbers of teachers participate through forums such as the senate and other meetings that would be, in New England, called "town meetings." In the work by Tooredman, all school trustees participate in negotiations. In many of the cases, new committees to deal with budget matters have been created that operate on a continuing basis.

Level 2 Changes Still Needed

While we have seen considerable movement toward the expansion of agendas and continuous negotiations involving all parties of interest, the cases also illustrate how negotiations as a generic process has been impeded by traditional arrangements. For example:

1. In the case of Flint, Michigan, the conduct of negotiations on a union-by-union basis has meant that decisions are being made in a suboptimum fashion. Clearly, the solution is to create a multiunion council that brings all of the relevant parties into the same room at the same time.

2. In both the Michigan Bell and Northrop cases, the rank and file remained at a distance from the bargaining process, and consequently they expected their representatives to behave in a traditional fashion, specifically, adversarial collective bargaining. This last-mentioned characteristic of the old order is especially resistant to change. Indeed, most union leaders are not excited about approaches that start to involve the rank-and-file members in negotiations via subcommittees, sensing sessions, and other forums for enhancing involvement.

The Crisis Facing the Representative Form of Unionism

Combining the point about a new environment with the essence of MGB suggests that new forms of unionism will need to emerge. If I had time I think I could show you mathematically why a representative or agent form of negotiations is at variance with the tenets of MGB. Briefly, the theory of MGB is that all parties of interest should be present and all interests should be brought out in the open. What happens in the representative form of negotiations, as we know it, is that many items of interest are winnowed from the agenda early on. and since the chief negotiator operates at a distance (i.e., behavior cannot be directly observed), there is an incentive for the negotiator to shape the agenda with items that can be obtained from the other side (even though the statement may be made that these particular items will be difficult to obtain in order to build up the perceived value of success). In other words, the bargaining that takes place between the chief negotiator and his constituents can ensure that the negotiator will be reelected to office and that the constituents feel satisfied, but in any objective sense, this form of bargaining does not move the parties to the pareto frontier. This can only be done by full involvement of the constituents in a much more open process following the ground rules of MGB.

The Current Gap Between the Demand and Supply for MGB

The requirement or the demand for MGB is escalating rapidly. It is a dynamic that creates its own momentum. This point can be illustrated by the experience of the University of Cincinnati (UC) where, as a result of MGB, the faculty union came much more into a joint process with school administration on matters of budget, or at least the expectation for this involvement was created. Consequently, when the president unilaterally issued a letter freezing leaves and instituting other measures (viewed as draconian), he received a vote of no confidence from the faculty. If the president had gone to the joint budget committee and stated the interests of the university and had engaged in a dialogue, the crisis that unfolded this fall at UC probably would not have occurred.

The point that I am making is that skilled negotiators have found it difficult enough to execute traditional negotiations that are time bound,

that are limited to key individuals, and that work with narrow agendas. While we specify the dimensions of the new configuration, such as multiple unions at Flint, the joint budget committee at the University of Cincinnati, and the ideal problem-solving process applied to important agenda items such as health care costs, the need for new concepts and skills is even more critical.

The requirement for professionals to operate in these new complex environments calls for conference/collaboration concepts and skills of a high order. The question is not as much whether MGB works, but how we can experiment and evolve powerful methodologies like MGB that will enable us as researchers and educators to supply the knowledge and the applications that are very much required by today's context.

Endnote

¹ This perspective on negotiations will be elaborated in a study by Walton, Cutcher-Gershenfeld, and McKersie (forthcoming).

IX. PERSPECTIVE ON THE RISING INEQUALITY OF WAGES IN THE U.S.

Accounting for the Recent Divergence in Regional Wage Differentials

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Convergence of regional income differentials is commonly perceived as the natural result of the gradual development and maturation of regional economies. Improved transportation and communication, enhanced mobility of capital and labor, and the shift away from resource-based activities could lead regions and their incomes to look more and more alike. Indeed, since the 1880s the general trend has been toward convergence of regional per capita income in the United States.

Recently this trend appears to be reversing. Browne (1989) shows that since around 1980, regional differences in per capita personal income have been on the rise. Regional per capita incomes have diverged over an extended period of time only once before this recent episode—between 1920 and 1940. Easterlin (1958) concluded from that 20-year reversal in the longer-run trend that "... it is by no means certain that convergence of regional income levels is an inevitable outcome of the process of development. For while migration and trade do appear to exert significant pressure towards convergence, they operate within such a rapidly changing environment that dynamic factors may possibly offset their influence" (p. 325).

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Moreover, Dickie and Gerking (1988) contend that differences in regional resource endowments, production technologies, markets, and fiscal structures can lead to increases in regional wage dispersion.

The post-1980 spread of regional earnings coincided with increasing wage dispersion across different groups of workers, as documented by Juhn, Murphy, and Pierce (forthcoming), among others. Levy and Murnane (forthcoming), in a survey of the expanding literature on the recent wage divergence, point to the shortage of highskilled workers as a leading explanation of the widening wage gap. At the regional level Karoly and Klerman (1991) find that wage inequality differs among regions.

The purpose of this paper is to examine whether the wage structure that caused a particular region to converge toward the national average before 1980 can also account for the divergence in wages in that same region after 1980. Two sources of regional wage differentials are examined: (1) regional differences in the return on various worker attributes and in the wage differentials among industries and occupations, and (2) regional differences in the levels of worker attributes and in the distributions of workers among industries and occupations.

Accounting for Regional Wage Differentials

The technique used to account for the two sources of wage differentials follows the approach of Oaxaca (1973) with modifications made by Sahling and Smith (1983). Using y for the logarithm of wages, which are a function of worker and industry characteristics (X_{jt}) and the price of each characteristic (b_{jt}) , the log difference of the wage in region S and the national average wage (N) at a particular time can be written as:

(1)
$$(y_{St} - y_{Nt}) = (b_{St} - b_{Nt})X_{Nt} + (X_{St} - X_{Nt})b_{Nt}, t = 1,...,T.$$

The first term on the right-hand side accounts for the difference in characteristic prices between a region and the national average. The second term denotes the difference in levels of worker and industry characteristics between the two regions. A residual term, $(b_{s_1} - b_{N_t})(X_{s_t} - X_{N_t})$, is omitted for simplicity.

Two approaches are used to address the issue of wage convergence and divergence. First, the variance of the total difference between a region's wage and the national average wage (left-hand side of equation [1]) can be tracked over time. In addition, the relative contribution of each right-hand side component of equation (1) can be examined by following the variance of each component over time. Second, the difference between the regional wage and national average wage can be displayed in order to determine which of the nine census regions follows the convergence/divergence pattern and to determine which component contributes more to this pattern for each region.

Empirical Results

Data

The data used to estimate the wage differentials are obtained for various years from the *Current Population Surveys* (CPS) compiled by the U.S. Department of Labor, Bureau of Labor Statistics. Following the human capital specification of Hanoch (1967) and Mincer (1974), individual wages (expressed in logarithms) are specified as a function of various workers attributes, including education level (entered as a quadratic), potential experience (age, minus years of education, minus six, also entered as a quadratic), and the interaction between experience and female. Dummy variables indicating race, gender, fulltime work status, occupation, industry, and Standard Metropolitan Statistical Area resident are also included. Hourly earnings were computed by dividing average weekly earnings by average weekly hours.

Comparing changes in regional wages relative to the national average partially adjusts for overall nominal wage increases over time. However, any deviations of regional price trends from the national average will be imbedded in the various components, particularly in those related to differences in characteristic prices. Instead of relying on the national trends to capture regional price differentials, it would be ideal to adjust regional wages for differences in the cost of living. Unfortunately, regional indexes are available only for metropolitan areas and, even then, there are no indexes that can be used to compare cost-of-living differences across metropolitan areas.

Patterns of Regional Wage Differentials

Variances of regional wages (relative to the national average wage), computed each year from 1973 throgh 1990, reveal a convergence of regional wages to the national average until 1980 followed by a divergence of regional wages. To summarize these trends, percentage changes in variances over two periods are displayed in Table 1.

U.S. WAGE INEQUALITY

Cross-region wage variances fell 33.1 percent from 1973 through 1980, and then increased 142.2 percent from 1980 through 1990.

	Time	Period
Wage Difference	1973-1980	1980-1990
Total	-33.1	142.2
Prices	-9.8	200.2
Mean	11.0	-63.3
Characteristic Categories (to	otal wage difference)	
Occupation	-100.4	1718.5
Worker attributes	-43.7	-4.7
Industry	-55.7	20.9

TABLE 1

Percentage Change in Variances of Regional Wages Relative to the National Average

Source: Current Population Survey and author's calculations.

The change in variances of regional wages over time results from the relative wage gains and losses across the nine regions. Examining the regional-national wage difference for each region reveals that wages for six of the nine census regions converged and then diverged for the three representative sets of years displayed in Table 2. For example, as shown in the last column of Table 2, wages in the Middle Atlantic region averaged 9.04 percent above the national average in 1973-75. By 1979-81 the difference had narrowed to 3.27 percent above the national average, but by 1985-87 the spread had increased to 7.58 percent. As evident from Table 2, most regions that exhibited the convergence-divergence pattern started below the national average in 1973-75. Two regions, West North Central and Mountain, lost ground during the 15-year period. Although converging toward the national average before 1980, these two regions were further below the national average in 1985-87 than in 1973-75.

Components of Regional Wage Differentials

The question of which of the two components in equation (1) contributes more to the switch from convergence to divergence can be addressed by computing the variances of the components and by examining the relative magnitudes of the components for each region. Table 1 displays the percentage change in the variances of the two

		(1)	(2)	(3)	
Census Region	Year	$(\mathbf{b}^{R}-\mathbf{b}^{N})\mathbf{X}^{N}$	$(x^{R} - x^{N})b^{N}$	Actual Wage Difference	
New England	1973-75 1979-81 1985-87	0064 0469° .0198°	0096° 0123 .0138	0208 0592 .0305	
Middle Atlantic	1973-75 1979-81 1985-87	.0547° 0005 .0221	.0429 0363° .0504°	.0904 .0327 .0758	
East North Central	1973-75 1979-81 1985-87	.0453 .0117 0010°	.0064° .0133° .0007	.0490 .0337 .0025	
West North Central	1973-75 1979-81 1985-87	0289 0137 0447	0461° 0483° 0605°	0861 0699 1089	
South Atlantic	1973-75 1979-81 1985-87	0332° 0459° 0396°	0303 0027 0076	0622 0448 0463	
East South Central	1973-75 1979-81 1985-87	0861° 0714° 1047°	0695 0264 0544	1589 1011 1524	
West South Central	1973-75 1979-81 1985-87	0915° 0496° 0471°	0176 0006 0020	$1078 \\0502 \\0524$	
Mountain	1973-75 1979-81 1985-87	0316° .0101 0158	0021 0220° 0446°	0270 .0106 0436	
Pacific	1973-75 1979-81 1985-87	.0782° .1280° .1253°	.0495 .0256 .0333	.1063 .1326 .1427	

TABLE 2
Components of Regional Wages Relative to the National Average

Note: Column 1 is the effect of differences in characteristic price between the region and the nation; column 2 is the effect of differences in characteristic levels between the region and the nation. Columns 1 and 2 do not add up to column 3 because of a residual component not shown in the table. Asterisks denote the dominant component for each time period and region.

Source: Author's calculations.

wage components. Variances of differences in characteristic prices follow the same pattern as variances of total regional wage differences, whereas variances of differences in characteristic levels display an opposite pattern. Furthermore, when the variables used to estimate wages were divided into three groups—occupation distribution, worker characteristics, and industry composition—the convergence-divergence pattern appeared to be strongest for the occupation variables, as shown in Table 1.

Cross-sectional estimates of the two components, shown in Table 2. are consistent with the results using variances but are not as strong. For the six regions that followed the convergence-divergence pattern. changes in characteristic prices dominated the regional-national wage differential for three regions for all three periods, changes in characteristic levels dominated one region, and the effects were split for the remaining two regions.

Conclusion

After converging for most of the century, nominal regional wages have diverged since 1980. This paper attempts to identify the source of this directional shift as either a change in the market prices for worker. attributes or a change in the levels of worker attributes. Results using individual worker wages and characteristics from the CPS show that differences in characteristic prices are largely responsible for the recent divergence in regional wages relative to the national average. Furthermore, much of the change is found in the occupation coefficients

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Wage Inequality and Family Labor Supply

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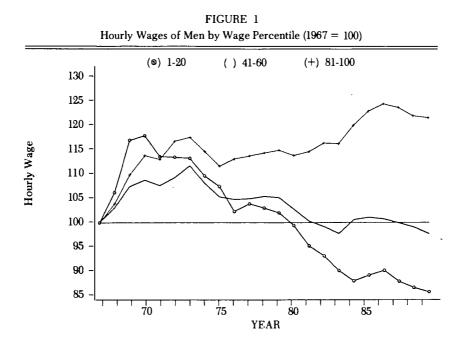
Between 1970 and 1989 there was an enormous increase in wage inequality among men in the U.S. labor market. While real wages for men in the top quintile rose by about ten percent, real wages for men in the bottom quintile declined by about 25 to 30 percent. Weeks worked per year also declined dramatically for men in the bottom quintile generating an ever larger decline in real annual earnings for these men. Over this same time period, time worked and annual earnings of married women increased dramatically. In this paper we ask to what extent these changes in female labor supply are linked to the labor market outcomes of husbands. Are women working more today because their husbands are earning less?

We use data from the 1968-1990 March Current Population Survey (CPS) and examine how changes in annual hours worked, hourly wages, and annual earnings of wives are related to the husband's wage. While hours worked increased for all married women, we find that the increases in earnings and time worked have been most dramatic for the wives of middle and high wage men and not for the wives of low wage men who have experienced the largest declines in earnings. The large hours increase among those wives whose husbands have done well in the labor market suggests that factors more directly related to the characteristics of these women have played the major role in raising female participation. For example, since wives of high wage men tend to be highly educated women, the increase in labor supply we observe among these women at least to some extent reflects the changing behavior among highly educated married women in general.

One of the most striking trends in the U.S. labor market in the last two decades has been the enormous rise in wage inequality among

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men. Researchers have documented this increase along a variety of dimensions.¹ Figure 1 illustrates what is now a familiar story. Using CPS March data the figure shows the change in real hourly wages of men at the bottom, the middle and the top quintile of the hourly wage distribution from 1967 to 1989. The figure shows that while real wages of men in the top quintile have increased 20 to 25 percent since 1967, wages of men in the bottom quintile have declined about 15 percent since 1967, and as much as 30 percent since 1970.²



A less well known but equally dramatic development has been declining employment of men in the lower wage categories. As Figure 2 shows, while the employment rate (measured as employed weeks divided by total weeks per year) of the top quintile remained essentially unchanged from 1967 to 1989, employment of the bottom quintile declined as much as 16 percentage points. Since these men in the bottom wage categories also suffered the largest wage declines, this translates into enormous losses in annual earnings for these low wage men.³

While male employment rates have declined, employment of married women increased enormously over this period. In our sample

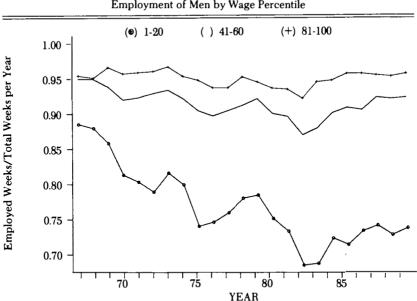


FIGURE 2 Employment of Men by Wage Percentile

of married women, hours worked rose from 693 hours per year in 1967 to 1270 hours per year in 1989, an increase of about 83 percent. In 1967, these women were employed 37 percent of the weeks in a year. By 1989, they were employed over 66 percent of the year. Can any of this increase be attributed to the decline in employment and earnings of husbands? Figures 3-6 and Table 1 explore this question by documenting changes in wife's annual hours, hourly wage, and annual earnings by husband's wage decile. Since we are primarily interested in the effect of husbands' earnings on hours and earnings of married women, we focus our attention exclusively on a sample of matched husband-wife pairs from the CPS. We also concentrate on a relatively young sample by only including couples where the husband has between one and 30 years of potential labor market experience.⁴ Under the presumption that an increase in husband's earnings reduces hours worked by the wife, we would expect the largest increase in hours to occur among wives of low wage men since these are the men who have suffered the largest earnings losses.

As Figure 3 shows, this is not in fact what we observed in the data. Figure 3 presents average annual hours worked by wives of men in the indicated wage decile for 1967-69 and 1987-89. Column (1) of Table 1

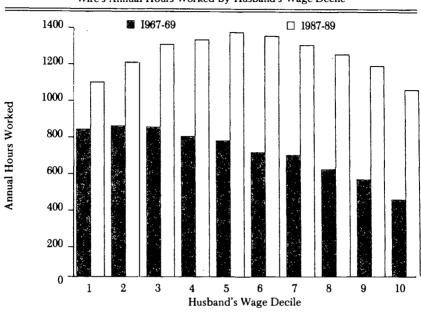


FIGURE 3 Wife's Annual Hours Worked by Husband's Wage Decile

presents the corresponding numbers. Figure 3 shows that hours worked increased among all married women but, in fact, increased the most for wives of men in the middle and the top wage deciles. This non-neutral increase has led to a dramatic change in the distribution of wife's time worked by husband's wage. In 1967-1969 (darkly shaded bars) there was a clear negative relationship between the husband's wage and wife's annual hours. That is, the higher the husband's wage, the less the wife worked. However, by 1987-1989 (shown with lightly shaded bars) this relationship had changed with wives in the middle of the distribution working the most. By far the largest increases in hours worked have occurred among wives of middle and high wage men. As shown in column (1) of Table 1, wives of men in the bottom wage quintile increased their labor supply by 316 hours from 1967-1969 to 1987-1989. Annual hours worked in the middle and top quintiles increased twice as much, by 635 and 634 hours respectively.

Figure 4 shows the distribution of wife's hourly wage by husband's wage decile again for 1967-1969 and 1987-1989. Hourly wage of the wife is the average wage of all working wives married to men in the

Husband	Year	Annual Hours	Hourly Wage (\$)	Annual Earnings	Annual Earnings (Fixed Wage)	
Wage Percentile		(1)	(2)	(3)	(4)	
1-20:	1967-69 1977-79	850 983	4.36 5.02	3,703 4,935	3,703 4,285	
	1987-89	1,165	5.20	6,056	5,078	
	Change % Change	316	19.3	63.5	37.2	
41-60:	1967-69 1977-79 1987-89	740 1,032 1,375	5.58 6.12 6.80	4,133 6,311 9,349	4,133 5,762 7,677	
	Change % Change	635	21.8	126.2	85.8	
81-100:	1967-69 1977-79 1987-89	496 808 1,130	6.66 7.37 9.29	3,304 5,956 10,503	3,304 5,382 7,527	
·	Change % Change	634	39.5	217.9	127.9	
1-100:	1967-69 1977-79 1987-89	704 958 1,259	5.48 6.15 7.07	3,859 5,886 8,904	3,859 5,253 6,903	
	Change % Change	555	29 .0	130.7	78.9	

TABLE 1 Hours Worked, Wages, and Earnings of Married Women by Husband's Wage Percentile

Source: March Current Population Surveys 1968-1990. The sample includes all matched husband-wife pairs (or cohabitants) where the husband had 1-30 years of potential labor market experience, where neither spouse lived in group quarters, where neither spouse was in school or the military during the survey week or worked only part of the previous year due to school or military service.

Note: "Hourly Wage" of the wife is the average wage of all working wives in the indicated wage percentile of the husband. The average was calculated as the sum of total annual earnings of all wives in the category divided by total annual hours worked by wives in the category.

Earnings are deflated using the personal consumption expenditure deflator.

Column (4) reports annual earnings of the wife holding fixed the hourly wage at its 1967-1969 value.

indicated wage decile. The average was calculated as the sum of total annual earnings of all wives in the category divided by total annual hours worked by wives in the category. Unlike hours worked in Figure

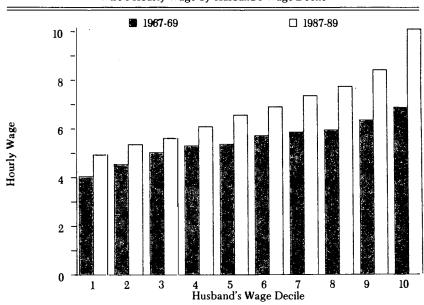


FIGURE 4 Wife's Hourly Wage by Husband's Wage Decile

3 where there was a clearly negative relationship with respect to the husband's wage in the beginning period, wages of spouses appear to have been always positively related. That is, even in 1967-1969 high wage men tended to be married to high wage women. As shown in column (2) of Table 1, wives of men in the bottom guintile earned \$4.36 per hour in 1967-1969 while wives of men in the top quintile earned \$6.66 per hour. Since that period, however, the relationship between the husband and the wife's wage has become increasingly more positive as the wives of men in the top quintile gained approximately 40 percent in real wages from 1967-1969 to 1987-1989 while wives of the lowest quintile men gained about 19 percent. While it is possible that the underlying sorting pattern has changed so that men and women are now more positively sorted than before, it is more likely that these differential wage gains reflect a more general pattern of high skilled women gaining on less skilled women. For example, if we take the same sample of women and compare across education categories rather than the husband's wage, we find that wages of college-educated women rose from an average of \$8.25 in 1967-1969 to \$9.86 in 1987-1989 (a gain of almost 20 percent), while wages of high school dropout women rose approximately eight percent and wages of high school graduate women rose about ten percent.

If the differential wage gains between wives of high wage and low wage men are indeed due to skill differences between the wives, this suggests that at least a portion of the differential increase in labor supply may be explained by a change in market opportunities favoring more skilled women.

Incorporating the changes in both wages and hours worked, Figure 5 and column (3) of Table 1 describe the change in annual earnings by husband's wage decile. As Figure 5 shows, the wife's annual earnings was almost neutral across the husband's wage decile in 1967-1969. While wives of high wage men worked less hours, they were paid more per hour. In contrast, by 1987-1989 there is a clearly positive relationship between husband's wage and wife's earnings. Once again, the largest increases in earnings have occurred for wives of men in the top deciles. As shown in column (3) of Table 1, annual earnings of wives in the bottom quintile rose by \$2353, an increase of about 64 percent. Annual earnings of wives in the top quintile rose by \$7199, an increase well over 200 percent. By the end of our data, wives of high

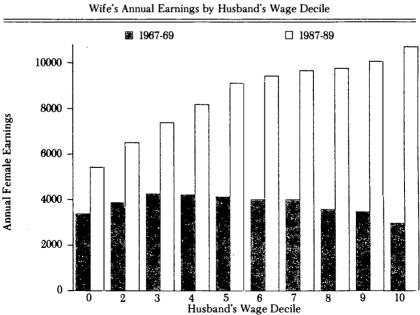


FIGURE 5 Wife's Annual Farnings by Husband's Wage Decile

wage men worked almost as many hours, but earned significantly more per hour, than wives of low wage men.

What percent of the increase in a wife's annual earnings was due to hours and what percent due to wages? The final column of Table 1 reports annual earnings of wives holding their wages fixed at the 1967-1969 value. Thus the column summarizes how much annual earnings of the wife increased due to increase in hours worked alone. For wives of men in the bottom quintile, increase in hours worked alone increased their earnings by \$1375, accounting for approximately 58 percent of the total increase in annual earnings. For the middle quintile, increase in hours accounted for 68 percent and for the top quintile, 58 percent of the increase in annual earnings. Thus, it appears that both the increase in hours worked and the increase in the hourly wage contributed significantly to the rise in annual earnings of married women with the increase in hours playing a slightly larger role particularly for women in the middle.

Finally, Figure 6 illustrates the change in family earnings due to changes in the earnings of each spouse. Again we use as a point of reference the wage decile of the husband and report average family earnings (sum of husband's and wife's earnings) in each category. The medium and darkly shaded bars represent actual family earnings in 1967-1969 and 1987-1989 respectively. The lightly shaded bars show what family earnings in 1987-1989 would be if we held the earnings of the wife constant at their 1967-1969 level. Thus the difference between the first two bars illustrates the changes in family earnings due to the changes in the earnings of the husband. The difference between the middle and the third bar illustrates how the earnings of the wife have reinforced (or offset) the earnings gains (or losses) of the husband. In the bottom wage deciles, the earnings of the wife has just about offset the earnings loss of the husband. In the middle deciles, family earnings increased solely due to the increase in earnings of the wife. In the very top decile, husbands and wives contributed about equally to the increase in family earnings.

It is somewhat difficult to summarize the contribution of women to family earnings inequality. On the one hand, the increase in earnings of women married to low wage men tended to offset the inequality generated by their husbands. On the other hand, the much larger earnings increase among wives of high wage men tended to reinforce the earnings inequality generated by the increase in the earnings of these men. Changes in the earnings of husbands and wives in the bottom percentiles appear to be consistent with the hypothesis that

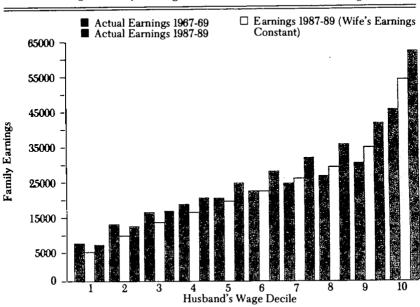


FIGURE 6

Change in Family Earnings Due to Husband's and Wife's Earnings

women have come into the labor force to offset the earnings losses suffered by their husbands. However, the even larger increase in earnings of the wives in the top deciles remains a puzzle and is problematic for a simple hypothesis that women have increased their labor supply to offset the bad labor market outcomes of their husbands. While husbands' earnings may have played some role (particularly for the wives of low wage men), the examination of wife's labor supply behavior by husband's wage clearly shows that it could not have been the only, or even the primary, factor leading to the increase in labor supply of married women.

So far we have described the simple bivariate relationships between the wife's labor market variables and the husband's wage. For both annual hours and earnings, the clear negative relationship between the wife's hours (earnings) and the husband's wage has disappeared, while the relationship between the wife's wage and the husband's wage has become more positive over time. The most logical next step would be to estimate the empirical relationship between the wife's annual hours and earnings of the husband, holding constant the wife's own wage and other characteristics such as age and education. One could then apply these estimates to the actual time series changes

in the wife's annual hours and changes in the husband's earnings to predict changes in female labor supply due exclusively to changes in husband's earnings. Our preliminary summaries of the data here suggest that the husband's earnings played a minimal role for women married to high wage men. The exact magnitude of the impact of declining husband's earnings on women married to low wage men still remains to be determined.

Acknowledaments

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Endnotes

¹ For a comprehensive analysis of the recent changes in U.S. wage structure see Katz and Murphy (1992). For reviews of the recent literature see Karoly (1990) and Levy and Murnane (1992).

² Wages were imputed for nonworkers from the full distribution of wages among those who worked 1-13 weeks and these imputed wages were included in the calculations. Comparison of educational attainment of the nonworkers and the 1-13 group suggests that this may overstate potential wages of nonworkers. For further details see Juhn (1992) or Juhn, Murphy, and Topel (1 1).

³ The employment measure used here is derived using the retrospective weeks worked last year question on the March CPS. One can also interpret this measure as the average employment to population ratio over the year. One reaches a similar conclusion when one compares employment across schooling categories. While the employment of college-educated men hardly declined, employment among high school dropout men has declined precipitously. See Juhn (1992) and Juhn, Murphy and Topel (1991).

⁴ There has been a decline in overall marriage rates over the sample period we examine. It is possible that by focusing on a sample of married couples, we are looking at a group that is becoming increasingly selected over time. There is some evidence that the decline in marriage rates and the delay of marriage among the educated men has led to an improvement in the quality of the single population. It is less clear how the quality of the married population is changing over time. Our preliminary findings suggest that declines in marriage rates have been neutral across education and wage percentile categories, which would tend to leave the quality of the married population unchanged. However, further investigation on this question is certainly warranted.

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HRM Policy and Increasing Inequality in a Salary Survey

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Wage inequality reported in the Bureau of Labor Statistics' Current Population Survey (CPS) grew over the last three decades (see Levy and Murnane, forthcoming). This rise is apparently at the root of much of the recent increase in the inequality of family income and has fueled a debate about the shrinking middle class.

Have changes in human resource management (HRM) caused the recent increase in wage dispersion, and what challenges will rising disparity pose for human resource managers? This paper discusses the implications for HRM policy of the rising wage dispersion found in a salary survey conducted by the Federal Reserve Bank of Cleveland (FRBC) (Groshen, 1991b). These data allow the first examination of the role of occupational distinctions and employer compensation practices in the recent rise in wage dispersion.

Analysis of the FRBC data reveals that the wages of two hypothetical nonproduction workers who differed both in occupation and employer would have pulled apart in the past three decades, even if neither changed occupation or employer. The analysis then explores which aspect of their jobs mattered most in the growing wage gap: occupations, employers, or individual differences.

The FRBC Salary Survey

Few data sets provide information on wages and employers, and no public survey offers occupational and employer detail for a longitudinal sample. The data set studied here has these desired features. It was gathered from an annual private salary survey conducted in Cleveland, Cincinnati, and Pittsburgh by the FRBC personnel department for 33 years.

The number of participating firms has grown over time and averages 83 per year. Cincinnati companies usually make up one-quarter

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of the sample, with Cleveland and Pittsburgh evenly represented in the balance. The discussion below uses "employer" to mean the employing firm, establishment, division, or collection of local establishments for which wages are reported. Since a participant's choice of the entities to include presumably reflects those for which wage policies are actually administered jointly, the ambiguity here is not particularly troublesome. The employers surveyed are generally large and include government agencies, banks, manufacturers, trade companies, utilities, universities, hospitals, and insurance firms.

The number of occupations surveyed each year ranges from 43 to 100. Each employer reports wages for an average 27 occupations per year. The jobs surveyed are mostly nonproduction jobs that can be found in all industries, and many are divided into grade levels. The complete data set has over 75,000 observations, each giving a year's mean or median salary for the people working in a surveyed occupation for a participating employer. Cash bonuses are included as part of the salary, but fringe benefits are not. From 1980 through 1990, individual salaries within job cell are also available.

Technique

The FRBC data allow the effect of employer wage policies to be examined through study of the variations within and between two well-identified characteristics of employment: occupation and employer, neither of which is well identified in household data such as the CPS. Within a salary survey framework, the group of workers in a specific occupation (e.g., job i) within an employer (e.g., firm j) is said to belong to "job cell ij." The mean wage for job cell ij can be described as the sum of four components:

(1) $\mathbf{w}_{ij} = \boldsymbol{\mu} + \boldsymbol{\beta}_i + \boldsymbol{\alpha}_j + \boldsymbol{\gamma}_{ij}$

where $w_{ij} = \log \text{ mean}$ (or median) wage of employees in job cell ij; $\mu = \text{mean} \log \text{ wage}$ for the entire sample; $\beta_i = \text{occupation } i$ differential; $\alpha_j = \text{employer } j$ differential; and $\gamma_{ij} = \text{internal labor}$ market (ILM) differential for job cell ij.

Occupation differentials estimate the average wage difference (over the mean wage in the city) paid to the occupation. Since even fairly broad occupation categories capture much of the variation picked up by standard measures of human capital (Groshen, 1991a), narrowly defined occupation can proxy well for human capital. Thus, estimated occupation differentials reflect the product of the average human capital in the occupation times the return to human capital. Similarly, the establishment differential is the wage premium paid to the average occupation by that employer, and it estimates the establishment's level of wage-relevant attributes (such as size and industry) multiplied by the return to those attributes. An ILM differential is compensation paid by an employer to a particular occupation, that falls above (or below) the average differential paid by the employer. Essentially, ILM differentials pick up idiosyncratic internal wage ratios.

Salary surveys are not random samples of the population; nor do entry and exit from the sample necessarily reflect market forces. Thus, these surveys are best suited to exploration of changes in wages rather than in the distribution of jobs. Since a simple time path of the standard deviation of wages among cells in the FRBC data does not control for the possibility that the survey now includes more diverse occupations and firms than it did before, Groshen (1991b) uses "rolling samples" to control for such sample changes. Between any two years, the change in variation is measured only for the subsample of job cells present in both years. These changes in variance are then added to the cumulative sum of previous changes plus the initial variance to obtain the total variance for a hypothetical, unchanged sample.

When the composition of jobs is held constant over time, a change in wage variance will be due to changes in wage structure or in the attributes of occupations and employers over time. In this context, if occupations are not equally represented within each employer, the variance of wages is as follows:

(2)
$$\sigma^2(\mathbf{w}) = \sigma^2(\beta) + \sigma^2(\alpha) + 2\operatorname{Cov}(\beta,\alpha) + \sigma^2(\gamma).$$

Changes in the variance of wages among constant job cells are composed of changes in one or more of these terms. To obtain total wage dispersion, a fifth term for within-cell, or individual, dispersion must be added to the between-cell components listed in equation (2). This final component of total wage variation can only be examined during the 1980s in the FRBC sample.

Summary of Results

Table 1 summarizes the results for standard deviations after controlling for compositional changes. Distributional changes are omitted by measuring the dispersion of the medians (or means) of job

	Total	Between-Cell Components				Within
	Between Cells	Occupation	Employer	ILM	Covariance	Cells
1961-1970	.002	.001	.000	.002	.000	n.a.
1971-1980	.005	.003	.006	.003	.000	n.a.
1981-1990	.003	.003	001	.000	.000	.000

TABLE 1 Average Annual Rate of Change of the Standard Deviation of Log Wages in the FRBC Salary Survey of Cleveland, Cincinnati, and Pittsburgh

Source: FRBC Salary Survey, Groshen (1991b).

cells, with a weight of one per job cell, and by using rolling samples. The first column of Table 1 shows that wage variation increases substantially in these cities in each of the three decades covered, most rapidly in the late 1970s.

During the 1960s, inequality rose primarily as a result of increasing occupation differentials and ILM variations. Widening ILM premia suggest that employers loosened their adherence to external market differentials over the decade. In the 1970s, occupational and ILM differentials continued to diverge. In addition, wage premia paid by employers underwent a large, apparently permanent increase in dispersion, reflecting a large increase in the union wage differential, or in differentials between utility, government, and durable manufacturing employers on the one hand, and financial industry employers on the other. During the 1980s, the only evident source of increasing inequality was the widening of occupational wage differentials, which can be linked to increased returns to general education. Employer and ILM differentials show little change during the decade.

Two other components of wage dispersion have not contributed to the rising inequality. First, no trend was obvious in the small component that results from the covariance between occupation and employer. Second, wage dispersion among workers within job-cell in the 1980s (the only period during which it can be measured) is very small and shows no increase.

These findings are generally consistent with those of Davis and Haltiwanger (1991), who conclude that within-plant wage dispersion accounts for most of the growth in wage inequality among nonproduction manufacturing workers from 1963 to 1986. For production workers, the role of between-plant wage dispersion and its growth is much stronger.

Did HRM Policy Changes Cause Rising Inequality?

HRM and Non-HRM Explanations for Increased Wage Dispersion

Perhaps the most frequently cited hypothesis for the rising wage inequality during the 1980s is "deindustrialization," the net creation of disproportionately low- and high-wage employers or occupations over the period. This is not essentially an HRM explanation. Other non-HRM candidates are increased returns to skills or training (due to technological change or international competition) and rising inequality of training.

The HRM hypotheses are linked to two major trends in the labor market. First, unionization has declined dramatically during the past three decades. Since unionized establishments and industries have lower wage dispersion than their nonunion counterparts (Freeman, 1980), declining unionism is a natural suspect in the search for causes of rising inequality. Historically, unions have sought low wage dispersion within and among their employers in order to enhance the cohesion of their bargaining units, to reduce labor-cost competition among employers, and to narrow supervisors' scope for adjusting wages in an unfair or arbitrary manner.

Second, coincident with declining unionization, employers have implemented a variety of "new human resources" personnel strategies in the past two or three decades. In contrast to the union model, the new human resources practices include the institution of clear internal productivity-related incentives for workers, such as individual or group bonuses, merit-based raises, or gain-sharing plans, any of which could raise wage dispersion directly. In addition, the absence of unionization may allow employers to use internal wage level as a competitive strategy, which could raise interfirm wage variation, perhaps mostly in the short run.

Industrial Restructuring: Total Wage Variation

The results obtained in this study allow rejection of a central non-HRM hypothesis as the *sole* source of rising wage dispersion. Since increases in wage variation over the past three decades can be seen even when occupations and employers are held constant, they are not solely a direct effect of deindustrialization. This finding is consistent with findings reported in Leonard and Jacobson (1990). Even if two workers had not changed jobs over the whole period, if they started in different jobs, their wages would have diverged markedly over the last three decades. Thus, something was taking place within existing firms and occupations.

Rising Returns to Training and Skills: Variation Among Occupations

On the basis of previous research (such as Bound and Johnson, 1992), the occupation term is expected to rise over the 1980s, reflecting the increase in returns to education during that decade. When FRBC occupation differentials are regressed on the level of specific vocational preparation (SVP) and general educational development (GED) for the occupation in each year, returns to SVP are fairly flat over the period, with the exception of a jump in the mid-1970s. In contrast, the coefficient on GED rises consistently over the period except for a strong dip in the mid-1970s, which is followed by a rapid recovery over the 1980s. The results from the FRBC survey suggest that rising returns to general education are a strong component of rising inequality, while returns to vocational preparation are essentially unchanged.

HRM policy has either accommodated a technologically driven increase in demand for educated labor or has fueled the increase in demand through its reorganization of the workplace. If the latter holds, the growing inequality is due in some part to changes in the HRM policies of employers.

HRM Wage-Level Strategies: Variation Among Employers

Employer wage differentials account for a large part of total wage variation (Groshen, 1991a). Although they have been linked to observable employer characteristics (such as industry, size, method of pay, etc.), no single theoretical source for these differentials has gained a consensus. Increased variation in this term could arise either from a decrease in unions' ability to remove wages from competition, or from changes in compensating differentials, in the degree of sorting of employees, in efficiency wages, or in implicit profit-sharing premia paid by employers.

The bulk of the increase in the dispersion of employer differentials occurred in the second half of the 1970s. Among the five employers showing large declines in their premia from 1974 to 1980 and an increased distance from the mean, all are nonunion. Four are banks and one is an insurer. In contrast, among the 19 employers with large wage increases that moved farther from the mean, 14 are at least partly unionized. This result is consistent with the high inflation and loose labor markets of the 1970s and the higher prevalence of cost-of-living indexing under unionization. Nine of these employers manufacture durable goods, six are utility or telephone companies, three are government agencies, and one is a nondurable-goods manufacturer. Thus, large increases in employer wage differentials in the late 1970s are largely due to a widening of the union wage differential or of the differentials paid by durable goods manufacturers and utilities, and perhaps to the effects of deregulation in the banking industry and unionization of federal jobs. Among the many unanswered questions about this result is why the increase in variance in the 1970s appears to be so long lived. This result also suggests that the decline of union power is not responsible for the increase in variance among employers, since presumably, declining union power would have reduced—not raised—union wages.

Market Insulation: ILM Variations in Pay Ratios

The variation of ILM differentials across firms measures the lack of uniformity of internal pay relationships among the firms. This component would have grown if workers' quest for job security in the high unemployment periods of the late 1970s and early 1980s had insulated employers' internal labor markets from external pressures. Then, internal pay relationships could have deviated substantially from overall market averages and would increase wage variation due to the ILM component. Alternatively, rapid technological change during these years could have created a temporary period of uncertainty when relative pay relationships varied substantially among companies. Third, increases in employer wage differentials may buy a degree of insulation from external market pay ratios, allowing corresponding increases in ILM variation.

The pattern found in the FRBC sample suggests that the latter explanation is not true. The increased idiosyncrasy of internal wage relationships during the 1960s and 1970s preceded the increase in wage variation by employer. Instead, growth in this component may reflect an increase in uncertainty about the market pay ratios, varying lags in adjustment to external changes, or greater insulation from the market due to workers' desire for job security.

Biased Wage Changes: Employer-Occupation Covariance

Positive covariance indicates that companies with high wages also tend to employ workers in high wage occupations. If this term grows while the distribution of jobs is held constant, it implies that firms with high or growing wages also employ more than their share of occupations with high or increasing wages. Such a shift might occur if the use of efficiency wages has grown among employers with high skill occupations, or if competitive pressures lowered wages mostly for low skill workers in low wage firms. Table 1 shows that the covariance term (which is small and positive) exhibits no trend over the period; it is not a source of increasing inequality.

Merit Pay: Wage Variation Within Job Cell

The increased use of merit raises (as opposed to uniform cost-ofliving adjustments or promotions) might widen the range of wages paid by employers within occupation. The full distribution of wages within job cells, which is available for the 1980s, can be used to capture this effect, since about 80 percent of the employers in the sample report that they implemented or strengthened their form of pay-forperformance and merit raises in that decade. Nevertheless, the last column of Table 1 shows that wage variation within job cells was unchanged during the 1980s. Furthermore, since the standard deviation of wages within job cell is very low, even if this component was nonexistent in 1957, its appearance sometime before 1980 would not have increased total variation by much. This finding does not rule out the possibility that merit pay affects individuals' wages substantially. It merely suggests that merit pay systems are probably not associated with higher wage inequality than are seniority-based systems.

Conclusion and Speculations for the Future of HRM

All in all, HRM policy changes do not seem strongly implicated in the rise of wage inequality. Increases in performance-based raises and a decline in the union wage premium can be ruled out as causes, as can total reliance on the non-HRM hypothesis of deindustrialization. Rising occupational differentials are also not obviously a result of HRM policy, although widening ILM premia suggest some role for HRM in the 1960s and 1970s.

Nevertheless, rising income disparity is likely to affect HRM. In particular, the dramatic widening of occupational wage differentials may well put pressure on HRM policy. Workplaces will house employees with more disparate incomes than they did in the recent past. The change to more within-house inequality, if not the wider disparities themselves, may pose challenges to employers with highly bureaucratic or very flat wage structures.

Employers may react to these pressures by fighting to maintain desired internal ratios. This strategy could be costly in terms of turnover or in terms of the overall wage differential necessary to avoid turnover. Alternatively, companies may choose (or may have already chosen) to spin off some top or bottom employees through contracting out for their services, or by breaking up the company into smaller, more-uniform subsidiaries or establishments. Perhaps some of the shrinkage of establishments and/or the growth in contracting out in the 1980s is a response to these pressures.

Finally, of course, employers may choose to adopt the new differentials and redesign their personnel practices to accommodate the new ratios. If so, these inherently less cohesive wage structures may require renewed emphasis on mobility enhancing programs, such as in-house training.

It also remains to be seen whether the growth of overall wage dispersion signals that HRM policymakers will have more freedom now to design and adjust compensation policies. Alternatively, rising inequality may imply less scope for HRM compensation policy as wages become more strongly determined by occupational labor markets and employers become more like the "price-takers" that economists always assumed them to be.

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DISCUSSION

LYNN A. KAROLY The RAND Corporation

This paper by Randy Eberts fits into the growing literature focusing on changes in the U.S. wage structure during the last two decades. In the last few years, there has been a virtual landslide of studies that have focused on the changing U.S. wage structure. Researchers have studied the overall rise in wage inequality, as well as changing wage differentials between different groups of workers defined by their characteristics such as gender, years of schooling, and experience. In this analysis, Eberts focuses on wage differentials between geographic regions of the United States. The starting point for this analysis is the expectation, drawn from trade theory, that regional wage differentials should be converging over time. Regional wage convergence has been documented by a number of researchers. Most recently, census data analyzed by Grubb and Wilson (1989) showed this to be the case, at least through the 1980s. Since 1979, however, the overall rise in wage inequality documented by other researchers appears to have also been accompanied by rising wage differentials between regions. Accounting for this regional divergence in the 1980s is the aim of Eberts' paper.

Overall, I think this is a strong paper which makes an important contribution to our growing understanding of the changing U.S. wage structure. Eberts takes advantage of a relatively unused source of Current Population Survey (CPS) wage data, a data set that I have also used to study regional patterns in the distribution of wages. The larger sample sizes available in the Outgoing Rotation Groups samples of the monthly CPSs facilitates the kind of disaggregated analyses undertaken here. The data also serve to extend previous analyses that have focused on regional wage patterns only through the 1970s. Another improvement over previous work is the disaggregated groups of states.

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In presenting my comments today, I want to focus on issues related to the empirical work.

One data related issue that is not discussed in the paper concerns the topcoding of the CPS wage data. In the May and monthly CPSs, reported weekly wages have been topcoded at \$999 through 1988. This constant nominal top code means a differential fraction of the upper tail of the distribution is truncated over time. In the late 1980s, more than five percent of the sample has their wages truncated at the top code. In other work using these data, we have found that the top code on weekly wages dampens the rise in inequality in calculated hourly wages, the wage measure used in this analysis (Karoly and Klerman, 1991). I expect that accounting for the top code, if it has not already been done, is likely to further accentuate the regional divergence documented in the paper.

A second empirical issue concerns the sensitivity of the regression decomposition to the specification of the regression equation. For example, I was curious to know why an experience-sex interaction term was included in the regression but no other coefficients were allowed to vary by sex. Other specification choices include the number of occupation and industry dummies. Other work has shown that simple decomposition analyses are sensitive to the number of partitions used for variables such as industry and occupation (Formby, Seaks, and Smith, 1989). Clearly, there are sufficient degrees of freedom in the regression equation to allow more regressors. I would be interested in knowing whether any sensitivity analysis was undertaken. Results regarding the fraction of wage divergence accounted for by different classes of regressors could be affected by these specification decisions.

One final concern I have about the analysis is the use of nominal wage data. As Eberts notes, the lack of regional price indexes precludes any effort to examine patterns in real wages across regions. This is unfortunate since the use of nominal wage data may bias estimates of the prices of worker characteristics if there is substantial regional variation in prices for other goods. One obvious source of regional price variation is differential changes in housing prices, a phenomena accentuated during the regional booms and busts of the 1980s. One way to explore this issue would be to examine whether the divergence pattern is consistent with differential movements in housing prices across regions.

One potential extension for the present analysis is to further disaggregate the data into smaller geographic units such as states or even SMSAs. If the proper theoretical construct is the local labor market, the grouping of states into census regions will often combine very different labor markets. Consider the Pacific group of states which includes Alaska, California, Hawaii, Oregon, and Washington. Wage movements in the last two decades are likely to vary substantially across these states. One advantage of the CPS wage data used in this analysis is the sample sizes should permit further disaggregation. One limitation, however, is the fact that the CPS did not identify every state on the public use files until 1977. Nonetheless, further disaggregation would serve two purposes. First, it will be useful to document the extent of wage divergence in the 1980s across more disaggregated regions. Second, further disaggregation, by better isolating local labor markets, may help to distinguish among the two hypotheses of wage divergence due to price changes versus changes in the distribution of workers' characteristics.

I noted at the outset that this work fits into the growing literature examining the rise in wage inequality during the 1980s. In conclusion, it is worth pointing out, however, that the rise in inequality between regions of the U.S., as documented in Eberts' analysis, only accounts for a small fraction of the overall rise in inequality. Between 1979 and 1988, a decomposition analysis shows that at most five percent of the rise in wage inequality among all workers is attributable to an increase in inequality between the nine census regions. I make this point not to diminish the value of research that improves our understanding of factors contributing to the changes in wage levels between geographic regions. Instead, it highlights the need for research, which also delineates the reasons for the rise in inequality within regions.

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DISCUSSION

RICHARD J. MURNANE Harvard University

My comments focus on the question of how this paper informs understanding of the trends in wage inequality that have been identified using the Current Population Survey (CPS), a data set that has the advantages of national coverage and information on the educational attainments of individual workers, but the disadvantage of not identifying individual employers. Groshen's Federal Reserve Bank of Cleveland (FRBC) data set has the limitation of including only employers in three cities, but the advantages of identifying employers, and including more fine-grained occupational categories than the CPS has.

An initial question to ask is whether the trends in wage inequality in the FRBC data match the trends in the CPS. The answer is, not exactly. The CPS shows a more rapid increase in wage inequality in the 1980s than in the 1970s. The FRBC data show the most rapid increase in inequality taking place in the mid-to-late 1970s. At least part of the explanation is the FRBC sample from a single geographical area does not have the increase in inequality of wages among regions in the 1980s that Randy Eberts' paper shows to be an aspect of the national trend.

Turning to components of trends in inequality, CPS data show a decline in wage premiums associated with education during the 1970s—a response to the well-educated baby boom cohorts reaching the labor market. In the 1980s, the CPS shows wage differentials associated with education growing very rapidly.

While the FRBC data do not include educational attainments of individual workers, Groshen finds that the fine-grained occupational categories in the FRBC data provide good measures of human capital. To be more exact, the coefficients on occupational indicators reflect differences between occupations in the amounts of human capital held

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by workers in different occupations and the wage premiums associated with amounts of human capital. If there were no changes over time in the amounts of human capital required for entry into specific occupations, then one would expect the pattern in occupation-specific wage inequality in the FRBC data to follow the trends in the premium associated with formal education in CPS data. However, this is not the pattern in the FRBC data. Instead of declining in the 1970s, the FRBC data show occupation-specific inequality increasing slowly but steadily during this decade. One possible explanation is that during the 1970s the amount of education required for entry into relatively high paying occupations increased. This would reconcile the CPS pattern of declining wage premiums associated with educational attainment with the pattern in the FRBC data of increasing occupation-specific wage differentials. The obvious place to look for evidence to support this hypothesis is the Dictionary of Occupational Titles, which provides information on the educational requirements in different occupations. Unfortunately, the last time the DOT was updated was 1977. However, it would be possible to compare changes in occupation-specific educational requirements between the 1960s version of the DOT and the 1977 version.

One other difference between the CPS patterns and FRBC patterns concerns the 1980s. The CPS shows rapid growth in educationspecific wage premiums beginning about 1980. Groshen finds occupation-specific wage premiums in the FRBC data to be stable between 1980 and 1985 and increasing rapidly in the second half of the decade. This difference in timing is puzzling.

Turning to employer-specific wage differences, Groshen finds rapid growth in the late 1970s, and stability through other periods. At first I thought that the explanation might have to do with the effects of inflation. The inflation rate in the last years of the 1970s and the first years of the 1980s was quite high and workers protected by COLA provisions in collective bargaining agreements would gain relative to workers without such contracts. But the timing does not seem to support this explanation because Groshen finds the increase in employer-specific wage differentials taking place between 1975 and 1978, while the high inflation years begin in 1979.

Finally, turning to the compensation policies of individual firms, Groshen finds no growth in inequality during the 1980s in the wages of workers in the same occupation working for the same employer, despite the fact that her survey of employers indicated an increase in the use of merit pay, or pay for performance. This does not surprise me in that merit pay is popular as a symbol of toughness, so it was in vogue to report its use. However, it is difficult to use, especially for nonproduction workers (the only workers in the FRBC data), and consequently its use is often only symbolic, and does not lead to large wage differentials among people doing the same job. To the extent that firms did pay more attention to the productivity of individual nonproduction workers in the 1980s than in the 1970s, the common actions were to base promotions more on merit than in the past. My guess is that one consequence of the fine-grained occupational categories in the FRBC data is that many promotions resulted in an individual moving to a different occupational category. If this is true, then a decision to base promotions more on performance would not show up in Groshen's analysis as widening wage differentials among workers in the same occupation working for the same employer.

A final question concerns interaction effects. While there may be no increase in wage inequality among workers in specific occupations working for the same employer in the economy at large, there could be increases in specific parts of the economy, such as the financial sector. I suggest that Groshen explore this. Similarly, I would suggest deleting all of the observations related to government workers and seeing whether the trends in inequality stay the same. I suggest this because wage setting in government tends to follow a different process than private sector wage setting, with legislative action often needed to adjust wages. Thus, the inclusion of government workers could mask trends in wages in the private sector.

These comments are all ideas for extending a very interesting line of research.

DISCUSSION

FRANK LEVY University of Maryland

This early draft shows the promise of being quite interesting. Because it is preliminary, I restrict my comments to clarifying some points and to suggesting some directions for future research.

Previous work has established that wives' earnings equalize the distribution of husband-wife incomes through two mechanisms. First, the wives of low-earning husbands are relatively more likely to work. Second, working-wives' earnings are typically more equal than their husbands' earnings.¹

Juhn and Murphy report that both of these equalizing mechanisms have weakened over time. The biggest recent gains in wives' labor force participation come from the wives of high-earning husbands. And earnings inequality between the working wives of high-earning and low-earning husbands has grown.

But if wives' earnings are not as equalizing as they used to be, the net effect is still equalizing. In 1967-69, the ratio of husbands' earnings in the top of the distribution (81-100 percent) to the bottom of the distribution (1-20 percent) was $3.80.^2$ If we look instead at the sum of husbands' and wives' earnings for the same families, the ratio falls from 3.80 to 2.93. In 1987-89, the comparable ratio for husbands' earnings only is 6.22 and for husbands' plus wives' earnings is 4.03. As Professor Juhn notes, wives' earnings have not been able to offset the big increase in earnings inequality among husbands. But that is a very strong test and wives' earnings still perform an equalizing role, albeit less equalizing than it used to be.

Increased earnings among the wives of high-earning husbands raises an obvious question: Is associative mating on the rise? The question involves more than husband and wife earnings correlations. Consider a husband and wife with high school educations and a second husband and wife with college educations. Juhn and Murphy's tabulations show that the college-educated wife may now work even

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though she didn't work 15 years ago. Beyond this, the earnings gap between the two wives will be wider today than it would have been 15 years ago due to the rising return to schooling that has affected both women and women's earnings over the last decade (Levy and Murnane, 1992). For both reasons, the correlation of husbands and wives will grow over time (suggesting more associative mating) even though we are looking at the same two couples.

Beyond this, associative mating today means something more than spouses' earnings (or potential earnings). There are the growing number of people who live outside of families—i.e., people who don't mate in the first place but who are somehow part of this picture. (The fact that such people won't show up in husband-wife samples means that comparisons of husband-wife samples over time may be biased.) And in a decade of low birth rates, there is the overlapping question of who is having children—both inside and outside of marriage.

I believe the authors can deal with this by expanding upon a technique they developed in earlier work with their colleague Robert Topel. In that work, the authors built up the wage distribution of prime age men including estimated wages for men who did not work during the year (i.e., the wages such men would have earned had they worked). For the current paper, it would be useful to extend that technique to construct a similar estimated wage distribution for women. It would then be possible to index each man and woman in a particular year by their percentile in the respected wage distribution. With these indices, one could look at a variety of questions:

1. Associative mating could be examined by looking at the association across families between the husbands' and wives' percentiles in the men's and women's wage distributions, respectively. A growing association over time would suggest more associative mating. (Note that this method bypasses the problem of wives who could, for example, earn a high wage but earn nothing because they choose not to work.)

2. One could get a clear picture of the position in the wage distributions of men and women who chose not to get married.

3. In a similar way, one could get a clear picture of the position in the wage distribution of women who were having children, both in and out of wedlock.

Juhn and Murphy inform me that developing an estimated wage for women is, in fact, substantially more difficult than developing the corresponding distribution for men. (The men's distribution relies on the assumption that the wages of men who work very little during the year are a good proxie for the wages of men (with similar characteristics) who don't work at all. The data for women may lack such a good proxie.) If the estimation proves possible, however, the approach I have sketched would lead to a more complete picture of the recent economic aspects in family formation (and nonformation), the question on which Juhn and Murphy have made a very good start.

Endnotes

¹ See Frank Levy, *Dollars and Dreams: The Changing American Income Distribution* (W. W. Norton, 1988), Chapter 8. While wives' earnings equalize the husband-wife income distribution, they can still increase income inequality among all families. In raising the family incomes of low-earning husbands, they may increase the gap between all husband-wife families and female-headed families.

² Calculations are based on Juhn and Murphy's Table 1A. The 3.8 ratio means that the average husband in the top 20 percent of the distribution earned \$3.80 for every \$1.00 earned by the average husband in the bottom 20 percent of the distribution.

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X. THE FUTURE OF IR AS A FIELD OF STUDY AND ITS IMPLICATIONS FOR THE IRRA

Maintaining Vitality and Relevance: Incorporating Basic Theory into IR Research, Curricula, and Practice

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The IRRA has a history of sessions at its annual meetings that explore the development and future of the industrial relations (IR) field. Periodically its luminaries have published essays and treatises to define the domain of subjects within IR and the manner in which they interact (Dunlop, 1958; Somers, 1969). Without actually looking I feel certain the percentage of pages devoted to papers and sessions on the direction and/or survival of the field is far fewer in the annual *American Economic Review* proceedings issue. Also, without fear of being proven wrong in the future, I suspect this will not be the last session devoted to the future of IR and the IRRA.

The difference in the focus in sessions between these two bodies should not be a cause for alarm, but should rather increase our recognition that IR is not a discipline, but rather the study of a particular form of social exchange: employment. IR will continue as a vital field of study as long as the employment relationship exists, and its usefulness will wax and wane to the extent it recognizes and understands problems and creates solutions that enhance the outcomes of the parties involved in the employment relationship.

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IR, as an academic field, is in many ways similar to medicine. A brief excursion through practice and research in medicine helps to understand the role of IR. Consider the medical treatment options for circulatory problems. Symptoms must be isolated and correlated to causal factors. Optimal treatment must be devised.

Surgery is one technique used to deal with circulatory problems. Open heart surgery to repair congenital defects and replace valves has become commonplace; coronary bypass surgery could almost be considered a standard industrial classification. But alternatives are being developed, including angioplasty and arterial reaming. Additionally, pharmaceuticals and altered lifestyles have indicated promise in reducing coronary artery blockages. Surgical techniques have also changed with lasers being used increasingly. All of these constitute different and improving remedies for circulatory problems. To the extent that one is wed to a particular solution as a field of study or practice, obsolescence is a danger. So too does IR (and by extension the IRRA) risk its continuing relevance if it studies or practices only one form of the employment exchange.

As in medicine, IR researchers focus on broad changes in correlates found to be related to outcomes affecting practitioners (patients). Curricula are adapted to incorporate a recognition of these changes and enhance the diagnosis of problems at the individual and establishment levels. New knowledge is also developed in IR as a result of practitioners identifying consistent changes in the employment relationship, with quasi-epidemiological work establishing the new correlates of an altered relationship. Ultimately, researchers develop new theories to explain the phenomenon under examination, and curricula develop new diagnostic and preventive procedures.

Medicine also benefits from research in basic disciplines. Research in a variety of sciences helps identify the underlying genetic causes or risk factors in disease processes. This knowledge is used to design the optimum delivery method for curative and palliative agents. Medicine is not the only beneficiary of these theories and empirical findings, but their application has enhanced medical efficacy substantially. So too has IR benefited from basic and applied theory and research in economics and psychology, and to a lesser extent from sociology, political science, history, and law.

Incorporation of New Theory and Methods

At Minnesota, we divide IR into five areas of study: staffing, training, and development; organization theory; compensation and reward; labor market analysis; and collective bargaining. Each of these has benefited substantially from the incorporation of new theory flowing from basic disciplines.

Staffing, Training, and Development

The area of staffing, training, and development has been materially enriched by several theoretical and methodological improvements. Staffing involves the identification of the "best" candidate for a given position or the "optimal" allocation of available candidates to open positions. Theories developed in the study of individual differences strongly suggest work performance is influenced by the possession of specific abilities, levels of particular aptitudes, and personality characteristics. Empirical studies often failed to support the theories. In fact, contrary to the theories, relationships between measures of abilities, aptitudes, and personality characteristics seemed to be related to performance in a situationally specific manner, and interacted with nonhypothesized individual characteristics such as gender and race. With the development of meta-analysis techniques that allow the aggregation of empirical studies and eliminating artifactual sources of variation, the inherent low power problems of small sample sizes and the inability to generalize from single setting studies have been overcome. General mental ability (Hunter and Hunter, 1984) has been found to be a strong predictor of job performance, regardless of the level of the job or the configuration of required tasks, duties, and responsibilities.

Training and development has benefited from advances on several fronts. Beginning with Rosenbaum's 1984 study of career mobility in organizations and progressing with the development of implicit contract theories (Rosen, 1985) and tournament models (Lazear and Rosen, 1981), the long-run behavior of individuals in internal labor markets can be more realistically studied. Before these studies and theories were published, promotions were seen as essentially involving the choice of multiple positions from a pool of candidates. Precision in measuring differences among candidates was deemed to be important. Rank order tournaments change the focus toward how one is selected into the pool, rather than who is selected from it; and away from measurement precision, since only the top individual needs to be identified. Reliability in measurement remains important since unreliability serves as a demotivating influence in the tournament.

Work in behavioral modeling (Bandura, 1977) served as the basis for new applied work in self-efficacy training. Behavioral modeling suggests behavior of attractive persons in organizations is emulated by others, even in the absence of formal training. Additionally, training from a person who is seen as attractive may enable the person to duplicate the trained behavior without necessarily practicing it. These findings have a great deal of applicability in situations in which employing organizations are being restructured and employees find their decision-making roles substantially expanded.

Organization Theory

This is the area that has responded the most rapidly to changes in theory during the past decade, and will likely be the area in which there are the most changes in the 1990s. Changes taking place throughout the world in government, commerce, and employment will continue to lead to major organizational changes, and will require the use of theories and new empirical research to explain them. The development of macro-organizational theory approaches has shifted from the behavioral and managerial areas to economics. The most important inclusions have involved transaction cost analysis (Williamson, 1975), agency theory (Jensen and Meckling, 1976), and the continuing development of the theory of the firm (Coase, 1937).

As organizations reduce levels of management, agency theory and transaction cost analysis are particularly informative. Management layers can be eliminated because information no longer needs analysis or interpretation. The methods and procedures that middle management supplied earlier have now been captured in spreadsheets and other information-processing software. Additionally, employees are increasingly trained in statistical process control, creating their own information on which they can act.

Agency theory is very helpful in diagnosing where organizational boundary levels exist—either between functions or between levels. Where there is a difference between what is desired and what is known about how to obtain an end, agency theory has an ability to explain how organizational units interact and reward structures should be created.

Team concepts have been introduced in a variety of environments, typically with the elimination or restructuring of first-line supervision. Team approaches usually include different methods of employee compensation. First, team members are compensated on the basis of their individual skills. The ability to do more of the tasks required of the team increases individual compensation. Second, teams are evaluated on their collective outputs. Some defined measure over which the team has major influence or control is used, and all of the team members share in compensation associated with its accomplishment. Increasingly, organizations are identifying the levels at which they can meaningfully aggregate outcomes associated with group performance (Eisenhardt, 1988), and tying rewards to those outputs and to that aggregation of employees. Thus, for the group, free rider problems and the group's ability to monitor individuals have become increasingly important.

Compensation and Reward

The 1980s saw increased changes in employee compensation programs. The 1990s promises more of the same with increasing emphasis on employee benefits and perhaps some regulation or taxation of executive and higher level pay as income has become increasingly unequally distributed.

A variety of new theoretical and empirical works were published in economic journals to try to explain why organizations pay the way they do (cf., Groshen, 1991). None has particularly altered practice, but they help to explain practice or more closely relate practice to theory. One of the most important is efficiency wage theory (Yellen, 1984). For IR curricula and practitioners, efficiency wage theory should help to explain why primary sector organizations experience lower turnover rates, what the role of monitoring is in organizations, and how wage levels can interact with performance management systems to enhance overall performance.

Both psychologists (Adams, 1965) and economists have been concerned with equity and fairness, or the relationship between contributions and pay. Behavioral scientists have shifted their approach toward examining the roles of procedural and distributive justice as influencing reactions to pay (Folger and Konovsky, 1989; Greenberg, 1987), while economists have begun to explain differences between pay and the value of an individual's marginal product through positive and negative prestige accruing as the result of performance (Frank, 1984).

Agency theory worked its way into compensation practice as a result of finance and accounting advocacy. Jensen and Meckling (1976) summarized the bases and research surrounding agency theory and its role in compensating executives. Advocates of agency approaches have argued that firms should put more pay at risk for employees. In a study of upper level managers across a large number of firms, Gerhart and Milkovich (1990) found that firms with higher proportions of pay at risk performed better. Economic theory assumes employees are risk averse. If they are, what risks do they primarily seek to avoid? Fluctuating income occurs when some proportion of pay is at risk. Simple median voter models (White, 1982) suggest that pay risks would be avoided until relatively large numbers of employees in a bargaining unit are affected, while job security risks would be avoided if the entire bargaining unit were at risk. If employees face increased risks—to the level they would encounter as owners—as owners seek to shift risks from themselves we should expect changes in both compensation and contracting for employees. Employees might expect a wage premium for exposing themselves to employment risk, or explicit term contracts together with assuming their own responsibilities for training and development. Internal labor markets and specific training would be diminished.

Labor Market Analysis

One of the most interesting developments in labor market analysis has its foundations in basic research in the psychological study of individual differences. There has been a long-running debate in psychology about the degree to which nature (genetics [Galton, 1869]) or nurture (environment [Watson, 1924]) determines individual behavior. While most do not subscribe to an either/or explanation, only recently have some highly controlled studies provided more information on the actual effects on human resource outcomes and employment attitudes. Two studies involving twins, one examining differences in work attitudes between identical (monozygotic) and fraternal (dyzygotic) twins reared apart, the other examining differences in returns to education among identical twins; held environment constant in the first case and genetics constant in the second case to obtain a more unconfounded test of the effects of genetics and environment on individual outcomes.

On its face, work attitudes would seem to be a particularly individual characteristic, formed by one's experience in employment, and through the vicarious knowledge of others' experiences. Twins reared apart have participated in different experience environments during their formative years. If nurture were the only element influencing behavior, then identical twins should not agree more closely on work attitudes than fraternal twins. Yet evidence uncovered in the study by Arvey, Bouchard, Segal, and Abraham (1989) indicates that similarity in work attitudes was about twice as strong among identical twins than fraternal twins. This is consistent with a genetic explanation since identical twins share common genetic material while fraternal twins share about 50 percent of the same genetic material. Additionally, genetic similarity accounted for about 30 percent of the reliable variance in work attitudes.

Another study (Ashenfelter, 1991) polled identical twins at an annual convention of twins in Twinsburg, Ohio, asking them for information on their educational background and earnings levels. Since these individuals shared similar genetic material, substantially greater similarity in aptitudes should be present as compared to the general population. Further, they were exactly the same age, thus opportunity would not confound the results. The study found that where dissimilarities existed between educational levels of the twins, the rates of return to education were about 10 percent per additional year of education consistent with the results of other studies that have introduced careful controls (Angrist, 1990).

Collective Bargaining

Three applications, in particular, intrigue me in collective bargaining. The first concerns the role of the full-time business agent or career unionist and bargaining to an impasse, especially in public sector negotiations. If the business agent is responsible for negotiating and administering several contracts, how can the rank and file in each unit be sure they're getting the agent's best efforts? To avoid principalagent problems, the agent may go to impasse even though the ultimate contract is not better than what the agent might have expected to negotiate (McCall, 1990).

The second is the increasing recognition of grievance and complaint procedures as part of the production function of the organization. Prior to Ichniowski's 1986 work, grievances had been looked at as indicators of work force dissatisfaction rather than economic influences on firm performance. Kleiner, Nickelsburg, and Pilarski (1988) subsequently showed that the optimal rate of grievances, from the firm performance perspective, was probably not zero. Grievances result from monitoring management activity that bargaining unit members feel violates the contract. Combining the two streams of work here, might unions confer an "efficiency employee relations" atmosphere to get employers to self-monitor, while taking advantage of the situation resulting in working to rules?

The third area explores the involvement of unions in political action (Delaney, Fiorito, and Masters, 1988). A willingness and interest in being involved in union activities expresses confidence among members that collective voice is likely to enhance outcomes. It could be expected that unions with more involvement in political activity would also be more militant in the workplace. There should be lower differentials between pay for union officers (agents) and the employment pay of members because of a closer connection between principals and agents.

Relevance and Theory in the Future

In its role as an applied field, IR needs to recognize continually and understand patterns of changes occurring in the employment relationship. It also needs to help practitioners apply new ideas generated through theory construction and empirical testing. In this regard, the field faces an exciting and daunting era—one that may lead to its eventual demise.

During the 1980s, most organizations changed the title of the top official responsible for employee relations activities from vice president, personnel; or vice president, industrial relations; to vice president, human resources. While some of these changes may have been made for euphemistic reasons, I believe that in most organizations, the role and viewpoint of the occupant of the position has changed markedly. Incumbents in positions in which titles changed first saw the change as a recognition of the importance of employees to the success of the organization. Inclusion of "human resources" (HR) in the title recognized the service aspect of the function to employees and indicated its contribution to the organization through enhancing the quality of the workplace.

However, that role has changed in the late 1980s and early 1990s to one in which the VP-HR is seen primarily as a member of the organization's management team, responsible for the acquisition, most efficient utilization, and least expensive divestment of human resources for the organization. The HR manager's responsibilities may essentially involve the creation and maintenance of a "just-in-time" work force with responsibilities for maintaining its quality externalized to the employees. In fact, the HR role may involve the design and negotiation of individual and group contracts with what were formerly employees. Organizations may increasingly be relatively loose collections of contracts operated by a small cadre of managers compensated by contingent incentives from owners (ironically the pension funds of "employees").

If employees are risk averse, and if organizations essentially rid themselves of long-term employees, the role of unions, if they are to survive, must move much more toward an agency role for individuals. The surviving model may be much closer to the associate membership arrangements suggested in the 1980s or the building trades or maritime model. With risk aversion, one could expect more deferred compensation, or, if risks are permanently shifted to employees, more entrepreneurial behavior on their parts.

For the IR field, and for the HR manager, what may be most important in the future use of theory, is to understand whether a profit-seeking organization can be most efficient when constructed with a set of contingent contracts based solely on measurable outcomes; or whether employment with its inevitable implicit contracts, norms, values, and traditions will enable an organization to best adapt in an increasingly changing environment.

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The IRRA as a Professional Association

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As its name implies, the Industrial Relations Research Association was founded in 1947 to promote research in the field of industrial relations. The original and present purposes of the association are (IRRA, 1990, p. ix): (1) the encouragement of research in all aspects of the field of labor—social, political, economic, legal, and psychological—including employer and employee organization, labor relations, personnel administration, social security, and labor legislation; (2) the promotion of full discussion and exchange of ideas regarding the planning and conduct of research in this field; (3) the dissemination of the significant results of such research; and (4) the improvement of the materials and methods of instruction in the field of labor.

The purposes of the IRRA have focused on encouraging, promoting, and disseminating research in all aspects of labor because it was believed that industrial relations was a multidisciplinary field involving the interface of a number of disciplines. What was required was a multidisciplinary association. In their 1988 examination of the IRRA, Kerr and Dunlop reaffirmed the role of the IRRA as a multidisciplinary association.

The IRRA is the professional association for academics interested in the broad field of industrial relations and for practitioners who are not specialized in such activities as dispute resolution (Society for Professionals in Dispute Resolution). Academics who approach the field of industrial relations from a particular discipline base will find sections of their disciplinary associations that focus on labor issues.

The Changing Composition of the Membership of the IRRA

Exhibits 1 and 2 show the changing composition of membership in the national IRRA and the local chapters as between academics and

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practitioners and by discipline background of the academics in the national IRRA.

The first observation is that the local chapters have far outstripped the national membership. In 1966, the national membership was slightly greater than the local chapters. In 1990, the local chapters had almost double the national membership (8,900 vs. 4,780). What is even more significant is the changed composition of both components of the IRRA. Academics are fading from the local chapters in absolute and percentage terms. As Exhibit 1 shows, the number of academics in local chapters has been declining since 1984, and in 1990, was less than the number in 1979. In proportionate terms their share had declined to eight percent from 15 percent. The greatest growth at the local level was in the group of arbitrators, legal and consultants. There was also growth in membership from unions. The share of government and, recently, business members has declined.

Similar changes have taken place in the composition of membership of the national IRRA: the academic share has declined from a high point of 44 percent in 1960, to 31 percent in 1990. The share of government and business members also declined. These were offset by arbitrators, legal and consultants whose share has grown the most to 22 percent. While these shifts have implications for the role of the IRRA as a professional association, the change in the composition of the academic members may have the greatest implications.

Exhibits 1 and 2 show the virtual disappearance from the association of members specializing in political science, psychology and sociology (see also Adams, 1992). These three groups represented almost a fifth of the academic membership in 1949. In 1990 they were estimated at two to three percent. Membership from the discipline of law has fluctuated but seems to be on the decline to its present four percent. What remains is a concentration of academic membership in industrial relations, labor economics, and human resource management, with smaller numbers in business administration and organization behavior. At the local chapter level the association has also focused on those practicing industrial relations, but only more so now. The implication is that the primacy of the objective of the IRRA as a multidisciplinary association should be reexamined. Kerr and Dunlop (1988) in their report refer to "... the resurgence of academic interest in our field ... but much of it has been occurring within various traditional disciplines ..." (p. 4). They also refer to the growth of human resource management and the 2000 members in the Personnel/Human Resource Management Division of the Academy of Management.

Number of Members by Occupational Glassification										
	1949	1954	1960	1966	1972	1979	1984d	1987d	1990d	
LOCAL CHAPTERS				2,359	4,420	6,619	8,557	9,236	8,900	
Academic Student Government Arb., Legal, Consult Business Union Other				343 132 399 388 720 377	533 196 490 754 1,498 949 	705 292 1,000 1,138 1,922 1,562 —	899 276 1,004 1,631 2,536 1,866 345	813 327 959 1,986 2,434 1,901 811	691 294 969 2,257 2,259 2,106 324	
NATIONAL IRRA	1,281	1,645	1,344	2,636	3,426	с 4,669	с 4,124	4,810	4,780	
Academic Student Government Arb., Legal, Consult Business Union Other	452 a 150 213 374 92 —	614 a 196 237 489 109	596 a 162 152 348 76 10	1,003 168 390 303 494 154 124	1,379 142 487 421 625 214 158	1,669 381 554 688 817 325 235	1,346 299 360 815 797 344 163	1,436 312 437 1,044 951 455 175	1,502 330 411 1,054 839 494 150	

EXHIBIT 1 National IRRA and Local Chapter Membership, 1949-1990, Selected Years, Number of Members by Occupational Classification

	1949	1954	1960	1966	1972	1979	1984d	1987d	1990d
NAT'L ACAD. BY DISCIP.	452	614	596	1,003	1,379	1,669	1,346	1,436	1,502
IR	а	131	194	193	367	617	469	475	452
HR	a	a	a	a	a	a	a	a	146
Econ.	{253	{319	{273	{587	410	394	298	319	334
Bus. Admin.	Ì	Î	í.	1	215	176	116	164	120
Admin.	` a	` a	à	26	152	130	104	106	131
Law	34	23	14	28	45	100	89	91	67
Org. Beh./Pers.	а	а	а	a	а	94	117	126	88
Pol. Sc.	19	11	13	9	14	13	11	Ь	b
Psych.	36	26	14	20	25	23	8	Đ	b
Soc.	31	23	15	66	52	36	27	Đ	b
Other	79	81	73	74	99	86	107	155	154

EXHIBIT 1-(Continued) National IRRA and Local Chapter Membership, 1949-1990, Selected Years, Number of Members by Occupational Classification

SOURCES AND NOTES TO EXHIBITS 1 AND 2

Source: IRRA Membership Directories: 1966; 1987; 1990.

NOTES

a. Indicates that the category was not listed separately in the Directory.b. These categories included in "Other."

c. There are significant differences between the group figures for 1979 and 1984 shown for the National IRRA in the tables on pages 399 and 405 of the 1990 Directory. We have used the figures on page 399 because of the greater detail. However, the sum of the individual items on page 399 is 4669, not 4665. Similarly for 1984 there are differences between the two tables. For 1984 as well we used the figures on page 399

d. Member statistics for 1984, 1987 and 1990 do not include several categories that were included in previous years, such as local IRRA Chapters, institutions receiving complimentary publications and members who are not current in dues payments.

	1949	1954	1960	1966	1972	1979	1984d	1987d	1990d
LOCAL CHAPTERS				100	100	100	100	100	100
Academic				15	12 5	11	11	9	8
Student				6	5	4	3	4	3
Government				17	11	15	12	10	11
Arb., Legal, Consult				16	17	17	19	21	25
Business				30	33	29	30 22	26	25
Union				16	22	24		21	24
Other				_		_	4	9	4
NATIONAL IRRA	100	100	100	100	100	100	100	100	100
						c	с		
Academic	35	37	44	38	40	36	33	30	31
Student	a	a	a	6	4	8	7	6	7
Government	12	12	12	15	14	12	9	9	9
Arb., Legal, Consult	17	14	11	11	13	15	20	22	22
Business	29	30	26	19	18	17	19	20	18
Union	7	7	6	6	6	7	8	9	10
Other	a	a	1	5	5	5	4	4	3

EXHIBIT 2 National IRRA and Local Chapter Membership, 1949-1990, Selected Years, Percentage Distribution by Occupational Classification

	1949	1954	1960	1966	1972	1979	1984d	1987d	1990d
NAT'L ACAD. BY DISCIP.	100	100	100	100	100	100	100	100	100
IR	а	21	33	19	27	37	35	33	30
HR	a	a	a	a	a	a	a	а	10
Econ.	{56	{52	{46	{59	30	24	22	22	22
Bus. Admin.	<pre>i</pre>	Ì	Ì	Ì	16	11	9	11	9
Admin.	à	à	`а	`3	11	8	8	7	8
Law	8	4	2	3	3	6	7	6	4
Org. Beh./Pers.	a	a	а	a	а	6	9	9	6
Pol. Sc.	4	2	2	1	1	1	1	ь	ь
Psych.	8	4	2	2	2	1	1	ь	ь
Soc.	7	4	3	7	4	2	2	ь	ь
Other	17	13	12	7	7	5	8	11	10

EXHIBIT 2-(Continued) National IRRA and Local Chapter Membership, 1949-1990, Selected Years, Percentage Distribution by Occupational Classification

These developments suggest that the IRRA should consider adding purposes that focus directly on industrial relations as a profession as well as viewing industrial relations as a multidisciplinary field. What is clearly occurring is that the field of industrial relations is dividing into research conducted by various persons within their own disciplines, and research as well as practice by those who consider themselves to be primarily in industrial relations and human resource management. From the perspective of universities and colleges, such a focus would be consistent with academic units that combine industrial relations and human resource management, as well as organization behavior in some cases. (Meltz, 1992).

A shift in the emphasis of the national IRRA from a multidisciplinary approach to a more concentrated focus on industrial relations along with human resource management would also be consistent with what is happening in the local chapters and in the national IRRA outside of the academic component. In both these sectors the fastest growing areas are those relating to the practice of industrial relations. Such a shift in emphasis may also be timely in view of the recent decline in membership in the national IRRA and in view of the local chapters.

The human resource management field seems to still be expanding. In 1990 there were 1502 academic members of the national IRRA, of whom 146 indicated their primary academic base was human resources. In 1991 the Academy of Management had 2224 members in their Personnel and Human Resource division. A majority of these are professors but students and practitioners are also included. The American Management Association, which is a practitioner organization, has an estimated 75,000 members of whom perhaps the largest group are in human resource management. The Society for Human Resource Management has a membership of approximately 45,000.

Kaufman (1991) has documented that in the early years of growth in the industrial relations field, personnel practitioners considered themselves part of industrial relations. However, within a decade after the founding of the IRRA and with the publication of Dunlop's *Industrial Relations Systems* (1958), the personnel area was viewed by industrial relationists as being outside their field. Dunlop's (1958) model of industrial relations does not include personnel management. The time may be right for industrial relations to rethink its relationship with human resource management. With the decline of other disciplines within the IRRA and an increasing concentration of academic and practitioner membership on industrial relations along with human resources and labor market economics, it would seem entirely appropriate to reconsider whether its purposes should only include being a broad-based multidisciplinary association. An alternative would be for the IRRA to place increasing emphasis on being a professional association.

The Activities of Professional Associations and the IRRA

There are many varieties of professional associations. Some are in professions that are licensed and others operate more informally. Most professions are concerned with the standards for obtaining professional competency, the maintenance and upgrading of the competency of those in the profession, the mechanisms to deal with members who are not performing competently, the supply and demand for persons trained in the professions, the rates of remuneration for the profession, and mutual benefits and pensions. Licensed professionals may be directly involved in controlling supply by regulating entry into the profession or by having an important voice along with government agencies in determining the supply (for example, physicians, dentists). Most academic professions do not directly control certification but are involved in peer review for accreditation of graduate academic departments in universities. A few academic professions such as psychology have formal accreditation processes. Exhibit 3 summarizes the major functions performed by professional associations.

Academic professional associations perform most of these functions except for fee setting and, in general, except for directly setting standards. The earnings of persons in the profession may be a subject

EXHIBIT 3

Major Functions Performed by Professional Associations

- Controlling the supply (entrants and/or graduations from professional programs).
 Monitoring and perhaps even influencing the demand for the professionals.

- Assisting in marketing graduates (bringing supply and demand together).
 Maintenance of enforcement of standards of competency for those working in the
- 7. Upgrading persons in the profession, including assisting in the learning of new
- by the provide standards for fees to be charged for various professional sources, possibly including the enforcement of fee structures.
- 9. Providing vehicles for communication among members including annual meetings, journals, other publications of new developments, special training sessions, etc.
- 10. Mutual protection and benefits including insurance (and malpractice insurance), pensions, etc.

Setting standards for the profession.

^{2.} Accrediting institutions which train the professionals.

of discussion but it is usually not a focus of action. This is left to unions in universities that have collective agreements and where the rates are set by rank although occasionally certain groups of professors may have separate bargaining units, such as law school professors or business school professors.

The major activities of the IRRA are faithful to its mandate. The IRRA organizes an annual winter meeting and an annual spring meeting to provide a forum for the discussion and dissemination of the results of research on industrial relations subjects. The proceedings of the winter and spring meetings are published by the association. The IRRA also commissions research volumes to examine specific subjects. Recent topics for research volumes include the volumes: *The State of the Unions* (1991) and *New Developments in Worker Training: A Legacy for the 1990s* (1990). The IRRA does not have its own journal, although Cornell University's *Industrial and Labour Relations Review* might informally be considered the association's journal.

A major component of the IRRA is the local chapters which function semiautonomously from the national association. These chapters have a much higher proportion of practitioners than the national association. The chapters have regular meetings to discuss issues of concern to IR practitioners and, for the most part, do not publish papers or the results of their discussions. Members of local chapters are not required to belong to the national IRRA.

The IRRA also operates an employment market for jobs at the annual winter meetings. The association recently instituted a doctoral consortium as well as poster sessions that provide opportunities for doctoral students to present their research in progress. In addition, the subject of the teaching of industrial relations is, on occasion, included in the annual winter meetings. Comprehensive review committees on the activities of the IRRA have reported in 1977 (Lester) and 1988 (Kerr and Dunlop). The bulk of these reports has focused on the relationship between practitioners and academics in general, and their respective roles in the winter and spring meetings in particular. The other main topic concerns research publications. In 1978 the IRRA established a standing committee on the market for the services of trained personnel in the industrial relations field, but there was no subsequent reference to this committee, and it does not appear in the list of current standing committees.

The annual winter meetings are the primary gathering place of national IRRA members who are academics. The proceedings are a good record of the research in progress in the field. The research volumes are detailed probings of research in specialized subjects within industrial relations.

If we compare the activities of the national IRRA with the functions of professional associations as summarized in Exhibit 3, certain activities play a greater role than others. Of the functions that are identified, four relate to the mandate the IRRA has set for itself: encouraging research and disseminating the results. These functions are item 9, providing vehicles for communication; item 7, some upgrading of persons by means of disseminating research; item 5, some assisting of marketing of graduates; and a little activity that could be said to be directed toward item 6, the maintenance (but not the enforcement) of standards of competency through discussing the teaching of industrial relations.

The purposes that the IRRA has set for itself seem to narrow the range of focus of its activities as a professional association. The question we will ask is whether the IRRA should expand its purposes and thereby broaden the range of its activities as a profession.

Should the IRRA Add to its Purposes Activities More Focused on Industrial Relations as a Profession?

The question of whether the IRRA should add to its purposes activities more focused on industrial relations as a profession is closely connected with the question of whether industrial relations is a discipline and/or a profession or whether it is simply a multidisciplinary field of study. The question of what IR is has been the subject of debate for more than three decades. In 1958, Dunlop published *Industrial Relations Systems* with the intention and the prescription to make industrial relations a discipline in its own right "... on the same logical plane as an economic system ..." (p. 4-5). In 1969 Heneman said that IR was on its way to becoming a discipline and he indicated what was needed to make it a full discipline. In 1974 Laffer said that IR was almost a discipline and he coined the term "industrial relationist." However, Barbash (1984), and Hebert, Jain and Meltz (1989), refer to industrial relations as both a field of study and a discipline.

As a field of study, the objectives of the IRRA may be adequate in promoting research and encouraging its dissemination. As a discipline or profession the objectives seem overly limited particularly for the almost 500 academics whose primary identification is with industrial relations. By discipline I mean academic units based on scholarship and teaching in industrial relations as I have discussed elsewhere (Meltz, 1992). Even for practitioners in business, government and unions, as well as arbitrators, legal and consultants, there should be some benefits for the field/discipline as a whole, as well as selfinterest, in increasing the range of professional activities at the national level. To begin with this would mean adding to its goals the enhancement of industrial relations as a profession for those who are teaching, conducting research, and practicing in the field. Consideration might also be given to including human resource management along with industrial relations. The addition of a profession-centred goal would imply dropping the word research from the title. The new title of the association could be the American Industrial Relations Association or the American Industrial Relations and Human Resource Association. An appropriate alternative would be the American Employment Relations Association.

A greater focus on industrial relations and human resource management as a profession will clearly require discussion within the association.

Possible Additional Activities for the IRRA

If the IRRA is to enhance the industrial relations profession there are a number of additional activities that the IRRA should consider. These activities would include an ongoing committee to examine the standards of training and practice in industrial relations, a committee to explore the relationship between the fields of industrial relations and human resource management, and a committee to monitor trends in demand and supply for persons trained in industrial relations (to implement what the 1978 committee doesn't seem to have done). Existing committees should explore the provision of additional vehicles for communication among members and local chapters and should consider methods for mutual protection and career enhancement of persons employed in industrial relations.

The American Economic Association (AEA) undertakes most of these activities for a membership approximately 60 percent larger than the combined total of the national IRRA and the local chapters. If only the national memberships are considered then the AEA's 21,578 membership is 4.5 times the IRRA. Considering the huge number of persons employed in industrial relations and human resource management, it seems appropriate to have a professional association for industrial relationists since there are several for human resource managers and officials. In 1980 in the United States 625,000 persons were employed as personnel and industrial relations managers and officers. There were 93,500 economists. The comparable employment figures for IR/HR people in Canada in 1986 were 68,305 along with 14,785 economists (Meltz, 1992).

Standards of Training

The directors of IR academic units meet at the same time at the IRRA meetings. Should this group, in conjunction with the IRRA, have a regular committee to explore and report on the standards of training and practice of industrial relations? Such a committee would highlight the importance of training and its link with practice in the field. This is particularly important given the large number of persons working in industrial relations.

The Relationship between IR and HR

Along with the examination of the standards of training and practice in industrial relations there should be an exploration of the relationship between the training and practice of persons employed in industrial relations and in human resource management. Traditionally industrial relations specialists have dealt with employees organized by trade unions while personnel (now generally referred to as human resource) specialists dealt with nonunionized personnel. Not only has the unionized sector shrunk in the United States (Meltz, 1985; 1990), but the range of activities and interests of human resource specialists has expanded (Stone and Meltz, 1988). The division between the two approaches to employment relations may be responsible along with some other factors (Keenoy, 1982; Kaufman, 1991; and Meltz, 1992), for the limited number of formal academic programs for the training of persons in IR/HR.

Whatever the cause of the limited extent of formal university training opportunities in IR, an important step in increasing the extent of university training must begin with the development of formal links between industrial relations and human resource management either within the IRRA or through links between the IRRA and those associations that have significant numbers of human resource specialists, such as the Academy of Management, the American Management Association and the Society for Human Resource Management.

Monitoring Trends in Demand and Supply

Most members of a profession are interested in what is happening to their profession, both in terms of employment and earnings as well as the outlook for the future. The IRRA should do what was implied by the 1978 proposal for a standing committee on the market for the services of trained personnel in the industrial relations field. The American Economic Association has a Director of Job Openings for Economists and a Committee on Economic Education.

Vehicles for Communication by and Among IRRA Members

At present the IRRA publishes high level research volumes on subjects of interest to persons in the field of industrial relations along with the proceedings of the annual winter and spring meetings. While these publications are very worthwhile, aside from the periodic IRRA bulletins, the vehicles for communication are already existing journals. I understand the subject of an IRRA journal has been explored in the past but perhaps it is appropriate to consider a different type of journal for the IRRA. The association may want to consider developing a regular journal that would include professional activities and developments along with research reports. Since over 60 percent of the national IRRA members are nonacademics or students, and almost 90 percent of the local chapter members are nonacademics or students, perhaps a different type of communication vehicle should be considered to advance the professional nature of industrial relations.

Additional vehicles for formal communication would include representation of the IRRA on statistical, research and other relevant associations that can contribute to the professional advancement of IRRA members. The American Economic Association is represented on a number of councils that are relevant to the IRRA as a professional association such as the American Association for the Advancement of Science, the National Bureau of Economic Research and Social Science Research Council.

Career Advancement

In addition to the above suggestions there could be other activities that advance careers of persons in IR. Such activities could include professional designations and advanced training for persons employed in IR. In the province of Ontario the legislature has just granted the formal designation of Human Resource Professional. The Ontario designation includes training in industrial relations. Whether the IRRA promoted a purely IR designation or one in conjunction with human resources, such an approach should be explored.

Concluding Comments

As its name implies, the Industrial Relation's Research Association has largely focused its national activities on research. At the local chapter level discussion of practitioner-oriented issues has been the norm. Membership at the local chapter level has far outstripped the national level. Research is conducted primarily by academics vet the proportion of academics in the national membership has declined to less than one-third, while at the local chapter level it is less than onetenth.

The composition of academic membership has also changed. Although the stated purposes of the association are the encouragement of research in all aspects of the field of labor, multidisciplinary membership has declined to a fraction with the virtual disappearance of members from political science, psychology and sociology and the rapid decline in the number from law. Instead, the academic members are increasingly concentrated in industrial relations, labor market economics and human resource management.

These developments suggest that the association consider giving more weight to industrial relations as a profession, possibly practiced in combination with human resource management. This would mean that the association add to its stated purposes the goal of enhancing industrial relations as a profession for those who are teaching, conducting research, and practicing in the field. It may also mean changing the name of IRRA to indicate that industrial relations is a profession and not just a field of study. The profession may be called employment relations.

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Industrial Relations is Alive and Well (But Changing)

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Bruce Kaufman's charge to this panel was to consider questions regarding the future of industrial relations as a vocational practice and field of study and the implications of the answers to those questions for the future of IRRA. Related questions we were to examine include (1) Is industrial relations the same as human resources? and (2) If union numbers decline, will industrial relations go the way of the cigarmakers' and cordwainers' unions? We were also to offer our thoughts on the Kerr-Dunlop Report and to discuss the choices IRRA should make to stay vital.

I speak from the perspective of the public sector practitioner and local chapter and national member. My contentions, therefore, will be bolstered largely by anecdotal evidence and personal experience, plus the reflections of some of our learned members from the IRRA's various constituencies. Since I served on the Kerr-Dunlop Committee, I will offer some ruminations on its 1988 report and its implications for the association's future.

My central thesis is that industrial relations in the U.S. isn't going away, nor is it going to be the same as it has been. The decline in U.S. manufacturing volume and the accompanying reductions in work force have been well documented, as has the associated decline in union membership. The public sector, however, has seen a steady increase in union organizing and collective bargaining. My view is that employment is shifting to other sectors of the economy, and wherever there is an increase in employment, ultimately we will see a resurgence of unions there. We are seeing activity in local chapters of the IRRA that reflect this (for example, public sector-related memberships have increased in some chapters). I submit that these phenomena have implications for the IRRA; specifically that the IRRA continue to

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extend both chapters' activities and scholarly review into these areas to attract and retain members from all these communities.

Let's examine the changing composition of the U.S. work force. The 1991 Research Volume of IRRA (edited by George Strauss, Daniel Gallagher and Jack Fiorito) explores the state of the unions in considerable detail. In addition to several in-depth treatments of the structures, composition, and history of American organized labor, this volume peers into the future. Tom Kochan and Kirsten Wever (1991) examine the vital role played by organized labor as a voice in national policy-making, especially during times of significant political upheaval. Michael Piore (1991) argues that new forms of unionism, e.g., community-based unions, as well as traditional company-based and craft unions, will provide the response needed by employees for representation with new or changed employers. He also looks to the gains of public sector unions as a model for success in organizing and growth. In commenting on the Kochan-Wever and Piore pieces, Douglas Fraser (1991) notes that the success of the AFSCME organizing effort at Harvard University demonstrates that new and different situations require targeted, or tailored tactics, and that labor can and must rise to this challenge. He also predicts increasing politicization of the U.S. labor movement.

From my less lofty perspective, it appears that more of our local chapter members are public sector union officials and public sector management people. Although our national office membership statistics do not break out public sector labor or management as discrete groups, an unscientific sampling, and indeed the composition of the Chapter Advisory Committee, suggest that this segment of local chapters is strong and growing. The Chicago Chapter, for example, has approximately two hundred members, of whom 30 are clearly public sector. Other urban chapters reflect similar patterns. Kay Hutchison of the national office agrees: and savs that, while the "government" category of national membership has remained more or less constant, her impression is that local membership of public sector people has grown. The implication is clear: this is an area where the IBBA needs to recruit and where our scholars need to train their lenses to give practitioners the benefit of their analysis. We also need to market the benefits of national association membership to those local chapter members who are not yet national members.

Following what Piore and others have suggested, I believe that new forms of unionism and the growth of unions in other parts of the economy will provide new areas to study and new members to bring to our discussion forums. I share the contrarian view expressed by Tom Geohegan (1991) that organized labor will rebound from its current membership slump:

Well, to sum up all this old history: Labor boomed in the 1880's, went bust in the 1890's, then boomed in the 1900's, and went bust in the 1920's. Or something like that. Then it *really* went bust—flat, dead bust—in the 1920's. I mean even deader than now. Which is, of course, what gives people like me so much hope.

So with the expected upturn in union membership, there will be an upturn in interest in the field and increased discussion. That is the meat and potatoes of this association. Meanwhile, there are plenty of other aspects of the employee-employer relationship to probe. This organization will be the keeper of the flame through the low and high membership phases of organized labor's life cycles.

Turning to the human resources/industrial relations issue, my view is that regardless of the label, we are studying the behavior of groups of people in the workplace. I don't particularly care for either term, "industrial relations" or "human resources." I understand that human resources has taken on a "nonunion" or "antiunion" cachet for some, and a more "managerial decision-making element" flavor for others. But I think this is baggage that has been added to the terms rather than concepts that are inherent in them. If we can continue to emphasize that industrial relations, human resources, or employee relations are concerned with how people in groups organize or are gathered to a common purpose at work and to further emphasize that our academic study concentrates on all aspects of these relationships—legal, economic, psychological, sociological, ethical, and historical—then the IRRA as an organization will continue to serve a purpose and serve as a useful forum for its members.

That provides me with a segue to the Kerr-Dunlop Committee's deliberations and report. As the IRRA approached its 40th anniversary this special committee reexamined the several original purposes of the association: (1) to provide a bridge between academics and practitioners; (2) to provide a meeting ground for management, labor, and government representatives, in a nonadversarial setting; (3) to draw together scholars from many disciplines that study industrial relations; (4) to encourage interchange with and study of the Canadian systems of industrial relations; and (5) to provide a bridge between the national association and local chapters of the association.

It went on to report on "problems, challenges, and bridging tasks," and to recommend the creation of groups to examine and propose concrete actions in the areas of improving local chapter relations, strengthening spring and winter meetings, and maintaining the high quality of the association's scholarly publications. Following that, other working groups and an ad hoc committee were created to implement the recommendations developed.

Having participated in the discussions preceding the creation of that report, I believe that the Kerr-Dunlop efforts provided a valuable review of where we've come from and useful guidance on how to proceed into the last decade of the century. They reexamined the vision of this organization as academically multidisciplinary, and as a roof under which the many practitioner communities and scholars can come together. This continues to be the main attraction for scholars and practitioners, from new as well as long-established schools and employment communities. The association should continue to advertise these assets as the distinguishing features of IRRA. The competition, especially the Academy of Management, appeals to narrow segments of our potential members; and the various labor or management associations are obviously dedicated to purposes other than the fair, open exchange of ideas in nonadversarial settings that this organization fosters.

So I conclude that the IRRA still has, and will continue to have, something unique to offer to a dynamic marketplace. New workers. new worker organizations, new scholars, and new managers will join with union leaders, employers' representatives, and established teachers in studying and learning how people work together in a changing, global economy. The IRRA provides the house for us all to gather in, and I believe it will grow if we continue to let our colleagues know of its value.

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Strategic Choices Facing IR and the IRRA

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Kochan, Katz, and McKersie (1986) have made a persuasive case that the industrial relations system in the United States is in the throes of a fundamental transformation. Less discussed, but no less real, is the similar transformation that is taking place in the academic field of industrial relations (IR). In particular, it is the thesis of this paper that academic IR in the United States is experiencing a serious decline in its organizational and intellectual vitality, and that this decline threatens the continued viability of IR academic programs, the Industrial Relations Research Association (IRRA), and IR as a field of study. In this paper I endeavor to document this transformation, identify its root causes, and describe a strategy that has the potential for reversing the field's declining fortunes.

IR in Decline

A palpable sense exists among IR academics that the field is in danger of marginalization, if not extinction. Indicative of this sentiment is the statement by Arnold Weber (1987, p. 9): "Will industrial relations institutes and the study of industrial relations go the way of home economics?", by George Strauss (1989, p. 257) that: "Short of an unexpected resurgence of union victories academic IR will have to make major readjustments. Otherwise, it may follow the example of the Cigarmakers and the Sleeping Car Porters, both leaders of their times," and by James Begin (1987, p. 473): "The IR label will die hard at many institutions, but one scenario is that in time it will disappear as a disciplinary label if collective bargaining as an employee decision-making mechanism does not stabilize or recover."

Is this doom and gloom justified, or does it represent an exaggerated sense of alarm? The evidence suggests that there are indeed

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good reasons for concern. The two major institutions of IR as an academic field of study are the industrial relations academic programs and the IRRA, the field's major professional association. Both institutions weakened noticeably over the 1980s. Consider first the IR academic programs.

The cornerstone of academic IR in the United States is the roughly two dozen industrial relations schools, institutes, and centers. The leading examples are at Cornell, Illinois, Minnesota, Wisconsin, Rutgers, Berkeley and UCLA. These units are the heart and soul of academic IR in that they offer degree programs in industrial relations (UCLA and Berkeley excepted), train many of the new Ph.D.s for the field, provide an organizational home for faculty interested in research and teaching in industrial relations, contain many of the most influential IR scholars, and provide a publishing outlet for IR research through sponsored journals and monograph series.

The good news in the 1980s is that the top tier IR programs weathered the decade intact and actually experienced a modest increase in enrollments. The bad news is that the remainder of the population of IR programs suffered significant attrition. To the best of my knowledge no new degree granting, autonomous IR-labelled units were established in the 1980s. The number of existing IR programs, on the other hand, declined significantly. Some units (e.g., Chicago, Columbia, Pace) were disbanded, others (e.g., Massachusetts, Michigan) suffered a substantial cutback in funding and/or faculty, while others (e.g., Purdue, Iowa, Georgia State) dropped the IR label and shifted their focus from industrial relations to human resources. Should these trends continue, as I predict they will, not even the top tier IR programs will be safe in the 1990s.

A review of the evidence also indicates that the IRRA suffered a net erosion of strength during the 1980s. One dimension is the decline in the number of academic members that belong to the organization and in the breadth of their disciplinary representation. From 1979 to 1990, academic membership of the national IRRA declined 6 percent (from 1,590 to 1,499), while at the same time (1981-1990) academic membership in the organizational behavior (OB) and personnel/ human resource management (HRM) tracks of the Academy of Management grew 42 percent (from 3,580 to 5,078). The disciplinary breadth of the IRRA membership also diminished, particularly among faculty from the behavioral sciences. In 1990, for example, IRRA members who listed their specialty area of study as human resources, organizational behavior, sociology or psychology comprised only 15 percent of academics affiliated with the organization.

A second dimension of decline is the growing thinness of intellectual talent attracted to the IBBA. The calibre of intellect in an organization is difficult to measure, but I believe that anyone familiar with the IRRA recognizes that it no longer attracts as many of the best and the brightest scholars to participate in its activities. I have assembled two admittedly circumstantial pieces of evidence to back up this claim. Many labor economists, for example, would consider the meetings of the Labor Studies group of the National Bureau of Economic Research (NBER) to be the leading forum for state of the art economics research on employment relations issues. It is telling, therefore, that only 28 percent of the members of this group belong to the IRRA (and a much smaller fraction are active and committed participants). The second piece of evidence pertains to researchers in human resources management. Of the 30 people on the editorial board of Human Resource Management Review, only 9 (30 percent) are IBBA members

The third dimension of decline is the growing gap and lack of interaction between the academic and practitioner wings of the IRRA. One of the fundamental goals of the founders of the IRRA was to promote a cross-fertilization of ideas and perspectives between academics and practitioners, enriching both the study and practice of industrial relations. Over time, however, the two sides have grown apart until they largely inhabit separate worlds. The domain of the academics is the winter meeting of the IRRA, an event that attracts mainly professors and graduate students who present and discuss academic research that increasingly has little input from or relevance to practitioners. The domain of the practitioners, on the other hand, is the local IRRA chapter meetings, events sparsely attended by academics and to which they usually contribute little.

Roots of Decline: The Field

The decline in academic IR is a direct consequence of the narrowing and hollowing-out of the field that took place after the "golden age" period of the 1950s. As I have documented elsewhere (Kaufman, 1993), from the founding of the field in the 1920s to the late 1950s industrial relations was composed of two "wings" or schools of thought. One was what I have labelled the institutional labor economics (ILE) school, the other the personnel management (PM) school. The fundamental dividing line between the two is in their approach to improving efficiency, equity, and human well-being in the workplace, a goal that I claim is the essence of the study and practice of industrial relations.

Briefly stated, the members of the PM school held that labor problems such as strikes, low work effort and arbitrary discipline are largely due to defective management practices and that the best approach to resolve these problems (i.e., to achieve improved industrial relations) is through more scientific and humane management methods, most particularly through the practice of human relations and a nonunion form of employee representation. The goal of these improved management methods is to create a congruence of interests between managers and workers, thus providing employees with incentives for efficiency and eliminating the causes of adversarialism and conflict. The PM school originated with management practitioners and consultants in the early 1920s (persons such as Clarence J. Hicks and Ordway Tead), entered academe through Elton Mayo and the Hawthorne experiments in the 1930s, and by the late 1950s had grown to include the fields of human relations (later organizational behavior), industrial psychology, personnel management, and a portion of industrial sociology.

The ILE school of industrial relations was born out of the writings of various institutional labor economists in the 1910s and 1920s, most notably John R. Commons. By the 1950s the ILE school had expanded to include not only the institutionalists of the Wisconsin school but also the "neoinstitutionalists" (e.g., John Dunlop, Clark Kerr, Richard Lester) and a number of scholars from law, history, political science and a portion of industrial sociology. The proponents of the ILE school maintained that labor problems originate from three "peculiarities" in the market system: the first is substandard wages and working conditions due to labor's inequality of bargaining power; the second is employment and income insecurity due to the boom and bust pattern of the business cycle, the occurrence of industrial accidents, and lack of protection against arbitrary dismissal; and the third is the authoritarian nature of the traditional master/servant relationship in industry and the consequent lack of due process and protection from capricious or unjust management decisions. These peculiarities, and the labor problems they create, are best resolved in the ILE view through several institutional interventions, including the promotion of trade unionism and collective bargaining, passage of protective labor legislation and social insurance laws (e.g., minimum wage, unemployment insurance), and full employment monetary policies by the Federal Reserve.

In the early 1950s it was widely accepted that industrial relations subsumed within its intellectual boundaries both the PM and ILE schools of thought and, in particular, the subjects of personnel management (later HRM/OB) and labor-management relations. As a field of study, therefore, IR had a legitimate claim to cover the entire employment relationship, for research and teaching in IR covered both the management and union side and did so from a behavioral and nonbehavioral perspective (Willensky, 1954). Given the wide range of subjects and disciplines included in IR, and the great public and academic interest in industrial relations due to the tumultuous nature of labor-management relations at the time, the field attracted a large number of influential scholars who generated numerous highly acclaimed works of research.

Thirty years later, IR as a field of study was much more narrowly constituted and had suffered a significant hollowing-out of intellectual talent. The narrowing and hollowing-out of IR was manifest in two developments.

One was that the PM school split off from industrial relations and gradually metamorphosized into a rival approach to the study of employment relations under the "HR" (human resources) label. Thus, where IR had once been a confederation of the management/ behavioral science-oriented PM school and the union/economicsoriented ILE school, after 1960 the fields of personnel management/ HRM, organizational behavior, industrial sociology and industrial psychology largely went their own way, leaving IR as only one-half of its former self (the ILE school). This meant that IR gradually acquired the intellectual persona of the ILE school and, most particularly, an association with the study of trade unionism and labor-management relations and a value system that supported the New Deal system of employment relations.

The second development was the gradual estrangement that developed between labor economics and industrial relations. During the 1950s a close relationship existed between the two fields because the neoinstitutional labor economists of the period were receptive to a multidisciplinary, social science approach to the study of labor markets, an orientation that made industrial relations a natural intellectual complement. After 1960, however, labor economics came under the sway of neoclassical economists of the Chicago school, such as Friedman, Stigler, Lewis, and Becker. Theoretically, the perspective of the Chicago school was antithetical to a close relationship with industrial relations because of the former's eschewal of an inclusive, multidisciplinary approach to the analysis of labor markets in favor of a narrowly focused application of competitive price theory to any and all employment issues. On a policy level the Chicago school also parted ways with industrial relations because of the former's hostile regard for labor unions and government regulation of employment conditions—institutional interventions that formed the core of the ILE policy program.

The result was that by the late 1970s the field of industrial relations had shrunk to a considerably reduced intellectual base. The core subject area of IR was now perceived to be trade unionism and collective bargaining; the committed members of the field were comprised largely of institutionally-oriented labor economists and academics from other fields who had an interest in some aspect of labor-management relations, and the ideology of industrial relations was "pro-union" in that the leading scholars were committed to the preservation of the institution of collective bargaining and the policy program underlying the New Deal industrial relations system.

This intellectual foundation proved, unfortunately, to be quite weak in the face of the events of the 1980s. As is well known, organized labor suffered its most serious loss of membership and bargaining power since the 1920s, with little prospect for an end to the slide in its fortunes. Political support for the New Deal industrial relations system also diminished considerably, as revealed by the election of Ronald Reagan and George Bush and the lack of public outcry over various antilabor actions, such as the firing of the air traffic controllers and the widespread use of striker replacements by companies. A third adverse development was the continued decline and near death of institutionalism in labor economics, a body of thought and approach to research that provided the closest thing to a theoretical base that industrial relations had. Finally, industrial relations was hurt by the continued decline in academic interest in interdisciplinary research, given that the original purpose of the field was to serve as a bridge between the disciplines for research on the employment relationship. The net result of these developments was a significant loss of support and interest in academic IR on the part of students, academic researchers, university administrators, employers in industry, and public officials. From this loss of support flowed the decline in the IR academic programs documented earlier, and the widespread perception that IR as a field of study is on the endangered species list.

Roots of Decline: the IRRA

The IRRA, as the major professional association for the field of industrial relations, also suffered a significant loss of support during the 1980s. Like IR as a field of study, the origins of this decline date several decades earlier.

The initial impetus for the creation of the IRRA came from a group of neoinstitutional or "social science" labor economists. (Richard Lester was the prime mover.) They had dual motives in founding the organization. One was a geniune interest in industrial relations per se (i.e., the multidisciplinary study of the employment relationship). The second motive was to provide an alternative home to the American Economics Association (AEA) for more institutionally-oriented labor economists who felt that their efforts to broaden labor market theory and make it more realistic were rejected or ignored by the "theorists" who dominated the AEA. Thus, the first motive was reflected in the statement in the IRRA's constitution that one of its purposes was: "the encouragement of research in all aspects of the field of labor-social, political, economic, legal, and psychological-including employer and employee organizations, labor relations, personnel administration, social security, and labor legislation." This motive was also reflected in the program of the first winter meeting of the IRRA in which a session was devoted to papers exploring the contributions of various social science disciplines (e.g., psychology, sociology) to IR research. The second motive was also manifest in the program and activities of the IRRA, however. Examples include the disproportionate number of sessions devoted to economics-related topics and the corresonding dearth of sessions on human relations/personnel/industrial psychology subjects, and the near monopoly on the office of IRRA president exercised by economists.

Although largely unintentional, the policies and practices adopted by the IRRA in its early years facilitated and reinforced the narrowing and hollowing-out of industrial relations as a field of study. This occurrence arose from a contradiction between the two motives noted above. While the IRRA and the labor economists who controlled it were committed in principle to an inclusivity of viewpoints on the subject of employer-employee relations, in practice the organization served the research and policy interests of the ILE school and promoted its institutional economics/collective bargaining viewpoint, while it largely ignored or was hostile toward the management/ behavioral science/nonunion viewpoint of the PM school. Because the members of the PM school (most particularly academics associated with the Elton Mayo and human relations) were given less than an equal political voice in the IRRA and were underrepresented in its programs, they largely ceased active involvement in the organization by the mid-1960s and gravitated to other organizations, such as the Academy of Management. As a result, the academy became the locus for academics interested in HRM/OB and metamorphosized into the home base for the "HR" approach to employment relations. The IRRA, in turn, became the professional organization devoted to the study of "IR," where IR was now narrowly construed to mean the ILE approach to employment relations.

The IRRA, like the field of industrial relations and the IR academic programs, was seriously hurt by the events of the 1980s. The decline in the union movement, the loss of public and political support for the New Deal industrial relations system, the demise of institutionalism, the shrinkage in IR academic programs and the number of academics interested in IR, and the shift in academic job market activities from the IRRA to the Academy of Management all reduced professional interest in the organization and its *raison d'etre* for existence. The outcome, as documented above, was a significant decline in its membership and organizational vitality.

Strategy for Survival and Growth

One strategic choice for IR as a field of study and the IRRA as its major professional association is maintenance of the status quo. This means continuing its traditional focus on trade unionism and collective bargaining and its support of the New Deal industrial relations system. This option might prove viable if trade unionism and collective bargaining stage a rebound in the 1990s, if not in terms of membership and bargaining power then at least in terms of perceived utility as a device for dealing with today's numerous employment problems. While such a rebound is possible, the odds do not favor it. Rather, the more likely scenario is that both unions and the traditional collective bargaining system will continue to decline in membership, influence, and political support. Maintenance of the status quo by IR and the IRRA in this environment is likely to doom both institutions to a distinctly second class status in the academic world. To prevent this outcome, a different strategy is required. The main points of such a strategy are outlined below.

The first task is to broaden and reposition the perceived content area of IR as a field of study. I advocate an intermediate position between the current focus (the study of labor-management relations) and the fields' original conceptualization (the study of all aspects of the employment relationship). The former is deficient, I believe, because it ties the field's existence to the fortunes of one particular institution (the trade union movement), while the latter is too all inclusive to provide an effective community of research interests. Instead, industrial relations should attempt to position itself as the intellectual bridge between the external environment studied in labor economics, labor law, and macro sociology and the internal practices, behaviors, and outcomes of individual organizations that are the province of HRM/OB. IR scholars, then, become the "externalists," while HR scholars are the "internalists" (a distinction made by Somers, 1969).

A possible organizing concept for the field, given this orientation, is that of "employment systems," where employment systems are alternative ways of organizing and managing work (see Osterman, 1987; Begin, 1991). The major topics of discussion in IR shift, accordingly, from those related to the practice and outcomes of collective bargaining to those dealing with alternative models of organizing work, the strategic and tactical considerations that lead organizations to adopt one type of work model over another, alternative methods of governance used in employment systems, and the performance outcomes of these alternative models. Industrial relations, with its historic emphasis on the external environment and the adaptation of institutions to that environment, is far better positioned to examine these issues than are the more psychologicallyoriented fields of HRM/OB. The focus on employment systems would also help to reintegrate IR with the fields of OB/HRM and labor economics, in the first instance because employment systems provide a larger role for the consideration of management and management practices than does the current focus on labor relations and in the second because it provides a more natural entrée for labor economists interested in the economics of the firm and human resource practices.

The second tact is for IR and the IRRA to undertake a fundamental reexamination of the theoretical and value premises underlying the field of industrial relations. The field is currently wedded to the theories and values developed by the early institutionalists in support of the New Deal-era industrial relations system. Abundant evidence suggests, however, that these theories and values, and the legislation and institutions they support, are no longer able to adequately deal with and resolve the many pressing employment problems affecting both companies and workers. Hence, the field needs to start with a clean slate and take a critical, forthright look at what are the major employment problems that need attention in the 1990s and then identify the best legal and institutional response to resolve those problems. The outcome of this reexamination is uncertain; it may be concluded, for example, that trade unions and collective bargaining remain the best approach and that the nation's labor laws need to be strengthened to make these institutions more effective, that a different type of employee representation is needed (e.g., European style works councils), or that some form of nonunion, participatory management style of employer-employee relations is best. In some respects the specific answer is less important for academic IR than the fact that scholars go through the process, for only by doing so can IR transform itself from a reactive, backward-looking field of study to a proactive, progressive field.

A third step of the strategy must be to increase the interaction between the academic world of IR and the world of IR practice. It is idle to think that IR scholars can successfully identify both the causes and solutions to leading employment problems if they have little practical knowledge of workplace organization, practices, and behaviors. Increasing academic-practitioner interaction is extremely difficult to achieve, however, given that the financial and social incentives in academe push scholars away from consideration of the big questions in IB and from contact with the real world of practice toward a style of research that is narrowly focused on issues primarily of interest to fellow academics and that is obsessed with ever greater theoretical and methodological sophistication. Several actions can materially improve the situation, however. The IRRA and IR journals. for example, could dedicate space in their publications to case study. problem-solving research and actively solicit such research. The IRRA could also dedicate the annual spring meeting to practitioner relevant research and upgrade the proceedings of that meeting so that it attracts top name academics. Finally, unions could advance their cause and simultaneously strengthen academic-practitioner links by encouraging academics to do case study research of topics such as management strategy and tactics in organizing campaigns, collective bargaining negotiations, and strikes.

The fourth part of the strategy concerns various actions that need to be taken to strengthen the IRRA as an organization. Suggestions include the following: dropping the name "industrial relations" in favor of some more topically inclusive, ideologically neutral term; establishing official "tracks" (e.g., labor economics, collective bargaining, HRM, etc.) such as is done in the Academy of Management in order to promote breadth of membership and session topics; significantly expanding the number of program sessions and annual research volumes dedicated to HR topics or to integrative IR/HR research; more aggressively using the IRRA as a home base for the development of an institutionally-oriented theory of labor economics (thus building on the ILE tradition of industrial relations); giving balanced weight and perspective in all association meetings and publications to the practice of union and nonunion employment relations; providing equal political representation and access to high office to academics from the ILE and HR wings and executives/practitioners from nonunion companies; and substantially increasing the "quality" of IRRA publications so that a greater number of top-flight academic researchers are motivated to participate in the meetings of the association.

Conclusion

The strategic choices facing industrial relations and its major professional association, the IRRA, are clear: opt for change and revitalization or maintain the status quo and the slide to second class status. The strategy of change advocated here is to broaden and update the field so that it is again a vital force for progressivism and reform in employment relations. Just as the nature of employment problems evolves over time, so must the solutions to these problems. The failure of IR and the IRRA is that they have become wedded to the solutions of the past; the challenge and opportunity awaiting both is to take what remains valid from the old and graft to it new theories, practices, and policies that can meet the needs of employers and workers for increased efficiency, equity, and personal growth in the workplace. The future of IR and the IRRA is thus dim or bright depending on which strategy is chosen.

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DISCUSSION

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What unites these papers is a common opinion that IR as a field of study and practice is undergoing sea changes. Their prescriptions for dealing with the problems and opportunities created by these changes range from emphasizing the development of the IRRA as a professional association (Meltz), to broadening the academic field of study and reflecting this in the IRRA (Kaufman), to being optimistic about the outlook for traditional collective bargaining and recognizing the changes in the field created by the increased importance of the public sector (O'Brien), to pointing out and urging the incorporation of basic theory into our work (Fossum).

Meltz' paper looks at the IRRA for the purpose of evaluating it and suggesting changes in it as a *professional association*. One of his more interesting points is the tension between the IRRA's functions of serving both the academic field of study and the profession. He urges moving in the direction of being a more traditional professional organization.

I agree that we should improve our effectiveness as a professional organization. If we are to be successful in this, it seems to me that some thought must be given to defining what the profession is. One good way to do this is to look to the composition of our local chapters, and to be guided by them in deciding how to define ourselves and our activities. Where I would tend to disagree with what I perceive to be a major thrust of Meltz' argument is that I would also favor reviving the academic side of the IRRA enterprise.

Kaufman's paper looks to the academic side of IR. My basic response is that I agree with him. What I find most interesting and challenging in his paper is the call to broaden the focus of IR as a field of study as it is currently operationalized in the IRRA and the journals. I suggest that we move to include, along with human resources, labor

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studies, history, and law while we are at it. I agree that the subject of concern is the employment relationship and everything that proximately affects or is affected by it. However, as I believe the Fossum paper shows, it is not contradictory to argue for more theoretical development and more attention to practice. Theory without practice is useless and practice without theory is rudderless.

We are extremely fortunate, I believe, to be able to claim jurisdiction over the study of the employment relationship at a point in history when new attention is being paid to it. This fundamental relationship may, as the economists argue, be usefully seen as dealing with a commodity called labor. But this is a very peculiar commodity indeed. Unlike any other, its sale is consummated only within the bounds of a social relationship called employment. This calls for understanding of human nature, social relations, social hierarchies, markets, power and dominance relations, social roles, and a number of other ideas that cut across traditional disciplines.

O'Brien's paper makes two special contributions to this topic. First, he takes a more optimistic view of the future of the labor movement, with which I happen to agree, and concludes that the future will be better for the historic core area of concern for the IRRA. Second, he directs our attention to the changing nature of our field as manufacturing declines and services and government employment grow. In a sense, his advice is similar to mine in that we both believe that how we define our organization should to some degree follow the actual membership that we already have, particularly in our local chapters. Also, his optimistic tone is good to hear.

Fossum agrees with Kaufman that the focus of the field is "employment" and that we should not limit ourselves to any one model of it. He rather convincingly argues for the relevance of theory to the various areas of industrial relations, although I would be inclined toward other particular theoretical perspectives in the area of collective bargaining. What strikes me as most perceptive in his analysis, however, has to do with the underlying reality with which the theory must deal. As he notes, the emphasis on "human resources" of the 1980s is giving way to employment relations management as an integral part of the management of the firm. If we are not to focus upon archaic problems we must direct our attention to this and the part-time, contracted-out temporary work force of the 1990s. For unions, for example, this might mean renewed attention to old craft union methods, such as hiring halls and apprenticeship and licensing. All of these papers raise interesting issues and argue for the value of such discussions. As Fossum notes, such discussions do not take place in some other fields. They are, in my judgment, the poorer for this.

XI. DISTINGUISHED PANEL: SUPREME COURT PHILOSOPHY ON LABOR AND EMPLOYMENT ISSUES

Supreme Court Philosophy on Labor and Employment Issues

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It would not take a confirmed cynic to suggest that the title of this paper amounts to an oxymoron. That soft-hearted but tough-minded commentator, Florian Bartosic, and his collaborator, Gary Minda, came close to putting it in so many words: "[T]he Supreme Court lacks a consistent and coherent theory of labor law" (1982). My own view is somewhat different. First, lack of a consistent judicial philosophy is not all bad; at least it is better than a consistently wrong philosophy. Second, the vacillating theories of the Supreme Court tend to reflect the divergent attitudes of American society toward labor over the years. These are expressed, for example, in the variegated writings of such scholars as Atleson (1983), Bok and Dunlop (1970), Cox (1960), Northrup (1964), Tomlins (1985), and Wellington (1968), as well as in the quite dissimilar policy pronouncements of Congress in the Wagner (1935) and Taft-Hartley (1947) Acts. Finally, and here I most nearly agree with Bartosic and Minda, the Supreme Court has at times exhibited a profound misconception of the values of organized labor and the lives of ordinary working people, minorities and women in particular. But in fairness, those instances must be balanced against others in which the Court has displayed an almost startling insight into the realities of industrial relationships.

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It is not enough for our highest appellate tribunal to reach even right results in individual cases. Principled decision making is essential for the guidance of the lower courts and the administrative agencies. Sometimes that will mean overriding collective or union values, but at least those values deserve to be understood. My aim in this paper is to examine several illustrative decisions to demonstrate what I believe is a distressing confusion about basic principles and values. I shall first look at cases dealing with union-management relations and then at those dealing with employment discrimination and affirmative action.

Union-Management Relations

Strikes, Picketing, and Boycotts

Three years ago, in TWA v. Flight Attendants (1989), the Supreme Court ruled that at the end of an economic strike, an employer could retain employees who worked during the strike and not replace them with striking employees who had greater seniority, just as it could hire new "permanent replacements" from outside. In so holding the Court placed American labor law at odds with the law or practice of Western Europe and with the International Labor Organization's latest interpretation of its guarantee of Freedom of Association (1991). Yet the TWA decision is but a modest and not illogical extension of the 50year-old precedent of Mackay Radio (1938), which first established an employer's right of permanent replacement. Mackay and TWA can be seen as trampling over incumbent employees' hard-earned equity in their jobs, and as dismissing union people's long-standing, deep-seated aversion to strikebreakers, or "scabs." But what could be more in the American grain than the individualistic belief that the employer is entitled to enlist anyone's aid-and promise permanent employment as an inducement-to keep its operations running? In thus elevating individual over collective values, the Court was arguably right in tune with the mind set of the 1980s.

To ask someone to make a lawful, independent, and totally uncoerced decision not to patronize a particular business would appear unexceptionable, and constitutionally protected as well. But if that self-same message, the better to be seen, is placed on a large sign and carried around, as is the working person's wont, it is no longer an appeal to "reason" but instead a "signal" calling for an "automatic response" and hence subject to prohibition. So declared the best reasoned of several opinions supporting the majority position in *Safeco* (1980). The holding was that a union violated the secondary boycott provisions of Taft-Hartley by picketing to urge consumers not to buy a particular primary product that constituted the major sales item of a neutral distributor. The badly flawed opinion of the Court did no more to meet First Amendment objections than to cite earlier decisions dealing with picketing addressed to union members. Wholly ignored was the important distinction between an appeal to a group, acting in accordance with group loyalties and even group discipline, and an appeal to individual members of the consuming public, acting in accordance with their own individual lights.

As if to underscore its downgrading of picketing as a means of communication, the Supreme Court was prepared in *DeBartolo II* (1988) to engage in some strained statutory construction in order to avoid constitutional questions and sustain the legality of handbilling asking customers not to shop at any of the stores in a mall where a nonunion builder was operating. Apparently picketing, organized labor's traditional mode of appeal and protest, falls into an entirely different category from handbilling and other methods of communicating. Regardless of its peacefulness, its location, or the lawfulness of its message if conveyed by another means, picketing may be treated as coercive *per se* and lose the First Amendment protections afforded other forms of speech.

Just when one is beginning to wonder whether the Court disdains the values most prized by the labor movement, along comes a line of decisions that looks very much in the opposite direction. In the *National Woodwork* (1967) and *Longshoremen* (1985) cases, the Court overrode the literal boycott language of Taft-Hartley and upheld work preservation clauses even though they seriously impaired technological innovation and productive efficiency in the construction and maritime industries. At the forefront of the Court's analysis was the primacy accorded free, voluntary collective bargaining, which has long occupied an honored place in the Court's pantheon. Perhaps it is that "free, voluntary" aspect of union-management negotiations which makes collective bargaining so attractive to a number of Justices. As we shall see next, however, even this relatively favored institution has its definite limitations.

Collective Bargaining

Over the past three decades, the most controversial issue regarding the scope of the duty to bargain has been the extent to which employers must negotiate about managerial decisions that result in a shrinkage of employee job opportunities. Under the Kennedy Labor Board a wide range of managerial decisions were reclassified as mandatory subjects of bargaining. The Warren Court's *Fibreboard* decision (1964), dealing with the in-plant subcontracting of maintenance work, gave qualified approval to this development. But the Burger Court took a different tack in *First National Maintenance* (1981). Although the peculiar facts of *FNM* could narrow the significance of its holding, the case was described by the Court as involving "an economically motivated decision to shut down part of a business." The Court held, with only Justices Brennan and Marshall dissenting, that the employer did not have to negotiate with the union about that determination.

In FNM the Court first declared that a proposed subject must be "amenable to resolution" through collective bargaining. Then came a balancing test. Bargaining over a managerial decision would be required only if the "benefit, for labor-management relations ... outweighs the burden placed on the conduct of the business." As the dissenters rightly objected, this supposed balancing tilted the scales against legitimate employee interests. It also ignored the increasing body of empirical data that union and employee input may greatly enhance the quality of management decision making. FNM was plainly a retrogressive movement in the Supreme Court's labor philosophy.

If FNM was a backward step, Connell (1975) was a headlong retreat. The Supreme Court held that a union lost its federal antitrust immunity when it sought and obtained an agreement from a general contractor that the latter would subcontract mechanical work only to firms that had a current contract with the union. For my purposes, the most significant aspect of the Court's decision was its characterization of the union's action as an attempted exclusion of potential business competitors from the subcontracting field, a matter of product market and antitrust concern. Surely most industrial relations experts would see the union's action as an effort to organize nonunion firms, a matter of labor market and labor law concern. Fortunately, in the subsequent Woelke & Romero case (1982), the Court limited Connell and held that a union was entitled to get a union-only subcontracting clause as long as it had a regular collective bargaining relationship with the employer. Connell remains important, however, in showing how critical may be the lens through which the Justices view a problem: is it a labor issue, or something else?

One aspect of collective bargaining has always been held in high esteem by the Supreme Court, namely, the provision for final and binding arbitration of disputes between unions and employers. In part the explanation may be that arbitration implements one of the Court's most fervently espoused values, industrial peace. In part the explanation may be that arbitration saves the federal judiciary from what could be the crushing burden of adjudicating claims under more than 100,000 collective bargaining agreements across the country. At any rate, the Court in the *Misco* case (1987) did not even stop short of enforcing an arbitral award reinstating a discharged employee, despite the employer's contention that the award violated public policy by putting back on a dangerous paper-cutting machine a worker who had been fired for smoking marijuana.

Race and Sex Discrimination

The Concept of "Discrimination"

Title VII of the 1964 Civil Rights Act forbids an employer or a union to "discriminate" in employment because of an "individual's race, color, religion, sex, or national origin." The legislative history made clear that Congress was out to eliminate the classic form of discrimination-intentional, malicious, malign disparate treatment excluding minorities and women from desirable positions and equal benefits in the work force. In Griggs v. Duke Power Co. (1971), a unanimous Court spoke through Chief Justice Burger and added a whole new dimension to the concept of discrimination. An employer had excluded a substantially larger percentage of blacks than whites from certain jobs because the blacks lacked high school diplomas and scored lower on standardized tests. The Court held that, regardless of the employer's intent, the use of a job qualification would violate Title VII if it had a disproportionately adverse impact on a protected group and could not be shown to be a business necessity in its relation to performance of the job in question.

Later, in the *Manhart* case (1978), the Court stressed that Title VII focused on "fairness to individuals rather than fairness to classes." The Court went on to hold that female employees could not be required to pay more than male employees to help fund a retirement annuity providing equal benefits for males and females, even though women on the average live longer than men and it thus costs more to provide benefits for them. Many individual women, the Court pointed out, will not live as long as the average man. But this emphasis on the individual as a critical element in defining discrimination, helpful as it was in resolving the *Manhart* issue, would reveal some distinct deficiencies in other contexts, as the Court soon discovered.

Affirmative Action

The most sensitive and difficult problem in employment discrimination is that of affirmative action, or conscious race and gender preferences in hiring, promotions, layoffs, and other job determinations. The theory, of course, is compensation for past discrimination. The rub is that the individual beneficiary is often not an identifiable victim of that past discrimination, and the individual displaced is often innocent of any participation in the discrimination as well. Nonetheless, in the Weber case (1979), a 5-to-2 majority of the Court sustained under Title VII a private, voluntary on-the-job training program that reserved 50 percent of the openings for blacks until the percentage of black craftspersons in a plant approximated the percentage of black workers in the local area. The Court observed that the plan was adopted to eliminate persistent patterns of racially segregated jobs. Accordingly, the plan was in keeping with the very purpose of Title VII, and it would be "ironic" if it were outlawed by "a law triggered by a nation's concern over centuries of racial injustice."

While Justice Brennan emphasized on behalf of the Weber majority that the evident purpose of Title VII was to improve the lot of those formerly excluded from the mainstream of American employment, he said nothing about the abundance of legislative history indicating that the means chosen by Congress to achieve this objective was "color blindness." Similarly, there was no reference to *Manhart's* insistence that Title VII protects individual rights rather than group rights. White complainant Brian Weber, who had greater seniority than some of the black employees selected for the training program, could fairly claim that he as an individual was being deprived of a place because of his race. The Court was not above manipulating concepts of group versus individual justice to reach desired results. Finally, and most significantly, there was no attempt by the Weber majority to come to grips with the crucial statutory term, "discriminate."

This is not to say that Weber was wrongly decided. It is to suggest that the majority could not agree upon a coherent, convincing rationale of the sort that united the Warren Court in Brown v. Board (1954), the landmark school desegregation decision. I sympathize with Justice Brennan's tactical problems in fashioning his fragile majority in Weber. I still believe, however, that more could have been done to bolster the intellectual appeal of the opinion. For example, the meaning of "discriminate" has evolved, so that it now connotes, not simple line drawing, but malign line drawing to someone's detriment or disadvantage. More important as a practical matter, the 15 years of exerience following the passage of Title VII in 1964 had demonstrated the naiveté of some of its assumptions. "Color blindness" was not going to produce equality or even equal opportunity for groups long subject to deprivation and degradation. The socioeconomic reality of the position of minorities in our society, and in certain key respects of women as well, cried out for more positive steps. Finally, the *Weber* majority did not even mention that the U.S. Senate, in adopting the comprehensive revision of Title VII contained in the Equal Employment Opportunity Act of 1972, twice rejected by 2-1 margins proposed amendments that would have expressly forbidden affirmative action by both government and private parties.

The departure of Justices Brennan and Marshall leaves the future of affirmative action in considerable doubt. The Supreme Court's last major endorsement of preferential treatment, this time on the basis of sex, was Johnson v. Santa Clara (1987), decided 6-to-3 under Title VII. Justices Scalia, Rehnquist, and White dissented, with all three calling for the overruling of Weber. In the Croson case (1989), which struck down an extreme form of city-mandated affirmative action as a violation of equal protection under the Constitution. Justice Kennedy joined the majority in applying the "strict scrutiny" test on the grounds that race is a suspect classification even if used for a "benign" purpose. Newly appointed Justice Thomas has been an announced foe of affirmative action in the past. It is therefore possible that five votes are now available to overrule Weber, regardless of how Justice Souter might go. But precedents as significant as Weber are not lightly overturned, and the Court has generally seemed more tolerant of private affirmative action, subject only to Title VII, as distinguished from public plans, subject also to the Constitution.

Conclusion

The Supreme Court's labor philosophy is a crazy quilt. It often downplays cherished worker values, like collective action, and modes of expression, like picketing. At the same time it embraces other union priorities, such as work preservation and dispute settlement through binding arbitration. Similarly, the Court has wavered irresolutely in sorting out the various worthy but competing interests at stake in affirmative action programs. To an extent this ambivalence may simply reflect the pragmatic approach of most American problem solving. There may also be a healthy attentiveness to factual differences in particular situations. In certain areas, however, with affirmative action the paramount example, one can only conclude sadly that there has been a dearth of moral leadership. At its best, as in Brown v. Board, the Supreme Court serves as the conscience of the nation, and we are the less when it shirks that function.

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DISCUSSION

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As an active labor and employment practitioner, I am pleased to hear Professor St. Antoine say, even if facetiously, that a lack of a labor "philosophy" on the Supreme Court may not be all bad. Frankly, I don't really want justices to philosophize, I want them to judge. The Supreme Court after all does not initiate the issues before it but, under Article III of our Constitution, is limited only to deciding the particular "case or controversy" presented to it. To me, saying the Court has a particular philosophy means only that you can predict in advance whose ox is likely to be gored. In other words, that it is tilted one way or the other.

Where I truly differ with St. Antoine is in perspective. For me a case that hurts organized labor or makes an employment case more difficult for an employee to win hardly demonstrates a "profound misconception" of the values of organized labor or working people. Rather, such decisions may demonstrate good common sense in allowing American businesses to operate competitively and to manage their human resources in a complicated and difficult economic environment. In any event, who says the Court must or should espouse the "values" of labor or of business? I come back to a results-oriented approach. While various Supreme Court decisions can be argued, as St. Antoine notes, as falling both on the pro- and antiemployee and labor sides of the ledger, this is a beneficial result that demonstrates what I believe to be the Court's overriding goal—the striving for *balance* between management and labor.

But just as in a pendulum or seesaw the point of balance may change, so too does the Court react. Whenever labor or management gains ascendancy over the other, you can expect to see the Court shift the balance point to reach a rough equality. And when the Court fails to act, Congress does, and this all adds up to an environment in which balance generally is maintained.

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However, I do understand why advocates of employees often maintain the Court is hostile to their aims. In part, I believe that this is because the Supreme Court and federal judges generally are tired, tired, tired of listening to employment disputes. We are just about the only industrialized country with a large amount of court-based employment litigation. Our competitors, for that is how we should look at them, in other nations handle employment matters with boards and tribunals, and without juries, punitive damages, and the inherent costs and inefficiencies of our out-of-control litigation system. The Court knows this and views many, if not all, of the employment cases it sees as a waste of limited docket space. It's really the GOMCH ("Get out of my courthouse!") approach at work. With that thesis in mind, let's turn to some recent decisions.

Arbitration

St. Antoine recognizes the unswerving support the Court has given to arbitration as a means of resolving labor/management differences, going back to the *Steelworkers Trilogy* of 1960. The recent decision in *Gilmer v. Interstate/Johnson Lane Corp.* (1991) expands this support. In *Gilmer* the Court held that a broker who had agreed to arbitrate "all disputes arising out of employment" under NYSE rules could be required to arbitrate rather than to pursue a claim of age discrimination in court. I submit this exemplifies both the Court's long-standing support for arbitration and is as clear a statement of GOMCH as could be found. Given the specific language of the Civil Rights Act of 1991 calling for parties to consider alternative dispute resolution (ADR) and arbitration to resolve discrimination cases, it takes no great leap of faith to see the Court continuing to steer discrimination cases away from the courts and into ADR whenever possible; and I predict this will happen.

Picketing and Private Property

This area provides a good example of the Court's attempts to balance the important competing rights of union organizational activities and private property. In NLRB v. Babcock and Wilcox Co. (1956) and Hudgens v. NLRB (1976), the Court closely analyzed the competing interests at stake, holding in Babcock that an employer could refuse to permit union organizers on company property where the union could reach employees through other means of communication; and in Hudgens that there was no First Amendment right to picket a shopping center, but that NLRA Section 7 rights and private property rights must be accommodated "with as little destruction of one as is consistent with maintenance of the other." The result is that a party will prevail in this area if, on balance, its interests clearly predominate over the other party's interests.

The Court is now considering, in *Lechmere v. NLRB* a further refinement of that balancing test. Specifically, it will consider whether union representatives seeking to organize workers of a retail store will be permitted in the store's parking lot to distribute literature. A primary focus will be on whether "effective alternative means" of communicating with the Lechmere employees exist. I will take the risk of prediction here even though a decision may issue shortly. I think the Court will *permit* access because the alternative means, such as advertising in local papers, are ineffective. I know this is not the outcome hoped for by my brethren of the management bar, but it is the right decision to maintain the balance between the property rights of Lechmere, which is open to the public, and of the employees who are asserting a core right, organizing, protected by the NLRA. We will see whether the outcome will support my thesis of balance.

Affirmative Action

This is an area in which I believe the Court's decisions have been remarkably consistent and far more supportive of affirmative action than publicity suggests. One needs only to go back to *Regents v. Bakke* (1978) and Justice Powell's opinion joined by shifting majorities to discern the outlines of the reasoning followed in every subsequent affirmative action decision. The *Bakke* decision was a great victory for supporters of the concept. Although it struck down the admissions plan at issue, it held that race-conscious decision making could pass constitutional muster *provided* there was sufficient evidence of past discrimination to permit remedial action and that such action was narrowly tailored to fit its predicate. The *Bakke* admissions plan could not pass muster primarily because U. Cal. at Davis was a new school without a history of discrimination.

From a practitioner's standpoint, all you really need to know about affirmative action is set out in *Steelworkers v. Weber* (1979). In approving a 50/50 ratio between whites and blacks admitted to a training program in a southern plant, the Court set out its criteria for lawful affirmative action: (a) a traditional and conspicuous racial imbalance in the positions at issue; (b) a voluntary (despite OFCCP requirements) and temporary plan—it would end when the imbalance ended; (c) no absolute bar of whites from advancement—50% of the slots went to whites; and (d) no layoffs or discharges of white workers—therefore, no undue trammelling of their interests.

Significantly, the case also struck an important balance by holding that the employer need not admit discrimination in order to take affirmative action. Needless to say, a requirement of an admission to establish a predicate for affirmative action would have doomed most existing and subsequent programs. By allowing a lesser standard, such as "traditional and conspicuous imbalance," to serve as the predicate, the Court preserved the ability of employers to take affirmative action without excess fear either of discrimination or "reverse" discrimination lawsuits. Another example of the GOMCH principle. I must confess here that I agree with St. Antoine about the questionable intellectual underpinnings of *Weber*. I have always thought Justice Rehnquist's dissent the only true legal analysis in the case. However, as a *practical* decision to maintain balance, *Weber* is faultless.

All subsequent affirmative action decisions can be analyzed in light of Weber and the results confidently predicted. For example, Wugant v. Jackson Board of Education (1986), a case striking down a plan to retain less senior black teachers over more senior white teachers in the event of layoffs. The Court found, in an opinion written by Justice Powell, that although a prior finding of discrimination was not necessary, "generalized societal discrimination" was an insufficient predicate for the plan. The absence of any strong evidentiary basis for remedial action thus doomed the plan. So, too, in Firefighters v. Stotts (1984), where a consent decree which never mentioned lavoffs could not provide a predicate for a court under its inherent powers to order racial preference in layoffs. The decision went on to note that there was no showing that any of the blacks protected from layoff had been a "victim" of discrimination. Stotts turned out to be much ado about nothing, being little more than a case of contract or consent decree interpretation, the "victim" language notwithstanding. A critical feature of both decisions was that whites actually lost jobs under the plans at issue. Harking back to the language of Weber, this could have been foreseen as an undue trammelling of the rights of white employees.

In contrast, numerous other decisions, Local 28 v. EEOC (1986), Firefighters Local 93 v. City of Cleveland (1986), U.S. v. Paradise (1987), uphold affirmative action. In each case there was a strong predicate for remedial action, that action was tailored to the predicate, and no whites lost jobs, just hiring, promotional or training opportunities. These decisions culminated with Johnson v. Santa Clara County (1987), extending the Weber rationale to gender-conscious affirmative action, again in a promotional context.

Yes, it is true that various members of the Court have questioned the validity of affirmative action. Yet, as St. Antoine notes, precedents like Weber are not lightly overruled, and I view these judicial comments as so much NATO (no action, talk only). Some may argue that Richmond v. J.A. Croson Co. (1989), constitutes a decision against affirmative action, but I disagree. As St. Antoine notes, the set-aside ordinance at issue was an "extreme" form of affirmative action-it provided a preference in awarding Richmond, Virginia, contracts to Aleuts! The proponents of the statute hoped that the Court would find that the Richmond City Council would be held to have some form of "special competence" in affirmative action that would remove the ordinance from a "strict scrutiny" analysis. The Court had previously held that the U.S. Congress did have such special competence in Fullilove v. Klutznick, because of its constitutional role as a coequal branch of government. States and municipalities play no such role and are not entitled to similar deference.

The Croson decision was written by Justice O'Connor, who had been critical of affirmative action in, among other cases, *Paradise* and *Johnson*. Yet she went out of her way to place the decision firmly within the analytical framework developed by Justice Powell in *Bakke* and *Fullilove*. She also strove mightily to guide local governments in how to draft lawful set-aside programs in the future. Many localities, including my own Chicago, have utilized that guidance to establish, through detailed hearings, a sufficient predicate for set-aside programs and narrowly tailored remedial actions.

In short, the Court's affirmative action decisions are a fine example of balance, balance of the competing interests of minorities and women locked out from equal employment opportunity, of majoritarian employees who have done no wrong save receive the general benefits of our society, and of companies and unions who may want to do right, but cannot and need not admit they have done wrong in order to take affirmative action. When one considers comments from each of these groups, none is satisfied. African Americans resent the lack of protection against layoff in seniority-based systems which have traditionally operated to their disadvantage. Whites and men resent what they view as "preferential treatment" given to women and minorities for hiring and promotions. And businesses and unions resent governmental agencies looking over their shoulders to see if they are meeting affirmative action goals. If the definition of a compromise as being a solution with which everyone is dissatisfied is correct, the Court's decisions on affirmative action are a perfect, balanced compromise.

NLRB and EEOC

As a final point, examination of the Supreme Court's treatment of the NLBB and EEOC may be useful. While by no means unsuccessful. the EEOC has, on a number of occasions, been treated with a marked lack of deference by the Court. Look back to General Electric v. Gilbert (1976), and to EEOC v. Arabian American Oil (1991) just last vear for examples of rejection of EEOC opinions interpreting Title VII. In contrast, while not always successful, the Court does show great deference to the NLRB. It deferred to the Board's refusal to apply a presumption on the union sentiments of strike replacements in NLRB v. Curtin Matheson (1989) and upheld hospital bargaining unit rules in American Hospital Association v. NLRB (1991). I was the lead counsel in the successful attempt by AHA to obtain a permanent injunction against the rules, so perhaps I can be forgiven for disagreeing with the ultimate result here. However, I think the deference shown to NLRB is a good, final example of GOMCH. Quite simply, I think the Court defers to the NLRB because, unlike the EEOC, it is an *adjudicatory* agency. By acting both as a trier of fact and as a policy-making (and now a rule-making) agency, the Board keeps many employment cases out of the courts. The EEOC can only resort to the courts to carry out its policies, and the Supreme Court may be trying to act as a brake on its activities which, coincidentally, may also reduce litigation.

Conclusion

Of course, I have had to select a relatively few cases to demonstrate my themes of balance and GOMCH. I can certainly agree with St. Antoine that the Court is at its best when it serves as the conscience of the nation, but what if your conscience and mine have different values? Thus, I question whether, in most cases, the Court needs or should serve as a conscience-stricken, super human resources manager. I think we are well served by the Court's practical, resultsoriented approach and to its attention to different factual settings in the employment area.

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XII. STRATEGIC EVALUATIONS OF UNION POLITICAL ACTIVITIES

Labor's Legislative Initiatives to Restrict Permanently Replacing Strikers

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The National Labor Relations Act (NLRA) guarantees employees the right to engage in strike action in support of their collective bargaining objectives. Specifically, Section 7 grants employees the right to participate in "concerted activities" which encompasses the right to strike in support of bargaining demands during the negotiation of a collective bargaining agreement. Section 8(1) makes it an unfair labor practice for employers "to interfere with, restrain, or coerce" employees for exercising their Section 7 rights. And finally, Section 13 provides that "Nothing in this Act, except as specifically provided for herein, shall be construed so as either to interfere with or impede or diminish in anyway the right to strike or to affect limitations or qualifications on that right."

The Supreme Court, however, in a decision upholding the National Labor Relations Board's (NLRB) decision that the Mackay Radio Company committed an unfair labor practice when it discriminated against strike leaders in rehiring employees following a stoppage, has held that Section 13 of the NLRA does not deny an employer,

... the right to protect and continue his business by supplying places left vacant by strikers. And he is not bound

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to discharge those hired to fill the places of strikers, upon the election of the latter to resume their employment, in order to create places for them. NLRB v. Mackay Radio & Telegraph Co., 304 U.S. 333, 345-346 (1938).

The Supreme Court's dictum asserting an employer's right to hire permanent replacements for striking workers during an economic strike, known as the *Mackay* doctrine, has become increasingly controversial in recent years. There are two major reasons for the emergence of this controversy. First, many observers believe that the incidence of the use of permanent replacements for strikers increased dramatically in the 1980s. Second, in many highly visible strikes, the use of permanent replacements was followed by the destruction of the bargaining relationship (Gramm, 1991a). In response, the AFL-CIO resolved,

... to educate the general public and the Congress to the evils of permitting employers to permanently replace striking employees; to seek federal legislation barring the hiring of permanent replacements for striking employees; and, pending such legislation to lend all possible aid and assistance to striking employees whose employer seeks to hire permanent replacements. (As cited in Bureau of National Affairs, 1985.)

Initiatives to reverse the *Mackay* doctrine began during the 100th Congress, when Representative Joseph E. Brennan of Maine introduced a bill (H.R. 4552) that would have made it an unfair labor practice for an employer to hire or threaten to hire permanent replacements for striking workers during the first ten weeks of a strike. Those efforts continued—both the 101st and the 102d Congresses have deliberated over bills designed to overturn the *Mackay* doctrine. The current version of the proposed legislation (hereafter referred to as the Striker Replacement Bill) would amend both the NLRA and the Railway Labor Act (RLA) to prohibit the hiring of permanent replacements for economic strikers throughout a strike.

Most observers seem to concur that the prospects are dim for enacting the Striker Replacement Bill during the 102d Congress. Although the House of Representatives voted to pass the bill, backers concede that it will be more difficult to muster majority support in the Senate. Moreover, in her testimony before hearings on the bill held by the House Subcommittee on Labor-Management Relations, Secretary of Labor Lynn Martin stated unequivocally that the Bush administration opposes passage of such legislation "and if the bill were presented to the President, his senior advisors would recommend a veto" (U.S. Congress, 1991, p. 4). Thus, even if proponents succeed in passing the bill in the Senate, the repeated failure of the 102d Congress to override presidential vetoes suggests that the likelihood of generating enough support to overturn a probable presidential veto is small. Nevertheless, the controversy surrounding the *Mackay* doctrine and legislative efforts to overturn it are unlikely to disappear with the end of this Congress.

What then must labor do to enhance the chances that the Striker Replacement Bill will be passed in the future? Obviously, the election of a president and Congress more sympathetic to labor's views would facilitate the enactment of this and other labor legislative initiatives. Although the right of employers to hire permanent replacements originated in a Supreme Court dictum, the *Mackay* doctrine has been the law for over 50 years. Because they seek to reverse the status quo, proponents of the Striker Replacement Bill will bear a heavy burden of persuasion regardless of who the policymakers are.

This burden of persuasion is complicated by nature of the arguments being made for and against the bill and how they are framed. In general, both opponents and proponents of the bill have relied primarily on two types of argument. I will refer to the first type of argument as "value-based," because it is based on the relative valuation given by the arguer to one construct, ideal, or outcome compared to another. The second type of argument is essentially an empirical prediction regarding the likely effects of passing or failing to pass the proposed legislation. My discussion will focus primarily on arguments made by opponents of the bill because their effective use of each type of argument poses special challenges for those seeking enactment of such legislation.

Value-based Arguments

Opponents of the Striker Replacement Bill have succeeded in representing their arguments in terms of simple but catchy terms that appeal to popularly held values. An example is the "right to work" argument sometimes made by opponents of the Striker Replacement Bill, which asserts that passage of the bill would deny prospective replacement workers the "right" to accept an offer of employment with a struck employer (e.g., Baird, 1988). The value judgment underlying the right to work argument is that the interest of a replacement worker in obtaining a job with the struck employer outweighs the interest of a striking worker to return to his or her job after the strike has ended. Such value judgments, however, are often unstated. And the average individual who is unfamiliar with the pros and cons of the bill will tend to concur with the simple assertion that a policy that interferes in some fashion with people's "right to work" is bad.

In contrast, proponents of the bill tend to make more esoteric arguments and have been less adept at coining slogans with broad general appeal to represent those arguments. For example, proponents of the bill contend that the NLRA's guarantee of the right to strike is perverted if management is allowed to permanently replace striking workers. As Lane Kirkland stated,

The notion that the law should recognize a fundamental difference between an employer's decision to discharge a striker and an employer's decision to "permanently replace" a striker ignores practical reality; in both instances the employee suffers loss of his job because he dared to exercise his statutory right to strike. (U.S. Congress, 1991, pp. 67-68.)

The average individual, including political candidates and office holders, is unlikely to know much about labor law and may not attend to lengthy arguments based on legal or economic logic. When the goal is to persuade such individuals to act in accordance with your point of view, it helps to be able to distill your arguments to simple phrases that tend automatically to invoke a sympathetic reaction.

Using the above examples, someone who is not well informed on the subject is probably going to be swayed more by the unelaborated right to work argument than by the right to strike argument. Although it is my impression that the initiation of the effort to seek change in this particular aspect of our nation's labor laws took those who support retaining the *Mackay* doctrine by surprise, by last summer opponents of the Striker Replacement Bill had achieved considerable success in articulating their point of view to the public. Both in editorials and letters to the editor appearing in local newspapers and in testimony before Congressional committees, opponents of the Striker Replacement Bill have gained a public relations advantage by using slogans and catch words that appeal to widely held values/beliefs to pitch their point of view. Right to work is only one of the slogans used by opponents of the bill to frame their arguments. They also have represented their arguments in terms of business competitiveness and balance of bargaining power. In order to recover their momentum, proponents of the bill must frame their message in a more concise and more widely appealing manner and must find a way to deliver that message more broadly.

"Predictive" Arguments

Both proponents and opponents have made numerous arguments that are predictive in nature supporting their objective. Due to space constraints, my discussion will focus on arguments made by opponents of the bill.

The major predictive arguments made by opponents of the Striker Replacement Bill (Hearings, 1991) include (1) passage of the Striker Replacement Bill will increase the incidence of strikes: (2) passage of the Striker Replacement Bill will increase labor's bargaining power relative to management's, leading to more costly collective bargaining settlements: (3) passage of the Striker Replacement Bill will make it more difficult and, in some cases, impossible for firms to exercise their right to operate during strikes, which in turn will have the following effects: (a) profit losses attributable to strikes will increase. (b) the incidence of businesses that are put out of business as a result of strikes will increase, and (c) jobs will be lost due to shutdowns or loss of business attributable to strikes; (4) the adverse effects hypothesized in (3) will be more prevalent in small firms than in large firms; and (5) the adverse effects hypothesized in (3) will be more prevalent in firms operating in highly competitive product markets than in firms in less competitive markets.

Although these arguments typically are stated as facts, in reality they are predictions or hypotheses. To date, there is little evidence to either support or refute these arguments. Gramm (1991a) has reviewed what little evidence has been generated relating to arguments made by both proponents and opponents of the Striker Replacement Bill. For additional evidence pertaining to effects of the use of permanent replacements, see Gramm (1991b) and Olson (1991).

The availability of concrete evidence contradicting some or all of the above arguments would facilitate labor's legislative efforts to restrict the hiring of permanent replacements. Social scientists can play a role by conducting research designed to test these hypotheses. There is, of course, no guarantee that the results will support a particular point of view. It is impossible to directly test the above hypotheses because we cannot perform an experiment in which bargaining pairs are randomly assigned to two alternative policy environments—one in which the use of permanent replacements is permitted and one in which the use of permanent replacements is banned. However, two types of data are potentially available that could be used to examine these hypotheses.

First. public policy regarding the use of permanent replacements for strikers has varied both across provinces and over time in Canada. Consequently, microlevel data on strikes in Canada and their consequences could potentially be used to examine many of the aforementioned hypotheses. In one such study, Gunderson and Melino (1990) found that strikes were more frequent and longer in Ouebec following its 1977 passage of a law banning the use of permanent replacements. However, because the law was passed following a major change in Quebec's government, it is impossible to infer that the increase in strike activity was attributable to the replacement legislation. Second, microlevel data on strikes in the United States in which employers vary in their use of permanent replacements could also be used. Gramm (1990a) has demonstrated the feasibility of gathering such data through surveys of firms and unions who were party to recent strikes. However, the small size of the sample used in her pilot study limits her ability to perform formal hypothesis tests.

Summary and Conclusions

In summary, although the Striker Replacement Bill is unlikely to be passed by the current Congress due to the difficulty of mustering enough votes to override a likely presidential veto, initiatives to pass the bill are likely to continue. In addition to working for the election of more sympathetic presidential and legislative candidates, proponents of the bill could enhance the chances of passing future initiatives by improving the relative persuasiveness of their arguments. I have suggested two ways of doing this. First, proponents need to frame their key arguments in favor of the bill in a more concise and more broadly appealing manner and to increase efforts to convey that message to the public and to current and prospective policymakers. Second, strong evidence refuting arguments made by opponents of the bill regarding its alleged potential adverse consequences would strengthen the case for enactment.

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Strategic Diversity in Union Political Action: Implications for the 1992 House Elections

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It was a difficult year for the labor movement in the political arena in 1991. Labor was unable to attract enough supporters in either house of Congress for the simple majority required to deny President Bush "fast track" authorization to negotiate a free trade pact with Mexico. Although the House passed a bill banning the hiring of permanent replacement workers during strikes, the margin of victory was insufficient to override an inevitable presidential veto. Support for the legislation also appears to be lukewarm in the Senate, with concern that there may not be the 60 votes required to stop a filibuster when the bill comes to the floor early in 1992. These are the two highest visibility issues of interest to organized labor, but similar obstacles have confronted other priorities, including family leave legislation and health care reform.

The legislative logiam has caused many labor leaders to reevaluate their political strategy. Several options have been promulgated. Some have suggested making fast track and/or permanent replacements litmus test issues and withdrawing labor support from all opponents. Others have made a more general call for ending "blind support" for Democrats. To most this means being more selective in deciding which Democrats to support, although for a few unions increased support for Republicans who have been cooperative on selected narrow issues appears likely. Some labor leaders have gone so far as to suggest that unions find their own candidates, or even consider forming a Labor Party.

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The purpose of this paper is to explore labor's strategic options in the 1992 elections. We will focus on House races because the diversity in political strategies among unions is most apparent there. However, our conclusions will have broader implications for union activity in elections at all levels of government. In evaluating the situation we will consider the impact of redistricting on labor's alternatives. We should note that recent developments have made many union political operatives more optimistic. The upset victory by populist Democrat Harris Wofford in the special Senate election in Pennsyvlania, the eventual compromises on civil rights legislation and extended unemployment benefits, and President Bush's decline in popularity all increase the stakes as the labor movement searches for the appropriate tactical approach to the pending campaigns.

Diverse Political Strategies of Labor PACs

As a framework for analysis we will rely on a taxonomy of labor Political Action Committees (PACs) that we have developed in research on the 1984 and 1986 House elections (Hurd and Sohl, 1992). In that research, we use principal component analysis to uncover underlying diversity in union political contribution patterns, and then employ cluster analysis to group PACs of individual unions with others that display similar patterns.

Table 1 summarizes the results. To facilitate interpretation, we report the patterns for only the 40 unions with the largest PAC donation totals. Unions toward the left side of the table follow an "electoral" approach, supporting candidates generally sympathetic to labor's agenda who are involved in closely contested elections. Unions toward the right side of the table pursue "access," concentrating their efforts on incumbents who either have proven themselves by their voting records to be friends of labor, or hold key positions in the House. Accordingly, the proportion of PAC donations going to incumbents increases from as low as 30 percent for unions on the left hand of the table to above 90 percent for some unions on the right hand of the table.

The marginal list referred to on the table is a list of races selected by the AFL-CIO's House Marginal Committee. The marginal committee meets regularly during each election year and chooses a limited number of races (45 in 1990) that deserve special attention from the labor movement. To be considered for inclusion, a candidate must be endorsed by the Committee on Political Education (COPE) (usually at a special convention held in each state), and be involved in

Marginal List Allegiance	Electoral	- Marginal List Advocacy		Balanced Approach		- Support for Friends	Access	Transportation Access
	AFL-CIO URW	ANA CWA IAM IBEW PAT SMW UFCW USA	BSOIW IUE	AFGE AFSCME AFT APWU ATU NALC NEA PPF SEIU UAW	ACTWU BBF CJA ILGWU LIUNA UMW	BRAC HERE IUOE NTE RLCA	IBT UTU	ALPA BLE ILA MEBA SIU

TABLE 1 Union PAC Contribution Strategies

Notes: Strategic categories based on Hurd and Sohl (1992) and additional unpublished research.

Standard abbreviations as indexed in Gifford (1990).

a close race from which he/she has a reasonable chance of emerging victorious. Most unions listed on Table 1 are represented on the House Marginal Committee.

As used on the table, "Support for Friends" refers to unions that donate a large proportion of their funds to incumbents with high COPE scores, whether or not they are involved in close elections. "Balanced Approach" refers to those unions who attempt to lend support both to marginal list candidates and to friendly incumbents.

The unions in the two right hand columns all have a primary membership base in transportation. For these unions narrow regulatory issues are key legislative concerns. Their PAC contributions reflect this, with almost all of their support going to incumbents, and special attention given to members of selected House committees (especially Public Works and Transportation, and Merchant Marines) regardless of political party or ideology.

Strategic Alternatives for 1992

In an apparent break from past practices, a number of labor leaders have become quite vocal about specific litmus test issues. Some have chosen to focus on fast track authorization, including William Bywater, President of the IUE, and William Holayter, political director of the IAM. Others have suggested that permanent replacements should be a litmus test issue, including Morton Bahr, President of the CWA.

Implications of applying these litmus test issues can be drawn from Table 2. Fast track authorization won by a large margin in the House, with labor succeeding in attracting only 34.1 percent of the vote (on a related vote for fast track extension labor improved its support to 45.3 percent). The results were not much better among House members whose campaigns received donations from labor PACs in 1990. Even among those with 1990 COPE endorsements only a bare majority voted with their union friends. Unions that choose to use fast track as a litmus test will be denying funds to many candidates who have been allies on most issues.

Labor fared much better in the House on the vote to ban permanent replacements for strikers. Although a substantial minority of those who received some labor financial support in 1990 voted "wrong," every House member who was on the 1990 marginal list and almost all of those who benefited from COPE endorsements supported the union position. Using permanent replacements as a litmus test would be less limiting and therefore acceptable to more unions.

	Permanent Replacement					
	Fast Track	of Strikers	Family Leave			
Total House Percent Right	148-274 34.1	247-182 57.6	253-177 58.8			
1990 Labor PAC \$ Percent Right	144-238 37.7	238-140 63.0	242-135 64.2			
1990 COPE Endorsement Percent Right	122-114 51.7	218-20 91.6	203-36 84.9			
1990 Marginal List Percent Right	21-13 61.8	34-0 100.0	30-4 88.2			
Percent of Wrong Voters with COPE > 70%	34.4	1.5	4.1			

TABLE 2

1991 House Votes on Key Labor Issues

Notes: Votes as reported in AFL-CIO b and c (1991) and Kraus (1991).

Information on 1990 marginal list provided by David (1991).

Information on 1990 COPE endorsements provided by Ingrayo (1991).

Data on labor PAC contributions reported in Federal Election Commission (1991).

Key political operatives in the labor movement are skeptical about using *any* litmus test issue. Rick Diegel of the IBEW, who chairs the Senate Marginal Committee, calls the idea "ridiculous," adding that "narrow criteria would be the kiss of death . . . [because] we survive on coalitions" (Diegel, 1991). Marta David of COPE, who chairs the House Marginal Committee, concurs, although she admits that "specific votes will be more important this cycle than in the past," and notes that some candidates are likely to be denied spots on the marginal list as a result (David, 1991). Joe Standa of the NEA states simply, "We are not a single issue union" (Standa, 1991) and most labor political officials would probably echo this position.

The impact of redistricting raises further questions about the advisability of applying a litmus test in 1992. As Table 3 reveals, states that are gaining House seats are less friendly to unions than those that are losing seats. The differences are greater on fast track and permanent replacements than on the broader agenda. A focus on either of these issues would severely limit the influence of unions in the states whose House delegations are growing.

TABLE	3
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	States Gaining Seats Percent Right	States Losing Seats Percent Right	Net Change in Right Votes
COPE Scores			
Democrat	76.2	86.9	
Republican	12.2	26.9	
Total	48.7	63.4	-2.8
Adjusted	40.1	71.4	-5.9
Fast Track			
Democrat	33.9	62.1	
Republican	9.7	14.2	
Total	23.4	42.3	-3.6
Adjusted	17.7	50.0	-6.1
Permanent Replac	ements		
Democrat	91.9	97.4	
Republican	0.0	18.6	
Total	45.2	64.7	-3.7
Adjusted	33.4	76.6	-8.2

Impact of House	Redistricting	on Support f	or Labor	Issues
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Notes: Right votes and COPE scores as reported by the AFL-CIO (1991 a,b,c).

All data are weighted by the number of seats gained or lost by each state.

Adjusted data are based on gains or losses by party in each state as forecast by Gersh (1991) and Cohen (1991).

Although the idea of a specific litmus test issue is unlikely to prove fruitful, the heightened awareness of unions to their legislative difficulties may prompt them to be more selective in their campaign contributions in 1992. By denying support to those incumbents who have not voted with labor on some narrow range of key issues, it may be possible to utilize limited funds more effectively. The third key vote included in Table 2 (family leave) was selected to represent broader social issues which receive legislative priority from labor. When taken together, the three issues should offer a concise and reasonable measure of a House member's 1991 labor voting record.

In 1990 labor PACs donated \$854,965 to winning candidates who subsequently voted wrong all three issues. An additional \$385,640 was donated to candidates who voted right on family leave, but wrong on both fast track and permanent replacements (Federal Election Commission, 1991). Included in this group were 14 House members who were endorsed by COPE in 1990. Segundo Mercado-Lorens, Director of Government Affairs for the UFCW, although resistant to the idea of a specific litmus test issue, concedes that it would be difficult to defend contributions to incumbents who voted wrong on both fast track and replacements, and inconceivable for those voting wrong on all three issues (Mercado-Lorenz, 1991). In this spirit, withholding COPE endorsements and PAC donations from unreliable incumbents would be a modest signal that standards are tightening.

Not all unions will be responsive of course. As noted above, unions in the transportation sector pursue a rather narrow access strategy designed to secure legitimate regulatory objectives to benefit their members. As reflected in Table 4, this approach often results in significant contributions to conservatives. As Jerry Baker of ALPA explained it, "We have narrow issues, and we have to demonstrate to our members that PAC contributions are useful in getting our job done . . . We need Republicans to pass legislation" (Baker, 1991). Of the 19 conservative House members for whom detailed donations were calculated in the middle column of Table 3 (based on receipt of at least \$10,000 from labor PACs in 1990), 12 serve on a key transportation committee and six others held key positions on other powerful committees (Ways and Means, Appropriations, or Rules).

(1) Percent o Funds Dor Conserva	nated to	Donation Members	2) s to House With Wrong Key Issues	(3) Donations dates Sup by Nation To Work C	to Candi- ported al Right
MEBA	39.5	MEBA	\$78,200	MEBA	\$66,500
ILA	30.0	IBT	54,500	ALPA	19,750
SIU	24.9	ALPA	52,300	IBT	13,250
RLCA	22.0	SIU	34,500	SIU	12,850
ALPA	20.1	NALC	31,400	ILA	9,050
BLE	19.5	UTU	15,900	NALC	8,500
UTU	16.7	ILA	14,050	LIUNA	4,350
IBT	13.7	CJA	12,817	UTU	4,050
IUOE	12.1	IUOE	9,500	NEA	3,977
UMW	11.1	NEA	9,150	AFSCME	3,500

TABLE	4

Labor PAC Support for Conservatives

Notes: Data from 1986 Federal Election Commission Tapes for 1986 (column 1) and 1988 (columns 2 and 3).

Column (2) refers to House members voting wrong on all three votes designated in Table 2.

Standard union abbreviations as indexed in Gifford (1990).

Although transportation unions may have a reasonable rationale for supporting conservatives, there should be room to persuade them to increase their contributions to open races and challengers without abandoning their own bipartisan allies in Congress. Furthermore, they are not the only unions that donate to conservatives as Table 3 reveals. In fact in 1988 (the last year for which detailed data by PAC are available), 29 different unions donated money to campaigns that were also financially supported by the National Right to Work Committee. Increased diligence could redirect financial support from these opponents of labor's broad agenda to more deserving candidates.

A strategic option which has been promoted by some friends of labor is to break from the past and pursue a more progressive agenda. Rich Trumka, President of the UMW, and Edward Carlough, President of the SMW, endorse this view. Tony Mazzocchi of OCAW has gone one step further, calling for a labor party and creating Labor Party Advocates to promote the idea. The wishes of labor progressives notwithstanding, a dramatic shift in the union movement's political agenda is unlikely. In our research using 1986 FEC data, we were unable to detect any unions that pursue a political strategy that can be distinguished from other unions as notably more left wing. It is unlikely that 1992 will prove to be any different on this score.

Perhaps the most positive way to channel discontent with incumbents among unions would be to promote increased adherence to the marginal list. As reflected in Table 2, members of Congress who benefited from being included on the 1990 marginal list have excellent labor voting records. A review of total 1990 labor PAC contributions to specific candidates helps explain why. Of the 29 current House members who received \$150,000 or more in labor PAC donations in 1990, 22 were on the marginal list, including the eight with the highest totals and 15 of the top 16. Furthermore, marginal list candidates were successful in 34 of 45 races. This included a win record of 11-5 in open seats, with an impressive 5-5 record where the former incumbent was a Republican. Additionally, in the eight races where a Democratic challenger of a Republican incumbent was included on the marginal list, the challenger won four.

Because of redistricting, Marta David of COPE expects a substantial increase in the number of races which legitimately could be included on the marginal list. If unions that in the past have placed their financial support indiscriminately with incumbents could be persuaded to redirect funds to marginal list candidates, the list could be expanded without diluting financial benefits and election success. In fact, in the 1992 House elections, the most promising strategic alternative for unions is an expanded marginal list accompanied by increased commitment to marginal list candidates.

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Labor's Legislative Agenda in the 1990s

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In the nineties organized labor faces many challenges in the U.S. Its traditional manufacturing bases of membership continue to decline because of the undaunting pressures of competitiveness. The public sector, a recent source of union strength, has encountered budgetary deficits, which necessitate layoffs and make expansion in membership more difficult. At the same time, union penetration of the service sector remains difficult.

A new politics seems to be emerging in response to the economic forces of competitiveness and debt. It coexists with the old politics, which focuses on time-honored, countercyclical fiscal and monetary policy responses to recessions. While not yet in clear form, the new politics represents a laundry list of public policy solutions to restore economic competitiveness. Organized labor, as well as other major institutions, therefore operates in a political environment that lacks public policy consensus.

Many argue that major political or economic events will or must precede organized labor's revival. If this is at least partially true, it is useful to look at labor's political support within Congress. Labor depends on this institution to secure favorable public policies. This paper examines organized labor's political support on two critical votes taken in the U.S. Senate during the first session of the 102d Congress. These votes concern "fast-track" legislation for free trade negotiations and the override of President Bush's veto of legislation to extend benefits to the unemployed.

Fast-Track and Unemployment Benefits Legislation

Fast-Track Legislation

The Bush administration seeks to reduce barriers to trade on a global scale, thereby arguably fostering economic efficiency and

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growth. (Much of the descriptive information on the legislative issues was obtained from the Democratic Study Group, U.S. House of Representatives.) In the Western Hemisphere the administration seeks a North American Free Trade Agreement stretching "from the Yukon to Yucatan." The immediate objective is to extend a free trading zone to Mexico like the one recently negotiated with Canada.

To facilitate this process President Bush supports a fast-track legislative device. A trade agreement normally requires congressional approval through the standard legislative process, subject to amendments and partisan attack. Fast-track obviates this by requiring a strictly up-or-down vote in the House and Senate within 60 days of the submission of a trade agreement.

In March 1991 this fast-track procedure expired and President Bush requested a two-year extension. The extension covered pending negotiations in regard to the General Agreement on Tariffs and Trade (GATT) and the U.S.-Mexico component of the North American Free Trade Agreement (NAFTA). Both the U.S. House of Representatives and the Senate considered resolutions to disapprove of the fast-track extension. On May 23, 1991, the House rejected a resolution of disapproval by a 192-231 vote. On May 24, 1991, the Senate similarly rejected the disapproval resolution by a 36-50 vote.

Unemployment Benefits

The U.S. economy entered a prolonged recession in summer 1990. Historically, unemployment benefits have served a countercyclical purpose, cushioning income losses. In the present recession a record number of unemployed have not received benefits because of either tightened rules of eligibility or the exhaustion of benefits due to prolonged job loss. During the first seven months of 1991, 1.6 million unemployed workers' benefits expired; 350,000 jobless Americans' benefits expired in July alone.

To ameliorate this situation, Congress passed legislation to extend unemployment benefits for the long-term unemployed in August 1991. Benefits would have been triggered automatically upon the declaration of an economic emergency by President Bush. The President refused to declare such an emergency, contending that the extended benefits legislation was a budget buster.

Congress responded by enacting another extended unemployment benefits bill that provided up to 20 weeks of additional benefits and eliminated the need for a presidential declaration. President Bush vetoed this legislation. The U.S. Senate took up the override on October 16, but failed (65-35) to produce the two-thirds required majority.

These two legislative issues deserve special attention for several reasons. First, they were a salient part of labor's agenda in the first session of the 102d Congress. Second, they captured elements of the old and new politics. The unemployment legislation involved a traditional countercyclical program considered in the midst of chronic budget deficits that make antirecessionary packages less appealing. The fast-track legislation may be part of the new politics of economic competitiveness, which emphasizes the elimination of trade barriers on a global scale. In addition, concerns about the economic and political stability of Mexico entered the debate, with proponents of fast-track arguing that it was in the long-term interests of the U.S. and Mexico to promote free trade. Finally, the two issues pitted interesting combinations of groups against each other. Opponents of fast-track included various labor groups (e.g., AFL-CIO, USWA, UAW) and environmental groups concerned about the absence of EPA-type laws in Mexico. Proponents included business organizations such as the Chamber of Commerce and the National Association of Manufacturers, plus the National Governors' Association, Consumers for World Trade, and the Mexican American Legal Defense Fund. Business and labor were similarly divided on unemployment benefits, but the opponents of extension also argued on behalf of the already overburdened taxpavers as a class.

Senate Votes

Table 1 reports a breakdown of the two votes along political party and ideological lines (the latter measured in terms of the senators' ratings by the liberal-oriented Americans for Democratic Action). The data show some interesting differences across votes. In terms of strict partisanship, party differences were clearly less apparent in the fasttrack vote. Thirty-one Democrats voted to disapprove the fast-track procedure, but 24 supported the procedure. Republicans displayed more discipline. Interestingly, the so-called liberal Democrats (i.e., Democrats with highly favorable ADA ratings) split relatively evenly (19-15) on the resolution of disapproval.

Party differences emerged more clearly in the veto override. All but two Democrats voted to override, including each of the ADA liberals. Most Republicans voted to sustain the veto, but the three liberals voted to override.

TABLE 1

		Fast-Track		Override	
	ADA Range	Yea	Nay	Yea	Nay
Democratic	0-33	3	2	4	1
	34-66	7	7	13	1
	67-100	19	15	37	0
Republican	0-33	2	27	2	29
	34-66	2	4	3	3
	67-100	1	2	3	0

Senate Vote on "Fast-Track" and Override of Unemployment Veto^a

Notes:

^a On both pieces of legislation, a "yea" vote is pro-labor. The table excludes senators for whom an ADA rating is unavailable. Including those senators, the vote to disapprove fast track was 36-59 (31 Democrats Yea; 24 Democrats Nay).

Table 2 breaks down the number of pro-labor votes cast by senators in terms of party and ideology. The extremes become apparent. Democrats were much more likely to be consistently prolabor; Republicans antilabor. Conservative Republicans were the most consistently antilabor; liberal Democrats the most consistently prolabor. But only 29 Democrats voted consistently pro-labor; the addition of three similarly pro-labor Republicans raised the rockbottom level of support to 32 U.S. senators.

Logit Analysis

The basic hypothesis is that there is a common set of variables indicating senators who are consistently pro-labor. This pattern

		Numb	er of "Pro-labor"	Votes
	ADA Range	0	1	2
Republican	0-33	28	4	0
	34-66 67-100	3 0	$\frac{1}{2}$	2
	0-33	1	1	3
Democratic	34-66 67-100	1	6 18	7 19

TABLE 2 Composite Senate Vote on "Fast-Track"

emerges in Table 3, column 3. Party (Democratic) and ADA ratings (more liberal) are both significant predictors of voting consistently pro-labor (versus voting consistently antilabor). Columns 1 and 2 of Table 3 also show some evidence of unique vote-by-vote effects; for the unemployment veto override there is a weak effect due to state unionization (p < .10) and for the fast-track resolution there is a moderate regional effect (p < .05). For none of the votes is PAC percentage significant.

and Consistent Pro-labor							
	Depend	Dependent Variable [Coefficient (SE)]					
Predictors	Fast- Track	Veto Override	Consistent Pro-labor				
Democratic							
Party	2.2277(.8783)°°	3.4553(1.2954)***	4.1912(1.8321) **				
ADA	.0011(.0133)	.0948(.0296)***	.1221(.0548)**				
State							
Unionization	.0202(.371)	.1413(.0848) •	.1555(.1408)				
Region	1.4944(.7742) •	0997(1.4939)	0922(2.1645)				
PAC%	1.1525(.7696)	3277(3.1681)	2.2710(4.4851)				
Constant	-1.8609(1.2367)	-3.5949(2.552)	-6.3096(4.1737)				

TABLE 3
Analysis of Senate Votes on "Fast-Track," Override of Unemployment Extension Vote,

° p < .10

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•• p < .05
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••• p < .01
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^a This is admittedly a preliminary, "first-pass" predictive model. The predictors are (1) Democratic-party affiliation (1 = Democrat; 0 = Republican); (2) ADA rating, the proportion of liberal votes cast among selected issues in the previous Congress; (3) a state's rate of unionization; (4) a region variable equal to 1 if a senator resides in a state adjacent to Mexico or a state adjacent to such a state; and (5) the ratio between PAC receipts and campaign expenditures in a senator's most recent elections. The dependent measures are dichotomous variables which equal 1 if the Senator voted pro-labor.

Conclusion and Implication

This study is limited by its focus on only two issues in the U.S. Senate. Based on these two key votes, however, the principal conclusion of this study is that labor's political support is limited even within a Democratic-controlled legislative body. On some issues, liberal Democrats may defect. This implies that labor needs to broaden its bases of appeal. A public policy economic agenda needs to be formed that will attract support from other segments of the populace.

DISCUSSION

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Hurd and Sohl address an important question in this paper. While unions have large Political Action Committees (PACs), they remain unable to achieve the broad legislative and administrative agenda they seek. Unions' inability to achieve labor law reform during the Carter administration is emblematic of that failure. Despite success on plant closing legislation, this frustration has continued unabated under the Reagan and Bush administrations. Administrative reverses are even more significant. For example, the National Labor Relations Board came under the control of management consultants with an avowed union-avoidance track record, radically changing the direction of NLRB policy.

By implication, Hurd and Sohl pose an important question: Why don't unions get their money's worth? Are they too easy on incumbents? Do unions contribute to candidates who later vote against worker and union interests? Are unions expecting too little of the politicians they support? Although this is not a criticism of Hurd and Sohl, the more important question may be: Is there something wrong with a political system in which one must either buy influence or have none? Perhaps I am naive, but I am not convinced that a bidding war for political influence serves the public good.

Such caveats aside, unions need to support someone if they are to participate in the process. To be effective they cannot just opt out of an election. Assuming Republicans are less likely to support unions, unions' ability to threaten Democrats who vote against them is limited. The threat to support an incumbent's Republican opponent will be an empty threat if, as expected, the Republican challenger is more hostile to unions than is the Democratic incumbent.

The solution is suggested in Hurd and Sohl's paper, but needs emphasis. Unions must engage the political process at all stages and at

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all levels. Whether or not unions support incumbents, they must get involved in the candidate development and selection process. This means organized labor must get involved in the primaries. To make their threat real, unions must have someone else to support before election day. Democratic politicans must not think that they can count on labor's support merely because they are better alternatives than the Republicans. However, to achieve this, labor does not need to find narrow labor candidates or establish a labor party. Labor does need to see its political involvement as a total process, one which requires grass roots effort.

My second comment is more technical. In Table 1, Hurd and Sohl define a continuum between "electoral" and "access" objectives. Principle components and cluster analysis may tell us that groupings exist, but these methods do not tell us what they mean. I would suggest different labels for these groupings: "broad social interests" and "narrow parochial interests." In both dimensions, unions are providing electoral support for candidates. However, support turns on different issues in each cluster. Contributions on the left side of the chart cluster support for broad issues that affect all workers. For example, universal health care affects a broad range of workers at all strata. It also affects all employers because the private health care system in the United States, virtually alone in the industrialized world, adds a large overhead cost that contributes to a lack of competitiveness in the world market. Labor law reform is also a broad social issue, as it affects all workers eligible to join unions.

Union PACs clustered on the right side of the scale support narrow issues that affect only some workers: they are industry issues. While support for industry issues may equally benefit labor and management, it benefits only those in the affected industry. So while "labor" is not a special interest, "airline pilots" are a special interest. Since a legislator's votes for a special industry interest and against permanent replacement legislation are not inconsistent, it is not surprising that labor ends up supporting antilabor candidates. Perhaps the best example of this phenomenon would be Teamster support of Ronald Reagan, whose administration filed the RICO lawsuit that put the union under court supervision.

Finally, surveys repeatedly have shown that people feel that labor is most effective in its support for broad issues that affect a wide range of people. Labor gains popular support for its advocacy of broad, social interest legislation. Labor's preferred strategy would follow. First, support broad issues with wide appeal, and use PAC money to support politicians who support that agenda. Second, labor should hold accountable politicians it supports. If politicians vote against workers' interests, labor must develop or support alternative candidates.

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XIII. INTERNAL LABOR MARKETS AND WORK ARRANGEMENTS: BEYOND THE INDUSTRIAL MODEL

Cores, Peripheries, and More and Less: An Examination of Mixes of Labor Relationships in Firms

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An organization can have a mix or portfolio of human resources. So far the dominant and almost singular expression of this point has been to suggest that organizations are using a core-periphery strategy. A core, composed of key and highly attached labor, is mixed with a periphery, composed of less critical human resources who are only marginally integrated into the organization.

Certain assumptions underlie this portfolio characterization, many of them stemming from dual labor market theory (Cain, 1976). One is that a core involves rigidities or fixed labor costs. This necessitates a periphery that provides flexibility or variable costs. Second, the core and the periphery are assumed to have very distinct boundaries inside the organization, with little movement across these lines. Major barriers exist for "moving up" from the periphery to the core; cores only infrequently "drop down" into the periphery. These assumptions lead to the view that the *raison d'etre* for the periphery is to act as a buffer, absorbing the environmental uncertainty or shocks that would otherwise fall on the core. Given this line of reasoning, it is not hard to see the unstated yet implicit corollary that cores can only exist when there is a periphery (and perhaps vice versa).

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The above core-periphery strategy offers one image of how organizations mix their human resources, yet there are many other mixes. If we are to understand how firms take a portfolio approach to human resources, we need to identify the range of mixes that exist or are possible. We therefore discuss a more general framework (Sherer, 1992) that suggests three distinct relationships an organization can have with labor and how these relationships can be mixed. We then empirically assess different portfolios.

Human Resource Portfolios: Core, Periphery, and More and Less

Several authors have addressed human resource portfolios, largely in the context of the core-periphery strategy (see, Abraham, 1990; Belous, 1989; Christiansen, 1991; Osterman, 1987, 1988; and Pfeffer and Baron, 1988). While there is not altogether agreement on what a core is (see Piore, 1991), there are recurring themes. Core human resources are seen as having a say in managerial control, sharing in risk, being integral and dedicated to the firm, and possessing firm- or assetspecific skills that are embodied in teams. Osterman (1987, 1988), for example, suggests that cores are in a salaried internal labor market where jobs are broad, deployment is relatively loose, compensation is personalistic or contingent, and employment continuity is assured.

The periphery has been described with something of a consensus. Abraham (1990) suggests that peripheries involve external marketmediated arrangements, such as part-time and temporary work. Belous (1989) and Christiansen (1991) focus on the periphery as a contingent work force, composed of part-timers, temporaries, and others with only limited firm attachments. Pfeffer and Baron (1988) suggest that firms create peripheries by externalizing several aspects of work: the duration of work through part-time work or limited term contracts, the place of work through telecommuting, and administrative control through the use of temps, for example. Osterman (1987) suggests that peripheries are in secondary labor markets. Peripheral labor is treated as if it is readily fungible to labor in the external market and there is little concern over losing such labor. Mangum, Mayall, and Nelson (1985) agree with the prior descriptions of the periphery as involving high mobility workers, but they find evidence that such peripheries include professionals/technicals and other occupations, jobs usually seen as being in the primary labor market.

These views imply that the core is deeply inside the firm and those in the periphery are virtual outsiders. We can more generally discuss mixes by looking at the degree to which labor is inside or outside of firms (Sherer, 1991, 1992). By examining the variation in the "insideness" of labor relationships, we can generate and empirically test for portfolios of human resources.

The employment relationship, the image most commonly held of how a firm and labor relate, usually involves some job security, some training, some monitoring of the work process, and some voice. An hourly wage rate or salary is typically the means by which an employee is paid. Employees work on a fixed schedule, full-time, fullyear, and in a central work facility. Labor is "inside" the firm to some degree in employment relationships.

Organizations and labor also have contracting relationships. The firm neither monitors nor trains labor. The main emphasis is on results and specified output; labor receives its income from results rather than from a guaranteed salary or hourly wage from the firm. Labor is "outside" of the firm in contracting relationships.

Organizations and labor also have partnership relationships. Labor owns the firm or at least a part of it and it thus may be difficult to differentiate labor from who controls the firm (Fama and Jensen, 1983). Moreover, the productivity of labor is often indivisible, embodied in teams (Williamson, 1985). Partners have ownership and voice in the organization. Labor is the residual claimant and thus takes shares or draws on profits (Fama and Jensen, 1983). Labor is deeply "inside" the firm in partnership relationships.

The above characterizations are ideal types and within each of these three relationships is a variety of ways of dealing with labor. Labor may only have partial ownership rights—there may only be some ownership, profit sharing, control, and the like. Employment relationships can be part-time or modified in other ways. Contracting relationships can involve parties with long-term attachments in which the contracted party has insider knowledge about the organization.

The question then is: How is the core-periphery strategy characterized in terms of these three relationships? One view would be that the core involves a partnership relationship and the periphery involves a contracting relationship. A second view would see the core as a partnership relationship too but would suggest that the periphery involves modified employment relationships. Since the core-periphery strategy can be thought of as both of the above views though, we suggest that the term does not sufficiently describe what firms can do with these labor relationships. There is a real difference between a core-periphery strategy that involves contract workers and a core-periphery strategy that involves modified employment relationships, however marginalized these employees might be. In labor law, employment relationships and contracting relationships have very different meanings, coverage, and protections (see, U.S. Department of Labor, Wage and Hour Division, 1985).

In sum, the core-periphery strategy has been a vivid way of demonstrating the way in which firms mix human resources. However, the term "core-periphery" is not inclusive of many mixes of labor relationships and it masks the range of human resource portfolios. We empirically demonstrate a variety of mixes.

Analyses

We made use of a fairly large data set on firms (N = 853) that was based on a survey conducted by Towers Perrin, a major human resource consulting firm. The objective of this survey was to assess changes in the demographics of human resources and the status of trends in human resource practices. We made use of 18 survey questions that assessed the status in firms of core, modified employment, and contracting practices.

We first analyzed the 18 survey questions with principal components analysis. (The results of the factor analysis are available from the authors.) As we expected, the eigenvalue pattern indicated three factors, reflecting the three sets of practices. We then did a varimax rotation of the factors in order to improve their interpretability. We found a strong approximation to a simple structure: items load primarily on their primary factor and that cross loadings are all below .20. Thus, the factors provide us with meaningful dimensions.

The results of the factor analysis are important because they tell us that the survey questions load together to form dimensions that have meaning beyond the individual items. Thus, we can assess the items in a factor as interrelated practices. The first factor captures core practices. The survey questions reflect the use of contingent compensation, participation or voice in the firm, and team structures, the more general theme being that of "empowering" the work force.

The second factor refers to modified employment practices. The practices that load highly on this factor include part-time work, flexible hours, and the externalization of work through having it done at home or satellite facility. These practices together reflect the growing number of ways that employers modify the employment relationship. A number of the items relate more specifically to how firms modify the employment relationship. The third factor refers to the use of contract workers. This factor largely reflects the use of retirees as prior employees who are now independent contractors. Such contract workers may ensure firms of quality workers, something firms are not always sure of when they transact with contract workers who are further outside of the firm (Christiansen, 1991).

The factor analysis tells us that these variables interrelate and form factors; it does not tell us how firms cluster on these dimensions. The composite scores derived from the factor analysis (based on unit weights of the variables in a factor) indicate that the correlation between CORE and MOD is r = .26; the correlation between CORE and CON is r = .28. These correlations indicate that these latter two practices are complementary to the core strategy. MOD and CON correlate at r = .32, again indicating that to some degree these practices, too, are complementary.

We used the composite scores in a cluster analysis to examine how firms cluster or group on these factors. Cluster analysis groups the firms in clusters based on the similarity of their scores on the three factors. Cluster analysis unfortunately has no elegant solution on how many clusters to derive (Aldenfelder and Blashfield, 1985). If we take a high score on each of the three factors to indicate the presence of a relationship and a low score to indicate the absence of a relationship, then a permutation with replacement results in eight combinations. We therefore expected at most eight clusters.

We examined 2-8 cluster solutions using Ward's Method (Aldenfelder and Blashfield, 1985) and found that the seven-cluster solution highlighted substantive differences between clusters. We focus on this seven-cluster solution. For each of the three factors, we obtained means on the seven clusters; we also calculated the grand mean for each factor, which was simply the average of the means on these clusters. For each factor we evaluated whether a cluster had a factor score that was above (high), at roughly the same level (medium), or below (low) the grand mean. We assume a high score for these analyses to indicate the presence of the relationship. Table 1 shows the seven clusters and the scoring of them on each of the three factors.

This scoring reveals that there are numerous mixes reflecting the different labor relationships. Cluster 1 reveals that firms have cores with modified employment and contracting relationships. Clusters 2 and 3 indicate that firms can have a portfolio from inside or outside by using a modified employment relationship or contracting relationship.

TABLE 1

CLUSTER #	N	CORE	MOD	CON	STRATEGY:
CLUSTER 1 CLUSTER 2 CLUSTER 3 CLUSTER 4 CLUSTER 5 CLUSTER 6 CLUSTER 7	58 114 59 61 102 154 305	H H L M L	H H H H L L	H L L L H L	HI CORE/PRTL/CON HI CORE/PRTL HI CORE/CON HI CORE HI PRTL HI CON TRADITIONAL

Cluster Analysis of Core, Modified Employment, and Contracting Practices

SCORING: L = LOW; M = MEDIUM; H = HIGH

Cluster 4 indicates that firms can make use of a core-alone strategy, as the other scores are quite low. Clusters 5 and 6 make it clear that contracting or modified employment can be the key or vanguard practice. In both clusters, there is moderate use of core practices. These clusters may reflect unique strategies or they may reflect an evolution toward having a full-blown core. Our last cluster, seven, is for the largest group of firms. These firms report that they are not making use of core, modified employment, or contracting relationships. Many of these firms appear to use a standard employment relationship almost monolithically. Some of them, however, may be engaging in core, modified employment, and contracting practices that were not covered in the survey.

There was not a cluster for HI MOD/CON. This may reflect modified employment and contracting relationships being substitutes when there is not a core. Or it may reflect the survey not containing the full range of contracting practices.

We subsequently examined these strategies relative to three organizational characteristics: percentage of the work force in a firm that is female, percentage of the work force in a firm that is minority, and firm size. The percent female is highest in those firms that use a HI MOD strategy; women represented almost 58 percent of the work force in those firms. The percent minority is highest for firms that use the HI CORE/MOD/CON strategy. Finally, firms with more employees are more likely to mix the three relationships.

Conclusion

Firms have a wide variety of options for mixing the relationships they hold with labor. Our ability to see the range in the mixes of these different labor relationships will encourage us to think beyond the assumptions built into the literature, which has vestiges of dual labor market theory and its limitations (Cain, 1976).

One assumption is that there is a core and it lives off a periphery that exists only to buffer the core. That is, the core needs the periphery, and the relationship between the two is at best symbiotic and at worst parasitic on the part of the core. Yet in our analyses we find cores "living" without a periphery. Moreover, while organizations can make use of buffering (Thompson, 1967), it is only one of several strategies a firm can use with labor. For example, firms can make use of rivaling—having human resources in different labor relationships compete for the same work. In fact, there are numerous examples where employees compete with contract labor for work.

A second assumption is that cores cause firms rigidities that can only be remedied by the use of buffers. Yet if the core is a very small part of the human resources in a firm or if, as we saw in our data, the core has contingent compensation related to firm performance, it is hard to see how *a priori* a core involves a great deal of rigidity.

A third assumption is that there are clear historic and contemporary lines over who is core and not, and these lines of demarcation reflect status and influence in firms. As our analysis suggests, there are contractors who were insiders in firms and now have views from outside. Boundaries may be more permeable and fluid in ways that are not immediately obvious. And being outside of the firm may not always indicate status.

The internal labor market (ILM) literature provided us with important insights into how organizations handled human resources for particular occupational groups in firms (Sherer, 1992). And dual labor market theory (Doeringer and Piore, 1971) and the coreperiphery strategy sensitized us to the mixing of ILMs and secondary labor markets within firms. However, a further understanding of human resources in organizations will come through seeing more generally that organizations have human resource portfolios. The coreperiphery strategy', while colorful, does not generate as much variegation as this sometimes more, sometimes less, portfolio view of human resources in organizations.

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The Management of Contract Workers and the Risks of Accidents: Evidence from the Petrochemical Industry

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On October 23, 1989, an explosion occurred at a Phillips 66 chemical complex in Pasadena, Texas. Twenty-three workers were killed and 232 others were injured.

The explosion at Phillips brought to a head a long-standing debate over the use of contract workers in the petrochemical industry. Contract workers are an important part of the work force in petrochemical plants, accounting for approximately 30 percent of work hours during periods of normal operation at a typical plant. Labor unions in the petrochemical industry contend that companies use lowwage contract workers as a means of evading high-wage permanent employees. These contract workers pose a safety risk because they have low levels of education, training, and on-site work experience. Industry representatives respond that contract workers are a legitimate means of coping with natural fluctuations in labor demand. They argue that management in the petrochemical industry has a strong commitment to work-place safety and one of the best occupational injury rates of any manufacturing industry.

The Phillips explosion moved Congress and the Occupational Health and Safety Administration (OSHA) to fund a study of the safety issues raised by the use of contract employees in the petrochemical industry. OSHA convened a steering committee composed of all interested parties—representatives of union and nonunion contracting firms, representatives of the major oil and chemical companies, and representatives of the major production and building trades unions. The John Gray Institute was chosen by OSHA to

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conduct a comprehensive study of safety issues relating to contract workers. The study had many parts including case studies of safety practices at nine petrochemical plants, a national survey of managers of petrochemical plants, a survey of contractors supplying labor to these plants, and a national survey of contract and direct hire employees in the petrochemical industry.

The purpose of this paper is to discuss the implications of our analysis of the determinants of contract and direct-hire accident rates in petrochemical plants. Readers wishing more detail on this portion of the research can consult Rebitzer (1991). For a comprehensive study of issues relating to the management of contract labor in the U.S. petrochemical industry see Wells, Kochan and Smith (1991).

Contract Workers and Safety Management

Petrochemical plants are large, complex operations and the knowledge required for safely functioning in these plants is often site specific. Direct-hire employees acquire site-specific safety information informally through experience on the job and formally through regular safety training programs run by host employers. These avenues for learning job-related safety practices are often not open to contract employees. The short, on-site tenure of most contract employees makes informal on-the-job learning problematic. In addition it is not clear whether the contractors supplying contract workers have sufficient knowledge of plant practices to offer adequate safety training or supervision. (Throughout this paper we use the term contractor to refer to firms that supply contract employees to petrochemical plants. The plants are, in turn, referred to as host employers.)

If contractors do not provide adequate safety training and supervision, host employers can, in principle, fill the gap by providing additional training and supervision. Case studies and surveys of plant managers and contractors indicate that this typically does not happen. Instead we find that host employers often do not keep reliable records of the accident experience of contract employees on site and they often engage in little or no direct safety supervision of contract employees. Through interviews we learned that plant managers generally seek to maintain an arm's-length relationship with contract employees. This hands-off policy does not arise from technical considerations. Rather managers are motivated by the rules workers' compensation systems use to assign liability for the costs of work-place accidents. Although details vary from state to state, most workers' compensation systems make the contractor liable for the premiums of contract employees and the host employer liable for the premiums of directhire employees. However, if host employers get closely involved in the training and supervision of contract employees, they risk becoming liable for the workers' compensation premia of contract employees. This method of assigning liability for work-place hazards creates two disincentives towards optimal work-place safety. First, unsafe host employers may profit by contracting out hazardous jobs and shifting the costs of these hazards onto contract employees. Second, safetyconscious host employers may be inhibited from closely monitoring the safety training and supervision provided by contractors because this could increase their workers' compensation premiums.

Empirical Findings

The preceding section outlined a number of safety management problems that emerged from case studies of petrochemical plants, surveys of employers, and surveys of the literature on workers' compensation systems. In order to assess whether these problems significantly influence safety outcomes we surveyed individual employees and collected information on their recent accident experience, relevant safety training and the intensity of safety supervision. Three fundamental empirical results emerged from the survey. For a complete presentation of these results see Rebitzer (1991).

First, contract workers in petrochemical plants experience significantly higher accident rates than do permanent employees. These differences in accident rates appear to result from the fact that contract workers are employed in more dangerous jobs than permanent employees. Second, the determinants of accident rates are quite different for contract employees than permanent employees. We found that contractors are given primary responsibility for the safety training of contract employees. However, the safety training provided by contractors appears to have no effect on the accident rates of contract employees. In contrast, the safety training provided to directhire employees by host plants dramatically reduces the accident rates of direct-hire employees. Similarly, experience with the employer dramatically reduces direct-hire accident rates but not contract employee accident rates. Third, accident rates among contract employees are significantly reduced if the host employer uses high or moderate levels of safety supervision, but approximately 35 percent of

the contract employees interviewed reported only low levels of safety supervision.

These three results indicate that the safety-management problems outlined above have a significant effect on workplace safety. The finding that contractor safety training and work experience has no effect on contract employee accident rates suggests that much of the important information needed for working safely in a petrochemical plant is not available to contractors. The finding that safety supervision by the host employer dramatically reduces contractor accident rates supports the notion that involving the host employer in the management of contract labor is crucial for ensuring their safety.

Policy Implications

Workers' Compensation: Case studies and interviews with plant managers in the petrochemical industry indicate that features of the workers' compensation system encourage an arm's length relationship between host employers and contract employees. Analysis of survey data suggests that this arm's-length relationship increases accident rates among contract employees. It follows then that safety in the petrochemical industry could be improved by altering the manner in which the workers' compensation system assigns liability for the costs of workplace injuries.

A number of reforms to the workers' compensation system flow naturally from our analysis. States could encourage the flow of information about job hazards by requiring that host employers collect and disseminate data on the accident experience of contract and direct-hire employees on a site-by-site basis. Disincentives for host supervision of contractor safety could be eliminated altogether if host employers were made liable for the workers' compensation costs of contract employees working on site. Although responsibility for workers' compensation lies primarily with the states, OSHA could encourage changes along these lines by holding host employers liable for safety violations relating to contract employees.

Industrial Relations: The future of American industrial relations hinges on the ability of unions and employers to transform traditional practices when they become dysfunctional (Kochan, Katz, and McKersie, 1986). The governance of employment relations involving contract workers and safety is a microcosm of the broader problems associated with transforming industrial relations systems. Maintaining traditional attitudes towards contract work in the petrochemical industry will lead to continued tensions between labor unions and management, continued declines in union membership, and unnecessarily high rates of accidents at petrochemical plants. An alternative approach (outlined in Wells, Kochan and Smith) is to involve all the stakeholders in a process of continuous improvement of safety conditions. This process would require that management and labor together make decisions about what work to contract out and what training and supervision be given to contract employees.

Moving to this alternative model of industrial relations will require a fundamental change in the behavior of organized labor, management, and the federal government, a change that was certainly not evident in the operation of the steering committee set up to oversee this research. The industry representatives, for example, approached the steering committee as if it were a mechanism that the unions and government were using to exploit public fears about safety in the petrochemical industry. As a result the industry adopted an extremely defensive posture. They worked actively to limit the scope of the data collection and to discredit the findings and the researchers involved.

The unions adopted a tactical approach to their participation on the steering committee. Once they saw that the industry was taking steps to thwart or control the research process and that the preliminary results of the research were nevertheless consistent with some of their claims, they chose to resign from the committee in protest. By doing so they maintained their freedom to criticize the industry and OSHA in the event the research was abandoned or the results suppressed, ignored, or watered down.

The Occupational Safety and Health Administration was in a position to take a leadership role on this issue by persuading labor and management to adopt more constructive postures or by initiating new safety regulations relating to contract employees. However OSHA's freedom to act was severely limited by political appointees overseeing the process from the Office of Management and Budget and the Labor Department.

The trench battles between labor and management together with the political limitations imposed on OSHA continue to prevent responsible labor, management, and government officials from working together to address the serious safety problems uncovered by the John Gray Institute study. Perhaps the safety and health of employees in the petrochemical industry should be added to the list of social costs resulting from the failure of management, unions and the government to transform the American system of industrial relations.

Implications for the Study of Short-Term Employees

The use of short-term employees has increased dramatically in the United States in recent years (see Abraham, 1990). The studies summarized here offer the first empirical analysis of the consequences of short-term employment relationships on labor market outcomes. (For a theoretical analysis of the consequences of short-term employees see Rebitzer and Taylor, 1991.) We found that, at least in one industry where they are an important part of the work force, short-term employees experience higher levels of job risks than do permanent employees. These accident differentials result in part from the difficulties of training and supervising short-term employees. We also found markedly lower wages for contract than direct-hire employees. These wage differentials persisted even after controlling for occupation, years of schooling, training, union status, plant size, race, and location (see Rebitzer, 1991).

The problems of training and supervising short-term employees are not unique to the petrochemical industry. Indeed, they are likely to appear whenever contract and temporary employees are used. In the absence of important externalities or information failures, the management problems created by short-term employees would be of little economic consequence. Analysts could reasonably suppose that the forces of market competition compel employers to choose an "optimal" mix of short-term and long-term employees. However, the lesson of this research project is that when information failures are important, a less sanguine approach to short-term employees may be warranted.

In the petrochemical industry, job hazards are complex and difficult for contract employees to monitor. This information failure, in the context of a flawed workers' compensation system, creates incentives for firms to employ too many, poorly trained contract employees for hazardous jobs. Some industries that rely heavily upon contract and temporary employees (notably health care) produce a product that is complex and difficult for the producer and customer to monitor. This sort of information failure may also lead employers to use "too many" and "inadequately trained" short-term employees. Our findings for the petrochemical industry underscore the need for further research into the labor market consequences of short-term employment relationships in other industries and other institutional settings.

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Staffing Strategies: Organizational Differences in the Use of Temporary Employment

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Temporary employment is an important component of what have been termed the "employment arrangements" of the organization, that is the totality of internal labor markets in the organization (Sherer, 1991). A Bureau of National Affairs (BNA) survey (1986, p. 10) found that in 1986 nearly all organizations used temporary help.

Interpretations of the use of temporary help have hitherto been limited. First, there has been a plethora of surveys of organizations that have revealed the proximate reasons for employing temporaries, such as the need to cover for absent and vacationing workers and to staff special projects among other things. However, they have done little to expose the underlying staffing strategies (see, for example, Simonetti and Nykodym, 1988). Second, even where temporary employment has been related, often convincingly, to a broader staffing strategy, especially the need to create a contingent work force (Belous, 1989), other strategic considerations that are necessary elements in a complete explanation of temporary employment have been excluded.

Further, although important theoretical and/or empirical advances have been made in specifying the determinants of interorganizational differences in staffing strategies (Abraham, 1987; Mangum, Mayall, and Nelson, 1985; Osterman, 1987 and 1988; Sherer, 1991), most authors have not considered the determinants of temporary employment in isolation, instead treating temporaries as part of a broader group of flexible staff. In addition, the highlighted causes have been relatively selective.

In recognition of these *lacunae*, this paper seeks to distinguish the various types of staffing strategies underlying the use of temporary employees. It also analyzes the causes of organizational differences in

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the strategic role accorded temporary help, guided by a broad conceptual framework. The qualitative data on which the paper is based were gathered in the late 1980s in a series of 50 case studies of organizations from a variety of industries in the Midwest. A semistructured questionnaire was administered in each case.

Staffing Strategies Involving Temporary Employees

Staffing strategies are generally designed to achieve one or more staffing objectives. First, a desire to recruit and retain sufficient workers to meet the output objectives of the organization is likely. Second, particular productivity goals that can be fostered through staffing may be established. Third, staffing strategies may have to contribute to cost control. Fourth, the organization may seek to treat staff equitably in terms of their employment conditions. Finally, staffing objectives would probably include the need to comply with relevant legislation. The first three objectives are likely to be the most significant determinants of different types of staffing strategies involving temporaries. The comparative treatment of temporary and regular employees and the extent of legal compliance are likely to be relatively undifferentiated among users of temporaries.

The recruitment and retention, productivity, and cost control objectives may be formulated in different ways, giving rise to different staffing strategies. Figure 1 shows that varying emphases in the statement of the three objectives by firms in the sample generated three broad types of strategies involving the employment of temporaries. These should be regarded as ideal-typical constructs (in the Weberian

	Staffing Objectives and Emphases				
Strategy	Recruitment and Retention	Productivity	Cost Control		
Core-Periphery	Retention of regular employees	Flexibility	Staffing adjustments		
Optimal-Mix	Recruitment of regular or temporary employees	Maximization	Compensation Staffing adjustments		
Constrained- Choice	Recruitment of regular employees	Continuity	Disruption of production o service		

FIGURE 1 The Relationship Between Staffing Objectives and Strategies

sense): deviations from the "pure" form of the strategies described occurred in practice. It is also important to note that these strategies were not mutually exclusive. Some employers had staffing objectives that were multifaceted and therefore employed multiple staffing strategies. Further, there were changes in strategy over time in some organizations.

The first strategy can be termed the "core-periphery" strategy. It was motivated in part by a wish to retain regular workers with desirable characteristics, for example nonunion status or essential skills. Since retention was not automatic, it had to be bought. The price included greater, although not necessarily guaranteed, job security. Thus, a *cadre* of valuable employees with relative job security—the core—was established. The remainder comprised the periphery.

The core-periphery strategy was also encouraged by a goal of flexibility which was believed to permit the maintenance of productivity in the face of changing numerical and functional demands. Numerical flexibility could be achieved relatively easily through changing the number of peripheral employees. Functional flexibility could obviously be effected by varying the tasks performed by employees in general, but the existence of a periphery with relatively less job security facilitated the substitution of workers with different skills. Temporary employees were one component of the periphery that provided both numerical and functional flexibility.

Finally, the core-periphery approach tended to be associated with a preoccupation with the control of the costs of adjusting the size of the work force, such as recruitment, hiring, training, and separation costs. Peripheral employees, particularly temporaries, could be hired and terminated relatively cheaply.

To illustrate, one hospital studied pursued a core-periphery strategy in order to retain its superior-quality nurses while significant periodic layoffs demanded numerical flexibility at minimum cost. Osterman (1988) also found in some firms that peripheral workers acted as a buffer against environmental pressures in order to enhance the job security, and hence the commitment and flexibility, of core workers.

The second strategy can be called the "optimal-mix" staffing strategy. It was facilitated in part by a nonconstraining staffing objective of recruiting sufficient workers, regardless of whether they were regular or temporary. There was no mandate to protect a core group of employees, nor to have a buffer of peripheral employees.

The strategy also tended to reflect a general desire to maximize per capita labor productivity, given the organization's output objective and given relative compensation costs. Thus, everything else being equal, temporaries were hired to the extent that they were more productive than regular employees.

In terms of cost control, the objective was usually to minimize staffing costs, both compensation and the costs of adjusting the size of the work force, holding productivity levels constant. Temporaries were preferred, everything else being equal, when the fee paid for their services (or the compensation paid to, and the cost of engaging, in-house temporaries) was less than the compensation of regular employees and their recruitment, hiring, training, and separation costs.

By way of example, one case study manufacturing firm employed the optimal-mix strategy, hiring both regular and in-house temporary employees. The temporary workers were called in during periods of peak production to remove the need for incurring the costs of hiring and firing regular employees. It was felt that productivity remained high because the in-house temporaries were experienced. The company also found temporary employment to be an economical method of screening employees prior to being hired on a regular basis. The strategy was distinct from the core-periphery approach in that there was no intent to protect regular employees.

There is other evidence in support of the existence of the optimalmix strategy. A review of the advantages and disadvantages of temporary employment emphasized the gains made by companies in cost savings and productivity improvements (Nye, 1988). Mangum, Mayall, and Nelson (1985) found that organizations with high benefits relative to payroll used temporaries more extensively. It should also be noted that the optimal-mix strategy underlies much of the normative literature on temporary employment to be found in professional human resource management magazines.

The third strategy is termed the "constrained-choice" strategy. The recruitment objective of firms pursuing this strategy was to hire regular workers except where constrained by supply and demand forces. Supply constraints occurred when it was difficult to hire a regular employee at existing compensation levels. Demand constraints occurred when it was imperative to hire someone. The essence of this strategy was that the employer felt constrained, compared to the other strategies where the employer was at least willing and perhaps anxious to employ temporaries.

The constrained-choice strategy was also associated with a productivity objective that emphasized continuity of production. Thus temporaries were employed to maintain output rather than to maximize production or enhance flexibility. The emphasis in cost control was on minimizing the costs of disruption. Given alternative staffing means were unavailable, temporaries were employed to the extent that the costs of disrupted production or service outweighed the costs of temporary help.

A case study example of an organization favoring the constrainedchoice strategy was a nursing home that preferred to hire only regular employees in order to provide continuous quality care to the residents. However, the home was forced to employ temporaries because of an unyielding demand for care from the patients, in conjunction with absenteeism and short periods of leave by regular employees. A shortage of care providers reinforced the constraint on the employer. Turning residents away would have been a more costly alternative, and would have prevented residents from receiving continuity of care. Most surveys of the reasons for temporary employment show that this strategy is common: supply constraints, such as absenteeism and interim vacancies while regular employees are hired, combined with an implicit need to maintain output, frequently necessitate temporary help (for example, BNA, 1986).

Determinants of Differences in Staffing Strategies

Conceptually, the organization's strategy is derived from its staffing objectives and ultimately from its business objectives, which in turn are fashioned by the internal and external environment, although there may be room for strategic choice. Of importance externally may be product and labor market pressures, as well as political, legal, and social influences. Internally, technology, unions, employees, organizational structure, and organizational culture may play a role.

The case study evidence indicates that the core-periphery strategy was found predominantly in organizations facing potential layoffs caused by the product markets in which they operated. In the main, seasonal fluctuations in product demand, although in some cases cyclical changes, short product cycles, and special projects, were responsible. In a more limited number of organizations, uncertainty concerning the durability of demand due to intensifying competition and the fear of greater cyclical variability played a role. Where layoffs had been experienced in the past, organizations tended to be more anxious to adopt a core-periphery strategy. The product market is not a sufficient explanation, however, because it does not explain why it was wished to retain regular employees. Three different supplementary influences were at work in the sample studied. First, and most important in the sample, was a strong organizational philosophy that there should be no layoffs. This was predominantly rooted in a belief that employment stability would help avoid successful union organizing campaigns—a cause that has tended to be neglected in previous research. Paternalistic attitudes, a concern for a good corporate image and employee morale, and Japanese ownership also influenced management philosophy. Second, where there were employees who were very productive or who had been highly trained by the employer, there was an incentive to protect them from layoffs. Third, where technical change was occurring, it was believed that the employees would be more flexible if they felt their employment was secure.

Facilitating the core-periphery strategy was the availability of an adequate supply of temporaries who were able to fill the peripheral positions. A nonunion environment also made the employment of temporaries easier.

The optimal-mix strategy was seen where there were pressures on the organization from the product market or from politicians and their bureaucracies to minimize costs. Competition and uncertain or volatile demand which had required or might potentially have caused layoffs was sometimes also associated with this strategy. Distinctively, however, the incentive to avoid layoffs through employing temporaries was motivated by the need to reduce separation costs rather than to protect core employees.

Alternatively, employing temporaries as part of an optimal-mix strategy was frequently triggered by a shortage of regular employees or high turnover rates which raised the costs of hiring regular employees such that temporaries became more economical. Less commonly in the sample, the relatively high compensation of regular employees gave an inducement to engage temporaries.

The productivity of temporaries was rarely a primary reason for their employment. However, their use was facilitated where their productivity levels were close to those of regular employees. This tended to occur when the job involved general skills, routine duties, or a short learning curve, or the employee had prior training or experience.

Nonunion status facilitated the optimal-mix strategy so long as there was no threat of an organizing attempt. In the unionized sector, the same effect was achieved where the union recognized that temporaries provided a degree of security to regular employees, even if that was not the objective of their employment.

The constrained-choice strategy tended to be adopted where the product market necessitated a particular level of production or service provision, and therefore a certain level of staffing. This occurred, for example, where competitive forces obliged a swift delivery to the customer, or where round-the-clock service was offered. Similarly, production technologies requiring specific numbers of personnel were a cause.

At the same time, the labor market was characteristically unable to supply sufficient regular employees to meet the demands of the product market or technology, often because of short notice. Frequently, the current regular employees of the organization were absent, sick, or on vacation, or quit, creating gaps in staffing. In other cases the lack of regular employees was caused by headcount ceilings. budget limits, or lags in the process of position approval.

Organizations were sometimes restricted to this strategic use of temporaries because of institutional pressures to minimize the extent of peripheral employment. In the public sector, governmental units typically had hiring procedures or specific laws limiting the conditions under which temporaries could be hired. A common view of unions, often embodied in contract language, was that temporaries should only be employed if necessary.

Conclusion

This paper has probed beneath the superficial reasons for using temporary workers and has identified multiple strategies. A wide variety of factors has been found to explain differences in organizational strategy. Future research should use survey data to test the significance of these explanatory factors. Attention should also be focused on the separate research questions not addressed here of whether the differences in strategy translate into differences in employment conditions, and of the strategic reasons for the choice of temporaries over other forms of flexible staffing.

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DISCUSSION

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The now familiar core-periphery model of employment systems serves as the starting point for the paper by Peter Sherer and Kyungmook Lee. Sherer and Lee are troubled by that model's implicit assumption that workers must be either "inside" the firm (core) or "outside" the firm (peripheral), and propose a categorization of employment types that allows, in addition, for an intermediate, partially attached group. Allowing for a greater variety of employment types naturally generates a greater number of ways in which these may be combined. Human resource strategies certainly exhibit far greater diversity than is captured by the core/periphery framework, and I am intrigued by Sherer and Lee's approach to studying that diversity. While there are problems with the specific analysis reported in their paper, some of which I outline in the following comments, there are also ideas there worth pursuing.

The first empirical task that Sherer and Lee set for themselves is to assess whether there are groups of human resource practices that tend to occur jointly and that are indicative of a firm employing a "core," "partially attached" or "wholly unattached" work force. Unfortunately, the survey questionnaire from which their data are derived asked respondents about a rather limited set of specific practices.

A priori, one might expect core employees to receive substantial training, enjoy attractive promotion prospects, perform a wide set of tasks, participate actively in important decisions facing the organization and perhaps have some financial stake in the enterprise. Partially attached employees might be expected to receive less training, have more limited access to promotion ladders, perform a more circumscribed set of tasks, perhaps to work away from the employers' premises, and often to work part-time or part-year. Finally, wholly unattached workers might include persons employed

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in a variety of statuses, including agency temporaries, short-term hires, and outside contractors.

Sherer and Lee have no data pertaining to training, to the firm's promotion or job rotation practices, or to the breadth of the tasks that various groups of employees are expected to perform, and only very limited data pertaining to the employment of workers in various statuses. In essence, positive responses to several questions concerning different types of worker participation are taken to indicate the presence of a "core" work force; reported use of nonstandard work schedules serves as an indicator of "partially attached" employment relationships; and reported use of retirees as temporary workers is taken to indicate the presence of "wholly unattached" workers. In each case, there is a significant discrepancy between the kinds of information on which one might have liked to base these determinations and the information actually available.

The fact that one observes certain sets of practices bundled together, rather than occurring independently, is of interest. For example, it is noteworthy that firms that have set up self-managed work groups and employee involvement teams also tend to have established productivity incentives and gain sharing schemes. I am nonetheless troubled by the rather weak linkage between the "core," "partially attached" and "periphery" constructs and the information available in the authors' data set. This, in turn, makes me skeptical of the ensuing description of the different ways in which these employment arrangements are clustered.

A further limitation of the present analysis is the lack of attention to the important question of *why* particular firms make use of a particular mix of employment relationships. Additional information on organizational and environmental characteristics would have been useful for addressing this issue. For example, the authors are at a loss to explain why some firms apparently choose to employ *only* core employees, with no surrounding periphery. One hypothesis is that low volatility of demand together with a rapid rate of technical change make this an attractive choice, but testing this hypothesis would have required information on the demand for output and the pace of technical change at responding firms.

Like Sherer and Lee, Philip Way is dissatisfied with the coreperiphery model. Way focuses on agency temporaries and proceeds by cataloguing reasons for their use in addition to the buffering function emphasized in the core-periphery literature. Based on his interviews with employers, Way points to potential cost savings associated with lower wage and benefit costs and to regular employee absences as additional reasons for using temporary workers. While both may be quantitatively important, the former seems more apt than the latter to reflect a deliberate plan and thus to be more appropriately labeled a staffing strategy.

An important question not addressed in the paper is why firms should ever be able to hire temporary workers at a lower wage than would be paid to regular employees of comparable productivity. One can, I think, tell an appealing story about how this might come about (Abraham, 1990). Efficiency wage models suggest that paying high wages may be a sensible way of reducing supervision costs, reducing turnover costs or fostering organizational commitment among the firm's "core" work force. There is, however, little obvious return to paying high wages to persons performing tasks less central to the organization's mission. This suggests that high wage firms may find it attractive to have certain tasks performed by "outsiders," perhaps including agency temporaries. This conclusion follows, however, only if the firm does not have the option of paying core workers abovemarket wages and simply meeting the market for other workers on its payroll. Is it reasonable to assume that firms cannot do this? I believe it may be. Even in the nonunion sector, internal equity considerations may well place significant constraints on workers' relative wages, such that if some groups of workers are highly paid all must be highly paid. The use of temporary workers who are viewed by other employees as outsiders may then offer a way to evade these constraints on relative wages.

A potentially important reason for using agency temporaries that Way does *not* discuss is the desire to take advantage of special expertise possessed by the temporary. In other work, I have found some evidence that this is an important reason for making use of various categories of "outsiders" (Abraham, 1988, 1990) and would have been interested in knowing whether those interviewed mentioned this as a motivation for reliance on temporary help agencies.

One somewhat disappointing feature of the Way paper is the lack of any quantitative analysis. At a minimum, it would have been useful to provide some sense of the relative importance of each of the different reasons for using agency temporaries catalogued. I also suspect that more could have been done to document the relationship between firms' stated reasons for using agency temporaries and their observable characteristics.

The paper by James Rebitzer and Thomas Kochan, which focuses on safety problems associated with the use of contract workers in the petrochemical industry, addresses a rather different set of issues than the other two papers. Even in their paper, however, the coreperiphery model raises its head. In this case, it appears in the form of the petrochemical industry's argument that the use of contract workers is a legitimate response to natural fluctuations in demand. While somewhat apart from the main thrust of Rebitzer and Kochan's investigation, it would have been of considerable interest to know whether there is a defensible basis for the industry's claim. Are the tasks performed by contract workers inherently such as to require a surge in staffing levels during the period they are carried out, or could they feasibly be handled by a regular work force of fixed size? If uneven labor requirements create a strong economic motivation for using outside contractors, the workers' compensation reforms that Rebitzer and Kochan propose might have relatively little effect on firms' staffing arrangements. I would agree, however, that their proposed reforms could only help to make contract workers' jobs safer

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XIV. HRM: POLICIES AND PRACTICES IN DEVELOPING & DEVELOPED COUNTRIES

HRM Policies and Practices of U.S. and Japanese Firms Operating in the U.S.

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A voluminous literature on Japanese management practices, especially human resource management (HRM) practices, has emerged in recent years (Yang, 1991). From one perspective, Japanese firms practice a form of "high-commitment-type" work-employment systems featuring job stability, flexible job design, work teams, relatively flat pay structures, substantial variable compensation, and on-thejob training, among other characteristics (Lawler, 1986; Taira, 1988). Some researchers have concluded that this high-commitment or "salaried-worker" model has been successfully transported across national boundaries, including to the U.S. (Shimada and MacDuffie, 1987). Other researchers emphasize the limitations of such HRM cross-national transferability (Yang, 1991), and still others emphasize the convergence of U.S. and Japanese HRM policies and practices (Jacoby, 1991).

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This paper addresses the question of whether there is in fact a single (high-commitment/salaried-worker or other) model of Japanese HRM practices in the U.S., and does so by analyzing two surveybased data sets recently obtained from samples of Japanese and U.S. firms operating in the U.S. (Yang, 1991; Delaney, Lewin, and Ichniowski, 1989). To preview the main findings and conclusions of this research, it appears that there is not a single model of HRM practices operating in the U.S., either among Japanese or U.S. firms. Rather, the data support the conclusion that dual (and perhaps multiple) systems of HRM practices are prevalent in the U.S., both among Japanese and U.S. firms. Some characteristics of these systems and some of their determinants are identified below. The paper also briefly considers the relationships between HRM practices and firm performance.

HRM Policies of Japanese and U.S. Firms

For this research we rely on data obtained through special surveys of samples of Japanese and U.S. firms operating in the U.S. These surveys were conducted in 1989 and 1987, respectively, and the reader is referred to Yang (1991) and Delaney, Lewin, and Ichniowski (1989) for further details about research designs, sampling methods, questionnaire content, response rates, and variable construction. These surveys yielded HRM data for 107 Japanese-owned firms and 438 U.S.-owned firms operating in the U.S. during the late 1980s.

Nine specific areas of HRM policy and practice are listed in Table 1, together with the percentage of Japanese and U.S. firms reporting that they followed these policies and practices. In each case, Japanese firms were more likely than U.S. firms to have the specific policy or practice in place. Further, and with one exception (flexible work rules), a majority of Japanese firms had each HRM policy/practice in place, while in only five of nine cases did a majority of U.S. firms have the specific HRM policy or practice in place. Thus, at first glance, Japanese firms operating in the U.S. seem more likely than U.S. firms operating in the U.S. to follow HRM policies and practices associated with high-commitment-type work-employment systems.

However, the primary economic sector in which a firm operates apparently is an important determinant of both Japanese and U.S. firms' adherence to a high-commitment-type work system. In particular, and as also shown in Table 1, firms in the manufacturing sector are more likely than firms in the service sector to have written human resource plans, employee training programs, formal job analysis

TABLE 1

HRM	Japanese Firms			U.S. Firms		
Policy	Total	Mfg.	Service	Total	Mfg.	Service
Written Human Resource Plan	58.8	61.4a	48.5a	51.4	60.9c	40.2c
Employee Training Program	62.6	76.2b	43.2b	41.2	51.4d	34.7d
Formal Job Analysis Program	74.5 [:]	83.6b	56.1b	56.4	61.3	51.2
Flexible Work Rules	46.5	56.2b	31.8b	11.1	12.3	9.7
Nonfinancial Participation Program	59.0	71.9b	39.3Ъ	38.3	46.8c	29.6c
Information Sharing Program	80.8	90.2a	67.5a	57.8	68.4d	45.5d
Performance Appraisal System	94.2	90.5	99.9	76.5	68.2c	71.4c
Financial Participation Program	52.1	67.4b	38.3b	41.2	52.3d	31.6d
Grievance/ Complaint Procedure	64.6	71.la	55.7a	61.6	78.7d	47.1d
(n =)	(107)	(63)	(44)	(438)	(230)	(208)

Incidence of Selected HRM Policies in Japanese and U.S. Firms Operating in the U.S., Total and by Sector (\$)

a = significant difference at p = < .05 according to a chi-square test

b = significant difference at p = < .01 according to a chi-square test

c = significant difference at p = < .05 according to a chi-square test

d = significant difference at p = < .05 according to a chi-square test

programs, flexible work rules, nonfinancial participation programs, information-sharing programs, financial participation programs, and grievance/complaint procedures; in most cases, these differences are statistically significant. Only in the area of performance appraisal are service firms more likely than manufacturing firms to have adopted formal systems.

Determinants of HRM Policy and Practice

To more systematically identify the determinants of HRM policies and practices in Japanese and U.S. firms operating in the U.S., a series of logistic regression analyses were performed in which each of the nine human resource policies and practices listed in Table 1 served as the respective dependent variables, and the following served as independent variables: firm size (measured by assets), firm age (measured by years since founding), unionization (measured by a dummy union present-union absent variable), region (measured by a four-category dummy variable), industry (measured by an eightcategory dummy variable), and HRM values (measured by a threeitem continuous variable based on scaled questions about management's prioritization of human resource issues in the firm, management's valuation of human resources in relation to financial resources. and management's beliefs about the contribution of HRM policies and practices to firm performance). To conserve space, the detailed regression results are not presented here, but are available on request from the authors.

The findings suggest that firm size is positively associated with the presence of written human resource plans, employee training programs, formal job analysis programs, information-sharing programs, formal performance appraisal systems, and grievance/complaint procedures among both Japanese firms and U.S. firms operating in the U.S. Younger (newer) firms are more likely than older firms to have written human resource plans, formal job analysis programs, nonfinancial participation programs, and information-sharing programs. In both Japanese and U.S. firms operating in the U.S., employee unionism is negatively associated with the presence of employee training programs, formal job analysis programs, and performance appraisal systems, and positively associated with the presence of information-sharing programs and grievance/complaint procedures.

Few significant regional differences with respect to firm-level HRM policies and practices are evident from the findings, although firms located in the northern region of the U.S. are somewhat more likely than firms located elsewhere to follow high-commitment-type HRM policies and practices. Manufacturing firms are considerably more likely than firms in other major industries to follow highcommitment-type HRM policies and practices, although there are occasional other positive and negative industry effects on the incidence of such policies and practices. Perhaps most notable, human resource values of senior executives in Japanese and U.S. firms operating in the U.S. are significantly positively associated with the presence of written human resource plans, employee training programs, flexible work rules, and nonfinancial and financial participation programs.

HRM Policy-Practice and Firm Performance

The extent to which high-commitment (and other) types of HRM policies and practices contribute to the performance of the firm is an issue that has recently attracted the attention of scholars from several disciplines (Mitchell, Lewin, and Lawler, 1990; Ichniowski, 1990). Certain popular writings as well as some academic works unequivocally claim that firm performance is enhanced through the use of highcommitment-type HRM policies and practices (Peters and Waterman, 1982; Lawler, 1986), and there is little doubt that senior human resource executives are increasingly being held to account for the contributions of HRM to firm performance (Freedman, 1990). Moreover, certain well-documented case or "best practice" examples, the most notable of which is NUMMI (the General Motors-Toyota joint venture), strongly underscore the contribution of high-commitment-type HRM policies and practices to firm performance (Childs, 1989).

To shed more light on this issue, we performed a series of OLS regression analyses in which respondents' perceptions of product quality and productivity improvement during the late 1980s served as dependent variables in the case of Japanese firms, and changes in reported return on investment and productivity (measured by revenue per employee) during the mid-1980s served as dependent variables in the case of U.S. firms. (Further details about the methods used to construct these dependent variables are available from the authors.) Selected results of these regression tests are presented in Table 2.

Generally speaking, few individual HRM-type independent variables are significantly related to measures of firm performance (and changes in firm performance) in Japanese and U.S. firms operating in the U.S.—although notably, the signs on most of these variables are positive. Observe, however, that (the presence of) both employee financial and nonfinancial participation programs were significantly positively related to productivity (revenue per employee) changes in U.S. firms during the mid-1980s. As to the control variables, firm age and location within the manufacturing sector are consistently negatively associated with the performance of Japanese and U.S. firms. Unionization is significantly negatively associated with

TABLE 2

Selected OLS Regression Results for Japanese and U.S. Firms Operating in the U.S. (t-values in parentheses)

	Dependent Variable					
-	Japane	ese Firms	U.S. Firms			
Independent Variable	Product Quality	Productivity	Return on Investment	Productivity		
Intercept	3.13	5.96	3.61	4.07		
	(4.35) °°	(3.57)°°	(2.96)°°	(2.75) ••		
Employee Training Program	+0.06 (+0.26)	-0.16 (-0.82)	-0.12 (-0.31)	+0.26 (+0.43)		
Flexible	+0.09	-0.06	+0.13	+0.41		
Work Rules	(+0.47)	(-0.70)	(+0.28)	(+1.27)		
Nonfinancial Participation Program (NFP)	+0.08 (+0.31)	-0.11 (-1.32)	+0.37 (+0.69)	+0.43 (+1.99)°		
Financial Participation Program (FP)	+0.42 (+0.73)	+0.31 (+0.69)	+0.28 (+0.58)	+0.37 (+2.06)°		
HRM Values	-0.16	-0.02	+0.04	+0.10		
	(-1.09)	(-0.07)	(+0.11)	(+0.17)		
Firm	-0.04	+0.67	-0.32	-0.35		
Size	(-0.19)	(+1.47)	(-1.55)	(-1.64)		
Firm Age	−0.32 (−1.92) °	$\stackrel{-0.89}{(-2.20)}$ • •	-0.46 $(-1.98)^{\circ}$	$^{-0.41}_{(-2.06)}$ •		
Union	-0.58	_1.27	-0.52	+0.43		
	(2.45) ° °	(−2.76)°°	(-2.05)°	(+2.02) °		
Manufacturing	-1.09	-6.24	+0.38	+0.26		
	(-1.22)	(-3.11)°°	(+1.04)	(+0.86)		
Manufacturing	+0.52	+0.40	+0.43	+0.39		
× Training	(+2.01)°	(+1.98)°	(+1.61)	(+2.02)		
$\stackrel{\rm Manufacturing}{\times\rm NFP}$	+0.62	+0.21	+0.36	+0.34		
	(+1.97)°	(+2.01)°	(+1.43)	(+2.07)°		
$\stackrel{\rm Manufacturing}{\times \rm FP}$	+0.38	+0.31	+0.57	+0.46		
	(+2.02) °	(+2.03) °	(+2.17)°	(+2.13)°		
$\stackrel{\rm Manufacturing}{\times} {\rm HRM \ values}$	+0.10	+1.17	+0.17	+0.27		
	(+2.04)°	(+2.63)°°	(+0.81)	(+1.62)		
R ²	0.36	0.48	0.31	0.42		
(N =)	(73)	(73)	(416)	(416)		

• = significant at p = < .05

•• = significant at p = < .01

perceived product quality and productivity improvement among Japanese firms and with (changes in) return on investment among U.S. firms, but is significantly positively associated with (changes in) productivity among U.S. firms. These differential effects of unionism on productivity may be due in part to the use of a perceptual measure of productivity for Japanese firms, in contrast to the use of a behavioral measure of productivity for U.S. firms.

To explore more fully these statistical relationships, several interaction variables were constructed and included in the regression analyses. The findings, also reported in Table 2, indicate that the interaction of the manufacturing sector with several HRM-type variables-training, employee nonfinancial participation, employee financial participation, and senior executive HRM values-are significantly positively associated with business performance and change-in-performance measures among Japanese and U.S. firms operating in the U.S., with the results being relatively more consistent for Japanese firms than for U.S. firms. These findings may be interpreted to support the notion that high-commitment-type workemployment systems can contribute to firm performance, but also that other often exogenous factors also influence firm performance. Additionally, these findings underscore the potential importance of further research on the determinants of HRM policy and practice "packages," and on the relationships between firms' choices of HRM packages and firm performance (Ichniowski, 1990).

Conclusions

Survey evidence obtained from samples of Japanese and U.S. firms operating in the U.S. during the late 1980s suggests that the former do not follow a single high-commitment/salaried-worker model of HRM policies and practices that distinguish them from the latter. While Japanese firms operating in the U.S. are more likely than U.S. firms operating in the U.S. to have written human resource plans, employee training programs, job analysis programs, flexible work rules, employee financial and nonfinancial participation programs, information-sharing programs, performance appraisal systems, and grievance/complaint systems, the incidence of these practices is significantly moderated by certain exogenous variables, for example, industry and unionization, and by certain endogenous variables, for example, firm size, firm age, and the HRM values of the firm's senior executives. Concerning industry effects on firm-level HRM policies and practices, Japanese and U.S. manufacturing firms are considerably more likely than Japanese and U.S. service firms to adhere to a socalled high-commitment/salaried-worker model.

With respect to the effects of HRM policies and practices on firm performance, and controlling for such variables as firm size, firm age, industry, and unionization, it does appear that certain high-commitment-type policies and practices are positively associated with product quality, (changes in) productivity, and, to a lesser extent, (changes in) return on investment. These policies and practices include training programs, financial participation programs, and nonfinancial participation programs. But also of (statistical) importance here is the "value" that senior executives place on HRM, and senior executives of Japanese firms operating in the U.S. appear to place a higher value on HRM than senior executives of U.S. firms operating in the U.S. The validity of this conclusion and the identification of factors that determine senior executive valuation of HRM, both in Japanese and U.S. firms, merit further theoretical and empirical research.

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Unions and Human Resource Management Practices in East and Southeast Asia

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The rapidly emerging economies of East and Southeast Asia now enjoy sustained annual rates of real economic growth approaching, and sometimes reaching, double-digit levels. (These countries include Korea, Taiwan, Hong Kong, and Singapore and, in recent years, Thailand, Malaysia, and Indonesia. China also falls into this category but, given its unique political situation, is not part of this discussion.) This paper examines the role of labor unions in this vital region, with special attention to their impact on various human resource management (HRM) practices within firms operating in Thailand. Other factors are also investigated, including a firm's national origin, professionalism in the HRM function, and contextual influences.

Union Effects on HRM Practices in Thailand: An Empirical Analysis

A study, conducted in Thailand over the period 1985-1989, generated in-depth interviews with personnel managers for 91 firms. These data are used here to assess union effects in comparison to other factors. Given space limitations, we only report here the results of a larger study, which examines both conceptual and empirical issues in much greater detail.¹

The firms used in this study are "modern sector" enterprises operating in the Bangkok area. The cases were randomly drawn from a listing of about 2000 of Thailand's largest companies. The sample

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includes both Thai-owned firms and subsidiaries of American, Japanese, and European multinational corporations (MNCs). The managers interviewed in our study were asked to evaluate the importance of a wide range of HRM policies in their firms, as indicated in Table 1. Because of the sensitivity of the issue, we were not able to obtain accurate wage data and are only able to examine very general policies (e.g., use of formal job evaluation systems, formal training methods, seniority-based pay).

TABLE 1

Dependent Variables Used in Analysis

WRITTEN JOB EVALUATIONS Use of job evaluation in setting pay structures (1 = extensive use; 0 = little or no use)**IOB DESCRIPTIONS** Use of written job descriptions by the firm (1 = extensive use; 0 = little or no use)INTERNAL PROMOTION Reliance on promotion from within for staffing positions (1 = all or most positions above entry level are filled by internal promotion;0 = positions are often filled externallySENIORITY-BASED COMPENSATION Extent to which compensation decisions are based primarily on seniority versus performance (1 = extensive; 0 = limited)WRITTEN PERFORMANCE EVALUATIONS Firm's reliance on formal, written job evaluations (1 = extensive; 0 = limited)**OUALITY CONTROL CIRCLES** Firm's utilization of quality control circles (1 = used; 0 = not used)SUCCESSION PLANNING Firm utilization of a formal succession planning system in staffing (1 = used; 0 = not used)PROFIT SHARING Firm's utilization of a formal profit-sharing or gain-sharing system for employees (1 = used; 0 = not used)EMPLOYEE STOCK OWNERSHIP PROGRAM Firm has a formal system by which at least some employees may acquire shares in the firm as a fringe benefit (1 = ves; 0 = no)EXTERNAL TRAINING (MANAGEMENT) Firm's reliance on external sources of training for managerial employees (1 = extensive; 0 = limited)EXTERNAL TRAINING (PRODUCTION) Firm's reliance on external sources of training for production workers (1 = extensive; 0 = limited)

In Western countries, unionism is known to impact many HRM policies in a firm. Whether that is the case in Thailand is an open question. Our preceding discussion suggests that union effects are likely to be weak. In addition, if unionism does impact HRM practices, it is more apt to affect HRM practices most closely linked to the workers represented by a union.

As management systems may be influenced by national culture, we might anticipate that HRM practices within a particular country, such as Thailand, will depend on the national origin of the firm. That this is the case is not self-evident, since MNCs might range from ethnocentric firms (where subsidiaries apply the management systems of parent companies with little regard to local conditions) to polycentric firms (where subsidiaries adopt local management systems). Systematic differences in HRM functions related to a firm's national origin can be taken as evidence that ethnocentricism dominates over polycentrism. This study compares the relative impact of unionism and national origin (culture) in shaping HRM practices. However, should HRM policies not differ by national origin, this could also be the consequence of firms utilizing some emerging global management system.

Another factor that might impact HRM practices is the extent to which the HRM firm is professionalized. "Professionalization" is taken to mean the extent to which human resource managers at the subsidiary level have had specialized training in systematic personnel practices. In American firms, the presence of personnel or HRM professionals within the subsidiary is apt to increase the reliance of the firm on formalized procedures that conform to externally-defined professional standards (Cohen and Pfeffer, 1986). As professionalization may also be related to unionization (since firms utilize HRM professionals to respond to unions), it is important to include this variable in the analysis.

Finally, one might argue that culture, unionism, and even HRM professionalism are not direct causes of HRM practices in firms. Rather, firms possess only limited "strategic" discretion and are really shaped by contextual factors, such as technology, organizational size, and market conditions. The basis for this argument is really quite simple: in the long run, firms that are not properly adapted to contextual conditions will fail because of competitive pressure. Hence, a limited number of contextual factors are included in this study as control variables.

Depending on the variable, responses to questions regarding HRM practices were recorded using either a multiple-category scale (usually a semantic differential) or dichotomous (yes-no) scale. The multiplecategory scales were converted to dichotomous variables (see Table 1) and logit analysis was used to differentiate between firms relying at least to some extent on a particular HRM method and those not utilizing the method (or utilizing it to only a limited extent).

As for the explanatory variables, union status is measured by a dummy variable indicating the presence or absence of union representation (for at least some workers) in the firm. HRM professionalism is a subjective scale based on such factors as the backgrounds of HR managers and the relative size and structural complexity of the HR subunit. The original scale (a five-point Likert item) has been recoded to a dummy variable (differentiating between firms of moderate and high HRM professionalism and those with low or very low HRM professionalism). National origin of the firm is measured by means of dummy variables (differentiating among Thai, Japanese, American, and European firms). In the case of joint ventures, the firm is categorized according to the national origin of the dominant firm (usually majority owner). Control variables include size of the firm, capital assets per employee, and industrial sector. These variables (or similar ones) have been identified by other authors as related to HRM practices (Cohen and Pfeffer, 1986; Jackson, Schuler, and Rivero, 1989).

Results

We only report the significance levels for various groups of independent variables for each of the HRM practices that were analyzed (Table 2). (Tables in the larger study report parameter estimates for all equations summarized in Table 1 here.) In addition, we report a summary of the results for logit analyses of union status and HRM professionalism. For logit analysis, significance tests are performed using the change in the log-likelihood ratio resulting from the inclusion of the variable or set of variables defining a given factor in the logit equation. (These tests are analogous to F-tests in regression analysis.)

Overall Analysis of HRM Practices

Table 2 summarizes the results for logit analyses for ten HRM practices (all but one at the .05 level or better). The contextual conditions included as control variables were also significant (as a group) in most of these equations. It would seem as though factors such as organizational size and industrial sector generally do play a

Total Effect ²	Union Effect ³	Country Effects⁴	HRM Prof ⁵	Control Variables ⁶
.001	.10(-)	.01	ns(+)	.05
	ns(—)	ns		ns
.10	ns(—)	.10	ns(+)	ns
.01	.10(+)	.01	ns(+)	ns
.001	ns(+)	.10	.05(+)	.001
.05	.05(+)	.05	ns(+)	.01
.001	ns()	ns	ns(+)	.001
.001	ns(—)	.05	ns(+)	.001
.05	.10(-)	ns	ns()	.05
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Summary of Results for Logit Analyses1

¹ Summarizes significance levels in logit equations for indicated factors based on the change in the likelihood ratio for equation as a whole using chi-square test (ns = not significant; '--' indicates factor not in equation.

² Significance level for equation as a whole.

³ Significance level of union status dummy variable (sign in parentheses indicates direction of estimated effect, regardless of significance).

⁴ Significance of change in likelihood ratio for set of dummy variables representing country of origin using Chi-square test.

⁵ Significance level of HRM professionalism dummy variable (sign in parentheses indicates direction of estimated effect, regardless of significance).

⁶ Significance level of set of control variables (firm size, capital assets per employee, industrial sector).

major role in shaping a firm's HRM practices independently of unionization, national culture, and HRM professionalism.

Impact of Unionism

Our major focus has been the impact of unionization on HRM practices. The results indicate that such practices are, in certain instances, affected by a union's presence in Thai firms. Not surprisingly, the unionization variable was found to be insignificant in the case of HRM practices rather removed from workers represented by unions (e.g., succession planning and training systems for managers). However, significant effects were found in the case of factors of more immediate interest to union workers, such as the firm's reliance on job evaluation, seniority-based compensation, and employee stock ownership. Moreover, the signs of the effects are consistent with what might be expected. That is, unionism reduces use of formal job evaluation methods, increases reliance on seniority-based compensation, and reduces employee stock ownership programs. It also significantly impacts use of quality control circles. Of course, unions are often divided on the issue of participative management programs; in the case of Thailand, it would appear that presence of a union serves to increase such systems. There are some areas usually of concern to workers in which unions in Thailand have not had much of an effect. Reliance on internal promotion as a staffing technique is not significantly related to union presence (and the estimated effect is negative, counter to expectation). However, the rapidly growing economy may make job security an issue of limited concern.

Impact of National Origin

The set of dummy variables indicating national origin was found to be statistically significant in six of the ten equations. And in some of the cases in which national origin factor is not significant as a whole, one or two of the component dummy variables is significant. The hypotheses relating to the impact of national origin on HRM practices are quite complex and vary depending upon the issue in question. As one might suspect, Japanese firms are most prone to use quality circles and Asian firms (Thai and Japanese) rely more extensively on seniority-based compensation. Conversely, Western (especially American) firms utilize formal job evaluation systems more extensively than Asian firms. These effects are discussed more thoroughly in the larger study and are not so relevant here given our focus on union effects.

Impact of HRM Professionalism

The HRM professionalism variable was found to be significant in only three cases; of course, if professionalism had no impact on HRM practices, the variable might still be significant due to change in a few equations out of the ten estimated. However, the signs of the professionalism coefficients are consistent with what might be expected in most of these equations, whether significant or not. Professionalism appears to be related positively to utilization of job evaluations, job descriptions, written performance evaluations, quality circles, and extensive training systems. Given the relatively small sample size and overall significance of the equations, the absence of statistical significance might be a statistical artifact.

Conclusions

This study has examined determinants of HRM practices in a sample of large companies operating in Thailand. Our major concern has been the impact of unionization on the firm's HRM system. Overall, our analysis does a very good job in explaining variations in a wide range of HRM procedures and methods. Surprisingly, given the environment typical of developing Asian economies, we found that unionism did have significant and theoretically reasonable effects on HRM practices particularly relevant to unionized workers. We also found exogenous contextual influences to be quite strong in most cases and observed significant variations in HRM practices associated with a firm's national origin. However, the professionalization of the HRM function was not found to impact HRM practices independently of these other factors.

While unions have been relatively weak throughout most of this region, our analysis suggests that the fledgling labor movement in Thailand has had some meaningful impact on worker welfare. This may well be the consequence of the rapid economic development in the area, a condition which generally enhances union power. Of course, unionism only operates at the margins of the economy, so as always is the case in the assessment of union effects, we cannot be sure that these results are not the consequence of sample selection bias. Unfortunately, we do not have the data necessary to correct for that influence.

Endnote

¹ Interested readers are invited to request a copy of the larger study from John Lawler, ILIR, University of Illinois, 504 E. Armory, Champaign, IL 61820.

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Human Resource Management Practices of Japanese and Other Foreign Companies in Developing Countries

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In recent years the management of human resources in Japanese enterprises has attracted widespread attention abroad. Their employment system is considered to be one of the key factors in achieving international economic competitiveness and in improving productivity and the quality of goods and services they produce. As a result, the transferability of the key elements of Japanese human resource management (HRM) practices has become a subject of considerable interest to scholars and practitioners in North America and abroad (Ouchi, 1981; Pascale and Athos, 1981). In fact, Taira (1991) has gone so far as to suggest that human resource management in many U.S. firms at present resembles the Japanese employment system. Other scholars have criticized both the Japanese HRM system and its exportability (Sethi, Namiki, and Swanson, 1984; Pucik, 1984).

This paper is divided into five parts. The first examines the traditional Japanese HRM philosophy. The second part examines the extent to which the HRM practices of eight Japanese parent companies adhere to this philosophy. Part three compares the practices of Japanese subsidiaries or joint ventures in Singapore, Malaysia, and India with those of locally-owned firms in the same sector or industry. The fourth

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part examines the HRM practices of domestic-owned companies relative to selected multinational companies (MNCs) in India.¹ In the final part we consider some of the broader implications of these findings for developing countries. In this paper the word "subsidiaries" includes joint ventures and the term HRM also includes industrial relations (IR).

Japanese Management Philosophy

The traditional philosophy of Japanese HRM emphasizes employee identification with the company through lifetime employment, participation, quality control (QC) circles, extensive benefits, consensus decision making, bottom-up communications (ringi system), onthe-job training, and others (Whitehill and Takezawa, 1968; Ouchi and Jaeger, 1978; Cole, 1979).

The main purpose of this paper is to identify and discuss the HRM/ IR practices of Japanese firms, their overseas subsidiaries, and indigenous firms. The paper is based on several studies undertaken by the authors during the last eight years (1983-1990). Due to their exploratory nature and small sample sizes, they provide qualitative rather than quantitative analysis. These studies include a study of eight large parent companies (four in manufacturing and four in services) in Japan in 1983 and a study of the subsidiaries of the same eight Japanese firms located in Singapore, Malaysia, and India in 1985. In each of these countries data were also collected on locally-owned firms engaged in the same line of business. In-depth interviews were held with key informants in eight firms. Key informants included not only top and middle managers but also union officials. A comparative study of selected MNCs, and local firms in India in 1985 and 1990 was also conducted. Four MNCs and 27 indigenous firms (private and public sector) were included.

HRM Practices of Japanese Parent Companies

An analysis of the data collected in the eight case studies in Japan suggests that the Japanese parent companies have internal promotion policies, a great many benefits, bottom-up communications, QC circles, and joint labor-management committees that engage in consultation beyond production and management questions, and include HRM matters such as recruitment, transfer, placement, work schedules, discipline, training, and retraining.

Japanese Subsidiaries and Locally-Owned Counterparts in Singapore, Malaysia, and India

A comparison of human resource management practices of the Japanese subsidiaries and their locally-owned counterparts in Singapore, Malaysia, and India reveals a number of similarities and differences (Table 1). As the table shows, there are more similarities in Singapore than there are in Malaysia or India.

In the case of Malaysia and India the evidence from our case studies suggest that, while some human resource management practices such as employee representation, hiring, promotion, and layoffs are identical in the Japanese firms and their local counterparts, there are major differences in such areas as training, the decisionmaking process, labor-management relations, and work ethics. These will be discussed below.

Training. Employee training is usually emphasized less in Malaysian and Indian companies than in Japanese subsidiaries. For instance, there are fewer in-house training programs in Indian and Malaysian firms. In both countries local firms encourage their employees to improve their skills through self-study. Most Indian companies prefer to hire skilled personnel from the local labor market than to provide training themselves.

QC Circles. Most companies in Malaysia do not have QC circles.

Decision making. The social and cultural environment in India and Malaysia is not conducive to consensus decision making, which is considered to be the sole prerogative of management. Japanese-style consensus decision making is not usually practiced by Japanese subsidiaries either, but they rarely make any important policy decisions without first consulting people at various levels of management. Before adopting operational decisions managers usually consult their subordinates. This is in sharp contrast to the practice in comparable locallyowned firms.

Labor relations. There are major differences between the Japanese industrial relations system and those existing in India and Malaysia. The Japanese firms in the two countries abide by the local system. As far as dispute settlement is concerned, however, the subsidiaries share their parent company's management philosophy. They make every possible attempt to resolve disputes through negotiations and discussions. In contrast, most Indian and Malaysian employers follow the

TABLE 1

HRM Practices of Japanese Subsidiaries and Locally-Owned Counterparts in Singapore, Malaysia, and India: Summary Table of Findings¹

	Singapore		Malaysia		India	
	Japanese	Locally-owned	Japanese	Locally-owned	Japanese	Locally-owned
Employee representation	Industry-wide and company unions; or no union	Industry-wide and mixed unions (house unions coexisting with industry- wide unions	Industry-wide unions or no union	Industry-wide and mixed unions; all possess negotia- tion rights	Industry-wide unions or no union	Same
Hiring	Most have no preference	No clear patterns	Mixed hiring practices; most give preference to fresh gradu- ates	Mixed hiring; most practices depend on the positions to be filled	Mixed hiring practices, i.e. local labour market or fresh graduates; pref- erence given to relatives of em- ployees	Local labor market
Promotion	Most try to pro- mote from within	Most try to fill high-level posi- tions from within	Promotion from within as far as possible	Preference given to promotion from within	Promotion from within as far as possible	Promotion from within but occa- sionally from out- side to bring in "new blood"
Layoffs	No written pol- icy, but have never laid off	Fewer than half have a clear pol- icy not to lay off, but none has laid off	No firm policy, but have never laid off so far	No specific pol- icy; retrench- ment used as a last resort	No clear-cut pol- icy but have never laid off	In most cases cannot lay off without govern- ment permission

Training	All emphasize on-the-job train- ing; none prac- tices job rotation	Most emphasize on-the-job and formal classroom training; none practices job rotation	All provide on- the-job training; fewer than half practice job rotation; some provide formal classroom train- ing	Technical train- ing emphasized less than in Japa- nese subsidiaries; on-the-job train- ing; self-study encouraged	Specialized train- ing for managers (company phi- losophy and technical train- ing); on-the-job training and self- study encour- aged	Hire skilled workers from labour market; on-the-job train- ing for lower- level employees; self-study encour- aged
Consensus decision making	None; policy decisions are generally made by senior man- agement; most hold regular con- sultations be- tween labour and manage- ment; bottom-up communications	None; senior management makes policy de- cisions; regular consultations be- tween labour and manage- ment; bottom-up communications	Bottom-up com- munications practiced; regu- lar labour-man- agement consul- tation meetings; decisions made solely by senior management	None practices bottom-up communications; decision making is the preroga- tive of manage- ment; no regular labour manage- ment consulta- tion meetings	None; informal consultation by senior manage- ment with mid- dle and lower management de- cisions made by senior manage- ment	All key decisions made by senior management; in many cases strict secrecy surrounds decision making
Quality- control circles (QCCs)	Slightly fewer than half have QCCs; voluntary participation in most	Slightly more than half have QCCs; voluntary participation in all	Majority of companies have none	Same	None	None
Conflict and grievances	Settled by nego- tiation and dis- cussion; griev- ance procedure in unionized firms	Same	Mostly settled through negotia- tion and discus- sion; formal grievance proce- dure in union- ized firms	Most have for- mal grievance procedures in- corporated in collective agree- ments	Disputes settled through discus- sion and negotia- tion; no formal grievance proce- dures except where pre- scribed by law	Formal proce- dures prescribed by law

¹ The data for Singapore and Malaysia refer to five Japanese subsidiaries in each country and five comparable Singaporean and five Malaysian firms. The data for India refer to two Japanese subsidiaries and two locally-owned counterparts.

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formal dispute settlement procedures prescribed by law and/or by collective agreement, which are not very conducive to harmonious labor relations.

Work ethics. There appears to be a conflict between the expectations of Japanese managers and those of Indian and Malaysian employees with regard to the latter's loyalty to and identification with the company.

Union officials in India and Malaysia claim that Japanese managers themselves work long hours, attach greater importance to their work and to their company than to their family and friends, and expect others to do the same. This is resented by the local employees of the Japanese subsidiaries and the locally-owned counterparts, who do not feel that company loyalty should mean that they are expected to sacrifice their private (family) lives.

Foreign and Domestic-Owned Firms in India

The limited evidence from 27 public and private enterprises and four MNC case studies suggests that while some HRM practices are similar in all these sectors, the pattern of adaptations and accommodations to the Indian ethos can be clearly seen in others. The four MNCs consisted of one U.S. pharmaceuticals company, one German machinery manufacturing company, one Japanese banking firm, and one Canadian metals manufacturing organization. In the Indianowned organizations, 15 public-sector companies consisted of heavy power equipment, some state-owned electricity boards, and service firms including banks, while the 12 private-sector organizations included mostly manufacturing and service companies.

Recruitment. For recruiting managerial and professional employees, MNCs put greater emphasis on college recruitment, advertisements in English-language newspapers, English language proficiency, and job experience in another country. Public-sector firms rely more heavily on advertisements in native language newspapers but also advertise in English language newspapers (Table 2). However, in several state public-sector organizations, the selection interview is merely an exercise in verifying the certificates of academic qualifications, age, and caste. There is no screening to assess job-related skills (see Murthy and Ratnam, September 1991).

Selection. In the public-sector organizations, internal interference on formal selection procedures results, in many cases, in the selection of people of the same caste, community, and regional affiliation.

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In the private sector, particularly in family-owned firms, a number of people at the top level are not fully qualified. In selection of people at all levels, nepotism based on family ties, personal relationship, and loyalty is practiced.

The multinationals in India, though subject to some of the same influences and pressures described above, have been able to filter and discard them to a large extent because of pressures on them to remain profitable and efficient.

Layoff policies. Lack of effective and efficient manpower planning more often than not results in overstaffing in public-sector organizations. The imposing role of politicized unions and the resultant perceived power of the union leaders and the government policy to maximize employment in the public sector leave no room for layoffs. In the private sector, because of the government regulation, documentation, and the power of the union, layoffs are avoided.

Compensation and promotion. The basis of compensation and promotion in both the public- and private-sector organizations seems to be seniority. In multinationals it is generally accepted that rewards such as promotions and special increments should be awarded on merit.

Training. None of the organizations in the public and private sector had any mechanism to determine the training needs of their employees. Blue collar workers were trained on the job. Managerial employees and office cadre were sent for training to outside courses and seminars organized by professional organizations. Training is accorded an important place among the priorities of multinationals. A Canadian and a U.S. subsidiary in India offered training and development programs for all levels of employees in its plants. The Japanese and German multinationals sent a number of their managerial employees to their head office for extended training. The focus of the training was on company philosophy and the development of technical expertise. In general, multinationals invested heavily in the training of their personnel, while very little investment went into training and development for nonmanagerial and worker cadres in public-sector organizations.

Performance appraisals. Formal appraisal systems existed in all organizations except one. However, employees in the public-sector organizations feel that their system is ineffective. It meets the quotas and achieves objectives initially laid down. In the private sector

	Public Sector	Private Sector	Multinationals
Recruitment	College recruitment, ads in native and English language newspapers and tests.	Informal methods; occasional newspaper ads.	College recruitment, ads in English language newspapers, English language proficiency (in 3 of 4) and job experience in another country.
Selection	Selection formal but ineffective.	Informal hiring and selection based on nepotism, personal relationships, family ties.	Formal: Competent people hired after job interviews, refer- ence checks and other selection criteria. Japanese MNC gave preference to employee rela- tives for junior (clerical and secretarial) positions.
Layoff policies	Do not lay off, companies comply with government directives.	Avoid layoff whenever possible. Procedure to lay off too cumbersome.	Will lay off if employee not found competent. Japanese multinational has a policy of no lay off.
Compensation and promotion	Compensation and promotion are based on caste, age, and seniority.	Preference is given sometimes to hire outsiders to "infuse new blood." Age and seniority is the basis for compensation.	Merit and suitability for in-house available positions is the basis for promotion. Special incre- ments and bonuses are awarded on merit and good performance.
Training	On-the-job training for lower- level employees. Outside courses and training for managerial and office cadre only.	No in-house training. Trained skilled people hired from labour market.	Heavy investment in training for all levels of employees. Multi- nationals send managerial staff to home office for training in company philosophy and tech- nical matters.

TABLE 2
HRM Practices of Multinationals and Indigenous Companies in India

Performance appraisal	Formal system exists but usually ineffective. Effective only in terms of meeting formal quotas and objectives.	No formal system in most companies. Some have formal system but considered ineffective.	Formalized performance appraisal carried out systematically.
Decision making and manage- ment style	Bureaucratic style, some infor- mal consultation with middle and senior management. Final decisions are made by senior management. Hierarchical or- ganization structure.	Paternalistic style. Organiza- tional structure centralized. Se- crecy surrounds decision mak- ing.	Participative style. Organiza- tional structure decentralized. "Open-door policy" towards employees. Key decisions made by top management in consulta- tion with senior and middle management.
Participative mechanisms and group work	Number of formal participative mechanisms but perceived to be ineffective by employees.	No participative mechanisms existed.	Formal participative mecha- nisms only in two of the organi- zations. Effectiveness depends upon the labour relations cli- mate in each company.
Union-management relations	Multi-union representation. Rivalry among unions. Unions confrontational and political in nature. Top management strategy to appease unions.	Union leaders all too powerful and controlling.	Union-management relations "accommodative." MNC man- agement particularly (Japanese) develop a closer rapport with unions for the common good of the organization.
Grievances	Company follows formal proce- dures prescribed by the law or laid down in collective agree- ments.	Workers in nonunionized com- pany have a tendency to approach the head of the orga- nization to resolve grievances.	In unionized companies grievances settled through formal procedures prescribed by law. In nonunionized com- panies settled by negotiations and discussions.

several firms did have a formalized appraisal system but it was considered perfunctory. The employees in general did not have much faith in it due to patronage and a halo effect that creeps in at the time of employee evaluation. Multinationals place greater faith in employee performance appraisals. The training and development program of an individual is directly connected with a formal appraisal system.

Decision making and management styles. In all organizations except two multinationals, it was found that management philosophy and its predisposition were paternalistic in nature. Paternalism seems to be the cornerstone of both Indian and Japanese organizations.

Union-management relations. The employees of public-sector corporations were represented by a number of unions that were affiliated with various political parties. Interunion rivalry and the dominance of the union affiliated with the ruling party created an adversarial labor relations climate.

Employee grievances in the multinationals are often settled amicably through negotiations and discussions. In both public- and private-sector organizations, management follows procedures prescribed by law or through grievance procedures laid down in the collective agreement. In the nonunionized companies workers have a tendency to approach the leaders of the company to resolve grievances.

Conclusions and Lessons

As far as the transferability of traditional Japanese human resource management practices to firms in developing countries is concerned, the limited evidence from our case studies suggests that government policy and cultural factors play an important role. For example, the Japanese work ethics, such as expectations of loyalty to and identification with the firm, are central to a worker's life in Japan but would be unacceptable to most workers in developing countries. This does not necessarily mean that local (non-Japanese) employees of Japanese subsidiaries in developing countries or employees of locallyowned counterparts are not loyal to the companies they work for, but it does imply that their priorities are different from those of Japanese nationals.

QC circles are another example of the importance of cultural factors. In India and Malaysia and even in Japanese subsidiaries QC circles are not very popular because, among other reasons, the general level of education is not as high as in Japan, and workers are not always able to achieve the same results. Another crucial factor is that

workers in India and Malaysia expect cash awards for the efforts they make to improve the quality of products and to raise productivity through OC circles.

In countries like India, where the work force in most organizations is composed of different castes, and in Malaysia, where Chinese and Malays have to work side by side, ethnic and religious tensions mean that incompatibilities inevitably surface from time to time, resulting in lower productivity, poorer quality of goods and services, and a decrease in the satisfaction that workers derive from their jobs.

Implications for HRM in India

India has two management systems operating side by side. The philosophy is paternalistic but the organization structure is bureaucratic and hierarchical in nature.

In India both collective bargaining and participative management seem to be functioning in all unionized organizations. Though participative structure existed on paper, both management and employees' nominees did not perceive them to be effective for different reasons. One of the main reasons for lack of enthusiasm was that the scheme of participation was entirely government initiated without the preliminary process of tripartite consultation and consensus building. Collective bargaining in practice is ineffective because of several factors: (1) dependence of workers on outside leaders. (2) politicization of trade unions, and (3) interunion rivalry and mistrust of management.

Trade union leaders look for help from politicians, government, and third parties to settle union-management conflict. This state of affairs is hardly conducive to developing a healthy relationship between the parties in an industrial relations system.

Endnote

¹ Until 1991, the government of India's Foreign Exchange Regulation Act (FERA) of 1973 required that all foreign equity holdings be diluted to 40 percent, unless the firm is operating in the "priority sector" designated from time to time by the government, and/ or the firm is exporting at least 65 percent of its production. Similar regulations apply in Malaysia (Negandhi and Baliga, 1979; Gupta, 1989).

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DISCUSSION

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Comparative analyses of HRM-IR practices have a long history. But their popularity among academics has gone in cycles. During the expansion of American multinationals in the 1950s and 1960s, comparative studies boomed. Part of the impetus was a desire to explore the linkage—if any—between HRM-IR approaches abroad and the degree of national economic success. The struggle between capitalism and communism was also a factor in the comparative interest. Was the world converging toward a common model of industrialism which would ultimately transcend ideology, or was the dichotomy in economic systems permanent? How much did culture and institutions matter?

After the 1960s, there was a drop-off of comparative research, perhaps the result of a turning inward of interest in the U.S. and its money-granting foundations to domestic concerns. But the 1980s saw a revival. The reasons for the renewed interest are not hard to find.

Within the U.S., the challenge of foreign competition became sharp enough to cause a questioning of *all* American management practices, not just HRM-IR. Moreover, the defining elements of the American system seemed to be coming unglued. Union representation fell to a small fraction of the private work force. And the very notion of an employer-employee relationship was eroded under the pressure of corporate restructuring, use of contingent workers, and a so-called "white-collar" recession. Such periods of uncertainty raise interest in other models, especially when the alternatives are as different as the Japanese approach and the "Social Europe" model.

A longstanding theme in comparative research is the degree to which foreign models of HRM-IR can be exported, especially through the mechanism of subsidiaries of multinational firms. Do foreigners end up adapting to local practice because of the dominance of local

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culture in the workplace? Or do the locals adapt to the foreigners? A standard approach is to compare samples of locally-owned and foreign-owned enterprises.

The Jain, Jain and Ratnam paper falls squarely into this line of research. Jain, Jain and Ratnam have actually written two papers under a single cover; one deals with multinationals and locals just in India while the other deals with multinationals and locals in Singapore, Malaysia, and India. Both would stand alone quite well. But together under one cover it is difficult to find central themes. Indeed, there are separate conclusions for each part, reinforcing the division.

I have four principal reactions to the Jain, Jain and Ratnam paper. First, I would suggest a softening of their assumption that the Japanese model is immutable and unchanging because it is locked in Japanese culture. Given recent world events, in which seemingly immutable societies have undergone dramatic changes, it is more useful to look for sources of future change rather than assume change is unlikely. Certainly, American management practice has varied significantly over the past century, ranging from nonunion Taylorism at the beginning to "mature" adversarial unionism in the middle, and to whoknows-what at the end.

Second, although the influence of government is mentioned tangentially by Jain, Jain and Ratnam, it seems to be underplayed in their paper. The cooperative union approach in Singapore, for example, is a largely government creation (as Lawler and Zaidi note in their paper); at one time Singapore had radical and uncooperative unions. There is also repeated reference to antilayoff regulations in India, suggesting that managerial approaches to layoffs are not entirely a matter of private discretion.

Third, there is not a clear distinction made in the paper between layoffs for cause and economic layoffs. Nor is voluntary turnover (quitting) analyzed. Certainly, in economies with very tight labor markets (as in Singapore) job changing is a possibility and one which potentially conflicts with company loyalty.

Fourth, the economic success stories of the past couple of decades among developing countries seem to have involved three key elements. One is the presence of a work force which has a solid basic education. Then there is a government policy oriented toward export-led growth. And finally—and this is the only characteristic linked to company-level HRM-IR—there is a cultural respect for authority (although expectations of what that authority owes to subordinates varies). In analyzing trends in Singapore, Malaysia, and India, Jain, Jain, and Ratnam might want to focus on these factors more centrally and pay less attention to the nitty-gritty of HRM-IR practices, e.g., performance appraisal.

The Lewin and Yang paper is similar to the Indian portion of Jain, Jain, and Ratnam in that it looks at foreigners and locals in a single, national market. Lewin and Yang note that the degree to which Japanese firms operating in the U.S. follow the Japanese HRM-IR model varies with circumstances such as industrial sector. That is a good point which is documented in the paper. However, even controlling for sector, the Japanese firms do seem to tilt more toward a participative and flexible model. Thus, in Lewin and Yang's logistic regressions, it would be nice to see coefficients for Japanese vs. American ownership.

It is unfortunate that they are unable to obtain truly comparable firm performance measures for the Japanese and American data sets. Japanese firm measures are based on the impressions of managers regarding quality and productivity. (And since the variables are impressionistic, one wonders whether the quality and productivity indexes are really distinct.) American firm measures are based on actual profitability and sales per worker. Case studies reporting success under Japanese management of previously poorly-performing American plants—especially the famed Toyota-GM NUMMI operation—often are open to criticism due to the lack of bottom-line data. Still, Lewin and Yang do not find a striking dissimilarity of results on firm performance across the American and Japanese companies.

One exception is the union variable. Previous American research suggests that unions are associated with higher productivity but an offsetting increase in costs which (net) cuts into profits. Lewin and Yang find precisely that for their American sample. But in the Japanese sample, the productivity effect of unions is negative (and there is no profit variable). Another exception is the HRM values variable. It does not seem to matter for American firms but does seem significant (in manufacturing) for Japanese firms.

As in the Lewin and Yang paper, Lawler and Zaidi concentrate on comparing foreign and local firms in a single country, in this case Thailand. However, they situate Thailand within an Asian context of paternalism and top-down management. Again, the question needs to be asked: How much is culture, how much is stage of development, and how much is political climate?

When the U.S. was at an earlier stage of development and had a mainly unskilled work force it too had such a managerial ideology. And, of course, aggressive managerial campaigns to remain nonunion and strikes in which unionists are fired are not unknown in the U.S. Moreover, Lawler and Zaidi's statistical results regarding the impact of unionization are in line with U.S. findings. For example, the notion that unions are associated with seniority-based pay is not surprising from an American perspective.

In summary, all three papers are part of a new thrust in comparative research. It is certainly a good thing that the IRRA has chosen to devote a session to this work. As for the ultimate question of the impact of national culture, we need to be content with limited answers. It is a little like the "nature-versus-nurture" debate in child development. Everything matters (somewhat).

XV. NEW DEVELOPMENTS IN INTEREST ARBITRATION

Strategic Behavior in Negotiations and the Use of Arbitration

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This paper investigates why parties involved in contract negotiations use binding arbitration as a means of settling contract disputes. I estimate the relationship between the probability of using arbitration and characteristics of the bargainers. My goal is to evaluate empirically the hypotheses that stem from theoretical models of arbitration usage.

The industrial relations literature (Farber and Katz, 1979; Farber, 1980; Bloom, 1981) has focused on the factors that affect the contract zone (the set of potential settlements that both parties prefer to arbitration). Risk aversion, beliefs about arbitrator preferences, and the relative costs to arbitration versus negotiation are shown to influence the contract zone. Interest in the determinants of the contract zone stems from the belief that the probability of impasse is decreasing in the size of the contract zone. However, this research does not explicitly justify the relationship between the size of the contract zone and the probability of impasse. Crawford (1981, p. 209) contends that "the view that the probability of impasse is directly determined by the size of the contract zone is a serious oversimplification, one which may be misleading."

Theoretical models developed by Crawford (1982), McCall (1990), and Babcock (1991) attempt to illustrate how the negotiations process

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could be altered by the existence of arbitration and to link this change to arbitration usage. These models explicitly focus on the interaction between strategic behavior in negotiations and the use of arbitration. In Crawford's model, impasses occur if bargainers make irreversible commitments to incompatible bargaining positions. Commitments are made in negotiations because, even though they increase the likelihood that an impasse occurs, they increase the expected value of the settlement. This suggests that factors that increase the benefit to cost ratio of commitment will increase the likelihood that such commitments occur, leading to more impasses.

McCall (1990) examines principal-agent relationships in contract negotiations under arbitration. His model characterizes a form of information asymmetry under which the principal (i.e., union membership) may not perfectly distinguish between poor negotiated outcomes resulting from unfavorable bargaining environments and those resulting from agent (union negotiator) shirking. These circumstances create incentives for the agent to prefer arbitrated outcomes to negotiated ones when the bargaining environment is unfavorable.

In an earlier paper (Babcock, 1991) I focus on the effect of uncertainty on the negotiations process. This theory employs two types of uncertainty: 1) uncertainty about arbitrator preferences, and 2) uncertainty about the opponent's expectations about arbitration. I show that the first type of uncertainty is not sufficient to generate impasses. When there is a contract zone, impasses only occur if there is also uncertainty about what the opponent expects from arbitration. I use a model of bargaining similar to Rubinstein (1985) to demonstrate this result. The basic idea underlying this model is that when bargainers are uncertain about the reservation value of their opponent (due to the uncertainty about their expectations about arbitration), they will negotiate strategically, leading to occasional impasses. This model implies that increases in uncertainty can increase the probability of impasse. This contrasts with models that assume a negative relationship between the size of the contract zone and the probability of impasse, which would predict that increases in uncertainty decrease the probability of impasse due to increases in risk costs.

In this paper, I present an empirical model of the use of arbitration in teacher contract negotiations using data from Wisconsin. The purpose of this model is to examine empirically the relationships suggested by the theoretical literature. In the following section, I summarize the arbitration procedure used in Wisconsin. I then discuss the data to be used in the empirical analysis, provide some descriptive statistics, and present the empirical model and results.

Final-Offer Arbitration in the Wisconsin Public School System

In 1978, Wisconsin adopted a collective bargaining statute which specified final-offer arbitration as the procedure for resolving contract disputes. During bargaining, if the union or the school board believe they have reached an impasse, they notify the Wisconsin Employment Relations Commission (WERC). The WERC assigns an investigator to try to mediate the dispute. In the majority of cases, the only unresolved issue is wages, and parties bargain over wage increases rather than wage levels. If mediation is unsuccessful, the investigator initiates the process that results in the final offers. Each bargainer makes an initial final offer to the opponent, who is then allowed to modify their offer. Modifications continue until each party declines to revise its offer after reviewing the offer of the other party. The bargainers then select an arbitrator by alternately striking names from a list provided by the WERC. Research indicates that even at this point much uncertainty exists on the part of both bargainers as to the preferences of the arbitrator (Olson, Jarley, and Dell'Omo, 1989; Dell'Omo, 1987).

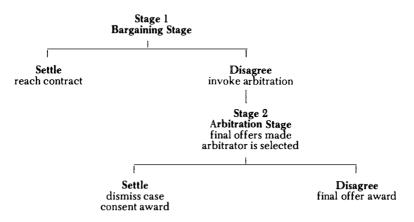
At this stage, the parties may bring about a settlement via a negotiated agreement or a "consent award." A consent award is a settlement reached by the parties that the arbitrator formally draws up as an award. These awards occur in 3.8 percent of all negotiations and their use suggests an agency problem. Because consent awards are binding on the negotiators, they are requested to bypass the need for ratification by the union membership or school district officials. If neither a negotiated settlement nor a consent award is reached, the arbitrator resolves the dispute by choosing one of the parties' final offers as the settlement.

In Wisconsin, both parties are represented by centralized organizations—the Wisconsin Association of School Boards (WASB) and the Wisconsin Education Association Council (WEAC). Both the WEAC and the WASB keep files on all arbitrators involved in previous arbitration cases. In 1984, WEAC began setting "wage targets," in an attempt to increase the wages of teachers throughout the state. That particular year it "advised" the unions to negotiate at least a 6.5 percent wage increase or proceed to arbitration. This strategy, an example of the general strategies discussed in Crawford (1982), allows the union negotiator to credibly commit to a bargaining position. Once arbitration is invoked, an average of nine months is required to reach an arbitration award. The arbitration procedure imposes substantial costs to each party. Cost related to delays, risk, and out-ofpocket expenses (i.e., professional fees) can be formidable. However, in some respects the arbitration procedure may be less costly for the parties than negotiating a contract. The bargaining parties are composed of elected officials, who are held accountable for any negotiated outcomes. The fact that the impasse can be resolved by a third party (an arbitrator) frees the bargainers from responsibility over the final contract. Kochan (1980, p. 291) remarks that "parties faced with difficult internal conflicts and political pressures may prefer to pass the buck to the factfinder or arbitrator and let themselves off the hook."

Data and Empirical Model

The data were collected from Wisconsin teacher contract negotiations from school year 1978-1979 to 1984-1985. There are 431 school districts and the average district negotiated six contracts in the seven-year time period.

Due to the structure of the negotiations process, the process is empirically modelled in two stages—the bargaining stage and the arbitration stage. The figure below outlines this process.



Bargaining rounds are divided into three groups: 1) agreement in stage one—contract is reached without invoking the arbitration procedure (79.2 percent); 2) disagreement in stage one, but agreement in stage two—contract is reached after invoking arbitration (10.2 percent) (this group also includes contracts reached through consent awards); and 3) disagreement in stage two-contracts reached by a final-offer award (10.6 percent).

The percent of cases invoking arbitration and receiving final-offer awards each year is given in Table 1. Arbitration usage has been increasing, with many districts using arbitration in 1982-1983 and 1984-1985. The latter number may be explained by the imposition of WEAC's 1984 program of wage "targeting" described earlier. Table 2 summarizes the dependence on arbitration. During the seven-year period, 53.1 percent of the districts never received an arbitration award and 34.6 percent received only one arbitration award. It is apparent that heavy reliance on arbitration is not a concern in Wisconsin as it is in other states. For example, 18.3 percent of New York State police bargaining units went to impasse seven times during a seven-year period (Kochan and Baderschneider, 1978), whereas in Wisconsin, only 2.1 percent of the districts ever received more than two arbitration awards in a seven-year period.

	Invoked Arbitration	Received Final- Offer Award
1978-1979	12.08%	6.18%
1979-1980	12.43%	7.51%
1980-1981	16.07%	9.82%
1981-1982	22.64%	11.59%
1982-1983	41.27%	20.63%
1983-1984	13.47%	6.02%
1984-1985	25.63%	11.70%
Total	20.80%	10.62%

TABLE 1	
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Arbitration Usage 1978-1985

Using the Wisconsin data, the probability of impasse is estimated in each of the two stages of negotiations. The purpose of this model is to

	District Dependence on Arbitration 1978-1985							
	0	1	2	3	4	5	6	
Invoked arbitration	30.0% 129	37.1% 160	19.5% 84	10.2 % 44	2.8% 12	. 2% 1	.2 % 1	= 100% = 431
Received final-offer award	53.1% 229	34.6% 149	10.2% 44	1.9% 8	.2% 1	0% 0	0% 0	= 100% = 431

TABLE 2 District Dependence on Arbitration 1978-1985

examine empirically the relationships that the theoretical models have suggested. Table 3 presents the results for the probability of impasse in the stages separately, and Table 4 presents the stages estimated jointly. Joint estimation of the two stages allows the correlation of the error terms across the two stages. However, Table 4 shows that this correlation is insignificantly different from zero. Since the results are quite similar, I will discuss them together.

The theories that suggest a negative relationship between the size of the contract zone and the probability of impasse (Farber and Katz, 1979; Farber, 1980) predict that increasing the costs to delay and risk decreases the probability of impasse. Larger districts, measured by *enrollment*, have smaller costs of using arbitration because the fixed costs of using arbitration as a percentage of the total wage bill are

	Bargaining Stage	Arbitration Stage
Constant	9146 (-4.600)	9649 (-1.855)
Enrollment	.0012 (1.990)	.0001 (.091)
Variance of wages in conference	0005 (236)	0035 (692)
Relative position	.0015 (1.703)	0006 (352)
D1984	.4165 (3.659)	1262 (579)
Property value	0849 (-2.447)	.3898 (3.195)
Per capita income	1182 (-4.029)	.0132 (.195)
Increase in funding	.0435 (2.572)	0169 (384)
Wage increase last contract	.0483 (4.973)	—.0192 (—.883)
Cost of living increase	.2704 (2.074)	.6170 (2.348)
New settlement		0114 (-1.412)
	-Log L = 1235.37	-Log L = 319.50

TABLE 3 Probability of Impasse_Universite Probit Model

Note: Asymptotic t-ratios are in parentheses. Equation for the arbitration stage contains a set of 24 arbitrator dummy variables. The sample size for bargaining stage is 2495; 519 for the arbitration stage.

	Bargaining Stage	Arbitration Stage
Constant	9160 (-4.3204)	-1.1367 (4961)
Enrollment	.0012 (2.0266)	.0002 (.1096)
Variance of wages in conference	0005 (2474)	—.0035 (—.6335)
Relative position	.1447 (1.6473)	0436 (1594)
D1984	.4172 (3.4304)	0926 (1789)
Property value	0848 (-1.9547)	.3792 (1.6176)
Per capita income	1181 (-3.8579)	0004 (.0002)
Increase in funding	.0434 (2.3419)	—.0122 (—.1530)
Wage increase last contract	.0482 (5.0034)	—.0137 (—.1727)
Cost of living increase	.2717 (1.9397)	.6276 (2.3528)
New settlement		0114 (-1.2077)
RHO		329 745)

TABLE 4 Probability of Impasse—Bivariate Probit Model

Note: Asymptotic t-ratios are in parentheses. The results include a set of 24 arbitrator dummy variables. The sample size is 2495, and the log likelihood is -1554.86.

smaller. The positive sign on *enrollment* supports this prediction. The positive effect of size of the bargaining unit on the probability of impasse is also found in other empirical work (Currie, 1989; Kochan and Baderschneider, 1978).

To test the theory in my earlier paper, variables are needed that reflect uncertainty about arbitration. In Wisconsin, the arbitrators consider districts within an athletic conference as the appropriate standard by which to determine "comparable" districts. The use of this standard makes it easier to identify negotiation outcomes in other districts that are likely to affect the parties' expectations about arbitration (since they affect arbitrator preferences) as well as uncertainty about arbitration. Therefore, uncertainty is measured by using the variance of wages in the athletic conference and the relative position of the district in the conference (the absolute difference from the mean). If the district is either far above or below the mean wage in the conference, there may be greater uncertainty as to whether the arbitrator would maintain this position or bring the district closer to the average. In the bargaining stage, the sign on the district's relative position is positive, suggesting support for my model. In the arbitration stage, the coefficients on both measures of uncertainty are insignificantly different from zero.

The use of commitment strategies can increase the use of arbitration (Crawford, 1982). The union's strategy of wage targeting, which began in 1984, is one indication of the bargainers' willingness to use these types of strategies. A dummy variable, D1984, is included in the analysis to capture the use of strategic behavior, and is positive as expected in the bargaining stage.

Commitment strategies may be more likely to occur in poorer districts than in wealthier districts. In poor districts, if union negotiators attempt to extract wage increases similar to other districts in their conference, yet school boards insist that their district is unable to keep up with other, possibly wealthier districts in their conference, poorer districts will be more likely to use arbitration. Both parties may prefer to use arbitration to be freed from the responsibility of negotiating an unfavorable settlement. Therefore, the parties may stake out bargaining positions that will ensure impasse, consistent with the theories of Crawford and McCall. The variables, property value and per capita income, reflect interdistrict differences in wealth. During the sample time frame, the state aid formula changed to give larger funding increases to poorer districts. Therefore, the variable, increase in funding, also captures wealth differentials. The signs on the wealth variables in the bargaining stage suggest support for the hypothesis that poorer districts have higher probabilities of invoking arbitration. In the arbitration stage, however, the coefficients on increase in funding and per capita income are insignificantly different from zero, and the sign on *property value* is positive and thus reversed from the bargaining stage. Therefore, conditional on invoking arbitration, wealthier districts receive final-offer awards, while poorer districts voluntarily settle or use consent awards.

The wage increase received last year may be linked to commitment strategies this year. If teachers received a large wage increase in the previous year, the board may commit publicly to keeping wages down. The union officials may prefer to let the arbitrator award an increase that caused the district to move toward the mean wage, rather than creating a politically unfavorable situation for themselves by voluntarily agreeing to such a contract. The positive sign on *lag wage increase* in the bargaining stage is consistent with this notion.

The variable, *lag cost of living*, measures increases in the consumer price index in the previous year. Large increases in inflation may have caused real wages to drop in the previous contract. The union may push heavily for large wage increases in the current contract to make up for previous losses, and the board may resist these demands. The positive sign on this coefficient in both stages is consistent with this characterization.

The variable, *new settlement*, measures the extent to which new settlements (resulting from agreement in stage two), that occur in the district's athletic conference after arbitration has been invoked differ from the conference average. It is expected that these new settlements cause the parties to update their expectations about arbitration if these settlements are far (in absolute value) from the average. The sign on this variable is negative, which suggests that when these settlements are very different from the average, expectations are updated or uncertainty is changed in a way that makes settlement more likely.

The estimates for the probability of impasse in the arbitration stage include a set of 24 arbitrator dummy variables. The null hypothesis that the set of dummy variables is equal to zero is rejected. There are several potential reasons why the identity of the arbitrator may affect the probability the bargaining pairs receive a final offer award, conditional on invoking arbitration. First, there may be differences across arbitrators in their predictability or in their perceived bias towards one side. If these characteristics affect the contract zone, it may affect whether a voluntary agreement is possible. Second, the arbitrators vary in their skills as mediators. Particularly successful mediators will be able to bring about voluntary settlements.

Summary of Findings

The empirical analysis provides support for theoretical models that highlight the interaction between strategic behavior and arbitration usage. First, consistent with Crawford's framework, the use of commitment strategies increase the likelihood of invoking arbitration. Second, the use of consent awards is compatible with McCall's theory of agency relationships in contract negotiations. Third, the results suggest that more uncertainty is associated with a higher probability of impasse—a result consistent with my theoretical model (Babcock, 1991). This result is also found in Tracy's (1987) analysis of the effect of uncertainty on strike incidence and duration. In total, these findings suggest the need for more investigation of the role that strategic factors play in the negotiations process.

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Bargaining Intensity and Interest Arbitration

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When arbitration is available to resolve collective bargaining impasses, how seriously do parties bargain? A common perception is that parties may be discouraged from bargaining if they believe negotiations may end in arbitration. The lack of incentive is presumably exacerbated in the case of conventional interest arbitration because any substantive movement in negotiations will reduce the area within which arbitrators will determine the outcome.

Previous studies of bargaining and interest arbitration have focused on the incidence of arbitration, the chilling effect of arbitration on negotiations, and the narcotic effect of utilizing the arbitration mechanism on future negotiation (e.g., Chelius and Extejt, 1985; Farber and Katz, 1979; Lester, 1984; Olson, 1988; Stern, 1975; Subbarao, 1978). As far as can be determined, no one has yet looked at the parties' effort to reach settlement, regardless of whether or not they were able to do so ultimately.

This study looks at the negotiations activity of Pennsylvania municipalities and police over a ten-year period. The measure of intensity of bargaining effort is the number of negotiating sessions reported by parties during each round of bargaining. That measure can be related to the bargaining processes involved in achieving the collective bargaining agreement. The hypothesis tested is that parties who receive an arbitration award to resolve a bargaining impasse are less likely to engage in extensive negotiations than those who achieve a settlement by themselves.

Scope of the Study

Act 111 of 1968 authorizes collective bargaining between Pennsylvania police and professional firefighters and their employers. The act provides for compulsory binding interest arbitration in the event of a

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bargaining impasse. The form of arbitration is conventional arbitration, that is, a tripartite panel of arbitrators has discretion to render a binding award on outstanding issues. The statute mandates that collective bargaining negotiations start at least six months before the beginning of the employer's fiscal year and that either party may initiate arbitration proceedings if settlement is not reached within 30 days but no later than 100 days prior to the beginning of the fiscal year.

A questionnaire was mailed in 1988 to the police chief in each of the 1138 municipalities listed by the Pennsylvania Department of Community Affairs as having a police department. The purpose of the survey was to find out the collective bargaining experience in the second decade of Act 111, 1978-87. Of the 643 responses, 377 reported a collective bargaining relationship between the municipality and its police. During the decade, these 377 parties experienced a total of 1689 rounds of bargaining.

One survey question asked how many negotiating sessions occurred before settlement or issuance of an arbitration award in each bargaining round. The respondent had four choices: 0 or 1 session, 2 to 4 sessions, 5 to 9 sessions, 10 or more sessions. Another question asked about the process used to arrive at the outcome of each bargaining round. Three choices were offered: the parties negotiated a settlement on all terms without invoking arbitration, the parties negotiated a settlement after applying for arbitration but before an award was issued, the parties applied for arbitration and subsequently received an arbitration award. Answers to these two questions provided the data for this study. Since not all respondents provided information on the number of negotiating sessions for each round of bargaining, the data are limited to 1407 rounds of bargaining. The proportion of the 1407 bargaining rounds ending in an arbitration award in the data available for this study was identical to that of the 1689 bargaining rounds of the total survey (Loewenberg and Kleintop, 1992). It was therefore assumed that the unreported information on number of bargaining sessions would not affect the results of this study.

The data may pose two other concerns. First, the data are selfreported by parties. Since the survey covered ten years of bargaining, there could be a question about the accuracy of information provided on the number of sessions for each round of bargaining. Second, the categories for number of negotiating sessions may be considered too broad. Ideally one would like to know the precise number of negotiating sessions in each round. Different meanings could be attached to two or four bargaining sessions in a bargaining round. The mail survey instrument was designed to facilitate responses; I felt that categories would yield a higher response rate and more accurate responses than requesting the absolute number of negotiating sessions in each round.

Results

Table 1 presents the number of negotiating sessions by type of bargaining process to achieve the final result. Over 70 percent of negotiations resulted in a settlement without the parties invoking arbitration; settlements were reached in 11 percent of negotiations after the arbitration procedure had been initiated; and in 19 percent of negotiations the parties received an arbitration award. Relatively few rounds involved less than two negotiating sessions or more than nine negotiating sessions.

Process and Outcome of Bargaining Round						
	Number of Negotiating Sessions					
Process and Outcome	0 or 1	2 to 4	5 to 9	10 or more	Total	
Negotiated settlement without invoking arbitration	63	474	397	62	996	
Negotiated settlement after applying for arbitration	0	31	104	26	161	
Applied for arbitra- tion and received arbitration award	4	77	117	52	250	
Total rounds of bargaining	67	582	618	140	1407	

TABLE 1 Number of Negotiating Sessions by Process and Outcome of Bargaining Bound

Table 2 provides a percentage breakdown of the number of negotiating sessions within each type of bargaining outcome. Of particular interest is the result that almost 21 percent of bargaining rounds ending in an arbitration award involved ten or more negotiating sessions compared to six percent of bargaining rounds in which parties negotiated a settlement directly and 16 percent in which they negotiated a settlement after filing for arbitration. Conversely, 54 percent of the bargaining rounds which ended in a settlement without

TABLE 2

	Number of Negotiating Sessions					
Process and Outcome	0 or 1	2 to 4	5 to 9	10 or more	Total	
Negotiated settlement without invoking arbitration	6.3%	47.6%	39.9%	6.2%	100%	
Negotiated settlement after applying for arbitration	0%	19.2%	64.6%	16.1%	100%	
Applied for arbitra- tion and received arbitration award	1.6%	30.8%	46.8%	20.8%	100%	
Total rounds of bargaining	4.8%	41.8%	43.9%	10.0%	100%	

Percentage Distribution of Process and Outcome of Bargaining Round by Number of Negotiating Sessions

resort to arbitration achieved that objective with less than five negotiating sessions, whereas only 32 percent of bargaining rounds that ended in an arbitration award involved less than five negotiating sessions.

Table 3 arranges the percentage data by negotiating sessions. Although relatively little difference appears in the case of ten or more negotiating sessions between negotiated settlements without invoking arbitration and negotiations ending in an arbitration award, substantial differences appear in all other categories. The significance of this

	Number of Negotiating Sessions					
Process and Outcome	0 or 1	2 to 4	5 to 9	10 or more	Total	
Negotiated settlement without invoking arbitration	94%	81.4%	64.23	44.2%	70.8%	
Negotiated settlement after applying for arbitration	0%	5.3%	16.9%	18.6%	11.4%	
Applied for arbitra- tion and received arbitration award	6%	13.3%	18.9%	37.1%	17.1%	
Total rounds of bargaining	100%	100.0%	100.0%	100.0%	100.0%	

TABLE 3 Percentage Distribution of Number of Negotiating Sessions by Process and Outcome of Bargaining Round

analysis is reduced by the heavy preponderance of bargaining rounds that result in settlement without the invocation of arbitration.

To see if the observed frequencies differ significantly from those that could be expected to occur randomly, a chi-square test of the data was performed. The resulting chi-square of 122.7 indicated that the null hypothesis could be rejected at the .001 level. Hence, there appears to be a relationship between the process and outcome of negotiations and the number of negotiating sessions in that round of bargaining.

Discussion

The hypothesis for this study was based on the perception that parties who had conventional interest arbitration as an impasseresolution mechanism would be unwilling to engage in serious bargaining if they believed that direct negotiations would not result in a settlement. Instead, such parties would meet perfunctorily, quickly initiate arbitration proceedings, and wait for the commencement of the arbitration hearings. On the other hand, parties who believed that negotiations would yield a settlement would bargain long and hard to achieve that result. The data do not support the hypothesis. Indeed, the data show that parties who initiated arbitration proceedings engaged in a greater number of negotiating sessions than parties who negotiated a settlement without resort to arbitration and that parties who eventually received an arbitration award had the highest incidence of engaging in ten or more negotiating sessions.

Perhaps not too much should be made of the fact that parties who negotiated a settlement without applying for arbitration were able to do so in the majority of cases with four or fewer negotiating sessions. Parties may achieve a settlement with relatively few meetings because of available patterns of other settlements, a spirit of cooperation, modest proposals, overriding economic or political constraints, or determination to avoid arbitration.

The distribution of number of negotiating sessions is skewed much more in the case of parties who applied for arbitration and either eventually reached a settlement directly or received an arbitration award. Over 80 percent of bargaining rounds in which parties applied for arbitration but reached a settlement by themselves involved five or more negotiating sessions. In some of these cases applying for arbitration may have been a *pro forma* procedural step required by the statutory timetable. In other cases, however, parties facing an arbitration deadline who wanted to avoid arbitration would have scheduled additional negotiating sessions.

A similar argument could be advanced in the case of parties who applied for arbitration but received an arbitration award. The only difference is that the additional negotiating sessions did not produce an agreement or stay the arbitration proceedings. The fact that a higher proportion of bargaining rounds ending in an arbitration award involved ten or more negotiating sessions than either of the other two categories supports this argument. The argument is contrary to the hypothesis and conventional wisdom. If parties who received an arbitration award were disinterested in attempting to reach a settlement by themselves, they would have little reason to bargain prior to the arbitration proceedings. Yet two-thirds of the bargaining rounds that resulted in an arbitration award involved at least five negotiating sessions between the parties. The data thus suggest that in general parties who received an arbitration award had arrived at a genuine bargaining impasse prior to arbitration rather than merely going through a quick ritual meeting in order to declare an impasse and proceed to arbitration.

Conclusions

This study has shown that bargaining intensity, as measured by number of negotiation sessions in a round of bargaining, deepens when parties apply for interest arbitration. The highest proportion of bargaining rounds with ten or more bargaining sessions occurred in cases where the parties eventually received an arbitration award. Moreover, two-thirds of all bargaining rounds which ended in an arbitration award involved five or more negotiating sessions. The hypothesis that parties who receive an arbitration award to resolve a bargaining impasse are disinterested in negotiating is not supported.

When viewed in a broader perspective, the results of this study suggest that even conventional interest arbitration serves the purpose for which it was designed. In cases where an economic strike is not deemed to be a feasible feature of the collective bargaining process, arbitration becomes a substitute mechanism. The availability of arbitration encourages bargaining, provides a deadline for direct negotiations, and raises for both parties uncertainty about the results of the impasse procedure. The results of this study suggest a sincere and serious effort by most of those parties to negotiate and settle their differences without proceeding to arbitration.

The research suggests two directions for additional research. First, the measure of bargaining intensity needs to be investigated further. The measure utilized in this study may have limitations. Number of negotiating sessions does not, for instance, indicate differences in the length of sessions or the seriousness of bargaining efforts. Nor do the available data permit relating the timing of negotiating sessions to invocation of arbitration. Case studies may be necessary to determine if other factors need to be added to the measure. Second, research in other jurisdictions would be useful to see if their experience is similar to that in Pennsylvania. Hopefully this study will stimulate interest in the concept of bargaining intensity and its relationship to collective bargaining.

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Arbitrator Decision Making in Multi-Issue Disputes

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A significant share of the interest arbitration research over the last decade has focused on the decision process of arbitrators (Ashenfelter and Bloom, 1984; Farber and Bazerman, 1985; Bloom, 1985; Olson and Jarley, 1991). This attention by scholars reflects the influence arbitrator decision making is thought to have on the behavior of the parties that negotiate under the threat of arbitration (Farber and Katz, 1979; Farber, 1980). Virtually all of the research on this topic is based on a simple model where the wage rate is the only disputed issue. In this model the arbitrator's belief about the "fair" wage (W_A) depends on a set of exogenous characteristics of the bargaining pair and environment observed by labor and management (Xs) and an unobserved component, ϵ :

(1) $W_A = XB + \epsilon$.

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In final-offer arbitration each side presents their final wage offer and the arbitrator selects the offer closest to W_A . If W_U equals the union's final offer and W_E is the employer's final offer, the probability the union's final offer is chosen is

(2) $Pr(Union win) = (W_U - W_A < W_A - W_E).$

Assuming ϵ is normally distributed, the probability of a union win is

(3) $Pr(Union win) = 1 - \Phi\{[(W_U + W_E)/2 - X\beta]/\sigma\}.$

 $\Phi(.)$ is the CDF for a standard, normal random variable. β , σ_{ϵ} and their standard errors are estimated using a slight modification of the standard probit model where the dependent variable is the offer chosen by the arbitrator.

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Provided all of the X variables observed by labor and management are also observed by the researcher, the probit estimates provide information on the weight placed on the X variables by arbitrators when determining the fair wage outcome and the parties' uncertainty about the fair wage beliefs of arbitrators. *This conclusion assumes the wage rate is the only disputed issue.* In disputes where the final offers of the parties include more than simply the wage rate, the single issue model is appropriate only if arbitrators completely ignore the nonwage issue(s) when reaching a decision.

The single-issue model was appropriately used in the previous experimental research because the wage rate was the only disputed issue in the scenarios presented to arbitrators (Farber and Bazerman, 1986; Bloom, 1986; Dell'Omo, 1989). It also appears to have been appropriate in the Ashenfelter and Bloom (1984) study of the early New Jersey experience, perhaps because the only issues subject to arbitration under the New Jersey statute are "economic" issues. As Olson and Jarley (1991) discuss, this model does not appear to be appropriate in many of the teacher disputes under Wisconsin's final offer by package procedure.

If arbitrators give some weight to the nonwage issue(s) when making decisions in multi-issue disputes, then the appropriate model of arbitrator decision making must reflect their multidimensional character. In this paper I elaborate on Olson and Jarley (1991) and show the single issue model is not appropriate in multi-issue disputes under a final offer by package regime. I then empirically explore the decisions of arbitrators in multi-issue disputes.

Multi-Issue Final-Offer Disputes

For the nine school years beginning with 1977-78, data were collected on 230 final-offer decisions in k-12 school districts where at least one of the disputed issues was wages. This sample is similar to the sample in Olson and Jarley except for the exclusion of a small number of awards in k-8 and 9-12 districts. Additional details regarding the statute and data can be found in Olson and Jarley. In 49 percent of these disputes the only disputed issue is the wage rate. A wage dispute is defined as a dispute over adjustments to the salaries in the salary grid, changes in the structure of the salary grid (e.g., number of lanes or steps) or proposals for lump-sum payments. The distribution of awards by the number of issues is:

Characteristics of the Case	No. of Cases
Wages only Wages + 1 other issue	112 33
Wages + 2 other issues	25 22
Wages + 3 other issues Wages + 4 other issues	16
Wages + 5 other issues Wages + 6 other issues	87
Wages $+ > 6$ other issues	7

There is also substantial variation in the type of nonwage issues in the multi-issue cases. The seven most common issues in the sample are:

Issue	No. of cases where at least one party submitted an offer on this issue
Extra-curricular or extra-duty pay Health insurance (typically cost sharing propos-	20
Health insurance (typically cost sharing propos- als)	19
Dental insurance (typically introduction of)	11
Union security Contract duration	9 6
Long-term disability (typically introduction of)	5
Layoff language	11

These two tables show a majority of the awards settled both the salaries for teachers and at least one other issue.

The single issue wage model of arbitrator decision making is inappropriate in the multi-issue disputes only if arbitrators give some consideration to the nonwage issue(s) when making their final-offer decision: if the nonwage issues are ignored by the arbitrator then a model that also ignores these issues is correctly specified. A natural way to test whether or not arbitrators consider the nonwage issues is to estimate the single issue wage model separately for the wage-only disputes and the multi-issue disputes. If the two samples provide different estimates, then the nonwage issues are important when arbitrators make their final-offer selections. The estimates for the two samples are shown in columns (1) and (2) of Table 1. The variables included in the model are: (a) the percentage change in consumer prices during the first year of the contract (mean = 4.9, SD = 3.8), (b) an index of the MA maximum point on the salary schedule in the district relative to the average MA maximum salary in the district's athletic conference for the previous year (mean = 100.1, SD = 5.9). and (c) the average percentage increase for the MA maximum salary cell for contracts settled earlier in the current school year (mean = 7.6,

		Dependent Variable				
	Final-Offer Decision	Final-Offer Decision	Final-Offer Decision	Final-Offer Decision	Stated Position On Wages Offers	Final-Offer Decision
Variable	(1)	(2)	(3)	(4)	(5)	(6)
Constant	20.082 (7.427)	14.560 (6.450)	24.306 (17.197)	17.362 (6.145)	11.006 (25.623)	16.970 (5.834)
Inflation	.376 (.128)	.303 (.157)	.491 (.289)	.379 (.124)	.704 (.449)	.376 (.121)
Wage Increase in the Ath. Conference	.500 (.208)	.292 (.150)	.728 (.488)	.344 (.150)	1.043 (.820)	.359 (.133)
Wage Level relative to the Ath. Confer, t–1	186 (.070)	108 (.064)	245 (.164)	142 (.060)	109 (.233)	139 (.058)
Øŧ	5.027 (1.063)	2.380 (.762)	8.044 (3.555)		10.264 (5.365)	2.434 (.732)
σ for wage only cases				2.613 (.872)		
σ for the multi-issue cases				7.239 (2.485)		
α						.554 (.173)
λ						.473 (.124)
– Log L	146.343	65.976	76.876	144.032	64.847	142.995
Sample Size	230	112	118	230	109	230
Description of the Sample	Wage & Multi- Issue Cases	Wage Issue Only	Multi-Issue Cases Only	Multi-Issue & Wage Cases	Multi-Issue Only	Wage & Multi Issue Cases

TABLE 1 Estimates of Fair Wage Beliefs of Arbitrators

Standard errors in parentheses.

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SD = 2.0). This average is computed over negotiated settlements in the district's athletic conference. Final offers are measured as the percentage increase in the MA maximum point on the salary schedule for the first year of the contract (mean = 7.4, SD = 2.6).

A likelihood ratio test of the null hypothesis that the parameters are the same in the multi-issue and wage-only decisions is constructed by comparing the results from columns (1) and (2) with the constrained model reported in column (3). The data do not reject ($\chi^{2}_{5 d.f.} = 6.982$, p = .222) the hypothesis that the models are the same in the singleissue and multi-issue cases. A model that allows σ_{ϵ} to vary across the two sets of cases is shown in column (4). This model is preferred to the model in column (1) which constrains σ_{ϵ} to be the same in each subsample ($\chi^2_{1,df} = 4.662$, p = .032). Moreover, the model in column (4) is not significantly different from the less constrained model that permits both σ_{ϵ} and the β s to vary across the two types of cases $(\chi^2_{3 \text{ d.f.}} = 2.36, p = .501)$. These results show the weight arbitrators apply to the facts of the case when determining the fair wage outcome is the same in single-issue and multi-issue disputes. However, the uncertainty around W_A is greater in multi-issue cases because of the weight given to the nonwage issues.

The consequences of ignoring the distinction between single-issue and multi-issue disputes and estimating the single-issue model on the pooled data is apparent from a comparison of the results in columns (1) and (3). The estimated standard deviation of ϵ is five percent in the pooled sample. The difference between the final offers of the parties should be about seven percent if the true value of σ_{ϵ} is 5.4 percent and the parties are risk neutral (Farber, 1980; Gibbons, 1988). Since the observed difference between the final wage offers is much lower (mean = 2.99, SD = 2.98) than seven percent, the estimates from the pooled sample imply an implausible level of uncertainty about the fair wage beliefs of arbitrators. The biased estimate of σ_{ϵ} obtained from the entire sample produces biased estimates of the β s because the estimates of the β s are proportional to σ_{ϵ} . The magnitude of this bias can be seen by comparing the estimates in columns (1) and (2). For example, the pooled estimates in column (1) imply a one percent increase in negotiated settlements in the surrounding school districts increases the fair wage beliefs of arbitrators by .5 percent. In the single-issue cases, the estimated effect of this variable is .29 or 40 percent smaller than the pooled sample estimate.

Stated Versus Revealed Preferences

A content analysis of the written awards in the multi-issue cases reveals an interesting pattern. Although arbitrators in Wisconsin are constrained to select the *entire* final-offer package of one side, in a majority of the multi-issue awards arbitrators discuss *each* issue and indicate in the written award their preferred offer on each issue. Frequently, this discussion also includes the weight the arbitrator *said* was given to an issue when reaching a decision on the two sets of offers.

The preference information in the written decisions is a potentially rich data source for studying multi-issue decisions. This information could be used to estimate a model where an arbitrator evaluates the parties' positions on each issue and then forms a weighted average of the parties' positions over all the issues when deciding between the two packages. A natural first step in developing such a model is to investigate whether or not the *stated* positions of arbitrators on a single issue in the multi-issue disputes correspond to the *decisions* the arbitrators would have made if the single issue had been the *only* disputed item. The Wisconsin data are sufficient to analyze the stated wage preferences of arbitrators in multi-issue cases.

The fifth column of Table 1 reports the probit estimates that try to predict the *stated* position of the arbitrator on the wage issue for the sample of multi-issue wage cases. A small number of cases are omitted from the analysis because the arbitrator said he or she was indifferent between the two wage offers. These results contrast sharply with the estimates in column (2) for the subsample of wage-only cases. The parameter estimates shown in column (5) are individually and jointly $(\chi^2_{4 \text{ d.f.}} = 7.14, p = .13)$ not different from zero at conventional levels of significance. Thus, *none* of the variables that predict arbitrator decisions in wage cases are useful in predicting the *stated* wage position of arbitrators in multi-issue awards.

The results in column (5) have several interesting implications. First, school boards, the state teachers' union (WEAC) and their agents spend substantial resources analyzing the written decisions of arbitrators in an attempt to reduce the uncertainty of the arbitration process and improve their ability to predict how arbitrators will make decisions. Since most final offer cases in Wisconsin involve wages, much of this effort is devoted to an analysis of the wage positions of arbitrators. These results suggest some of this effort is wasted because the stated wage preferences of arbitrators in multi-issue disputes are not useful in predicting the actual decisions of arbitrators in wage disputes.

The intriguing question is *why* the stated preferences of arbitrators do not match their decisions. Insight into this question is provided in Table 2 which gives a breakdown between the preferred wage offer, the final-offer award and the predicted wage decision. In this table each case is divided into one of two categories based on whether or not the *predicted* probability the arbitrator prefers the union's wage offer is greater or less than .5. This classification is based on the parameter estimates in column 2 of Table 1, and provides an estimate of the wage offer an arbitrator would most likely select if the case only involved wages.

	Preferred								
Emp	loyer								
< .5	! 	< .5	¦ ¦ ≥.5	Predicted Pr(Union Wage Offer is Preferred)					
16	17	5	1 10	Employer is FOA Winner					
1		19	40	Union is FOA Winner					

 TABLE 2

 Preferred Wage Offer, Predicted Preferred Wage Offer and Final-Offer Selection

There are two important results in this table. First, there is a very strong relationship between the winning package and the wage offer preferred by the arbitrator. Arbitrators express a preference for the union's wage offer in 97 percent (19+40/61) of the cases where the union's final offer is chosen. Overall, the final-offer decisions match the preferred wage offer in 84 percent (16+17+19+40/109) of the cases. Second, this correlation between the stated wage preference and the final offer award is caused by the divergence between the stated wage preference and the predicted wage decision. In 39 percent (17+1+5+19/109) of the cases the stated position of the arbitrator on wages is different from the predicted wage offer the arbitrator would select if wage is the only issue. As the numbers in the two shaded cells show, most of this inconsistency occurs because of the cases where the predicted wage decisions are different from *both* the preferred wage offer and the FOA decision. This suggests arbitrators give more

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weight to the nonwage issue(s) in multi-issues disputes than they are willing to reveal in their written decisions.

This finding could be because many of the nonwage issues are "lumpy" issues and have only a discrete number of outcomes. For example, some of the multi-issue cases are disputes where the employer paid 100 percent of the cost of health insurance and proposed that teachers share in the cost of insurance under the new contract. In these disputes the union views a change from 100 percent employer-paid coverage as a major concession. There is little uncertainty about the arbitrator's position on health insurance if a decision is based on this issue and this fact is revealed in the written award. Regardless of the arbitrator's position on the issue, the probability the arbitrator will be selected in a future dispute of this type is reduced because one party will likely strike the arbitrator's name from future panels.

The Relative Importance of Wage and Nonwage Issues

Since the stated position of arbitrators on individual issues in multiissue disputes appears to be of limited use in modelling arbitrator decisions in these cases, in this section I pursue a slightly different approach. I assume the probability the union's package is selected is a weighted average of the probability the arbitrator prefers the union's final wage offer and the probability the arbitrator prefers the union's position(s) on the nonwage issues. If α equals the weight given to the wage issue, the probability the union's offer is chosen equals

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Pr(union package is selected) = \alpha Pr(W<sub>U</sub> - W<sub>A</sub> < W<sub>A</sub> - W<sub>E</sub>) + (1 - \alpha) Pr(nonwage offer(s) of the union is preferred).
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Ideally, I'd like to parameterize the last term in this equation using the final offers of the parties on the nonwage issues and a matrix of exogenous factors that determine the fair outcome belief of the arbitrator. Such an approach is not feasible because of the small number and the tremendous variety of nonwage issues. Instead, I simply estimate the average probability the nonwage offer of the union is preferred by replacing the last term in the equation with a constant, λ . If ϵ is assumed to be normally distributed, then β , σ , α and λ is estimated over the pooled sample of wage and multi-issue wage disputes. If U = 1 if the union's package is selected and S = 1 if the dispute is a single issue wage dispute, the likelihood function for this model is

(4)
$$L = \prod_{U=1, \gamma=1} Pr(W_U - W_A < W_A - W_E)$$

$$\prod_{U=0,S=1} [1 - Pr(W_U - W_A < W_A - W_E)]$$

$$\prod_{U=1,S=0} [\alpha Pr(W_U - W_A < W_A - W_E) + (1 - \alpha) \lambda]$$

$$\prod_{U=0,S=0} \{1 - [\alpha Pr(W_U - W_A < W_A - W_E) + (1 - \alpha) \lambda] \}$$

The parameter estimates for this model are shown in the last column of Table 1. This model fits the data substantially better than the simple pooled model which sets α equal to zero and the fit is similar to the model shown in column (4). The estimates of α and λ are different from zero and neither are significantly different from .5. This suggests arbitrators prefer the position of the union about half the time on the nonwage issues in multi-issue disputes. This result is very close to the union win rate in wage-only cases, suggesting that on both wage and nonwage issues the parties present final offers that are, on average, equidistant from the fair outcome belief of the arbitrator. Since α is also not different from .5, these estimates suggest arbitrators give equal weight to the wage and nonwage items when deciding which package to select. Finally, the estimates of β and σ are very similar to the estimates obtained on the wage-only subsample.

Conclusion

I draw three conclusions from this study. First, under a final offer by package law the simple, single-issue model of arbitrator behavior is not an appropriate model for disputes where there is more than a single issue. Second, the written arbitration awards which include statements about the preferred positions of the arbitrators on the individual issues do not resemble the decisions the arbitrators would make if the cases involved only the single issue. Third, the results suggest the written awards understate the weight given to nonwage issues in multi-issue disputes. On average, arbitrators give equal weight to wage and the nonwage issue(s) in multi-issue disputes.

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Is Arbitration Addictive? Evidence from the Laboratory and the Field

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Compulsory arbitration has become an important method for resolving collective bargaining disputes in the public sector. However, many industrial relations scholars have expressed concern that the use of arbitration is associated with growing dependence on arbitral intervention and a breakdown in the ability of bargaining parties to negotiate a settlement. (See Anderson [1979] for a survey of this literature.) This problem has been dubbed the "narcotic" or "addictive" effect of arbitration.

Attempts to measure this addictive effect have produced contradictory results. For example, Kochan and Baderschneider (1978) find evidence of positive state dependence (an addictive effect of arbitration) in a sample of police and firefighters in New York state. Using the same data, however, Butler and Ehrenberg (1981) show that if permanent bargaining-pair-specific "fixed effects" are controlled for, bargaining pairs who used arbitration in the last round of negotiations were less likely to use arbitration in the current round (negative state dependence). Hence, bargaining pairs who had used arbitration in the past appeared to be "hung-over" rather than addicted. More recently Currie (1989) uses 35 years of information about annual teachers' negotiations in the Canadian province of British Columbia to demonstrate that there can be an addictive effect of arbitration even when fixed effects are accounted for.

These studies beg the question of why one might expect to see positive or negative state dependence in arbitration data. Clearly this

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question must be answered before any normative judgment can be made about whether the discovery of state dependence in arbitration data should be interpreted as evidence that arbitration is an undesirable way of resolving disputes.

In this paper we test for the presence of state dependence using data generated by a bargaining experiment. The value of running an experiment is that we can focus on particular aspects of the arbitration process and abstract from others. Specifically, we abstract from many of the institutional aspects of interest arbitration and focus on the hypothesis that the use of arbitration *per se* causes state dependence.

There are at least three reasons why the use of interest arbitration might lead to state dependence: 1) The use of interest arbitration could reduce uncertainty about arbitration, thereby reducing the cost to the parties of using the process (Farber and Katz, 1979); 2) Failing to negotiate a settlement might create antagonism between the parties, leading to further disagreements in the future; or alternatively 3) Failing to negotiate a settlement might demonstrate to both parties that their opposition is "tough" and lead them to be more compromising in future negotiations. The first two reasons lead to positive state dependence while the third leads to negative state dependence.

The Data

The experiments consisted of a series of repeated pie-splitting games. Each subject negotiated with the same opponent for 20 rounds over the division of a fixed quantity. One hundred thirty-one subject pairs first bargained ten rounds without an arbitration system followed by ten rounds with an arbitration system that determined the split of the pie in the event of disagreement. The experimental treatments consisted of randomly assigning pairs into five groups, each with a different type of arbitration system.

Initial experiments with five bargaining pairs per treatment were conducted in 1984, and further experiments with approximately 20 pairs per treatment took place in 1988. All experiments were conducted using Plato software at the University of Arizona's laboratory for experimental economics using University of Arizona students. Upon arrival at the laboratory, a subject was seated at a computer terminal and given the instructions necessary to send, receive, and accept offers. Subjects did not know the identity of their opponents, who were seated at different computer terminals some distance away. They did know that they would be bargaining with the same opponent for all 20 rounds. The bargaining protocol in each round was unstructured, as is naturally the case in the field. Each party's last offer was posted on their screen and on their opponent's screen at all times, and parties were free to revise their offers at any time. An offer consisted of a number between 100 and 500. A schedule translated these numbers into cash payoffs. Each round was limited to five and one-half minutes. At the end of that time, if the parties had not agreed on a division they were deemed to be in dispute.

In rounds without arbitration, disputing parties forfeited the entire pie. In rounds with arbitration, a division was imposed by the "arbitrator." In all cases, the arbitrator was modeled as a random draw from a normal distribution. For further details about the experimental design, see Ashenfelter et al. (1991).

In order to compare the results obtained from our experiment to information about the operation of arbitration in the field, we reanalyze the British Columbia teacher data previously analyzed by Currie (1989). These data consist of information on 35 annual contract negotiations between 75 school boards in British Columbia and their teachers. The data span the years 1947 to 1981. For further information, see Currie (1989).

A Nonparametric Test for State Dependence

A simple test for state dependence involves dividing bargaining pairs into categories defined by the number of disputes they had. Under the null hypothesis of no state dependence, all permutations of dispute histories that sum to a given total number of disputes would be equally likely, and this is the basis of our test. For example, suppose that we observe three negotiations per pair. There are eight patterns that can occur: { (000), (100), (010), (001), (110), (101), (011), (111) }. It is, of course, true that these eight patterns are not equally likely even with no state dependence, but no state dependence does imply that each pattern with the same total number of disputes would occur with the same frequency.

It should be clear that we cannot learn anything about state dependence by looking at bargaining pairs with either zero or three disputes in three rounds, but we can learn about state dependence from pairs with one or two disputes. Consider bargaining pairs with two disputes in three rounds. Our test is based on the prediction that if there is no state dependence then each of the three possible patterns $\{(011), (110), (101)\}$ is equally likely. On the other hand, if there is positive state dependence then the first pattern (011) should be most

likely and the last pattern (101) least likely. Intuitively, this is because the first pattern has only disputes once a dispute occurs while the third pattern has disputes only following no dispute (implicitly assuming no dispute in the zeroth round). Analogously, if there is negative state dependence, the third pattern (101) should be most likely and the first pattern least likely (011).

While there is substantial interpair heterogeneity in how disputeprone pairs are (Ashenfelter et al., 1991), it is important to recognize that this heterogeneity does not affect our test. The intuition for this can be illustrated using our example of three negotiations per pair. Suppose there are equal numbers of two types of bargaining pairs: highly dispute-prone (type A with a dispute probability of 2/3) and less dispute-prone (type B with a dispute probability of 1/3). Type A pairs will have a higher dispute rate than type B pairs so that the twodispute category will be disproportionately composed of type A pairs. If there is no state dependence and we looked only at the type A pairs. we would expect to find that each of the three patterns with two disputes in three rounds is equally likely (each occurs with a probability of 1/3). The same argument applies for the type B pairs. If we then pool all observations on types A and B pairs who have two disputes in three rounds, each of the three patterns is still expected to occur 1/3 of the time if there is no state dependence. The fact that we cannot identify which pairs are type A and which pairs are type B has no bearing on the test.

The first ten rounds of the experiment provide a benchmark where the entire pie is lost in the event of a dispute (similar to a strike). In contrast, the arbitration mechanisms in the last ten rounds provide an arbitrary division of the pie in the event of a dispute. None of the pie is lost directly, but part of the pie may be lost due to bargainers' risk aversion and the uncertainty about what the division will be. On balance, arbitration offers a lower cost of disputing than does the strike-like mechanism of the first ten rounds. Currie and McConnell (1991) present field evidence that disputes occur with higher frequency where arbitration is the dispute settlement mechanism than where strikes are used to settle disputes.

If the use of arbitration leads to state dependence relative to the noarbitration case, then we expect that the extent of state dependence will differ between the first ten rounds of the experiment and the last ten. For example, if experience with arbitration reduces uncertainty about future awards thereby lowering the costs of disputes, then we will see positive state dependence in the last ten rounds but not in the first ten. If hostility toward a recalcitrant opponent leads to state dependence, then we expect to see more positive state dependence in the last ten rounds than in the first ten since each party can "punish" their opponent at lower cost when arbitration is provided than when it is not. Alternatively, parties might be less afraid of their "tough" opponent when disputes are less costly. In this case, we would expect more negative state dependence in the first ten rounds than in the last ten.

These considerations suggest that the most natural way to carry out our test for state dependence in our experimental data would be to first divide the data into the ten rounds negotiated with arbitration and the ten negotiated without arbitration. This is, in fact, the first test that we carried out. However, since there are many possible patterns of disputes in ten rounds, we have chosen to present results based on the pattern of disputes in groups of five rounds. Our conclusions are not affected by this decision, but the exposition is considerably simplified.

We divided the data into four groups: rounds 1 to 5, 6 to 10, 11 to 15, and 16 to 20. We then pooled the data from the first two groups and the data from the last two groups. To give an example, suppose a pair had two disputes in the first five rounds, three disputes in the next five rounds, and three disputes in the last five rounds. The pair would contribute one observation to the two-disputes without-arbitration category, one observations to the three-disputes with-arbitration category. The 35 years of British Columbia data were also divided into seven groups of five negotiations each: 1947 to 1951, 1952 to 1956, and so on, and these groups were pooled.

Results

The frequency distributions of patterns of disputes for each category of total number of disputes (from one through four) are contained in Table 1. If there was no state dependence, then one would expect to see an equal number of observations of each pattern within each category: thus the expected number of observations of each pattern is equal to the total number of observations in the number-of-disputes category divided by the number of possible patterns. By comparing the actual number of observations of each pattern with the expected number, we can test whether the null hypothesis of no state dependence fits the data.

Casual examination of Table 1 shows that, within number-ofdispute categories, the differences between the actual and expected

TABLE 1

Actual vs. Expected Number of Observations of Each Possible
Pattern of Five-Negotiation Outcomes
by Total Number of Disputes

One Dispute Total			Two Dispute Total					
	Exper 1-10	Exper 11-20	Field B.C.		Exper 1-10	Exper 11-20	Field B.C.	
Expected # in Each Pattern:	15.6	9.6	23.6	Expected # in Each Pattern:	2.9	3.8	11.4	
Actual # in Each Pattern:				Actual # in Each Pattern:				
00001 00010 00100 01000 10000	16 7 19 17 19	12 9 7 13 7	24 33 31 11 19	00011 00101 00110 01001 01010 01100	3 2 4 1 4 5	5 5 2 2 3 3	14 5 24 8 12 9	
Three Dispute Total			10001 10010	4 5 3 3	4 3	16 9		
	Exper 1-10	Exper 11-20	Field B.C.	10100 11000	2 2	6 5	16 1	
Expected # in				Four Dispute Total				
Each Pattern: Actual # in Each Pattern:	.4	3.8	8.1		Exper 1-10	Exper 11-20	Field B.C.	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Expected # in Each Pattern: Actual # in Each Pattern:	.4	6.2	9.0				
10101 10110 11001 11010 11100		13 6 7 9 6	01111 10111 11011 11101 11110	1 0 0 0 1	9 8 3 6 5	7 7 3 19 9		

number of each pattern are larger for the field data than for the experimental data. We cannot reject the null hypothesis of no state dependence in the experimental data. The chi-squared test statistic for the first ten rounds of the experiment is 24.8 with 26 degrees of freedom (p-value = 0.53), and the chi-squared statistic for the last ten rounds of the experiment is 17.8 also with 26 degrees of freedom (p-value = 0.88). In contrast, the chi-squared test statistic for the field data is 79.5, again with 26 degrees of freedom (p-value = 2.5e-7), which indicates that the null hypothesis of no state dependence can be rejected with a high degree of confidence in the B.C. field data.

Table 1 also shows that in the experiment disputes became more frequent once arbitration was available. See Ashenfelter et al. (1991) for an extensive discussion of this phenomenon in these data.

Unfortunately, it is difficult to determine from Table 1 whether state dependence in the field is positive or negative. In order to get at this question, we compared the number of times that disputes occurred together (one dispute following another) in the field data to what would be expected if there were no state dependence. If disputes are contiguous more often than one would predict under the null hypothesis of no state dependence, then this is evidence of positive state dependence and vice versa. This comparison is shown in Table 2. Overall, disputes occur contiguously at approximately the rate expected by independence (263 observed contiguous pairs vs. 250.8 expected). There are more than the expected number of observations with contiguous pairs in the two-dispute category suggesting positive state dependence. However, there is no clear pattern in the three- or four-dispute categories. Thus, while we reject independence in the field data, we find only weak evidence of positive state dependence.

		# of Contiguous Pairs						
		0	1	2	3	Total		
# of Disputes Category								
2	Expected Observed	68.4 56	45.6 58			45.6 58		
3	Expected Observed	8.1 13	48.6 37	24.3 31		97.2 99		
4	Expected Observed			27 29	18 16	108 106		
All	Expected Observed	76.5 69	94.2 95	51.3 60	18 16	250.8 263		

TABLE 2

Observed and Expected Number of Contiguous Pairs of Disputes British Columbia Data

Note: The expected number of contiguous pairs is computed within each category as the number of observations in the category multiplied by the expected fraction of times that number of contiguous pairs will show up in five trials. The expected fraction is computed conditional on the total number of disputes in the category assuming independence (no state dependence). For example, there are 10 possible configurations of two disputes in five rounds. Six of these ten configurations have no contiguous pairs while four of the ten have one contiguous pair. There are 114 cases with two disputes in the B.C. data, so that the expected number of cases with no contiguous pairs is $0.6 \cdot 114 = 68.4$ and the expected number of cases with one contiguous pair is $0.4 \cdot 114 = 48.6$.

Discussion and Conclusions

We began by stating that the advantage of using experimental data was that we could abstract from some aspects of the arbitration process as it occurs in the field and focus on others. Our experiment captured the facts that employers and unions engage in repeated negotiations, that actual negotiations are unstructured, and that there are losses associated with breakdowns in the collective bargaining process. In addition, we believe that we have incorporated the uncertainty and the reduction in dispute costs associated with the institution of an arbitration system in a realistic way.

We find no evidence of state dependence in the experimental data. Hence our hypotheses that the use of arbitration *per se* leads to state dependence, either through reducing uncertainty about the arbitral process or through changing the bargaining parties' perceptions about their opponents, are rejected. These results suggest that an explanation for any positive state dependence in the British Columbia field data may lie in aspects of the arbitration process that are not captured by our experimental design.

It may be important to allow for face-to-face negotiations, or for possible principal-agent problems between the bargaining parties and the agents that represent them. If these factors were behind a finding of state dependence, policymakers might well be concerned about the use of arbitration as a dispute-resolution procedure.

Alternatively, apparent state dependence might be caused by unobserved characteristics of bargaining units that change slowly over time and hence are not captured by our analysis. This sort of spurious state dependence should not be a cause for concern, and it could be the cause of the weak positive state dependence in the field data. While we used rather short runs (5 rounds), our analysis did not control for observable time-varying factors that could be captured in a more complex model which accounted for year effects and other timevarying observable characteristics of bargaining pairs in the field (Currie, 1989).

We believe that experiments along the lines of the one discussed here may prove useful in isolating the causes of state dependence in arbitration data. Further work could start with our "bare-bones" framework and add key institutional features. At the least we have demonstrated that bargaining experiments of this kind can be used to rule out hypotheses with a definiteness that is not usually possible using field data alone.

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DISCUSSION

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During the past 15 years there has been a strong and continuing interest in the use, outcomes, and impacts of interest arbitration. In particular, researchers have tried to explain why some unionmanagement pairs arbitrate rather than settle directly, and others have tried to explain how or why arbitrators make decisions. The four informative papers in this session provide useful information in one or the other of these categories. These papers also demonstrate that both laboratory and field studies can yield interesting findings.

Regarding the use of arbitration, three papers present different findings. Babcock's analysis of Wisconsin school district/teacher union arbitration use indicates that arbitration is more likely to be invoked in larger and poorer districts, in districts that received a large wage increase in the previous year, during periods of high inflation, and during periods when local unions are pursuing a statewide wage targeting ("commitment") strategy. All of these results are intuitively plausible, and they indicate that the use of arbitration is hardly random. Advocates and arbitrators will be particularly intrigued by her finding that once arbitration is invoked, the identity of the arbitrator has an influence on whether an award is issued or the parties settle. This finding suggests that the parties behave rationally when they invest in arbitrator search costs. Also, her differentiation between invoking the arbitration procedure and receiving an arbitration award is an extremely useful reminder that a great deal of bargaining continues to occur after the disputing parties enter the arbitration pipeline.

Loewenberg does not specify the characteristics that differentiate the Pennsylvania cities and police unions who arbitrate from those who settle. However, he does find that most arbitration users try diligently to settle, as measured by the number of negotiating sessions.

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His results refute claims that Pennsylvania conventional arbitration users merely go through the motions of bargaining in order to dump their dispute in an arbitrator's lap. However, his data do not show how seriously the arbitrating parties attempted to resolve their differences in these lengthy negotiations, which is a much more difficult phenomenon to measure. Consequently, it is not clear why the arbitrating parties were unable to reach agreement in spite of their considerable time at the negotiating table. His results also confirm Babcock's finding that many negotiated settlements occur after the arbitration procedure has been invoked.

Focusing on the single characteristic of prior arbitration use, Currie and Farber find that in British Columbia school districts prior arbitration use ("positive state dependence") is a guide to future arbitration use. However, no such finding emerges from laboratory studies using students as negotiators. Currie and Farber rightly note that there is nothing about arbitration use *per se* which would cause future use. However, they also note that the "pure" versions of arbitration used in the laboratory omit many of the elements of the "messy" versions of arbitration used in the field. A crucial arbitration use element suggested by their study and by Babcock's research is the dynamics of the principal-agent relationship. It is not clear if agents contribute to more or less use of arbitration, but it would be very useful to find out. This subject may be difficult to research in the field, but laboratory studies could yield some insightful findings.

Turning to the deepest recesses of the interior of the arbitral black box, Olson's study usefully indicates that researchers err when they ignore the nonwage issues in multi-issue arbitrations. His admonition is long overdue, but the measurement difficulties associated with nonwage issues suggest that we should have modest expectations about the extent to which his clarion call for research accuracy will be heeded.

Equally useful is Olson's finding that there may be a divergence between the outcomes arbitrators say they prefer and the outcomes they actually prefer. When that finding is coupled with his finding that arbitrators decide wage and nonwage issues for each side about half the time, the "fair outcome beliefs" of arbitrators that has been the premise of much recent arbitration research might be more usefully conceptualized as their "career enhancement beliefs." His research suggests that a fascinating study would be a comparison of arbitrator decisions in jurisdictions where the disputing parties control the selection and compensation of arbitrators versus jurisdictions where arbitrators work under conditions equivalent to judicial tenure and compensation (if any such jurisdictions can be found). Practically all studies of arbitrator decision making are built upon the explicit or implicit premise that arbitrator livelihoods are directly controlled by the arbitrating parties. The relaxation of that premise might yield some extremely informative results about how arbitrators respond to the facts of the dispute as well as to the number of disputed issues.

Together these papers help push back the interest arbitration frontier of understanding. These analyses help us better understand why some negotiating parties arbitrate while others settle, and they help us understand arbitrator behavior. However, we have a long way to go before we can say that we have comprehensive models that enable us to predict arbitration use and arbitrator decisions. As indicated in these four papers, most arbitration studies are based on data from a single jurisdiction. As a result, the results may or may not be applicable to other jurisdictions with different arbitration rules, particularly regarding how arbitrator decisions will be made. Consequently, there is still plenty of mystery inside the arbitral black box awaiting further research.

XVI. HRM IS FOR UNIONS TOO

The Management of Human Resources in National Unions

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It is paradoxical that American unions, dedicated to upgrading and policing the personnel practices of the organizations for whom their members work, have devoted so little attention to these practices in relation to their own employees. In 1970, Derek Bok and John Dunlop pointed out that "judged by contemporary standards of administration" (p. 168), the performance of American unions in this area was generally below par. This was particularly the case in the areas of personnel selection, training, and motivation.

Twenty years later, Dunlop (1990) revisited this issue and concluded that while substantial improvement had occurred in the administration and management of American unions, nonetheless, "the political process [still] leaves its mark" (p. 7). He observed that the system constrains union leaders in their efforts to choose union administrators chiefly on their managerial talents and limits the time and resources they can devote to attacking the problems of internal union administration.

With the increasing centralization of union government (Ulman, 1955; Craft, 1991), has come an increase in the number of staff employed by national unions. A recent study by Clark (1992) provides evidence that the number of employees on the payrolls of many American

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unions increased steadily, relative to membership levels, over a 24year period beginning in 1961. While this study focused exclusively on professional employees, there is evidence that there has been a concomitant increase in the number of support staff, including clerical and technical employees.

This trend suggests that human resource management is central to, and growing in importance for, the administration of American unions just as it is for business, government, and nonprofit organizations. However, unlike these types of organizations, labor unions have been slow to develop policies with respect to the recruitment, selection, training, and promotion of their staff. For example, in contrast to business and government groups, which base employee selection on specified criteria and objective tests, unions generally rely on informal hiring processes which reward political loyalty (Joseph, 1959; Stamm, 1969). Other components of human resource management, such as performance appraisal, systematic compensation programs, and employee involvement in work decisions are largely unknown within the union context (Gray, 1975).

This paper will present and analyze a part of the data collected in a survey of national union presidents who were asked to provide information concerning the current administrative practices of their organizations. Among the issues this exploratory survey focused on was the internal human resource management practices within these unions. This paper will analyze the responses to survey questions concerning these practices and their implications for understanding the current state of human resource management in unions.

Unions as Employers

The phenomenon of unions as employers has for years placed labor organizations in an unfamiliar and uncomfortable position. National union leaders who achieve office on the basis of their political skills and ability to effectively represent the interests of their memberemployees to employers, suddenly find themselves filling the role of administrator of a sometimes large and complex organization. Among their leadership responsibilities is the management of large numbers of paid employees.

The personnel practices of unions have historically been tremendously varied and diverse (Belfer, 1952; Gordon, 1986). These practices have generally been a function of many different factors, including the politics of the organization, the union's structure, and the personality and style of the leadership in power. It is somewhat paradoxical that, while one of the main objectives of unions over the years has been to formalize personnel practices through written contracts, personnel policies *within* many unions have remained informal, unwritten, and nonuniform (Heckscher, 1988). In a significant number of labor organizations this contradiction has been at least partly responsible for the unionization of professional and support staff employed by those unions. This situation has forced union leaders into the awkward position of having to sit on the management side of the negotiating table across from their own employees (Clark, 1986).

Union personnel practices have not been examined or discussed in any detail in the literature on union administration (Barbash, 1967; Adams, 1977; Estey, 1981; Wallihan, 1985). What has been written on this issue has tended to be impressionistic and anecdotal (Belfer, 1952; Gordon, 1986). The data presented here are, as far as the authors can ascertain, the first systematic effort to gather empirical evidence about how unions deal on a day-to-day basis with their work force.

The Survey and Results

Data Collection

The information gathered concerning union personnel practices was part of a larger survey focusing on the more general issue of union administrative practices. Questionnaires were mailed to the presidents of 110 national and international unions. Forty-eight completed survey forms were returned for a response rate of 44 percent. In addition to the questions asking for very specific information contained in the questionnaire, the respondents were given several opportunities to elaborate in an open-ended fashion on the issues raised in the survey. Many of the respondents provided useful background information in this fashion.

The survey gathered information on personnel administration in unions, the extent that unions employ formal personnel policies, union recruitment and hiring practices, and the use of outside consultants by unions. Unions were also asked to provide information as to whether administrative practices in these areas had changed in recent years.

Administration of Personnel Policies and Practices

Major personnel decisions in most labor organizations have, historically, been made by the national officers and implemented by top administrative staff (Stamm, 1969). Most unions have not designated specialized staff to assist in the making or implementation of these decisions. However, as the payrolls of many unions have grown, and as the complexity of personnel matters has increased (affirmative action requirements, complex pension plans, staff unions, etc.), some unions are turning over the day-to-day personnel functions to a personnel or human resources director or department. The results of this survey indicate that 44 percent of the responding unions currently handle personnel administration in this manner. While no baseline data exist to compare this figure with past practices, interviews with union administrators indicate that, in their view, this is a change from the way unions handled these matters in the past.

A breakdown of the survey results by union size also indicates that the creation of staff positions solely to handle personnel administration is positively related to the size of a union's membership. As Table 1 indicates, 87.5 percent of unions with over 500,000 members employ human resource professionals, while only 25.9 percent of unions with less than 100,000 members employ such staff.

Surprisingly, unions that are growing in membership size are less likely to employ personnel managers than those that are losing members. Classified by sector, government and building trades unions, compared to industrial/manufacturing, transportation, or service unions, are most likely to have an individual designated as a personnel or human resources director.

Formal Personnel Policies

As suggested earlier, while unions have long fought to formalize personnel practices through written contracts, these same practices

Total N = 48 Unions					
	Membership Size				
	More than 500,000	499,999-100,000	Less than 99,999		
Employ Personnel Director	87.5%	53.8%	25.9%		
Hired Headquarters Staff Who Worked for Other Unions	100.0%	100.0%	69.2%		
Hired Field Staff Who Worked for Other Unions	75.0%	33.3%	59.1%		
Have Employed Outside Consultants	62.5%	46.2%	32.0%		

 TABLE 1

 Human Resource Practices of Unions by Membership Size

 Total N = 48 Unions

within unions have remained largely informal, unwritten, and nonuniform. The unions surveyed were asked to address this issue by indicating whether or not they had formal, written policies in any of several personnel areas for two major groups of employees professional staff at the union's headquarters and professional staff in the field.

In only one area (discipline and discharge) for only one group of workers (headquarters or professionals) did a majority of the unions responding have formal, written policies (54 percent). In all of the other areas—affirmative action, hiring, salary review, performance appraisal, and promotion, for both groups of employees, significantly less than 50 percent of the unions surveyed had formal policies. Of the areas included in the survey, the human resources functions of performance appraisal and promotion were the areas in which unions were least likely to employ formal policies.

Recruitment and Hiring Practices

Observers of unions have pointed out that as unions are political organizations, hiring decisions are often influenced by political considerations (Joseph, 1959). In an effort to get a more current picture of union recruitment and hiring practices, the survey asked union presidents several questions concerning their organization's practices in this area.

While only 44 percent of the unions responding indicated they had formal policies concerning hiring, 75 percent stated that "specific qualifications" were required for appointment to the headquarters staff of the union. Of the unions requiring "specific qualifications" the two most commonly identified qualifications were specific degrees or training (46 percent) and current membership in the union (37 percent). The least common requirements were prior election to union office within the union (2 percent) and prior employment by another union (0 percent). The respondents also indicated that in most of these unions (72 percent), qualifications varied by function.

The survey also attempted to gather information on the issue of whether or not unions were moving away from the traditional practice of hiring from within toward hiring professional staff who had previously worked for another labor organization. The responses suggested that this was a much more prevalent practice for headquarters staff than for field staff. Twenty-two percent of the respondents indicated that they frequently hired employees who had worked for other unions for headquarters jobs and 61 percent reported they hired these types of employees "on a few occasions" for these positions. Only eight percent indicated they hired such individuals for field assignments on numerous occasions, while 44 percent stated they hired them for field jobs "on a few occasions."

The data also suggested this practice was more common in larger unions. When broken down by size, the results indicated that 100 percent of unions with more than 500,000 members hired these "outsiders" for headquarters jobs, while only 69 percent of unions with less than 100,000 members indicated they hired such individuals. For field positions, 75 percent of the largest unions reported hiring individuals who had worked for other unions; 59 percent of the union respondents with less than 100,000 members stated they hired these types of individuals (see Table 1).

Also of interest in this regard is that 75 percent of the largest unions indicated their policies in this area had changed in the last 10-15 years, either somewhat or significantly. Sixty-seven percent of unions with memberships between 499,999 and 100,000 indicated similar changes, while only 22 percent of the unions under 100,000 members indicated that their hiring practices had changed regarding this issue. Unions representing service, building trades, and government workers reported changes in hiring practices to a greater degree than unions in the industrial/manufacturing or transportation sectors.

Use of Outside Consultants

The fourth area concerning union personnel practices examined by the survey involved the issue of the employment of outside consultants by labor organizations. Preliminary information gathered in preparing the survey identified eight types of services for which at least some unions had employed outside consultants.

Sixty-nine percent of the unions responding to the survey indicated they employed consultants in the area of computer services. This was the area most frequently cited in the survey. The second most prevalent areas, with just under 50 percent of the unions surveyed employing consultants, were the areas of public relations and health and welfare benefits. A relatively small percentage of unions indicated the use of outside consultants in the human resource areas of training (34 percent) and personnel recruitment (11 percent). It is also significant to point out that where a union did employ these consultants, the union was satisfied with the performance of the consultant in nine out of ten instances. And, as we have seen in some of the other areas examined in this study, larger unions tend to employ outside consultants at a greater rate than smaller unions (62.5 percent of unions over 500,000 members as compared to 32 percent for unions with members under 100,000 members—see Table 1).

Again, even though the percentage of unions employing consultants in most of the areas surveyed is small and no baseline data exist to compare union practices in this area in the past, discussions with union leaders suggest that this is a relatively new, and growing, trend within labor organizations.

Implications and Discussion

The results of the survey identify a number of interesting practices and developments in the area of human resource administration in national unions. One emerging trend is suggested by the fact that a significant number of unions, particularly larger unions, currently employ a personnel or human resources director.

The survey responses, and follow-up discussions with union administrators, raised an important issue related to this phenomenon. Informed sources inside and outside the labor movement report that in the absence of a personnel or human resources director, the personnel function has traditionally been performed by the national union president (often acting through an executive assistant) or by the secretary-treasurer. While many unions apparently are moving toward assigning responsibility for personnel administration to a personnel director or department, there is some evidence that the individuals hired to perform these duties may not have the requisite knowledge and background to be effective in these positions. In some cases, these positions are being assigned to union staff from other departments who have no expertise in this area.

It would seem that if unions desire to professionalize their human resources practices, not only must they create positions to administer these programs and policies, but they must fill them with individuals who are qualified to carry out these responsibilities. One example of a union that is moving in this direction is the Service Employees International Union (SEIU). In recent years, SEIU has hired outside specialists to fill the positions of human resources director and affirmative action officer.

In the area of recruitment and selection, unions have apparently been hiring an increasingly large number of their professionals, particularly headquarters staff, from outside the union. This is a clear shift from the "hire from within" policy that was the predominant philosophy employed by unions for many years. Not only are more

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outsiders, often highly skilled and educated professionals, being hired from outside the union, the survey results suggest that larger unions are hiring professionals who have previously worked for other unions. This phenomenon of outsiders being hired to perform professional functions for unions and, in many cases, taking those skills to other unions, suggests that for some, union employment has become a "profession." One concrete example of this is the AFL-CIO Organizing Institute. The Institute recruits and trains individuals for careers in organizing. In addition to recruiting union members from the work force, the Institute also has actively recruited on college campuses in an effort to provide "professional" organizers for the labor movement.

Related to this issue is the manner in which unions recruit professional staff. Although the survey results indicate that only a small number of national unions currently use their services, a number of consultants and consulting firms have made themselves available to unions in search of qualified individuals to fill important positions. These "headhunters" publicize positions, screen and interview applicants, and in some cases, make recommendations about hiring. A few unions now advertise staff openings in *The New York Times* and other publications, again moving away from the insider network. These practices are consistent with the idea of a profession of "union staffers" who can move across unions in the same way that executives move across corporations.

Many of the trends toward more systematic and professional human resource practices and policies identified in the survey and mentioned above, appear to be much more prevalent in larger unions. This phenomenon could be a function of a number of factors. First, larger unions have greater needs for systematic record keeping and formalized policies as they employ larger numbers of employees. Secondly, these unions often have more resources to devote to human resource management. Thirdly, it may be that as unions grow larger, both in terms of members and staff, a gradual depoliticalization takes place as at least a certain portion of the union's staff becomes a part of a professional "bureaucracy." These individuals are hired for their skills in a specific area and not as a result of demonstrated political loyalty. And while not completely removed from the politics of the organization, they are somewhat insulated from that aspect of the organization's life.

The results of the survey generally suggest that while union personnel practices are changing, the change is slow and unevenly distributed across the labor movement. Some unions have clearly recognized that the professionalization of their human resource policies is a positive step in improving the administration of their organization. The Communications Workers of America's (CWA) Committee on the Future, for example, has called for the adoption of "a more professional approach to managing CWA staff, working with them to upgrade their morale, motivation and performance" (1983). In many other unions, however, very little has changed in this area over the last 30 years.

The data gathered in the course of this exploratory study and discussed in this paper have just scratched the surface of an area long neglected by students of the American labor movement. There are numerous human resource issues that are not addressed here. Staff training, for example, is an area in which significant changes have taken place in recent years. Deviating from the union tradition of only providing on-the-job training, most unions now provide some type of formal training for their staff. In some cases, staff training is linked to needs assessment and planned professional development as is the case in most major corporations (Gray and Kornbluh, 1989). This level of attention to a human resource need is, unfortunately, the exception and not the rule in most unions.

Another issue not addressed is the important area of compensation. While some information on what union staff are paid can be found in LM-2 reports, little effort has been made to analyze this information or compare it within or across unions. How salaries and salary increases are determined is another aspect of compensation that has not been systematically examined.

And while this survey focused exclusively on practices at the national level, the structure of some unions creates large, semiautonomous regional and local bodies, both of which may employ significant numbers of employees. Anecdotal evidence suggests that personnel practices at this level are even less formalized than at the national level (Clark, 1989). Given the important role that staff at all levels play in meeting the many challenges unions face, the management of these human resources merits further study.

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Unions and Strategic Human Resource Planning

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North American corporations have demonstrated an increasing interest in planning strategically for their human resources over the past 15 years. The corporate world has realized that linking organizational goals and strategies to human resource planning is a key determinant of gaining a competitive advantage (Ulrich, 1986). Consequently, more focus is being directed toward strategic human resource planning (SHRP).

Because SHRP is a concept still in its infancy, no definition has been universally accepted by academics or practitioners (Craft, 1981). Therefore, for the purpose of this article, SHRP is defined as a means of linking organizational goals and strategies to human resource objectives and programs (Nkomo, 1988).

While it seems that more firms are embracing the notion of SHRP, little is known as to whether or not unions are adopting parallel practices for their human resources, i.e., hired staff members. This paper, however, proceeds from the conviction that SHRP can be beneficial to unions. A union's success, much as a corporation's success, may hinge upon the quality of its human resources, as even the best union strategy has little hope of success if the right people are not in the right place at the right time.

The objective of this paper is twofold: (1) to outline how SHRP can be of benefit to union management, and (2) to describe the results of a research project investigating the current state of union SHRP.

Strategic Human Resource Planning and the Management of Unions

Just as top executives agree that the human resource function is critical to business success (Rhodes, 1988), it would seem that unions

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must have effective human resources if they are to optimize their potential. Consequently, the objective of SHRP for unions should be to build initiatives that link human resource planning to their organizational strategy.

Today, unions must formulate strategies to cope with a plethora of environmental and workplace challenges such as rapidly changing technology, complex legislation, and increasing globalization. In conjunction with this operational strategy making, unions must determine which human resources are requisite to ensure the success of their plans. In other words, unions need to incorporate human resource considerations in their planning, as they need personnel who can understand and implement whatever strategies they formulate.

Furthermore, most unions require expertise in areas such as economic analysis, technology, global issues, public policy, and marketing, as well as in the traditional union activities of organizing, negotiating, grievance handling, and education if they are to be effective. For example, responding to the introduction of new technology in contract negotiations may require union personnel who are well-versed in such technical developments; or, the recent trend of protecting the environment may require staff who are knowledgeable about "green" issues. Some unions are also attempting to form alliances or coalitions with various interest groups. To accomplish this, a union requires personnel who are knowledgeable about, and sympathetic to the interest groups' causes. Through implementing SHRP, unions may be able to identify the people requirements needed to best achieve their own organizational strategies and goals.

A comprehensive review of the industrial relations literature revealed no references specifically linking strategic planning (SP) by labor unions with human resource planning activities. The review did yield some research pertinent to SP and/or to the management of unions, however. For example, Dunlop's (1990) recently published book on the management of labor unions includes a chapter on SP. Within this, however, he does not mention human resource planning. Clark and Gray (1991), in a review of union administration research, examined union personnel practices, including characteristics of union executives, and issues such as selection and compensation of staff. No attempt was made, however, to link their findings to union strategy. Rather, in terms of human resources and staffing, they observed that: (1) many staff are hired based on political loyalty, as well as demonstrated leadership ability; and (2) while the majority of staff are hired from within the union, there has been a growth of union professionals who come from outside the union. These conclusions are derived from survey research, however, and the data lack somewhat in terms of the depth and richness a qualitative methodology can provide.

To gain insight into what unions are presently doing in terms of linking strategy with human resource planning for hired staff, a qualitative research project was conducted. Following are some of the preliminary results of this project, based primarily on Canadian data.

Empirical Evidence of the Current State of SHRP

Methodology and Sample

The major activity of the research has been to interview both officers and staff of a diverse sample of unions. To date, 22 in-depth interviews (19 in person and three over the telephone) have been conducted with selected union personnel from 13 different organizations. The sample included six individuals from the local level, seven from regional or provincial offices, five from (inter)national offices, and four from umbrella bodies such as the Canadian Labour Congress or provincial federations. In terms of role, nine of the interviewees were top officers (either president, vice-president or secretarytreasurer) and 13 were hired staff members, e.g., executive assistants or research directors. The unions selected represented a mix of private/public sectors and manufacturing/service sectors. Table 1 presents interview participant demographics.

The 13 organizations varied in terms of size, typical membership characteristics (e.g., education level) and structure (centralized vs. decentralized). The sample diversity was deliberate as one goal was to determine if any patterns, or themes exist based on union differences.

Following Miles and Huberman (1984), the data gathering was bounded through the development of an interview guide. The primary purpose of this was to gather consistent information across participants in order to allow for comparative analysis, thus providing a means for establishing the generality of a fact. Further, replications are the best means for validating facts (Glaser and Strauss, 1967). Importantly, following the methods of inductive research, participants were also encouraged to discuss other aspects of SHRP which may not have been included in the interview guide.

To heighten reliability and validity, as well as to decrease researcher bias throughout the interview process, each session was tape-recorded with the consent of the interviewee. After being transcribed, each

	L	(N = 22)		
	Local	Regional/ Provincial	(Inter)national	Umbrella
Public	1 officer	2 officers 2 staff		1 officer 3 staff
Private	3 officers 2 staff	2 officers 1 staff	1 officer 4 staff	
Manufacturing	3 officers 2 staff	2 officers 1 staff	4 staff	1 officer 3 staff
Service	1 officer	2 officers 2 staff	1 officer	

TABLE 1	
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Interview Participants

(N = 22)

interview was then analyzed by two individuals involved in the project.

Results: General Patterns

One phase of qualitative research involves pattern formation, whereby various generalities can be discovered based on the data collected (Miles and Huberman, 1984). Following are some patterns, or themes which emerged as a result of the data analysis.

Strategic Planning is Emergent

Strategic human resource planning involves linking an organization's strategy with human resource objectives; therefore the existence of union strategy is a precondition for SHRP. The first pattern to emerge was that all unions had strategies, but most were implicit or had been formulated on a reactionary basis. Many of the interviewees indicated that they were either planning to start, or had just started formal SP, i.e., an explicit process of generating objectives designed to achieve long-term goals within constraints, and then formulating action plans to achieve these objectives (Reshef and Stratton-Devine, 1991). Further, the data analysis contrasting public to private and service to manufacturing unions revealed no differences on this, or any other issue. Prior to gathering the data, it was believed that manufacturing and/or private sector unions might engage in more SP because they have been subject to more change and external challenges, thus heightening the need to plan. This, however, did not hold true. Instead, it seemed planning hinged on the leaders of a union, and whether or not they viewed it as a priority item.

Union Level Effect

Another pattern was that any semblance of SP became more evident in higher levels of the union. In other words, individuals on the local level had given virtually no thought to formal SP, or of linking such action to human resources, while regional and (inter)national level interviewees were more cognizant of the need to plan. According to the participants, this union level effect is partly a function of size. and partly a function of role. Local level union personnel are too busy looking after operational details and "fire fighting," while the regional, national and umbrella bodies have more time and resources, as well as a broader scope and range of responsibility to allow them the ability to plan. Further, few of the locals hire paid staff members, but instead rely on volunteers or assistance from higher up in the union should they need it. Finally, one national staff member stated his union did attempt to look into the future, predict likely issues, and then create positions so that individuals with expertise in these areas could be hired. Interestingly, of the umbrella bodies, only one of the interviewees said that any human resource planning took place. The other two responded by saving "no . . ." and "very little . . ."

Trickle Down Effect

Regional level unions were more likely to conduct SP when planning also occurred at the national level. Most participants agreed that there is a trickle down effect, whereby lower levels of the union will only engage in planning if such activities also occur at higher levels. Thus, the key role played by (inter)national level leaders was again highlighted.

"By the Seat of Our Pants"

Another distinct pattern was that the majority of unions do not explicitly conduct SHRP activities. While some of the interviewees on the regional/provincial and national level indicated they do plan for future staffing requirements, not one stated that they formally link human resource planning to the strategy of the union. Furthermore, three of the participants mentioned in some way that they mainly act "by the seat of our pants," or merely react with no systematic planning. For example, one staff member from a provincial umbrella federation stated "we very much fly by the seat of our pants . . . in a lot of unions, the people doing the work are volunteer, part-time people who aren't even being coordinated by anybody who knows anything about volunteer coordination." Similar to most corporations, it seems unions view human resources as a short-term implementation issue rather than a driving force in the formulation of strategic plans (Nkomo, 1988), and, as stated by a regional staff person, their staffing is "more artistic than scientific."

Union Members Only Need Apply

On all levels, local, regional, national, and umbrella, most staff members were recruited from inside the union. The main exceptions to this were found only when no one within the union had the expertise required to perform various technical functions, e.g., legal affairs or research, and individuals from outside the union were hired. The majority of interviewees stated, however, that they prefer to hire individuals from within the union before going outside to find personnel. One exception to this was a provincial level union which consciously attempts to achieve an equal split of hiring from both inside and outside the union.

Political Overtones

Many individuals mentioned that the political nature of unions affected their human resources. For example, one staff representative of a provincial umbrella body stated that many unions hire certain individuals because they supported a leader who was elected. According to him, "[t]hat's not being cynical—that's the way it happens, and that's probably the way it should happen." Another said the human resource planning is distorted as people from the opposition were hired in order to "buy them off." He went on to say that whether or not those individuals are capable of performing the requisite duties is questionable. In fact, his advice was that unions should create an arm's length distance between politics and staffing by creating some type of hiring body. Finally, most stated that hiring for technical positions was based on expertise and ability, with staff typically drawn from nonunion candidates. As such, there is little dependence on politics for these jobs.

Reliance on Volunteers

Another theme from the regional, (inter)national and umbrella level organizations was that many people are groomed as part of the union development process, i.e., those individuals who volunteered to take part in the unions' education programs. According to one interviewee, however, they do not actively search for talent. Further, he felt that perhaps the most talented people aren't available because of other demands or priorities "which becomes particularly the key when it comes to women whose responsibilities include childbearing and families." Further, the president of a provincial federation stated that "people who could be leaders don't have the opportunity. We have to provide opportunities for trade unionists to be involved other than in their own local."

Conclusion

Perusal of the above findings implicitly suggests that most unions do not perceive strategic human resource planning as critical to their operation, and are relying on past practices, thus supporting Craft's (1991, p. 402) observation that "[u]nions are unique bureaucracies with characteristics that tend to inhibit change and encourage maintenance of the status quo." It may be time for unions to critically evaluate their processes and personnel, and ask questions such as: What new roles will be required within the union to implement our strategies successfully? What new knowledge, skills and abilities will we need in the coming years? Are we really getting the best people, or may we be losing talented people through lack of an integrated strategic human resource plan? Furthermore, issues such as the identification of high potential personnel, management development, and succession planning are all salient to union strategic planning, and should be included within the planning process.

In sum, as unions continually face more challenges, and formulate new strategies, it would seem that instituting SHRP might assist them in obtaining success. Overall, SHRP can ensure that appropriate personnel are available to provide necessary expertise and leadership.

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An Evaluation of Steward Training

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Organizations spend a considerable amount of money on supervisory training, most of this on interpersonal relations skills (Schuler and Youngblood, 1986, p. 399). This type of training is designed to improve relationships between the subordinate and supervisor, which in the long run is believed to be beneficial to the organization.

In a union setting, support from the rank-and-file membership is crucial for effective operations. The steward is often the only link the rank and file has with the union (Strauss, 1991). Similarly, training designed to improve the relationship between the steward and rank and file should result in a more supportive membership (Thacker and Fields, 1987; Fields and Thacker, 1985). All unions of any size conduct training, although the level of resources devoted to training varies greatly (Clark and Gray, 1991). The emphasis of union training programs is typically on skills that are reactive (how to file a grievance, etc.).

This study presents the findings from a comprehensive evaluation of a different type of training program aimed at stewards called grass roots training (GRT). The main objective of GRT is to obtain a "more informed" general membership which should be more supportive of union activities.

Evaluation

Evaluation, according to Kirkpatrick (1975), can be measured at four levels of increasing complexity: reaction, learning, behaviour, and results. Measuring all four levels helps a trainer assess the level of success the training has achieved and determines where improvements in the training program are needed.

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Training and its evaluation are both valuable human resource management functions. A comprehensive evaluation, however, is seldom conducted in business organizations, even though more human resource people are beginning to realize its advantages (Camp, Blanchard, and Huszczo, 1986, p. 175). Unions must also begin to realize the advantages of comprehensive evaluations.

Purpose of the Study

The purposes of this paper are two-fold: to determine the effectiveness of GRT and to demonstrate how the two more complex levels of training evaluation are useful in evaluating training. In most training evaluations only the first two levels are used; we use the last two. Kirkpatrick's four levels of evaluation in order of increasing complexity are:

1. Reaction: a measure of how the trainee feels about training. It is important because positive affective reactions, or high interest in training, results in the motivation to learn.

2. Learning: an assessment of whether the trainees actually learned the intended skills or knowledge.

3. Behavior: a measure of the amount of transfer of the skills to the job. Positive behavioural change is essential in order to obtain a change in results.

4. Results: an assessment of the extent to which training affected some specific organizational objective (improved relationships, reduced scrap, etc.).

Hypotheses

The reaction and learning components are not discussed in the present paper. A more detailed version of the paper is available from the second author. A number of hypotheses were tested involving behaviour and results of trainees (stewards) and their constituents (the rank and file).

Stewards

Stewards who received the GRT will: interact more with the rank and file (H1) and will discuss critical issues with the rank and file (H2) more often than stewards who do not receive this training.

Research suggests that socialization causes union loyalty (Gordon et al., 1980). As training is a socialization process, steward loyalty to the union should improve as a result of training (H3).

Rank and File

Because the objective of training is to create a more informed membership, rank-and-file members whose stewards attended the GRT will have a greater understanding of critical issues than rank and file whose stewards did not receive this training (H4).

Research shows that an increased interaction between stewards and the rank-and-file membership has a positive impact on the rank and file's loyalty to the union (Fields and Thacker, 1992; Thacker and Fields, 1987). Therefore, rank-and-file members whose stewards received training should be more loyal to the union (H5).

Training Content

The GRT consisted of a one-day workshop for stewards on how they should interact with the rank-and-file membership. Small group discussions and role playing were employed to develop specific skills. These involved keeping the rank-and-file membership informed about issues of concern in their industry (deregulation, technology, stress in the workplace, etc.).

Subjects and Procedure

Stewards

All stewards who worked for a large public utility in Eastern Canada (whether they had received training or not) were sent a survey (N = 405). The approximate time between training and completing the survey for stewards was 17 months. Forty-five percent of all surveys (N = 181) were returned, of which 175 were useable. For the hypotheses related to stewards, those stewards who indicated they had received GRT (37) were compared to those who indicated they had not (135).

Rank and File

Members of three local unions (not including elected officials) who worked for the same utility were sent a survey instrument (N = 2027). Respondents were asked to place the name of their steward on the survey to enable us to send these stewards a questionnaire to determine how much and what type of training they had received. The approximate time between the steward training and the rank-andfile survey was 20 months. About one week after we mailed the rankand-file surveys a strike was called. When the education director of the union had given the "go ahead" to conduct the survey, he and other union officials believed negotiations would conclude successfully. Since the union leadership did not foresee the strike, there is no reason to expect rank-and-file responses completed prior to the strike were influenced by the strike. The strike did have an influence on the response rate, which was 8 percent (153). Only individuals who completed the survey immediately after receipt had mailed them before the strike. Once the strike began few surveys were received (N = 3) and these were omitted. There is no reason to believe that those who completed the survey are different from those who would have completed them later if the strike had not occurred.

The strike lasted four months. Three months after the strike ended, the one-page information blank was sent to all stewards (N = 43) who had been identified by at least one rank-and-file person in order to match the responses from the rank and file to the training background of the stewards. They were asked to indicate the length of time they had been a steward and to answer yes or no to a number of questions regarding any training they received prior to the strike. Twenty-three (54%) of these stewards responded, which reduced the useable sample of rank-and-file data to 65 (38 whose stewards had received GRT and 27 whose stewards had not).

Measures

Behaviour

To assess behaviour change, questions were asked of both the stewards and rank and file. These questions pertained to the amount of interaction between the steward and the rank and file, and the extent to which stewards provide the rank and file with information on issues of concern to workers in their industry.

The first measure for stewards consisted of five questions regarding the amount they interact with the rank and file. They asked: "How often do you ask members opinions on important issues, etc." Responses ranged from 1-almost never to 5-almost always.

The second measure consisted of six questions designed to assess the extent to which the stewards believed they provide the rank and file with information. These asked: "When was the last time you started up a conversation with an individual (or a small group) regarding: deregulation, etc." Responses ranged from 1-within the last two weeks to 5-never started such a conversation.

Two identical sets of questions were asked of the rank-and-file members regarding their steward. These were similar except they began: "How often does your steward . . .," and "When was the last time your steward . . ."

Results

Rank and File: There were six questions asking how informed the rank and file believed they were on specific issues. These questions began: "To what degree do you understand why there is a concern regarding: deregulation, etc." Responses ranged from 1-do not understand the issue at all to 5-completely understand the issue.

Stewards and Rank and File: Loyalty to the union was measured using ten items from the Gordon et al. (1980) union commitment measure. It was included on both surveys.

Statistical Analysis

The hypothesized impact of GRT could be accounted for by other factors (tenure as a steward, other steward training). To deal with this, hierarchical multiple regression analysis was used entering GRT last. In this way the variance contributed by tenure and other training was controlled for (Cohen and Cohen, 1978, p. 99).

A series of hierarchical multiple regressions to test the hypotheses were generated. The variables were entered in the following order: (1) tenure as a steward; (2) local steward training, Canadian labour Congress training, and any national training prior to 1986; (3) two training programs offered by the present training director (steward training and advanced steward training); and (4) GRT.

Findings

Behavioural Change of Stewards

Ratings of Stewards: The two hypotheses related to the behavioural change of stewards involved frequency of interaction (H1) and discussion of issues of concern between the steward and rank-and-file membership (H2). No relationship between these self-reported behaviours and GRT were found.

Ratings of Rank and File: Regarding "frequency of interaction" (H1), the results in Table 1 indicate that the GRT (Beta = .40, p < .01) resulted in improved levels of interaction. The rank-and-file results in Table 1 also supported H2. They indicate that stewards who received GRT discussed issues of concern with the rank and file more often than stewards who did not receive this training (Beta = .52, p < .001).

TABLE 1

Rank-and-File Ratings of Steward Behaviour Beta weights from the results of hierarchical multiple regression (HMR) on the dependent variables.

		Dependent Variables	
Entered	Independent	Steward Interaction	Steward Discussion
first	Steward Tenure	38°	25
second	Local Union Stwd Training	.13	.05
second	CLC Stwd Training	07	.19
second	National Union Stwd Training (prior to 1986)	.47°°	05
third	Stwd Training (after 1986)	30	12
third	Advanced Stwd Training	33°	06
last	GRT	.40 • •	.52***
	MULTIPLE R	.55	.55
	R ²	.30	.30
	ADJUSTED R ²	.22	.21

• p < .05; •• p < .01; ••• p < .001

Results Change

Rank and File: The main objective of GRT was a more informed membership (H4). The GRT was successful (Beta = .38, p < .05) in accomplishing this objective.

Stewards and Rank and File: As hypothesized (H3) loyalty to the union was higher for those stewards who received "grass roots" training compared to those who did not (Beta = .21, p < .05). Loyalty did not improve for the rank and file (H5).

Discussion of Results

Behaviour

Contrary to earlier findings, the data gathered from stewards indicated no differences as a function of GRT in either the amount of interaction (H1) or discussion of issues with the rank-and-file membership (H2). Further examination of the data indicate that stewards from both the trained and not trained group believed they interacted a great deal with the rank and file. This is consistent with Cascio (1989, p. 319) who suggests self-report information (on performance) has a tendency to be inflated. Nonetheless, taken at face value, the hypothesis that GRT influences behaviour is rejected by the results using steward data.

The rank-and-file membership were also surveyed regarding the behaviour of their stewards. These results are consistent with the hypotheses that the training did influence the extent to which stewards interact (H1) and discuss issues of concern with the membership (H2). These findings provide evidence that the GRT resulted in changes in behaviour. Although the "learning" level of evaluation was not directly assessed in this study, learning can be inferred from the fact that changes in behaviour have occurred. Furthermore, now that the transfer of training has occurred, the stage has been set for "results" change to occur, particularly related to the main objective, a more knowledgeable membership.

Results

Rank and File: The primary objective of the GRT was to have a more informed rank and file. Given the democratic nature of unions, it is very crucial for the membership to be aware of and understand the union's concerns. The GRT seems to have accomplished this goal.

Stewards and Rank and File: Stewards who attended GRT were more loyal to the union than stewards who did not, but their members were no more loyal to the union. Although increased interactions by stewards with the rank and file improved member loyalty in other research (Fields and Thacker, 1992; Thacker and Fields, 1987), we did not find that result. A more positive attitude to the union on the part of the membership would be the last link in the process, and just because it has not happened, does not mean it will not. In related studies that dealt with the interaction of stewards with the rank and file, Fields and Thacker (1985) did not find a change in rank-and-file loyalty but Thacker and Fields (1987) did. The difference in the two studies was the time lag between the intervention and data collection.

Although the findings are generally positive, there are some limitations in the study. With respect to the rank-and-file survey there was a low response rate and the method of assessment was self-report. Stewards were not randomly selected to be trained and so the statistical results may be biased. Perhaps the most critical problem is that the study was cross-sectional in design. Although statistical methods were used to deal with a cross-sectional design, a longitudinal study would be more desirable.

The good news is that for most unions who wish to evaluate training, these limitations should not pose a problem. This is because measuring stewards (and rank and file) on an ongoing basis (or prepost-training) would not be difficult. Development of survey instruments and methodologies to conduct these evaluations are both feasible and cost effective. An evaluation can provide union decision makers with data to improve training so that in the long run the training does become increasingly effective.

Acknowledgments

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DISCUSSION

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As one who studied unions years ago I am delighted with the renewal of interest in the internal life of the union, and especially in union administration. Rather than critique these fine papers I will stress a topic which deserves more attention: the role of the paid staff representative. There have been numerous studies of elected officers and stewards but, with the major exception of Wilensky's *Intellectuals in Labor Unions* and much recent work by Clark and Gray, union staff have been largely ignored. Too often they are taken for granted or assumed to be just paid help, much like other employees.

Relevant to this is a story ascribed to the now deceased president of a major union. At the behest of an outside trainer-consultant he reluctantly agreed to a question-and-answer session with his junior staff. "Mr. President," one brave staff member asked, "Why do you treat your employees just like [our major employer] does?" To which the president answered, "Is there any other way?"

The point of these papers is that there is another way. But I would like to argue that before we prescribe training programs or engage in human resource planning, we need to know more about who the staff people are—their backgrounds and interests—and the nature of their jobs.

Back in Wilensky's day there was a sharp difference between the college-trained intellectuals (who engaged in research, writing, and the like) and the field staff who came up from the ranks. Today this distinction is less sharp. Many of the staff people who come up from the ranks have acquired some education along the way. Further, as Clark and Gray point out, there is a growing tendency, especially in white-collar unions, for staff people to follow a career pattern of moving from one union to another, thus leading perhaps to greater identification with the *profession* of union staff person and less

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identification with one's union of the moment. Clearly we are seeing a variety of career patterns and I hope more research is done on this. What has been the influence, for example, of the veterans of the 1960s student revolts, now in key positions in some unions?

But also we need a lot more information as to the nature of the union staffers' job and the pressures under which they operate. For example, what are their sources of job satisfaction and dissatisfaction? What are the tensions between staff people and elected top officers, or between staff people and rank-and-file voluntary leadership? To what extent are there conflicts between staff people who have roots in the unions and those who are recruited from outside? These are some questions I've been examining myself recently.

In studies of union management it is tempting to compare unions with companies. But unions might learn more by comparing themselves with nonprofit organizations, especially those which depend heavily on volunteers, such as the Boy Scouts, Red Cross, some churches, and the Sierra Club. Since these organizations have much in common with unions, they may even have some lessons for unions. Let me suggest five points:

1. Both unions and nonprofits rely heavily on volunteers.

2. In both unions and nonprofits staff are recruited originally for idealistic reasons, but soon find out that much of the work consists of humdrum routine.

3. More than in profit-making organizations, the rewards in both unions and voluntary organizations are heavily psychic; when psychic rewards are lacking, motivation drops dramatically, and crusaders turn into timeservers.

4. In both unions and nonprofits, challenges tend to be greater than the resources to deal with them, thus contributing to burnout and even cynicism.

5. In both cases, since staff people identify with and work hard for the organization's objectives, they believe it only right that they be allowed to participate in establishing these objectives, that as professionals they should enjoy substantial autonomy. Instead they often feel forced to carry out policies they have had little part in setting. Put another way, they feel somewhat powerless, squeezed between elected officials at the top and rank-and-file members at the bottom, both of whom give them orders. Consequently, many staff people report feeling isolated and lonely. This is particularly the case for those who lack an independent power base within the union. In defense these staff people form their own unions. This helps them act as an independent pressure group, somewhat protected by their own union from their employer-union's control. Many staff people are more militant (especially with regard to women's issues) than either the seasoned (and sometimes battle-weary) top leadership or the apathetic rank-and-file below. This difference in values may make it more difficult for either top union officialdom or the rankand-file membership to implement their own policies. Thus professionalism has implications for union democracy.

In short, we need to know much more about how union staff people view their world before we start prescribing human resources policies for them. And the best way to know how they feel is to talk to them. Surveys of their bosses won't do.

DISCUSSION

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There is much to be learned from the use of corporate metaphors in analyses of nonbusiness organizations and, as the research reported here demonstrates, from the study of HRM in unions. But applying models anchored in one type of organization to dissimilar organizations can also obscure essential differences, giving rise to issues of perspective and emphasis.

Another source of such issues is investigator orientations to different levels of union structure. In labor studies and industrial relations are those whose "structural preference" is variously national leadership, staff representatives, local union leadership, or rank-andfile members. Bok and Dunlop (1970, p. 199), for example, exhibit their "top leadership" orientation when they describe the position of the AFL-CIO as "special in that it is twice removed from the rank and file" and "better situated to take a longer view of union policies. . . ." The federation, they assert, "is in a superior position to serve as a source of new ideas and new knowledge for its member unions."

A better case can be made for the view that no single level of the labor movement monopolizes foresight and innovation and that much planning and initiative arise from "lower" levels. The essential point is that, regardless of level of organization studied, researchers need to avoid the myopia that can result from structural biases and reliance on corporate models. Clark and Gray examine the HR functions attaching to national unions as employers. Their starting point is the union itself. The resulting profile establishes a baseline for future research, but their analysis goes beyond simple description to begin the needed explanation. One of the more interesting findings—that unions in decline are more likely than growing unions to employ personnel managers—invites further investigation, with the literature on public sector cutback management possibly affording insights. Also

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noteworthy is the identification of a growing body of union professionals circulating among unions.

Stratton-Devine's point of departure is the corporation, which leads her to ask whether unions adopt "parallel practices" in SHRP. Her use of "elite interviews" illustrates the potential value of this qualitative methodology both for direct results and for the generation of propositions to be tested using other methods (Dexter, 1970). Local, as well as regional and national, bodies are included, which buttresses the assertion of a "union level effect." Nevertheless, one wonders how much the SHRP reported at higher levels really differed in substance from "informal" planning at lower levels. Much can vary according to the questions asked and terms used; lower levels often plan, and plan strategically, but may call it something else.

Thacker and Fields look to the management training literature and postulate a parallel between supervisor/subordinate and steward/ rank-and-file relationships. Their findings are noteworthy on at least two counts. First is the effort to measure learning transfer by surveying those whom the training is ultimately intended to affect, the rank and file. Secondly, the emphasis on interaction with the "silent majority" is well placed, although I question whether the activities targeted in the grass roots program are inherently more proactive than the "practical aspects" of representation. The implications for steward role definition are indeed significant, confirming the centrality of the representation expectation and, one might argue, militating against "loading up" stewards with additional, nonrepresentational, responsibilities. The authors recognize some shortcomings of their design, including the possibility of selection bias not detected in the regression analysis, and the desirability of a longitudinal analysis.

It would be ironic if the old concern with union bureaucracy as antidemocratic emerged now as a call for bureaucratic rationality. Whether or not HRM is "for unions too," the three papers presented here suggest it can clearly be relevant, if not sufficient. Perhaps we need the correction afforded by models anchored in explicitly political organizations.

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DISCUSSION

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I want to begin by commending the Industrial Relations Research Association for sponsoring a session on trade union administration. Faced with a plethora of topical issues, I'm pleased to see this one given the attention it deserves.

My perspective on today's session is that of a union bureaucrat for the past ten years. My views are therefore anecdotal, having worked for two major unions and one central labour organization during that time. I am also one of the small number of people who came to work for the labour movement as a "hired gun," i.e., not up from the ranks. (For this opportunity, I remain very grateful. Working in the labour movement is exhilarating, challenging, and above all satisfying, when gains are made that benefit all working people.)

My comments today will focus on three broad themes:

1. Unions are fundamentally political organizations. Realizing this is essential to any study of how unions operate, and avoids any facile comparisons with corporations.

2. Unions do engage in strategic planning, although most union leaders would not recognize this as such, and instead appear to function purely in a reactive mode.

3. The industrial relations literature explains very little of what does constitute planning within labour organizations. To cite two examples, union mergers and coalition building (on issues like free trade) can't be explained by any of the current theories of "what unions do." Political theory is much more relevant to this end.

Unions as Political Organizations

The notion that unions are political organizations should hardly be a surprise to most industrial relations practictioners. Yet this

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perspective is strangely absent from most of the industrial relations textbooks.

What do I mean by "political" organizations? Far from being a pejorative (as, evidently, Dunlop believes), unions as political institutions reinforce what we value in society—democracy, accountability, responsible decision making, compromise, etc.

Kay Stratton-Devine's paper highlights some of this perspective. Unions do recruit staff, in the main, from within the membership of the union. This makes perfect sense when outcomes depend, in large part, on motivation, loyalty, and commitment of staff, whether it be in an organizing drive, contract negotiations, or a political campaign.

The exceptions to this include not only research, communications, and legislative staff, but also support personnel. Here, the union's union (the OPEIU) has been able to negotiate top wages, benefits, and working conditions which in turn attracts above average skills. In most labour organizations, outsiders don't participate in the political process, which in part explains Clark and Gray's finding of staff mobility between unions.

What is missing, however, is an analysis of unions as democratic institutions. In the CAW—Canada, for example, union officers from the local to the national levels are elected every three years. This accountability to the members exceeds that which exists for many political offices, and this permeates decision making within a union.

For this reason, I reject Devine's conclusion that unions can learn lessons on human resource planning from the corporations. For starters, many North American corporations have terrible track records when it comes to training, long-range planning, promotion of women, visible minorities, etc. Second, her argument fails to take into account the democratic nature of union decision making. To paraphrase a famous quote, it may have its faults, but like democracy, it will continue until we find something better!

In fact, recruitment of union staff is far from ad hoc. To be considered, one must first be elected to successive levels of local union office (steward, bargaining committee, local executive, convention delegate, etc.). In this capacity, one typically develops an expertise (e.g., handling members' U.I. appeals) or has played a key role (e.g., led a workplace occupation that resulted in plant closure legislation). Normally, one has participated in all levels of the union's education programs. No wonder in our union, at least, the competition is stiff and there is an incredible wealth of talent to draw upon. Dare I say, this selection process is far more rigorous than many university tenure processes!

Unions and Strategic Planning

This brings me to my second theme: unions and strategic planning. It is fallacious to conclude that planning doesn't occur in unions, because it wasn't identified in a survey. It's the identification of the specific function and the terminology that doesn't exist. It would be a rare union leader who decided to formalize this process, but one shouldn't conclude from this that unions only function in a reactive mode.

I am equally skeptical of the conclusion that "employee involvement" is unknown within unions. Except I call it delegating responsibility. Here, unions do a marvellous job and have nothing to learn from corporations and their multilayered bureaucracies!

I offer two examples where unions have adopted a strategic plan, by action, not by name. The first is in the area of building the membership base. In Canada, at least, it has long been recognized that in order to properly service the membership, a certain "critical mass" is required in terms of size. Services such as research, education, communications, health and safety, organizing, legislative, etc., may not be available to members of smaller unions. (In the case of international unions, these services may only exist in the U.S.) Since the 1980s, a wave of union mergers has occurred in Canada, impeded only, I might add, by parent organizations in the U.S. that fear the loss of their Canadian members.

The CAW—Canada has been involved in five major mergers since 1985, beginning with CALEA (passenger and reservation agents), followed by UFCW units in Newfoundland and Nova Scotia (fisherman), TCU (also in the airlines), BRAC (railway carmen), and last month CAIMAW (industrial workers in western Canada). Together with an aggressive organizing approach, this has boosted the union's membership by 33 percent since the split from the UAW.

We are also not alone. In December, three Canadian industrial unions—the CPU, the CWC, and the ECWU—announced merger talks that will lead to a new union of 150,000. All three split from their international union prior to 1985.

Each merger has brought to our union a wealth of talent, new perspectives, and new problems to address. The services the new organization can provide the members has been the most important rationale, with reasons as diverse as a strike fund, leadership development programs, and expertise in areas like pension indexing. Each merger challenges the conventional wisdom that unions defend the status quo, and resist change. The use of outside consultants, as identified by Paul Clark, is an alternative way to gain this expertise, though it is not without problems. Interestingly, mergers invariably result in too many staff, particularly in leadership positions.

Continuing on the issue of services provided to union members, I have one further comment for future research in this area. The scope of union activity today extends well beyond the budget and resources of the national (or international) labour organization. Many unions operate centres, which offer educational services, both to members and to others on a commercial basis. Other unions administer training trust funds, pursuant to collective agreements with employers. My union, for example, is currently developing a certificate training program for production workers in the auto parts sector, together with the APMA and the Government of Ontario. Collective agreements also contain representation provisions that cover such areas as stewards, committeepersons, benefit representatives, health and safety coordinators, substance abuse representatives, etc. These services augment what is available from the union itself.

Steward training, as evaluated by James Thacker and Mitchell Fields, is one example of this. As their paper suggests, this training is most effective when the objectives are general (i.e., developing critical, independent thinking) rather than specific (i.e., how to handle Step 2 grievances). The best union educationals use local union instructors (who draw on their own experiences as workers) and apply adult education methods. Future research in this area should focus on the content of such programs (i.e., what works and what doesn't).

My second example of strategic planning by unions is in the area of coalition building, as identified by Kay Stratton-Devine. In response to the neoconservative agenda, unions in Canada learned to form new alliances with a broad constituency that includes churches, women's organizations, the antipoverty movement, farm groups, environmentalists, etc. This form of political organizing reached its zenith during the free trade debate in 1987-1988, but continues today and has encompassed such issues as fair taxation and now the national unity debate. Interestingly, it was emulated by the U.S. labour movement in the NAFTA debate.

Towards A New Theory Of Unions

All of this leads me to query whether current industrial relations theory is at all relevant to explaining what unions do. The traditional collective bargaining paradigm doesn't capture this today (if it ever did). Political theory offers an alternative, and does provide an explanation of points as diverse as unions as political organizations, and coalition building. It would be interesting to see some cross-disciplinary research in this area.

A Study in the Development of Trade Union Bureaucratization: The Case of UAW Local 6, 1941-1981

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There have been a number of macrotheoretical studies which discuss the occurrence of trade union bureaucratization (the removal of the rank and file workers' power to decide issues on the shop floor and the placing of that power into the union leaders' hands) in industrial unions (Michels, 1949; Herberg, 1943; Lester, 1958). The conventional wisdom of this past research, including Michels' (1949) classic study, is that trade union bureaucratization is an inevitable process which occurs, over the long run, in a basically linear fashion. However, this study arrives at a different conclusion using a microtheoretical approach in contrast to the macrotheoretical foundations of the earlier institutional studies.

According to Michels' (1949) "Iron Law of Oligarchy," trade unions, in spite of their democratic and antiauthoritarian beginnings, are as susceptible as all other organizations to the development of both an oligarchy and bureaucratization. The purpose of this dissertation was to test Michels' (1949) ideas through the development of a microtheory of trade union bureaucratization which would then be used to study an American industrial union local.

Theoretical Framework

Although the external environment is important in understanding the development of trade union bureaucratization, the role of

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historical agency is also crucial in this process. The institutionalization of collective bargaining, which requires that the union focus more on contract negotiation and administration as opposed to shop floororiented activities, drives trade union bureaucratization and is consciously pursued as an organizational strategy by the union leadership.

The institutionalization of collective bargaining leads to two additional theoretical components which contribute to trade union bureaucratization. The first is the removal of power from the hands of the shop floor representatives, which occurs because the collective bargaining agreement now deals with the issues that the shop floor representatives used to deal with in the past. In the early years of CIO industrial unionism in America, shop stewards not only controlled the daily negotiations with management but also developed policy and initiated collective action on the shop floor (Peck, 1963; Howe and Widick, 1949).

The operationalization of this component should be evidenced by a decrease in the shop stewards leading a variety of "collective action" events on the shop floor such as wildcat strikes, slowdowns, etc. In addition, since shop stewards are no longer able to "bargain informally" or to settle grievances on the shop floor, one would expect the shop stewards to play an increasingly insignificant role in the grievance process.

The second theoretical component, which results from the institutionalization of collective bargaining (as well as from the removal of power from the hands of shop floor representatives), is the control of shop floor militance. Industrial militancy can be defined as "any method of seeking solutions by means other than negotiation" (Rigg. 1987). Peck (1963) points out that the decline in labor militancy on the shop floor is directly related to the decreased power of the shop steward. Mills (1948) argues that once collective bargaining becomes institutionalized, trade unions begin to adopt functions similar to the companies with which they are dealing. This results in the trade union becoming involved in the discipline of the rank and file, which in one manifestation is the control of shop floor militance. The institutionalization of collective bargaining has led to the "incorporation of workplace trade unionism" (Edwards and Heerv, 1985), a situation in which shop stewards are no longer able to initiate "collective actions" on the shop floor but are now responsible for ending them whenever they occur.

This form of control is expressed in two ways. The first occurs when trade union leaders attempt to stifle spontaneous shop floor militance (wildcat strikes, etc.) because of their concern that such behavior will interfere with the attainment of collective bargaining objectives. However, the second occurs at specific times when trade union leaders determine that it is necessary to encourage shop floor militance as a pressure tactic for the achievement of collective bargaining objectives. Gouldner (1954) argues that union leaders may actively encourage wildcat strikes (albeit clandestinely) while officially declaring that they are opposed to the action. Therefore, in order to operationalize this component, one would expect to see less militance exhibited on the shop floor, and when it does occur, to be explicitly encouraged by trade union officials.

The Case of UAW Local 6, 1941-1981

This microtheory was empirically tested using the United Auto Workers (UAW) Local 6 as an individual case study from its inception in 1941 through 1981. Local 6 was first organized at the Buick Aviation plant in Melrose Park, Illinois (13 miles west of the Chicago loop) and was later reorganized by the local in 1946 after the plant had been sold to the International Harvester Corporation (IHC) at the conclusion of World War II.

Although collective bargaining became institutionalized in Local 6 during the World War II and postwar periods, it occurred under different sets of circumstances in Buick Local 6 and Harvester Local 6. In the World War II years the institutionalization of collective bargaining occurred because of the local leadership's willingness to follow the lead of the UAW International in allowing the National War Labor Board (NWLB) to regulate the collective bargaining relationship between Local 6 and Buick. In the immediate postwar years when NWLB controls were removed, collective bargaining became institutionalized in Local 6 because of the commitment of the leaders in the ruling caucus to follow the strategy that Walter Reuther was developing for the UAW International as a whole. At this time, Reuther was committed to establishing a system of collective bargaining in which "industrial jurisprudence" issues were to be settled through contract negotiation and administration as opposed to being handled through militant shop floor activity (Lichtenstein, 1988).

During World War II, this commitment to the institutionalization of collective bargaining had a direct effect on the development of the local's shop floor unionism. Because the NWLB invoked the maintenance of membership clause and the dues check-off in contracts between the CIO unions and the large industrial companies, the unions agreed to a no-strike pledge during wartime in exchange for this increased organizational security. Although the Local 6 leaders were vehemently opposed to the no-strike pledge, the pledge was used by the local union's leadership to control shop floor militance. The local leadership used the no-strike pledge as a way to oppose the use of wildcat strikes in favor of legal strikes. In addition, it was used to channel the workers' militant tendencies into changing the UAW International's policy concerning the pledge rather than allowing this shop floor militancy to be expressed. Opposition to the pledge served two purposes. It allowed the local to appear militant as well as prevented illegal job actions from occurring on the shop floor.

Because of the Local 6 leadership's commitment to the institutionalization of collective bargaining in the postwar period, the local's shop floor unionism became subordinated to the mechanisms of collective bargaining. Both the grievance and arbitration procedures, as outlined in the contract, were viewed as the primary vehicles for solving shop floor problems. Since the contract was viewed as the workplace rule of law (Brody, 1980), the shop stewards and shop committeemen attempted to abide by the steps of the grievance and arbitration procedures. Thus, these two procedures removed power from the hands of the shop stewards because they restricted the tactics that they could use to settle grievances.

Only when the grievance and arbitration procedures had totally broken down was shop floor militancy used. However, this militancy was utilized because the union leadership wanted these procedures to function more effectively, not because they wanted to permanently replace them with different mechanisms.

When there was an upsurge of shop floor militancy in 1951-52 over piecework and occupational classification adjustments, the Local 6 leadership maintained a tight rein on the actions occurring on the shop floor. Job actions in the form of "locker room meetings" and "extended lunch hours" were covertly organized by the shop committeemen. "Locker room meetings" consisted of the shop committee organizing an action in which they would send a department's workers to the locker room in order to pressure the company into dealing with the workers' most immediate grievances. "Extended lunch hours" involved the shop committee instructing a department's workers not to return to work after lunch.

In addition to organizing these actions, wildcat strikes were explicitly discouraged as were individual departmental actions that were not organized by the shop committee. However, the preferred method for dealing with IHC when the local experienced problems with the company was to hold strike authorization votes and legalized strikes, two legally sanctioned procedures.

From 1953-1969, the local leadership's increasing commitment to the institutionalization of collective bargaining was reflected through the local's shop floor unionism. After IHC implemented more severe discipline for work stoppages after 1952, and with the continued deterioration of the grievance and arbitration procedures, the amount and nature of shop floor militancy changed. Because of the leaders' desire to respect the collective bargaining agreement, instead of the leadership clandestinely organizing illegal shop floor actions, they began to organize actions that were not contract violations, such as "work to rule actions" and "overtime strikes." When "overtime strikes" became illegal after the signing of the 1967 UAW-Harvester Master Agreement, the local union leaders abandoned the organizing of any shop floor militancy whatsoever.

In the years from 1953 to 1959, the conflictual issues that had afflicted Local 6 from 1946 to 1952, the slashing of both the piecework prices and occupational classifications, continued to generate bushels of grievances. Although the UAW International and IHC instituted a number of changes in the grievance procedure in the middle to late 1950s (McKersie and Shropshire, 1962) shifting power from the shop floor representatives to the UAW International staff, these mechanisms failed to thwart the accumulation of unsettled grievances. Throughout this period the Local 6 leadership did not come up with any new ideas for handling this situation. In fact, its solution for dealing with these problems remained the threat of authorizing strike votes as well as the conducting of legal strikes.

Because of the labor relations problems generated from the plethora of unsettled grievances, the "new look" procedure was introduced in 1960 (Ozanne, 1967). The "new look," which involved settling *all* grievances orally on the shop floor, provided an opportunity to "debureaucratize" shop floor labor relations as well as to act as a potential force against trade union bureaucratization. It also offered the opportunity for the shop steward to reemerge as a more powerful player in the grievance procedure.

However, the system did not live up to what it had promised—the informal settlement of oral grievances at the point of production. Instead, the same thing happened with the handling of the oral grievances as had happened to the written grievances several years earlier. The oral grievances were *not* settled on the shop floor but piled

up and had to be settled by the top levels of IHC management in "Supreme Court" type hearings.

In 1970, a revolt against trade union bureaucratization had commenced within the local. With the hiring of young workers who had been influenced by the antiwar and student movements and the influx of minority workers caused by the closing of IHC's Tractor Works (Chicago), the workers that entered the plant in the early 1970s were more committed to developing a militant shop floor unionism that was opposed to the institutionalization of collective bargaining. With the formation of a new caucus that clearly articulated this principle, a revolt against bureaucratization began to take shape within the local. This orientation placed the "deinstitutionalizers" in direct opposition to the local's leadership that vigorously supported the institutionalization of collective bargaining (the "institutionalizers").

The differences between these two groups in approaches to collective bargaining, shop floor unionism, and internal union politics brought them into immediate conflict. In terms of collective bargaining, the "deinstitutionalizers" criticized the local for not prosecuting the legal strikes in a vigorous manner and for too easily compromising at the bargaining table.

However, the major area of conflict between these two groups was over shop floor unionism. The "deinstitutionalizers" led shop floor actions and wildcat strikes throughout the 1970s because of their belief that trade unionism should be based on the shop floor *in principle* as opposed to focused around the bargaining table and the grievance and arbitration procedures. They believed that this would place more power in the hands of shop stewards who now would be responsible for the organization of departmental job actions on the shop floor. This is, in fact, what occurred. Militant shop stewards organized such shop floor actions to empower the workers.

However, such behavior led to a conflict between these stewards and the shop committeemen, who were from the "institutionalizer" factions. The shop committee not only discouraged these actions but were actively involved in breaking them whenever they occurred. Thus, the control of shop floor militance had progressed from the shop committeemen actively organizing wildcat strikes and shop floor actions in the late 1940s and early 1950s to actually breaking them in the 1970s.

By 1981, with both the defeat of the "deinstitutionalizers" and the beginning of an economic recession after the UAW's 172-day

chainwide strike against IHC (Friedman, 1989), the local's workers abandoned shop floor militancy. With this movement away from the shop floor towards the formal collective bargaining mechanisms, power remained in the hands of the leadership rather than in the hands of the rank and file workers. Local 6 remained bureaucratized.

Conclusion

The evidence from UAW Local 6 indicates that the inevitability of trade union bureaucratization as predicted by Michels' (1949) fundamental thesis (outlined in the "Iron Law of Oligarchy") may not be correct. In addition, this microtheoretical study demonstrated that although trade union bureaucratization occurred, it did not develop in a linear manner. A number of external events (e.g., the introduction of the "new look" procedure) and internal events (e.g., the development of an opposition shop floor movement) relating to the development of Local 6 indicated that bureaucratization did not occur in a smooth asymptotic fashion but rather in a manner in which the outcome of bureaucratization remained fundamentally undetermined.

Although collective bargaining had become institutionalized in Local 6, the local union had remained essentially democratic, which allowed for the development of a movement opposed to the institutionalization of collective bargaining. Even though the "deinstitutionalizers" were ultimately defeated both on the shop floor and in local union elections, they were successful in organizing a number of effective departmental job actions on the shop floor as well as defeating the ruling caucus on a few key union policy votes. Nevertheless, these actions provided the potential for a fundamental "debureaucratization" of the local union which would have led to the invalidation of the Michelsian (1949) thesis.

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Nonunion Grievance Systems: Perceptions of Fairness

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This dissertation examines the relationships among fairness perceptions and characteristics of nonunion grievance systems, using a policy-capturing approach. Subjects are 450 nonunion, nonmanagement employees from seven large companies.

The study asks and provides empirical evidence for the following two broad questions: (1) Which nonunion grievance system characteristics influence employees' perceptions of fairness? and (2) Which organizational justice component—procedural, distributive, or interactional—influences overall organizational justice perceptions most heavily?

The study of nonunion grievance systems has become increasingly popular in the industrial relations literature (Boroff, 1991; Ewing, 1989; Ichniowski and Lewin, 1987; McCabe, 1988; Peterson and Lewin, 1990; Westin and Feliu, 1988). Much of the writing is prescriptive or speculative and usually falls into one of three categories: (1) reasons for the establishment of systems, and hypothesized advantages, or outcomes; (2) case studies, or anecdotal evidence about organizations with nonunion grievance systems; and (3) speculation and some empirical evidence (Boroff, 1991) as to which systems, or system characteristics, are most effective. However, there is little evidence, or agreement, as to which system characteristics lead to effectiveness. This is where the present study contributes to the literature.

Justice Theory

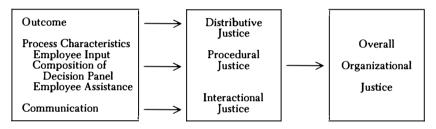
A logical measure of effectiveness of nonunion grievance systems is fairness perceptions. High perceptions of fairness may indirectly lead to other effectiveness measures. A system that is not perceived as fair may result in a failure to achieve other goals, such as reduced litigation, union avoidance/substitution, and/or increased productivity.

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DISSERTATIONS

It has been suggested that organizational justice is a function of three components, or dimensions of justice: distributive justice, procedural justice, and interactional justice. *Distributive justice* is the perceived fairness of an outcome (Folger and Greenberg, 1985) and is grounded in equity theory (Adams, 1965). *Procedural justice* is the perceived fairness of the process(es) by which decisions are made or outcomes are allocated. *Interactional justice* is the perceived fairness of interpersonal communication in decision-making contexts (Bies and Moag, 1986).

A grievance decision, for instance, can be perceived as fair or unfair based on the outcome, i.e., "winning" or "losing" the grievance (distributive justice), on the nature of the process used to arrive at the decision (procedural justice), and/or on the nature of the interpersonal communication that surrounds the decision (interactional justice).



This study examines the relationships among nonunion grievance system characteristics and justice perceptions, as shown in the above model:

H1: Outcome will be the major determinant of distributive justice. Distributive justice will mediate the relationship between outcome and organizational justice.

H2: Process characteristics (employee input, decision-making independence, and employee assistance) will be major determinants of procedural justice. Procedural justice will mediate the relationship between process characteristics and organizational justice.

H3: Communication of the decision will be the major determinant of interactional justice. Interactional justice will mediate the relationship between communication and organizational justice.

The literature strongly supports the notion that procedural justice "matters" when measuring overall fairness or justice (Folger and Greenberg, 1985; Folger and Konovsky, 1989; Greenberg, 1987; Lind et al., 1980; Tyler and Caine, 1981). Moreover, several studies suggest that procedural justice is likely to have a stronger effect than distributive justice on overall fairness judgments (Folger and Greenberg, 1985; Tyler, 1984; Tyler and Caine, 1981).

H4: Organizational justice is a function of distributive, procedural, and interactional justice perceptions. Procedural justice will influence organizational justice more heavily than distributive justice or interactional justice.

Finally, other organizational justice research has suggested that procedural justice has a moderating effect on distributive justice (Greenberg, 1987; Lind et al., 1980).

H5: Procedural justice will moderate the relationship between outcome and distributive justice.

Methodology

A policy-capturing questionnaire was chosen to determine how subjects formulate perceptions of fairness. Compared with selfreporting, policy capturing gives a more precise estimate of the relative importance of the criteria used in arriving at a judgment. Other benefits include the avoidance of socially desirable responses (Rynes, Schwab, and Heneman, 1983), the ability to manipulate the variables in question, and the ability to rule out (control for) competing variables (Rynes, Weber and Milkovich, 1989).

The questionnaire consisted of 64 scenarios of orthogonal combinations of the six manipulated independent variables described in Table 1. Data were provided by a sample of 450 nonunion, nonmanagement employees from seven different organizations. (The response rate was 51%.)

Scenarios consisted of short "stories" that outlined a grievance situation, including the nature of the offense, the procedures followed, the outcome, and the explanation offered to the grievant. The scenarios were presented in the third person, for example, "the employee in this case. . . ." All cases involved discharges. Respondents were asked to rate the grievance systems described on several seven-point Likerttype scales. For all scales, 1 was "not at all fair" and 7 was "very fair." Relevant to this paper are the ratings of distributive, procedural, and interactional justices, as well as the overall fairness of the situation.

Results and Discussion

The data were analyzed using OLS regression equations. Since the nature of the offense involved in the scenarios was not significant in any of the analyses, discussion will focus on the remaining variables.

TABLE 1

Operationalizations of Manipulated Independent Variables

EE INPUT	Multiple opportunities to present argument (coded 1). Given one opportunity to present argument (coded 0).
EE ASSIST	Provided with assistance in preparation (coded 1). Not provided with assistance (coded 0).
INDEPENDENCE	Panel of independent arbitrators (coded 1). Panel of top managers (coded 0).
OUTCOME	Discharge overturned (coded 1). Discharge upheld (coded 0).
COMMUN.	Employee provided with an explanation (coded 1). Employee not provided with an explanation (coded 0).
OFFENSE	Employee accused of drug use (coded 1). Employee accused of theft of co. property (coded 0).

The nature of the outcome had the largest effect on distributive justice ratings, supporting hypothesis one. These results are in the lefthand column of Table 2. Other data (not shown) show that distributive justice mediates the relationship between the nature of the outcome and the overall organizational justice rating, as hypothesized.

Three process characteristics, the opportunity for employee input, composition of the grievance panel, and the availability of employee assistance, significantly influenced procedural justice, and did so more strongly than did the nature of the communication surrounding the

Variables	DJ	РJ	IJ
Employee input	.2601°°°	.4143 °°°	.0362°°°
	(17.55)	(31.51)	(4.13)
Dec. making ind.	. 2002°°°	.3676 °°°	.0527 ° °°
	(13.51)	(27.95)	(6.01)
Employee assist.	.1216°°°	.2420°°°	.0419°°°
	(8.21)	(18.40)	(4.78)
Communication	.1444°°°°	.1325 °°°	.8446°°°
	(9.76)	(10.08)	(96.43)
Outcome	.2755 °°°	.0844°°°°	.0718°°°
	(18.59)	(6.42)	(8.20)
Adj. R²	.2166	.3834	.7264
F-value	198.327 •••	444.637°°°	1895.5 99***

TABLE 2

OLS Regression Results for Justice Components ($n = 3568$)
Beta Coefficients—(T statistics in parentheses)

•••• p < .0001

decision and the nature of the outcome, confirming hypothesis two. (The data are in the middle column of Table 2.) These results suggest that it is important that nonunion grievance systems allow for employee input, as several observers (Ewing, 1989; McCabe, 1988; Westin and Feliu, 1988) have suggested. It is also helpful if decision makers have independence from management, although this appears to be less critical from a procedural justice standpoint than many (Aram and Salipante, 1981; Ewing, 1989; McCabe, 1988; Rowe and Baker, 1984; Westin and Feliu, 1988) have suggested. As hypothesized, procedural justice was found to mediate the effects of process characteristics on overall organizational justice ratings.

The presence or absence of an explanation for the decision reached had an overwhelming effect on the rating of interactional justice, supporting hypothesis three (as shown in the right-hand column of Table 2). Other data also indicate that interactional justice acts as a mediator between the communication variable and overall organizational justice.

Variable	beta	T-stat
Procedural justice	.4900***	(49.48)
Interactional justice	.3416***	(42.38)
Distributive justice	.3030***	(30.37)
Adj. R ²	.7925	
F-value	4543.989°°°	

TABLE 3 OLS Regression Results for Organizational Justice (n = 3568)

•••• p < .0001

Perceptions of procedural justice, distributive justice, and interactional justice, all contributed positively to the ratings of overall justice, supporting hypothesis four. (The analysis is shown in Table 3.) Procedural justice had the greatest effect, followed in order by interactional justice and distributive justice. While several theorists and researchers have hypothesized, speculated, and shown that procedural justice is a more important component of organizational justice than is distributive justice, the addition of interactional justice to this equation provides a new insight. Hypothesis five was also supported; process moderated the relationship between the nature of the outcome and perceptions of distributive justice. Specifically, unfair outcomes (upheld discharges) resulting from objectively fair processes (with an opportunity for employee input, use of outside arbitrators, and the availability of employee assistance) had higher distributive justice ratings than fair outcomes (overturned discharges) resulting from objectively unfair processes (with little opportunity for employee input, use of a management panel, and no availability of employee assistance). The distributive justice ratings were 5.04 and 4.25 (on a 7-point scale) respectively (P < .001).

Conclusion

The results of this study suggest that nonunion grievance systems can be designed to increase perceptions of fairness. Most important is the need to provide employees with multiple opportunities to have input into the process. It is also helpful if the ultimate decision maker is independent of management and if employees are provided with assistance in processing their grievances. Taking time to explain the reason for the decision reached also contributes to perceptions of fairness. Moreover, both favorable and unfavorable outcomes are likely to be seen as more fair if the process is seen as fair.

Additional research examining the effects of the three justice components is necessary. Much of the research to date examines procedural justice and distributive justice, but ignores interactional justice. Considering the findings of this research, interactional justice is an important justice element. Also, additional support for procedural justice's moderating effect on the relationship between outcome and distributive justice would be beneficial. Using situations where the outcome has a more direct impact on the respondents may result in findings different from those obtained in the present study.

Fairness perceptions served as the dependent variables in this study. Additional research needs to be conducted to examine the effects of nonunion grievance system characteristics on other effectiveness measures such as commitment, turnover, absenteeism, the avoidance of litigation and unionization.

The present sample consisted primarily of white-collar, professional employees; perhaps blue-collar or managerial employees would respond differently. Also, employees of various types may respond differently depending on their organizational experiences. Analyses not shown here found few differences across employees of the seven companies studied, but this research was not specifically designed to examine such differences.

Acknowledaments

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Labor-Management Trust: Its Dimensions and Correlates

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Industrial relations researchers have identified the level of labormanagement trust as one of the crucial institutional characteristics that determine which firms have a competitive advantage relative to others (Kochan, Katz, and McKersie, 1986). In particular, Jacoby (1990) suggested that in firms with high labor-management trust, "employers have less need for control devices and cumbersome governance structures that are costly and can interfere with their ability to adapt quickly to changing market circumstances" (p. 335). One aspect of labor-management trust is the level of trust in work relationships between labor and management representatives (Walton and McKersie, 1965). Thus drawing on appeals by Lewin and Feuille (1983) and Jacoby (1990) for industrial relations research that integrates work from other disciplines, the present study used theories and methods from organizational behavior and social psychology to investigate the role of trust in work relationships between labor and management representatives.

Past research on labor-management trust has suffered because it has not accorded construct validity the same importance as substantive validity. Substantive validity embodies an emphasis on relationships among constructs, i.e., relationships among independent variables and dependent variables of immediate practical interest, e.g., organizational performance (Schwab, 1980). Construct validity, on the other hand, emphasizes empirical investigation of the "correspondence between a construct [conceptual definition of a variable] and the operational procedure used to measure or manipulate that construct" (Schwab, 1980, pp. 4-5). Schwab urged researchers to sequence their research so that construct validity is studied before undertaking substantive research.

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Because the emphasis in the trust literature has been on substantive validity, some critical issues about labor-management trust have yet to be addressed. First, is it a unidimensional or multidimensional variable? Second, how is it affected by attitudinal, organizational, and work climate variables? The purpose of the present study was therefore to investigate (1) the dimensions of labor-management trust and (2) examine the effects of several correlates (i.e., determinants) of trust.

Conceptual Basis for the Study

Trust is an individual's reliance on another person under conditions of dependence and risk. Reliance refers to behavior that allows one's fate to be determined by the focal person (i.e., the person about whom a decision to trust must be made). Reliance on the focal person always involves some degree of risk stemming from the possible consequences of the focal person's untrustworthy behavior. Dependence is a property of the social relationship between the individual and the focal person; it refers to the degree to which one's consequences are linked to the focal person's behavior. Risk is one's subjective perception about the degree of loss that would be experienced due to the focal person's untrustworthy behavior. Under conditions of dependence and risk, one's willingness to put his or her fate in the hands of the focal person signifies the level of trust.

Using literature from organizational behavior and social psychology, along with a total of 70 preliminary interviews conducted for the study, four dimensions of trust between labor and management representatives were identified. Using public school districts as an organizational context, the present study used two samples, one comprised of school district superintendents and the other made up of presidents of local teachers' unions. Thus, for illustration, examples of trust items asked of superintendents are provided below with the description of each dimension.

1. Communicating openly and honestly with the focal person. People who trust the recipient of their communication will reveal a greater amount of information, be more accurate when doing so, not filter and distort information, and be more willing to disclose important yet potentially self-damaging information (see O'Reilly and Roberts, 1976). An example of an item from the superintendent survey was: "Give the union president all known and relevant information about important issues even if there is a possibility that it might jeopardize your job as the superintendent."

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2. Entering an informal agreement with the focal person. The risk involved in entering an informal agreement stems from the absence of a binding document (e.g., contract) that explicitly states the punitive sanctions against an individual who fails to fulfill his or her obligations. The absence of a contract can create ambiguity surrounding what is at stake for the other party if he or she violates the agreement. An item was: "Enter into an agreement with the union president even if his/her future obligations concerning the agreement are not explicitly stated."

3. Relying on the focal person to accomplish a task. Superintendents and presidents must often rely on each other to accomplish tasks. An example of an item was: "Ask the union president to convince the membership of the local teachers' union to give support to a newly initiated cooperative program between teachers and school administrators."

4. Maintaining surveillance over the focal person. The first three dimensions dealt with the presence of trusting behavior, whereas the surveillance dimension indicates the absence of trusting behavior. To the extent one does not trust another person, one will feel the need to keep a careful watch over that person (Strickland, 1958). On the other hand, when trust is high, surveillance is unnecessary. An example of a surveillance item was: "Check with other people about the activities of the union president to make sure he/she is not trying to 'get away' with something."

Figure 1 summarizes the hypothesized relationships between willingness to trust and the correlates. Bentler and Speckart's (1979) version of Aizen and Fishbein's (1980) "theory of reasoned action" was the theoretical basis for three of the correlates. This framework posits that the primary psychological factors determining an individual's behavior are the individual's attitude toward the behavior, the group norms acting on the individual, and the consequences of the individual's past actions. Thus applied to the present study, trust is determined by (1) a positive attitude toward trusting the focal person. (2) perceived group norms for trusting the focal person, and (3) past trustworthiness of the focal person. Two correlates relating to work relationship climate were also included. First, when individuals possess the necessary technical skills, interpersonal trust is a central variable in determining the degree of collaborative problem solving (Zand, 1972). Second, one reason for hostility in a work relationship is a history of violated trust (Zand, 1972). Hostility may stem from a desire to get even for past injustices, such as violated trust, and may result in openly vindictive behavior or withdrawal from the work relationship.

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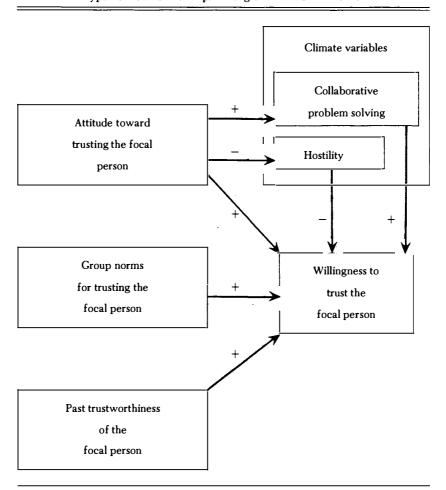


FIGURE 1 Hypothesized Relationships Among Trust and Its Correlates

Sample and Measures

Data were gathered through surveys sent to the offices of 500 public school superintendents and 551 presidents of National Education Association (NEA) local teachers' unions in a state in the northeastern United States. A total of 305 superintendent surveys (61 percent response rate) and 289 president surveys (52 percent response rate) were returned.

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Based on preliminary interviews, 20 items were developed that measured respondents' willingness to engage in trusting behavior. The four hypothesized factors were expected to be comprised of the corresponding five-item subscales intended to measure each dimension. The items asked respondents to indicate how likely they were to engage in specific trusting behaviors with the focal person.

The degree to which a respondent had a positive attitude toward trusting was determined by the cross-product of items assessing (1) expectations concerning whether the focal person will be trustworthy in the future and (2) the desirability of potential positive consequences incurred from the focal person's trustworthy behaviors. Perceived group norms was the cross-product of items measuring (1) a respondent's belief that a salient group (e.g., the school district's board of education or members of the teachers' union) thinks the respondent should or should not trust the focal person and (2) the respondent's motivation to comply with that group. Several items measured the frequency with which the focal person had been trustworthy in the past. A collaborative problem-solving scale was developed based on Zand's (1972) work. A hostility scale was based on Kornhauser's (1975) research. Respondents were asked to rate the degree to which items tapping these two aspects of work-relationship climate accurately described their work relationship with the focal person.

Results

Principal factor analysis (principal components analysis with squared multiple correlations in the diagonal of the correlation matrix) was used to investigate the existence of the four hypothesized dimensions of trust. Based on a cutoff of eigenvalues ≥ 1 and loadings of \pm .30 or greater (Child, 1979), the results for both samples provided support for the existence of three of the four hypothesized dimensions. For management representatives the eigenvalues for factors 1, 2, and 3 were: 4.88, 2.04, and 1.10, respectively. For labor representatives the eigenvalues for factors 1, 2, and 3 were: 5.41, 1.31, and 1.24, respectively. For both samples factor 1 was comprised of surveillance items, factor 2 of task items, and factor 3 of communication items. Items measuring willingness to enter an informal agreement failed to load consistently across the two samples.

The interfactor correlations from an oblique (promax) factor rotation provided support for discriminant validity between factor 1 (which signified the absence of trust) and factors 2 and 3 (which signified trust). As expected, these correlations were negative and ranged from -.21 to -.33 for management representatives and -.39 to -.55 for labor representatives. Positive interfactor correlations found between factors 2 and 3 provided support for the convergent validity of the two factors signifying trust. The correlation was .39 for management representatives and .31 for labor representatives.

Based on items from factors 1, 2, and 3 that loaded consistently across both samples, an additive 10-item scale of willingness to engage in trusting behavior was created. The scale contained four surveillance items (reverse scored), four task items, and two communication items.

Ordinary least squares regression was used to test the effect of attitudes, norms, and past trustworthiness of the focal person on the 10-item measure of willingness to engage in trusting behavior. Respondent's sex, age, and the length of time the respondent had worked with the focal person were included in the regressions as covariates.

Table 1 contains descriptive statistics and correlations. Table 2 contains the main regression analyses. Similar results were found for both samples. The regression equation significantly predicted willingness to engage in trusting behavior for management representatives (F [6, 224] = 38.60, p < .0001) and for labor representatives (F [6, 251] = 58.70, p < .0001). Examination of tolerance values (Darlington, 1990) showed no evidence of multicollinearity in either sample.

Zero-order correlations (see Table 1) provided evidence for the association between past trustworthiness of the focal person and the climate of the work relationship. Further regression findings showed that for both samples collaborative problem solving and hostility also significantly predicted willingness to trust. (These regressions are available from the author.) These findings provide preliminary support for the past trustworthiness \rightarrow work climate \rightarrow willingness to trust idea, although longitudinal research would be necessary to conduct a full test.

Discussion

Factor analytic results supported the view that the measure of willingness to engage in trusting behavior was multidimensional. The degree of trust among labor and management representatives is apparently expressed in terms of both what they are willing to do (communicate openly and accurately; rely on each other to carry out a task) and what they need not do (maintain surveillance over each other).

Findings concerning the attitude toward trusting showed that both labor and management representatives were affected by the combined

Management representatives	Mean	SD	1	2	3	4	5	6
 Willingness to trust the labor rep. Attitude toward trusting the labor rep. Group norms for trusting the labor rep. Past trustworthiness of the labor rep. Collaborative problem solving Hostility 	4.4 1.6 12.7 4.1 3.8 1.2	.9 2.1 3.4 .8 .8 .6	(.73)	.62** (N/A) 	.27** .33** (N/A) 	.62** .70** .33** (.93) 	.51°° .61°° .20° .60°° (.76)	44°° 56°° 21° 59°° 46°° (.73)
Labor representatives	Mean	SD	1	2	3	4	5	6
 Willingness to trust the management rep. Attitude toward trusting the management rep. Group norms for trusting the management rep. Past trustworthiness of the management rep. Collaborative problem solving Hostility 	$3.8 \\ 1.5 \\ 10.4 \\ 3.6 \\ 3.4 \\ 1.6$	1.0 2.1 3.1 .8 .9 .9	(.82)	.66°° (N/A) 	.53°° .47°° (N/A) 	.73** .72** .57** (.89) 	.51°° .62°° .43°° .58°° (.83)	52°° 60°° 37°° 59°° 60°° (.83)

TABLE 1 Descriptive Statistics and Correlations

Note. Management representatives: N = 301-305. Labor representatives: N = 285-289, $^{\circ}p < .001$, $^{\circ \circ p} < .001$. Coefficient alphas (internal consistencies) of scales are in parentheses. N/A = coefficient alpha is not applicable to variables based on cross-products.

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Management representatives	b	Beta	t
Attitude toward trusting the labor representative	.16	.35	5.24°°
Group norms for trusting the labor representative	.03	.10	1.79
Past trustworthiness of the labor representative	.46	.37	5.40°°
		Equation $R^2 = .5$	51
Labor representatives	b	Beta	t
Attitude toward trusting the management representative	.12	.23	3.97°°
Group norms for trusting the management representative	.04	.12	2.44°
Past trustworthiness of the management representative	.62	.49	7.33°°
		Equation $R^2 = .5$	38

TABLE	2
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Regression Results with Predictors of Willingness to Engage in Trusting Behavior

Note. Management representatives: N = 231. Labor representatives: N = 258. $^{\circ}p < .05$.

• • p < .0001.

influence of expectations and anticipated consequences when deciding whether to trust their counterpart. Whether the focal person had been trustworthy in the past was a particularly important variable for both samples and especially so for labor representatives. On average, labor representatives rated management representatives as less trustworthy in the past compared to vice versa (see Table 1). This suggests the possibility that the saliency of the variable measuring past trustworthiness may be increased when past consequences have been relatively negative.

That the group norms variable was weakly associated with willingness to trust for both samples may have been due to labor and management representatives being in positions of authority. It was clear from preliminary interviews that most of these individuals saw themselves as decision makers who are not easily swayed by the influence attempts of others. Labor representatives, however, are elected officials and therefore may be more prone to consider the needs and desires of the local union membership. This could explain

p < .00

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why the group norms variable reached statistical significance for labor representatives. Thus, a qualification may be in order concerning Wall's (1975) laboratory bargaining simulation findings on the influence of constituents; in real organizations constituents may have a substantial effect on their representative only in situations where an institutionalized mechanism exists (e.g., union elections) for control over the representative.

As hypothesized, the past trustworthiness variable was significantly associated with collaborative problem solving (a positive relationship) and hostility (a negative relationship). These findings, obtained in an organizational setting, corroborated Zand's (1972) laboratory research on the connection between trust and work climate. The two work climate variables also proved to predict the respondents' willingness to trust. These findings supply preliminary empirical support for the suggestion made by Kochan, Katz, and McKersie (1986) regarding the connection between trust and the climate of labor-management relations.

The approach taken in this study followed Schwab's (1980) suggestion that the construct validity of measures be investigated before they are used in substantive validity research. The present work, therefore, provides the necessary conceptual and empirical foundation for future substantive research on labor-management trust and organizational effectiveness.

Acknowledgment

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DISCUSSION

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It is encouraging to see that the new generation of scholars working in the industrial relations area is pursuing a wide range of topics that span the field of employee relations and focus on emerging topics of some fundamental importance. My recommendation for these authors is simply to find ways to expand the audience for their work by drawing on—and ultimately contributing to—related work being done in fields outside of IR.

I see Victor Devinatz's study of union bureaucratization, for example, as part of what I believe will be a growing body of research that helps us understand why there is variance in organizational forms. In this regard, the appropriate literature to think about is the research on "institutionalization" in sociology, which puts forth arguments about the tendencies for organizations to develop similar forms. The focus here on Robert Michels work may be less relevant; while Michels argues that bureaucratization is inevitable, he does not seem to say much about changes in the level of bureaucratization once it occurs.

One component of Devinatz's story is to show how changes in shop floor decision making affect the union as an institution. An interesting analogy here would be with the British trade union movement over the last few decades where power and bargaining functions have shifted from the shop floor (and shop stewards) to plant-level organizations. Some brief mention of this development would help make the issue appear more general.

There are also a couple of areas where this work could be strengthened. First, the level of bureaucratization of the local union studied here is described using developments that are also used to document the shop floor developments that drive bureaucratization. When independent variables look so very much like the dependent variable, the study begins to appear a bit tautological. Some

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independent measure of bureaucratization, such as the number of fulltime officials of the local union, would help make the argument clearer. The other area is with the change at the local when its plant was transferred from Buick to International Harvester. This change represents a natural experiment that can be used to analyze more effectively why the extent of bureaucratization can change.

Donna Blancero's paper on perceptions of the fairness of nonunion grievance procedures can be placed in the context of a larger literature on justice in business ethics as well as in organizational behavior. It is important to remember that perceptions and reality are not necessarily the same thing. (People can be convinced to believe that objectively unjust arrangements are fair.) Perceptions are nevertheless important, especially for practical questions such as whether a given arrangement will be accepted by workers.

I believe that Blancero's finding that the outcomes of a grievance system are related to participants' perceptions of the distributive justice of that system, a concept that by definition is designed to capture outcome-related perceptions, is more a test of the reliability of her measures than of any interesting hypothesis. But the fact that opportunities to present one's arguments, a process issue, are virtually as powerful a predictor of the perceptions of the fairness of outcomes as are actual outcomes is a finding of some significance. It suggests, for example, that people are just about as satisfied with the outcome of a grievance system if they lose, as long as they get to participate, as compared to if they win and do not participate. This finding should be of importance to the growing literature on participation.

Steve Currall's paper on trust gets at perhaps the most fundamental of the issues raised here. There is a growing understanding, not only in human resources but also in other management areas such as strategy, that the key issue in understanding the relative performance of firms is to look for "distinctive competencies"—things that they do better than competitors and that cannot easily be copied by those competitors. Trust between employees/unions and management allows organizations (among other things) to reduce monitoring costs, to manage change with greater ease and speed, and improve decision making. What little we know about trust suggests that it is not something that can easily be copied as, for example, a new piece of equipment might be. This suggests that trust is among the central factors contributing to distinctive competencies across organizations. It is also a crucial factor underpinning "high commitment" systems of work organization.

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Currall's use of public schools as a data source is important because it is a sector of the economy where there has been relatively little investigation (in contrast especially with manufacturing) to understand the benefits of improved union-management relations and worker attitudes. Having a dual sample of superintendents and local union leaders is a great asset and should allow Currall to look at a range of interesting issues in matched samples such as situational factors that cause high levels of trust in both parties and factors that might explain why one side has higher trust than the other. The most interesting result in this paper is that group norms predict the level of trust of union leaders but not of supervisors, and more discussion as to why that might be would be helpful. One factor might be that local union leaders are part of common international unions, and the rules and norms of the international affect their attitudes and behaviors. Supervisors, in contrast, have no affiliations with equivalent influence over them.

Again, these are interesting papers that have something to say about bigger issues than are their immediate focus. It would be helpful for the authors, and for the field of IR, if they could develop the relevance of their work for these larger issues.

DISCUSSION

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The paper by Devinatz addresses one of the longstanding themes in industrial relations research, that of union democracy. In essence his detailed, qualitative study of developments in UAW Local 6 over a 40year period suggests that the establishment of formal collective bargaining arrangements did not result in a steady, unbroken movement towards union bureaucratization. The author's view of collective bargaining is essentially similar to that of the "rank and filist" group of labour historians in Britain, being held to be a conservative, stabilizing force that institutionalizes conflict and lowers rank-and-file expectations by continual reference to what is "realistically negotiable." Similarly he appears to view the aims and objectives of shop stewards as being relatively close (compared to those of the union hierarchy) to those of the rank and file, largely through reasons of physical proximity.

In some ways, however, he appears to exaggerate the basic hypothesis that he seeks to test, namely that the bureaucratization process (induced by the primacy attached to collective bargaining) will develop in an unbroken, linear fashion. I am far from certain that the majority of mainstream IR researchers would ever initially hold such a view. The point is that periodic challenges to union bureaucratization from both the rank and file and shop stewards are very much a feature of the historical and indeed contemporary scene in many countries. In Britain, for instance, various attempts to draw union leaders into cooperation with national policies of wage restraint in the 1960s and 1970s resulted in instances of opposition to bureaucratization. Furthermore, he overwhelmingly views the essence of union democracy as the development of an internal faction opposed to the formal institutionalization of collective bargaining. In fact, as we all know, there are various individual measures of union democracy

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that do not always intercorrelate closely. Moreover individual measures of union democracy are capable of different interpretations. For example, above average attendance by rank-and-file members at a union meeting is interpreted by some as a healthy indicator of democracy; to other commentators it is more likely to signal dissatisfaction with the leadership's failure to deliver "the goods." The latter observation helps to make the point that studies of union democracy increasingly need to be embedded in a somewhat larger framework of analysis than is apparent in the paper, namely the effectiveness of the union as a bargaining agent so that one can investigate the "utility" or value of democracy as a means to an end, rather than purely as an end in itself. Finally I would have welcomed more discussion in the paper that provided some feel for the size of the opposition movement, and the reasons for its demise by the end of the study period.

Blancero's paper is important in a number of senses. Firstly, it signals the need for, not to say desirability, of members of this association becoming increasingly involved in studies of nonunion firms. And secondly, it takes us considerably beyond some of the rather glib, existing discussions of the nature of nonunion grievance systems. The paper reviews the organization justice literature, outlines a number of a priori hypotheses and tests these on a sample data set. The hypotheses are largely supported, with key findings being that employee perceptions of the fairness of nonunion grievance systems are enhanced by providing an opportunity for employee input, decision-making independence, the availability of employee assistance, and provision for communication or explanation of outcomes. One suspects that few researchers would be surprised by such findings. However, the really important question (which still remains open) is just how many nonunion grievance systems embody such desirable features in practice. The author points to a number of issues or areas for further research that will hopefully be pursued in the future. This is because many researchers regard the operation of the grievance procedure in unionized firms as a key indicator of the overall quality of the union-management relationship. However, it has become increasingly apparent that various objective and perceptual indicators of the workings of the grievance procedure in unionized firms do not always intercorrelate well. One suspects that similar results will occur in the case of the nonunion sector, although it would be nice to have the evidence on this matter. Finally, one of the leading themes in the HRM literature is that an individual organization needs

to establish a coherent HRM policy mix in which the individual components complement and reinforce one another. This perspective should caution one against analyzing any one element of the policy mix as a discrete, self-contained entity. That is, one needs to recognize the possibility (some would say likelihood) that perceptions of the fairness of nonunion grievance systems will be influenced by perceptions of other elements in the HRM package, such as communications and employee involvement arrangements.

There have been many good features of the changing nature of IR research in the 1980s and '90s in a number of countries (e.g., more attention to the management actor, nonunion firms, and the strategic level of decision making). This being said, some recent research has very much involved a "labelling" phenomenon in which terms like "management style" and "high (low) trust" relationships are scattered around with little attempt being made to precisely define the terms, measure them, identify their determinants, and establish their impact, *ceteris paribus*. The paper by Currall is a useful step in this direction. The results obtained from a sample of union and management representatives in school districts indicate that the current willingness to trust one's bargaining counterpart is heavily influenced by previous experience in this regard and by the nature of the work climate.

The *a priori* framework of the author is very much an OB and social psychological one, although the results obtained are certainly not inconsistent with Walton and McKersie's discussion of some of the factors that shape the attitudinal structuring process. The social psychological approach utilized by Currall may, however, involve some limitations for purposes of "generalization." For instance, the focus on interpersonal trust between one management representative and one union representative, albeit important representatives, may give us only limited insight into the degree of trust involved in the larger, overall bargaining relationship. As we are all aware, the turnover of certain key individuals (from both the management and union sides) has frequently undermined the maintenance and longer term staving power of various integrative bargaining, joint problem solving arrangements. This experience obviously raises the allimportant question of how to ensure that "personalized" trust becomes "institutionalized" trust in order to survive the test of time. Furthermore, this study has been conducted in a public sector industrial relations setting, the natural home of multilateral bargaining where two clear-cut management and union groups involved in a process that exclusively determines all major industrial relations outcomes rarely exists. Accordingly, one might want to question whether the existence of interpersonal trust between two representatives of management and unions really matters a lot in a setting where externally imposed budget cuts, for example, are likely to be so important in shaping the ultimate nature of industrial relations outcomes.

The Role of IR Academics in Research, Teaching, and University Administration

FRANK BORGERS Ohio State University

The consortium consisted of four presentations on various topics of immediate interest to industrial relations Ph.D.s entering the labor market. Presentations were made by Kirsten Wever, Northeastern University; Craig Olson, Princeton University; Thomas F. Reed, University of Calgary; and Teresa Ghilarducci, University of Notre Dame. A lively question and answer session followed.

Wever spoke on "Navigating the Bridges Between Academia and Practice," and made four points on doing academic research of applied value. These were points she wished "someone had made to me before I went off to do my first big research project (my Ph.D. thesis)." First, the bridge between academic and practitioners in the IR field depends on the definition and pursuit of common concerns and interests. To capture practitioners' attention often requires: (a) defining the research questions from their perspective, and (b) defining the research question in contemporary public policy terms. Second, good research hinges on a clear understanding and acknowledgment of the usually different paradigms informing the world views of practitioners on both the labor and management sides, public officials, and academics of various stripes.

Third, for those doing primarily qualitative work, storytelling by interviewees carries with it great potential benefits, but also costs. The benefits include the potential interest and insight of "insider" stories. The costs include becoming a captive audience of the interviewee, and accumulating information of little use to the research question. Last,

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the crisis of the industrial relations system in the U.S. deeply affects the attitudes and strategies of both practitioners and academics in the field, and the researcher needs to compensate for these effects. In particular, the researcher needs to be aware that U.S. industrial relations practitioners are likely to be initially suspicious of academics. Labor is likely to be suspicious of academics based in business schools. Management is likely to be suspicious of academics who operate in a field (industrial relations) that assumes the legitimacy of unions. Wever recommended objectivity and acknowledgment of one's own perspective up front as ways to lessen practitioner suspicions.

Olson addressed "Getting in the Front Door: The Application and Interview Process." He presented numerous insights to the application and interview process of recent Ph.D.s based on his years of experience in reviewing and assessing job applications and interviews.

Interviewing: The answer to one question, "Does this individual possess the potential for future research performance?" largely determines the outcome of a job interview. This question is answered on the basis of an evaluation of the student's dissertation. A number of considerations are important in such an evaluation: (1) Will the dissertation enable the researcher to tell an interesting story? (2) The dissertation should be problem driven but simultaneously tied to a theoretical framework. (3) Is the dissertation methodologically sound? The essence of the answer to this question is that alternate explanations have been ruled out. (4) Does the dissertation use a robust and appropriate research design?

Olson recommended that the most interesting dissertations are typically based on "naturally occurring experiments." He demonstrated this with recent research on returns to education conducted at the Twins Convention in Twinsburg, Ohio. Further, he advised writing a dissertation that would quickly yield a publishable article. Of course evaluation of the above considerations largely depends on the individual's ability to effectively communicate their research potential and interests.

Job Talk: Olson's experience has been that much of the emphasis (possibly too much, he conceded) is based on an applicant's job talk. Consequently, it is critical that applicants rehearse their presentations before an audience of fellow students and faculty.

Teaching: Olson recommended the development of as diverse a teaching portfolio as possible. Such a portfolio need have little to do

with one's personal research interests (as was his own experience). Such diversity can enhance one's teaching and general academic experience.

Reed spoke on "Surviving (and Maybe Even Prospering) in Your First Academic Position." He presented a frank and wide-ranging checklist of suggestions for prospering and surviving in the academic world of IR. Reed argued that IR in the U.S. was in danger of becoming an irrelevant discipline. Reed urged emerging Ph.D.s to help develop new models of the employment relation that are more relevant to today's environment. Indeed, Reed argued that the contemporary U.S. environment offered IR scholars numerous and challenging "employment problems" to be studied.

Reed offered the following advice on how to survive:

Teaching: (1) Keep the number of preps to a minimum; this is a negotiable outcome. (2) Keep prep time to a minimum. (3) Keep student contact to levels you feel comfortable with. An open door policy is not always in your best interests. (4) Develop as diverse a teaching portfolio as possible.

Service: (1) Service is essentially "investment in the organization." Reed's view is that your investment should increase as the university's investment in you increases. Consequently, you should avoid service in the first year of a new job. (2) Perform service that increases your human capital and expands contact with critical organizational actors. (3) Remember, "no" is a complete sentence when responding to service requests.

Research: (1) Get your dissertation done ASAP. Divide the dissertation so as to publish as much as possible from it. Research is the primary criteria in evaluating tenure. (2) Send articles to top journals. (3) After completing dissertation related activities, *then* start new projects. (4) Develop a research *program*.

Reed also offered the following advice on balance: there are diminishing marginal returns in life; balance your life interests with your professional interests. Active management of your time will help you balance. Remember, "you are not your vita." On spouses/ partners: dual career tracks are difficult to manage effectively, but in the long run it is better to deal with these issues up front, honestly and compassionately. On resources: these are negotiable and should be committed by the employer, up front and in writing. Tips for prospering: Develop a clear, focused research program that will involve a number of studies. Expand the boundaries of the discipline; do not endlessly replicate previous studies. Fill up your publishing pipeline early on so that you can experiment with new ideas. Develop grant writing skills; this will give you independence for exploring ideas your university does not want to support. Develop and maintain your network. Decide whether you want to be a "cosmopolitan" or a "local." If you decide to be a local, you should adopt a department focus in your academic life. Attaining tenure is a political process. Again, manage your career and hold the institution accountable. Leaves of absence are recommended, especially in an applied field such as IR. Reed's own experiences have been very fulfilling. Be sensitive to colleagues and students. In particular, white males should be sensitive in their dealings with women and minorities in the classroom and hallways.

Finally, Reed advised, have fun, this is your life, trust your instincts, take chances, and don't let the process grind you down.

Ghilarducci addressed "Unanticipated Benefits: The Roles of Industrial Relations Experts in University Administration." She reported results from her study on whether and why IR academics are more likely to be involved in university administration/management than other academics.

Ghilarducci found that of the 25 private universities she surveyed in February 1991, three had presidents trained in IR (only history filled as many slots as IR). The results from Ghilarducci's telephone survey of academic IRRA members are as follows:

University Governance Involvement of IRRA Members Academically Affiliated (Sample Size = 50; Survey Administered October 1991)

	Count:
IR Academics involved in administration	39
Extent of involvement: President, Dean, major post Department chair Committee position	12 9 10
# Involved who thought IR training affected their involvement	26
# Who thought IR experts in general are more involved than those in other disciplines	23

Ghilarducci then summarized respondents' views of the relationship between IR scholars and their administrative involvement: Older IR experts or labor economists are more involved in administration because they have engaged in practice, as well as scholarly work, as War Labor Board administrators, arbitrators, or consultants. IR training provides IR academics with special skills and orientations well suited to management, especially those related to human skills, knowledge of internal labor markets, power, mediation, and labor management conflict. IR scholars are more sensitive to their own rights than other academics. The causal relationship between IR scholars and their administrative involvement seems to be that those drawn to administration are drawn to the subject matter of IR. However, a small number of respondents saw no connection between IR and administration. As one respondent argued: "To rise in a university, Machiavelli is probably more helpful than Dunlop."

Ghilarducci concluded that as the field of IR, and labor economics in particular, has become increasingly theoretical, contemporary IR academics seem less interested in the institutional concerns of university administration. Ghilarducci concluded that:

IR-trained scholars will participate more in university governance if they have a stake in the practice and value of their own skills in mediation and administration. But that depends on the evolution of our discipline, away from or toward, integrating theory and practice.

XIX. CONTRIBUTED PAPERS— COLLECTIVE BARGAINING

Determinants and Consequences of a Mutual Gains Orientation in Public-Sector Collective Bargaining

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There is a growing literature offering practitioners advice on mutual gains, "win-win," or interest-based approaches to collective bargaining and other types of negotiations (Fisher and Ury, 1981; Ury, Brett, and Goldberg, 1988; Susskind and Landry, 1991). Most of this literature is rooted in practical experience (utilizing case study methodology) and normative in tone with an emphasis on improving the bargaining processes. The focus of this literature is predominantly on private-sector bargaining. At its core is an assumption that a problem-solving oriented approach to bargaining can produce mutually beneficial outcomes.

In industrial relations, there is a well-established literature on public-sector collective bargaining. Most of this literature is centered on bargaining outcomes, impasse resolution procedures, and the contrasting implications of different public-sector bargaining laws (Lewin, Kochan, Feuille, and Delaney, 1987; Aaron, Najita and Stern, 1988) with relatively little attention to the tone or orientation of the bargaining process.

This paper bridges between these two literatures in a variety of ways. First, unlike most of the mutual gains negotiations literature, it

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presents a formal model that examines the influence of structural, past relationship, and current process variables on chief negotiators' perceptions of the tone of their most recent collective bargaining negotiations. Second, the focus is on police and fire negotiations in the public sector, which has not typically been the focus of writing on mutual gains negotiations. With this focus it is possible to assess the extent to which a mutual gains bargaining tone influences the likelihood of settlement prior to third-party intervention. Third, in contrast to most of the literature on public-sector negotiations, our focus is on the tone of negotiations and elements of the bargaining process, which is a level of detail not usually achieved.

Theoretical Framework

This research is grounded in the behavioral theory of labor negotiations, developed by Walton and McKersie (1965). While the behavioral theory has been widely cited in the field, relatively little research has been conducted testing elements of the theory (Tracy and Peterson, 1986). This paper is centered on the distinction between distributive and integrative bargaining. In particular, our focus is on one aspect of this distinction, which we refer to as a "win-lose" or "mutual gains" tone of negotiations. Note that this incorporates a broader range of "mutual gains" behaviors than are associated with current initiatives aimed at applying "win-win" principles (Fisher and Ury, 1981) to collective bargaining, though our findings do have implications for such initiatives. By assessing the determinants of alternative bargaining climates and examining intraorganizational consensus (which we do), we are testing a portion of the behavioral theory.

In addition to utilizing the behavioral theory to guide our analysis of the bargaining process, we have also introduced a range of contextual variables. These include structural variables regarding labor and management and measures of various aspects of past bargaining relationships. Recent research on private-sector collective bargaining suggests the importance of assessing such contextual measures when explaining both mutual gains and contentious extremes in negotiations (Cutcher-Gershenfeld, Walton, and McKersie, 1989). Both types of context variables serve as controls in the analysis that we present.

Methodology

A mail survey was employed for this research. Survey questionnaires were sent to all known police and fire bargaining units in the state of Michigan. In each case, a survey questionnaire was sent to the chief negotiator for the municipality and the local union. This represents a total of 652 potential respondents.

A mix of qualitative methods was used in the development of the survey instrument. First, a cross-section of five municipalities were identified and in-depth interviews were conducted with union and management representatives. The interview protocol included many open-ended questions aimed at tracing the full bargaining process from preparation through settlement or arbitration. Second, in one municipality, both police and fire negotiations were observed from the initial exchange of demands through all stages of bargaining. (At this time arbitration is pending for the police negotiations.) The information gathered from these sources was used in crafting a detailed survey questionnaire on bargaining processes for police and fire negotiations. This questionnaire was then pretested with chief negotiators and revised where appropriate. The questionnaire was mailed in spring 1990 and addressed collective bargaining negotiations that occurred primarily in 1989 and 1990. The questionnaire also included variables on communications networks and other issues not addressed in this paper. This paper represents a first report on the results from this survey, which is also the baseline data collection point for a longitudinal study assessing the impact of computers on public sector collective bargaining processes.

After a mailing and three follow-up contacts, a total of 224 usable questionnaires were returned. However, since the unit of analysis in this study is individual communities, one of each pair of duplicate (union and management) responses from the same community had to be eliminated. Following a random selection process 141 questionnaires were ultimately used (for a response rate among potential communities of 61 percent). The final sample included 77 questionnaires from union chief negotiators and 64 from management chief negotiators. (In about 20 percent of the cases the questionnaire was completed by the individual who had chief responsibility for the negotiations, but who did not have the position of chief negotiator.) The distribution of police and fire bargaining units was 102 and 39, respectively.

Table 1 provides profile data on the characteristics of the achieved sample population. The majority of the respondents, for example, were from cities (84 percent). While the average municipal budget in the sample was \$10.4 million, the median budget size was \$4.7 million, reflecting the large number of smaller municipalities in the state. On

TABLE 1

Type of Municipality City Township	84% 16%
Size of General Fund for Municipality	\$10,357,355 (15,636,725) [median = \$4,704,577]
Percent of General Fund Used for Police and Fire Expenditures	36.3% (15.9)
Population	25,678 (30,377) [median = 13,710]
Total Number of Bargaining Units in the Municipality	3.6 (1.8) [median = 3.0]
Number of Employees in Bargaining Unit	31 (41) [median = 17]
Union Affiliation: Fraternal Order of Police (FOP) Police Officers Association of Michigan (POAM) International Association of Fire Fighters (IAFF) Other Unions, Independent or Not Specified	38% 30% 15% 37%
Year Local Union Established	1969 (14 years)
Tenure of Local Union President	3.9 (3.7) [median = 3.0]
Lead Management Responsibility for Labor Relations: City Manager/Township Superintendent Personnel/Labor Relations Manager Mayor/Township Supervisor Other	46% 33% 11% 10%
Years Experience for Individual with Labor Relations Responsibility	6.5 (5.9) [median = 5.0]

Profile Characteristics of Sample Population Means, (Standard Deviations), [Medians] and Percentages[•]

• Note that the City of Detroit has been excluded from this analysis since it is so much larger than other Michigan cities.

average, these municipalities spent 36.3 percent of their total budget on police and fire activities. The average size of the population in the municipalities in this sample was 25,678 (though again the median was smaller, at 13,210). The typical municipality in this sample bargained with just under four different bargaining units, and the average number of employees in the police or fire bargaining unit was 31, though there was a great deal of variance here.

Three major unions, the Fraternal Order of Police, the Police Officers Association of Michigan, and the International Association of Fire Fighters, account for about two-thirds of the survey respondents. The balance belonged to other international unions (e.g., the Teamsters and UAW), independent locals, or others not specified. The typical local in this sample was established in 1969, about four years after the first law granting collective bargaining to public employees in Michigan was adopted. The average tenure for the local president in the bargaining units surveyed was 3.9 years.

On the management side, the lead responsibility for daily labor relations activities was split among city managers/township superintendents (46 percent), personnel/labor relations managers (33 percent), mayors/township supervisors (11 percent), and others (10 percent). The average tenure for these individuals was 6.5 years.

This profile information is helpful in assessing the generalizability of the findings reported. To the extent that public-sector bargaining units and municipalities in other states have similar characteristics, the generalizability of the findings will be greater.

Variables and Constructs

The analysis in this paper centers on our measure of the tone of the most recent negotiations involving a given police or fire bargaining unit. This measure was constructed as a four-item scale consisting of the respondent's perception of the tone on highly salient substantive bargaining issues. For each issue, there was a choice among: all or mostly win-lose (=1); some win-lose/some mutual gains (=2), which we refer to in this paper as "mixed"; all or mostly mutual gains (=3); or not applicable.¹ Together, the items constitute a reliable scale (Cronbach's Alpha = .78) with a grand mean and standard deviation for four-item scale = 2.0 (.58); n = 139. Further construct validity was generated through a confirmatory factor analysis. The distribution of responses across three bargaining tone categories was: win-lose = 22, mixed = 84, mutual gains = 33.

A number of other variables have been used in the analysis that derive from various aspects of the bargaining process. The first set of variables, which are all listed in Table 1, have been characterized as "structure" variables. These include the distinctions between police and fire bargaining units, cities and townships, and union and management respondents, all of which have been coded as dummy variables. We have also included in the analysis the size of the bargaining unit, but we have excluded overall municipal budget size and population since these are highly correlated and bargaining unit size is most directly relevant. While the total budget figure is not included in the analysis, the percentage of the municipal budget used for police and fire expenditures is. Finally, the tenure of the union president and the person with lead labor relations responsibility on the employer side are included as measures of experience.

A second set of variables, which we have termed "past relationship" variables, are included in the analysis. These include a continuous variable for the total number of past instances of collective bargaining with a given bargaining unit divided by the age of the relationship,² the past number of times that negotiations have been settled in interest arbitration divided by the number of contracts negotiated (producing an average of five percent of negotiations going to interest arbitration),³ and the experience with grievance arbitration over the past two years (calculated on a per capita basis for cases in arbitration).

A third set of variables has been termed "current process" measures. These include a categorical variable for the number of bargaining sessions in the most recent negotiations,⁴ a measure of the perceived intraorganizational consensus on four key issues prior to negotiations,⁵ and the respondent's perception of the change in tone of collective bargaining (in comparison to the tone of the most recent negotiations).⁶

A final set of variables concerns the actual point at which the most recent negotiations were settled. In our sample, 43 percent of the negotiations were settled prior to impasse; 29 percent were settled during mediation, but prior to arbitration; 11 percent were settled during arbitration, but prior to the issuance of an award; and 12 percent were settled with an interest arbitration award.

Structural and Process Determinants of Mutual Gains Bargaining

In order to assess the determinants of mutual gains bargaining in the public sector, a set of models was constructed with the tone variable as the dependent measure and the structure, relationship, and process variables as independent measures. In such a model, a positive and significant coefficient would indicate an increased association with mutual gains bargaining as perceived by the respondent to the survey.

As Table 2 indicates, some of the structural variables are indeed helpful in predicting the tone of the bargaining. First, we find that the police bargaining units were more likely to be associated with a mutual gains tone. This may reflect the dominance of two competing unions representing police in the state of Michigan, in contrast to a single dominant union representing fire fighters. Our qualitative research suggests that the competition between the two police unions

TABLE 2

Structural and Process Determinants of Mutual Gains Bargaining OLS Regression Models

Dependent variable equals TONE (1 = Win-Lose; 2 = Mixed; 3 = Mutual Gains) for all regressions.

	Structure Model	Past Relationship Model	Current Process Model	Unrestricted Model
-	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
UNION	0.016 (.129)			0.053 (.111)
POLICE	0.285°° (.138)			0.232° (.131)
BARG SIZE	-0.003°° (.001)			-0.002° (.001)
PERCENT	-0.004 (.004)			0006 (.004)
CITY	-0.136 (.179)			-0.223 (.160)
TENURE UN PRES	-0.007 (.018)			-0.009 (.016)
TENURE LR RESP	-0.009 (.011)			-0.006 (.009)
ARB PER CAPITA		-0.245 (.715)		-0.084 (.680)
CONTRACT FREQ		0.447° (.234)		0.154 (.213)
INTEREST ARB FREQ		-1.355° (.708)		-0.315 (.654)
CHANGE IN TONE			0.395 °°° (.067)	0.394 °°° (.071)
BARG SESSIONS			0.081 ° (.044)	-0.024 (.049)
PRECONSENSUS	8		0.007 (.082)	0.009 (.087)
CONSTANT	2.252 ••• (.259)	1.887 °°° (.111)	2.957 °°° (.208)	2.934 ••• (.317)
	Adj. R ² = 0.06 F = 1.895°	Adj. $R^2 = 0.02$ F = 1.606	Adj. $R^2 = 0.28$ F = 13.865°°°	Adj. $R^2 = 0.29$ F = 4.224°°°
	N = 95	N = 99	N = 99	N = 89

Note: The variable for Police/Fire, City/Township, and Union/Management are dummy variables with Police, Union, and City equal to 1.

• p < .10; •• p < .05; ••• p < .001

is manifest in a greater emphasis on service to local bargaining units, which might include greater attention to relationships with management.

Second, the size of the bargaining unit is significant and negative, indicating that the chief negotiator in a larger bargaining unit is less likely to report a mutual gains orientation in bargaining. This is in keeping with our original expectations since our field research indicated that smaller units feature highly interdependent roles and a more informal bargaining process.

Five other structure variables were analyzed, none of which achieved statistical significance. The lack of a significant finding on the union variable suggests that perceptions of bargaining did not vary in systematic ways among union and management respondents. (Also, since we used only one survey per community and chose randomly among union and management responses where both were returned, this finding addresses one potential threat to validity.) The nonsignificant finding on the percent of budget allocated to public safety may suggest that the perceived tone of the bargaining is independent of the relative availability of resources. There was no observed difference between the city and township respondents, which is not surprising since both types of municipalities are diverse in structural characteristics. For example, while townships tend to be smaller than cities, there are many cities that are smaller than the larger townships. Two different measures were included for the level of experience at the bargaining table, one for management and one for labor. Neither was significant, which suggests that experience alone is not a determinant of the perceived tone of negotiations.

Table 2 also includes a restricted model with three measures concerning the past labor-management relationship, two of which achieve significance at this stage in the analysis. This model suggests that the greater the number of times in which the parties have engaged in past contract negotiations, the more likely they will perceive a mutual gains orientation in their most recent negotiations. Not surprisingly, the more frequently past negotiations have not been resolved until interest arbitration, the less likely there is a perception of a mutual gains orientation. These findings confirm two important public-sector phenomena—first the validity of the maturity hypothesis and secondly the tendency for conflictual patterns to persist. The lack of a significant finding for past grievance arbitration is contrary to our expectations since we would anticipate a bridge between conflictual contract administration and collective bargaining tone.

Finally, three process measures concerning the current negotiations are included in the third restricted model listed in Table 2. Of these, the change in tone has a significant and positive influence. Where a negotiation is seen as having more of a mutual gains orientation than previous negotiations, then the process is seen as being mutual gains in nature (and vice versa). This suggests that negotiators do not have an objective standard for negotiations in mind, rather they judge their present experiences relative to the most recent past negotiations.⁷ Also, the number of sessions involved in the negotiations is negatively associated with mutual gains bargaining. This relationship most likely reflects the increased number of sessions associated with post-impasse procedures in the public sector (and we will see below that mutual gains negotiations are more likely to settle prior to impasse).⁸ The measure of intraorganizational consensus represents a partial test of the Walton and McKersie (1965) theory; however, the lack of significance suggests that the perceived tone in negotiations is independent of the perceived internal consensus prior to negotiations.

The final set of regression results on the determinants of mutual gains negotiations are presented in Table 2 as the "unrestricted model." The two structural factors continue to help explain the perceived tone of negotiations, as does the change in tone relative to past negotiations. Interestingly, the two past relationship variables (contract frequency and interest arbitration frequency) no longer achieve significance. We interpret these results as suggesting that the shift from past negotiations—more than the actual past experience—is the dominant factor in explaining the perceived tone of the present negotiations.

Implications of Bargaining Tone for Process Outcomes

One final question to be addressed concerns the extent to which the tone of negotiations and the perceived shift from past negotiations influences the point in the bargaining process at which the parties settle. That is, does a mutual gains tone or a win-lose tone influence the likelihood of settlement prior to third-party intervention (by a mediator or arbitrator). Similarly, how important is a shift in tone (relative to the last negotiations) in explaining settlement prior to thirdparty intervention.

Two logistic regression models were constructed (see Table 3). One included the current bargainng tone and a set of control variables, while the other included the change in tone with the same set of control variables.⁹ The dependent variable in both cases is bivariate, with the null category being settlement prior to intervention by a third party.

TABLE 3

Implications of Bargaining Process and Change in Tone for Point of Settlement

Logistics Regression Models (Dependent Variable 0 = Before/1 = After Third-Party Intervention)

	Bargaining Process Model	Change in Tone Model
	Coefficient (S.E.)	Coefficient (S.E.)
MUTUAL GAINS	-0.323 (.407)	
WIN-LOSE	-0.123 (.467)	
POLICE	-0.073 (.292)	-0.026 (.305)
BARG SIZE	-0.005 (.007)	-0.006 (.006)
PERCENT	0.028 (.018)	0.024 (.018)
CITY	-0.513 (.387)	-0.389 (.385)
TENURE UN PRES	0.030 (.077)	0.050 (.082)
TENURE LR RESP	-0.021 (.042)	-0.012 (.044)
ARB PER CAPITA	-4.182 (3.137)	-4.508 (3.442)
CONTRACT FREQ	-0.078 (1.149)	0.668 (1.202)
INTEREST ARB FREQ	2.038 (4.289)	3.176 (4.631)
CHANGE TO MORE MUTUAL GAINS		-0.835°° (.371)
CHANGE TO MORE WIN-LOSE		0.853°° (.396)
BARG SESSIONS	0.844 ° ° ° (.266)	0.828°° (.277)
PRECONSENSUS	0.307 (.404)	0.070 (.431)
CONSTANT	-3.237°° (1.274)	-2.970°° (1.291)
Model X ²	31.75°°	35.02 ***
D Statistic	.24 N = 102	.26 N = 100

• p < .10; •• p < .05; ••• p < .001

The first model indicates that the perceived tone of the current negotiations is not a significant predictor of the point of settlement. This includes both the cases where the tone was seen as mutual gains in orientation and the cases where it was seen as win-lose (suppressing the mixed cases). The only variable that achieves statistical significance is the number of sessions, which is not surprising since third-party intervention only occurs at later stages of bargaining.¹⁰ Thus, the perceived tone of the bargaining, in itself, does not help predict whether an agreement will be reached prior to third-party involvement.

The second model is exactly parallel to the first, except that the change-in-tone variables have been used instead of the descriptions of the current tone. In this case we again see that the number of sessions is a significant predictor of third-party involvement. Far more interesting, however, is the significant relationships found *both* where the current negotiations are more win-lose in tone and where they are more oriented toward mutual gains. As we would predict, those negotiations that had shifted to become more oriented toward mutual gains were also significantly more likely to settle prior to third-party involvement (as is indicated by the negative coefficient). As well, those negotiations that had shifted to become more win-lose in tone were significantly more likely to require the involvement of a mediator or arbitrator in order to come to a settlement (as is indicated by the positive coefficient).

Taken together, the two models suggest that the actual tone of a negotiations is less important than the contrast between current and prior negotiations.¹¹ Further, shifts in the tone of negotiations are truly pivotal; a positive shift toward a mutual gains orientation can be a powerful lever in achieving settlement prior to impasse, while a negative shift toward a more win-lose orientation increases the likelihood of impasse and third-party involvement.

Conclusion

This research represents an initial investigation into the determinants and consequences of the tone of public-sector collective bargaining. Since it is the first investigation of its kind, the results must be interpreted with caution. Many of the measures have been developed specially for this survey and the generalizability beyond Michigan would need to be assessed on a state-by-state basis.

Still, our research suggests that a mutual gains tone of the negotiations is the product of structural factors such as bargaining unit size and police (rather than fire) negotiations. Moreover, while some past patterns (such as the maturity of the relationships and the experience with interest arbitration) initially seem to account for a mutual gains tone, these factors lose their significance when we take into account the degree to which the present negotiations represents a shift in tone in comparison to past negotiations.

In examining the consequences of the tone of negotiations, the specific tone is not significant in determining the point of settlement. However, shifts in tone prove to be powerful predictors, both in the positive sense of predicting settlements prior to third-party involvement (if the shift is towards mutual gains) and in the negative sense in predicting delays until third parties become involved (if the shift is toward a win-lose tone).

These exploratory findings highlight the importance of understanding shifts in the tone of negotiations. Clearly, further longitudinal research is called for in order to trace shifts in tone over time. Given the reduced cost and speedier results associated with the private resolution of disputes prior to third-party involvement, then these findings reinforce the importance of promoting movement toward a more mutual gains orientation.

Acknowledgments

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Endnotes

¹ The wording of the questions for this item (TONE) was: Based on the bargaining in the most recent negotiations, how would you characterize the tone or atmosphere of the bargaining around the following matters: the wage settlement? (mean = 2.0; s.d. = [.73] n = 139); health care benefit provisions? (1.9 [.72] n = 130); work time arrangements (shift assignment, overtime allocation, hours of work, etc.)? (2.1 [.77] n = 120); promotion policies and procedures? (2.1 [.75] n = 107).

² The wording of the question for this item was: Approximately how many contracts has the local union negotiated with the municipality?—which was then divided by the age of the bargaining relationship to produce the variable (CONTRACT FREQ)—Mean (Standard Deviation) = 0.45 (.36).

³ The wording of the question for this item was: How many times has an impasse in negotiations been settled through an arbitration decision?—which was divided by the number of contracts negotiated to produce the variable (INTEREST ARB FREQ)—Mean (Standard Deviation) = .05 (1.0).

⁴ The wording of the question for this item (BARG SESSIONS) was: During the last negotiations, approximately how many official negotiating sessions were there? Scale: 1 = fewer than 5 (25\$), 2 = 6-10 (41\$), 3 = 11-15 (18\$), 4 = 16-20 (8\$), 5 = more than 20 (8%).

⁵ The wording of the question for this item (PRECONSENSUS) was: In going into the last negotiations was there strong consensus (=1), mostly agreement (=2), mostly disagreement (=3), or deep divisions (=4) among all the constituents on your side? (The same question was asked across the same four issues listed in the measure of the tone of negotiations.) The Cronbach's Alpha for this four-item scale was .77 and the overall scale mean was 1.81 (.64).

⁶ The wording of the question for this item (CHANGE IN TONE) was: How would you characterize the bargaining in the most recent negotiations compared to the previous couple of negotiations? 1 = more oriented toward win-lose (29.8%), 2 = about the same combination of mutual gain and win-lose (42.6%), and <math>3 = more orientedtoward mutual gain (25.5%).

⁷ Of course, these findings must be interpreted with caution since both variables were collected via a single instrument and concern similar constructs. In later analysis, however, we will see that the two concepts are distinct.

⁸ It is of note, however, that there is a perception among some practitioners that mutual gains bargaining involves more sessions in the private sector, an issue that bears further investigation.

⁹ These two factors were not included in the same model since our prior analysis demonstrated that one was a significant predictor of the other-suggesting a high degree of collinearity.

¹⁰ This finding is significant in challenging popular notions that parties who anticipate settlement under the auspices of a mediator or arbitrator will only engage in minimal prior negotiations.

¹¹ The fact that "change in tone" is significant, while "tone" is not (in two separate models), suggests that they are distinct phenomena, reducing concerns about common method bias in our earlier analysis.

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Embracing the Committee on the Evolution of Work Report: What Have Unions Done?

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The Committee on the Evolution of Work (CEW) was formed by the AFL-CIO Executive Council in August 1982 to examine changes in the American labor force and to recommend internal union reforms that would help invigorate the union movement. The CEW, made up of national union leaders and academicians, issued its first report in 1983. "The Future of Work" (CEW, 1983) reviewed and evaluated significant changes in the labor force, technology, and industry. The second report, "The Changing Situation of Workers and Their Unions" (CEW, 1985), offered several suggestions for internal union reform. This second document has received a great deal of attention within the academic community, with numerous articles making references to the report's findings and recommendations. Just how widely national unions have embraced the CEW report is less clear. This paper sheds light on this issue by comparing major CEW recommendations with the responses of national union leaders and staff members to a recent survey.

The National Union Survey

The data for our analysis come from the National Union Survey (NUS). The NUS, undertaken with the support of the AFL-CIO, collected national union leaders' and staff members' responses to a 25minute telephone survey conducted by the Iowa Social Science Institute in July and August of 1990. The survey resulted in 275 interviews with representatives of 111 national unions. Seventy-four

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percent of the 150 national unions in the target population completed at least one interview, including 86 AFL-CIO affiliates.

The NUS was designed to measure several attributes of national unions including strategies, centralization of decision making. administrative structure, environmental scanning, and perceived effectiveness. The survey also queried respondents on the degree to which they used various methods and techniques in organizing and servicing their members. Sixty-eight percent of the responding national unions completed multiple interviews. For questions that involved opinions or estimates, a union-level response was obtained by averaging the responses of individuals from the union in question. For other questions, where only one "correct" answer could exist (such as the existence of an associate membership program), union-level responses were assigned using one of three methods. For about 75 percent of all union-level "assignments," the multiple respondents all agreed or there was only one respondent. Absent consensus, a majority rule was used. Roughly 15 percent of all union-level data assignments used the majority rule. Finally, in cases of ties, respondent job titles and the nature of the question were used to assign the union-level response. In general, higher ranking officials' views were given greater weight than lower ranking officials' views, although respondent expertise was also a factor where respondents were of comparable rank. For some items the sole union respondent was unable to provide the information requested, resulting in a reduction in the number of cases available for analysis.

It must be stressed that responses to the NUS provide a "snapshot" of national unions as of the summer of 1990. Inferences about the degree to which national unions have embraced the CEW report are made by comparing responses to the NUS with selected CEW recommendations. Because some unions may have used such techniques prior to the CEW report, examination of the NUS almost certainly overstates the report's influence on national union practice. Analysis of the NUS does, however, provide evidence on the degree to which national unions view the CEW recommendations as consistent with good union practice.

Embracing the CEW Report

The CEW report made recommendations regarding new methods for advancing worker interests, membership participation, relations with the media, union organizing, and union structural change. Many of the specific recommendations were interrelated and designed to meet multiple objectives. In addition, some of the specific recommendations focused on AFL-CIO reform, while others encouraged affiliates to institute change. It is this latter set of changes that interest us, although AFL-CIO reforms designed to encourage national union change will also be briefly discussed. We focus on five specific CEW proposals that can be addressed using the NUS: (1) establishing new membership categories and direct benefits to members, (2) increasing the use of corporate campaigns, (3) improving member participation in their unions, (4) improving organizing, and (5) union structural changes. While not an exhaustive list of CEW proposals for national union reform, these topics represent the bulk of the committee's recommendations.

New Membership Categories and Direct Benefits to Members

Based on responses to the Union Image Survey and early field experiments, the CEW report concluded that a significant number of nonunion workers desired a form of union representation different from the traditional collective bargaining model. To meet this demand, the CEW encouraged unions to establish a new membership category for workers outside organized bargaining units. It also suggested that unions consider creating a vehicle for offering direct services to members, both as an economic incentive for workers to join the new membership category and as a means of augmenting the benefits of traditional membership.

Both of these recommendations were implemented by the AFL-CIO in 1986 when it established the Union Privilege Benefit Program (UPBP) corporation. The UPBP provides national unions with a "menu" of benefits to select in fashioning their own programs. UPBP offerings may be made available to traditional union members or they may serve as the foundation for the establishment of an alternate membership form outside the collective bargaining context, generally referred to as associate memberships (see Jarley and Fiorito, 1990). It is important to stress that although the UPBP provides development assistance and benefit administration, decisions concerning the nature and scope of any such programs are left up to the nationals.

Table 1 reports the degree to which the national unions in our sample have implemented these recommendations. National unions report much more experimentation with direct services to members than with associate membership-like programs. Over half (53.1 percent) of the national unions in our sample responded "frequent" or

	Not Used	Infrequent	Some	Frequent	Extensiv	e
UPBP-like Services	13.5%	12.6%	20.7%	45.9%	7.2%	N = 111
Associate Member- like Programs	60.6%	15.6%	16.5%	3.7%	3.7%	N = 109
These new membersl		cent 'es"				
a. to retain as member jobs.		.6 %	N = 41			
b. to identify firms as potential organizing targets.					.0%	N = 42
c. to provide union supporters in failed election campaigns with a means of maintaining union membership on a permanent basis.).5%	N = 43
 d. to establish employee organizations with the expectation that they will evolve into unions. 					3.8 %	N = 43
e. as a means to permit anyone who wishes to join the union the opportunity to do so.					.8%	N = 43

TABLE 1 Union Use of Associate Membership Programs and Direct Benefits to Members

"extensive" when queried on their use of "service offers such as lowcost travel, low-interest credit cards, or buying services to attract and retain members." Only 7.4 percent of the national unions in our sample gave a similar response when asked, "How frequently has your union used nontraditional membership categories such as associate members?"

Although 43 unions reported that they had established an associate membership-like program, this number is twice that reported by the AFL-CIO as operating in conjunction with UPBP (Union Privilege Benefits News, 1989, p. 5). It appears that some nonaffiliates have similar programs (e.g., NEA), and that some AFL-CIO unions had established similar programs prior to the creation of UPBP (Sherer and Leblebici, 1990).

It is also clear from the survey that unions employing associate membership-like programs do so for a variety of reasons. Most common was using such programs as a means of retaining members about to retire or change jobs. Least common was using associate memberships as a mechanism for establishing employee organizations with the hope that they would evolve into traditional local unions. It is also worth noting that about half of the unions with such a program use it rather indiscriminately, allowing anyone to join.

Increased Use of Corporate Campaigns

Encouraged by early successes at J. P. Stevens and Beverly Enterprises, the CEW report recommended that unions expand their use of the "comprehensive" or "corporate campaign." Unions were encouraged to "develop the research and other capabilities needed to mount effective corporate campaigns" (p. 21). The committee commented that such campaigns could be used to secure neutrality agreements from employers in organizing campaigns and to assure good faith bargaining.

To facilitate union efforts to institute corporate campaigns in organizing drives, the AFL-CIO created the Comprehensive Organizing Strategies and Tactics (COST) office in 1986 (Bureau of National Affairs, 1986). The COST office was relatively short-lived, but several AFL-CIO departments, notably the Food and Allied Service Trades (FAST) and the Industrial Union Department (IUD) provide member unions technical expertise and support, as does the AFL-CIO Strategic Approaches Committee.

Responses to questions on union corporate campaigns are summarized in Table 2. It should be stressed that the term corporate campaign is notoriously ambiguous and respondents almost certainly differ in the meaning they assign to this term. Yet, according to our respondents, a considerable degree of corporate campaign activity has taken place in the last ten years. About 65 percent of the national unions in our sample claim to have initiated at least one corporte campaign over this period. As with the items reported in Table 1, considerable variation exists across unions, with 32.7 percent of the unions in our sample stating they have not engaged in any corporate campaign activity, while just over ten percent report more than 15 campaigns over this period. It is significant to note that only half of all unions reporting some corporate campaign activity had developed inhouse staff specializing in corporate campaign techniques. This suggests that for a significant number of campaigns technical support was offered by the AFL-CIO or outside consultants.

Table 2 also discloses the situations in which unions used corporate campaign techniques. Unions that used the technique tended to do so in both organizing and bargaining disputes. Sizeable majorities reported using the technique in organizing drives, as a complement to strike activity or instead of a strike. A considerable minority of the unions that used the technique did so in an attempt to settle grievances under an existing agreement. It appears that unions see corporate campaign techniques as meeting a wide variety of situations.

Corporate Campaign Use							
	None	1-5	6-10	11-15	> 15		
How many corpo- rate campaigns has your national union initiated in last ten years?	32.7%	21.8%	22.8%	15.8%	10.9%	N = 101	
Union has used corp		cent es"					
a. in an attempt to organize new bargaining units.					71.0%		
b. after the initiation of a strike or lockout.					5.2%	N = 69	
 c. during bargaining in the absence of a strike or lockout. 				73	3.5%	N = 69	
d. in an attempt to settle grievances under an existing collective bargaining agreement.				47	.8%	N = 69	
Does your national union have in-house staff specializing in corporate campaign techniques?				51	.5%	N = 69	

TABLE 2	
annonata Compaign	T

Improved Participation by the Membership

The CEW report stressed that a resurgence of the labor movement required greater participation in union affairs by the rank and file. After concluding that monthly membership meetings are not enough, the CEW report went on to suggest ways to improve rank-and-file participation in union affairs including: special labor event days where members and leaders could interact, opinion surveys to allow members to express their views to leaders, orientation and other membership programs, improved training for officers and staff, and greater rank-and-file involvement in organizing and political activities.

Table 3 summarizes responses to the NUS on items related to greater membership participation. Considerable differences exist in the degree to which the national unions in our sample have used these techniques. Clear majorities of the national unions reported "frequent" or "extensive" use of rank-and-file members in organizing and in helping the union achieve its political goals. Significant minorities of the unions in our sample also report frequent or extensive use of membership surveys and formal programs to train staff. Few unions, however, make frequent or extensive use of education programs for members' families that try to describe the role and importance of unions in society.

	Not Used	Infrequent	Some	Frequent	Extensive	
Rank-and-File Involvement in Organizing	8.2%	12.7%	14.5%	40.9%	23.6%	N = 111
Rank-and-File Involvement in Politics	4.5%	10.9%	22.7%	40.9%	20.9%	N = 110
Membership Surveys	6.3%	24.3%	29.7%	35.1%	4.5%	N = 111
Programs to Train Staff	10.0 %	18.2%	30.9%	31.8%	9.1%	N = 110
	None	Very Infrequent	In- frequent	Frequent	Very Frequent	
Education Programs for Members'						
Families	22.9%	29.4%	31.2%	14.7%	1.8%	N = 109

	Т	A	BLE 3	
Techniques	Related	to	Membership	Participation

A Greater Emphasis on Organizing

The start of the 1980s coincided with a marked decline in representation election activity. Chaison and Dhavale (1990, p. 369) reported that the average number of elections per year and the estimated net increase in union members as a result of election activity declined by more than 50 percent for 1982-87 relative to the 1975-81 base period. The CEW report emphasized the need to reverse this trend and made several suggestions to expand and improve organizing activity. The committee stressed the importance of carefully identifying both organizing sites and organizers. It also encouraged experimentation with new methods including video technology and one-on-one organizing.

The AFL-CIO took a significant step in implementing these recommendations when it created the Organizing Institute in May of 1989 (AFL-CIO Executive Council, 1989, p. 8). The institute is charged with aiding unions in their attempts to coordinate organizing drives and has also embarked on a program to recruit and train organizers. Both classroom training and field experience with professional organizers is provided. Graduates of the program receive jobs with member unions. Despite AFL-CIO encouragement, the number of representation elections continued to decline from 1985 to 1990 with only a modest increase in the union win rate (Bureau of National Affairs, various issues). Furthermore, data from the NUS suggest that organizing still takes a back seat to servicing current members for many unions. Table 4 reports that over two-thirds of the national unions in our sample "agree" or "strongly agree" that providing good representation to current members is more important than organizing new members. Similarly, 53.6 percent agree or strongly agree that their union's main concern was collective bargaining and that all other activities such as organizing (and political activities) are of secondary importance.

Although a large percentage of unions still consider bargaining their central goal, the national unions in our sample report considerable experimentation with the new organizing techniques endorsed by the CEW report. As reported in Table 1, many unions are offering direct services to their current members and such offerings should have at least a marginal impact on organizing success. Some unions also report using associate memberships as a means of attracting (rather than simply retaining) members, and roughly 20 national unions report using associate memberships as a means of identifying organizing targets. A large percentage of unions using corporate campaigns report they have employed them in organizing drives (see Table 2).

While corporate campaigns and associate membership programs have received a great deal of attention in the popular and labor press, less talked about methods appear to have received more widespread acceptance. Large majorities of unions report extensive or frequent use of rank-and-file members in organizing (Table 3) and computerized data analysis to aid bargaining or organizing (Table 4). In this latter instance, however, it is not known what percentage of unions in the sample use this technique exclusively in bargaining activities. A significant minority of unions also report frequent or extensive use of video or cassette tapes (see Table 4).

Union Structural Changes

The CEW seemed particularly concerned that many small affiliates had lost the ability to service their members, but that mergers had not always been done in an optimal fashion. To counter these problems, the CEW report proposed merger guidelines and encouraged the AFL-CIO to provide technical support to affiliates seeking mergers. For its part, the AFL-CIO has encourged but not pushed small unions to merge (AFL-CIO News, 1985). Beyond these concerns, the report

	Strongly Disagree		ee	Agree	Strongly Agree	
Good representation to current members is more important than organizing.	0.9%	30.9%		54.5%	13.6%	N = 110
Collective bargain- ing is primary and all other activities such as organizing are of secondary	y and vities nizing					
importance	4.5%	41.8%		44.5%	9.1%	N = 110
	Not Used	Infrequent	Some	Frequent	Extensive	
Producing video- tapes or cassette tapes.	10.9%	21.8%	30.0%	25.5%	11.8%	N = 110
Computerized data analysis to aid bargaining or organizing	8.2%	12.7%	14.5%	40.9%	20.9%	N = 110

TABLE 4
Organizing Emphasis and Techniques

noted that many national unions had not taken advantage of modern management, budget, and planning methods that allow for a more efficient allocation of union resources. National unions were encouraged to adopt both long-range strategic planning and better management techniques.

Although the NUS did not query national unions on their attitudes toward mergers, Chaison's 1985 survey of union leaders in small unions (less than 50,000 members) found support for mergers is growing, with over half agreeing that mergers benefit small unions. A large number of union mergers took place between 1980 and 1984 (Chaison, 1986, p. 32), and since 1985 several mergers involving small unions have taken place, including the Molders with the Glass, Pottery, Plastics and Allied Workers in 1988, the United Furniture Workers with the IUE in 1987, and the Upholsterers with the Steelworkers in 1985, to name just a few.

The NUS assessed union structure using a variety of items designed to measure internal communication, specialization, departmentalization, standardization, and formalization. Table 5 reports responses to questions relating to strategic planning and internal coordination, two

TABLE S	5
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Strategic Planning Activities and Internal Coordination

How accurately do the following statements describe your union?						
	Very Inaccurate	Mostly Inaccurate		Mostly Accurate	Very Accurate	
Specific efforts to anticipate changes in this union's en- vironment are un- dertaken on a scheduled basis.	0.0%	30.9%		56.4%	12.7%	N = 110
Specific individuals in this union are assigned responsi- bility for identify- ing environmental changes that af- fact is union.	2.7%	20.7%		E 7 7 9	18.00	N - 111
fect this union.	2.78	20.	(76	57.7%	18.9%	N = 111
	Extremely Well	Very Well	Fairly Well	Not So Well	Not At All Well	
How well planned are the work assignments of the staff from differ- ent departments who work to- gether?	2.7%	26.4%	56.4%	13.6%	0.9%	N = 110
gemer		20110		201010		N - 110
	Very Perfectly	Fairly Well	Not So Well	Well	Not At All Well	
In this union, how well organized are the efforts of its many groups to- ward providing the best possible service to mem- bers and potential	0.93	29.7%	55.9%	13.5%	0.0%	N = 111
members?	0.310	29.10	00.9%	13.07	0.0%	IV - 111

union characteristics with obvious relationships to the CEW report. The national unions in the sample report a high degree of activity associated with strategic planning, although Stratton and Brown's (1989) survey suggests that only about 35 percent have formal strategic plans with specific goals. National unions tended to give themselves lower marks when it comes to coordination of activities. Over 50 percent of national unions stated that work activities are planned and coordinated only fairly well at best.

Discussion

Roughly six years after the release of "The Changing Situation of Workers and Their Unions," the AFL-CIO has implemented virtually all of the CEW's recommendations. National unions (both inside and outside of the federation) have had a more uneven record. In general, national unions have embraced the CEW recommendations concerning member participation in union activities (particularly organizing and politics) and the provision of services directly to members. Many unions also report using corporate campaign techniques, although only half of those engaged in such activities report the development of inhouse corporate campaign staff. The CEW recommendations concerning associate memberships, emphasis on organizing, and union structural changes have enjoyed less widespread support. Associate membership-like programs exist in only a minority of unions and even fewer appear to use them as a means of attracting new members. In addition, while unions report considerable experimentation with new organizing techniques, the aggregate level of election activity continues to decline. Finally, although our data on union structural change are spotty at best, many national unions seem fairly critical of their own planning and coordination activities, and while many scan their environment, only about a third have formal strategic plans. Several unions have merged, but AFL-CIO per capita payment-based membership figures for 1989 show about 30 AFL-CIO affiliates have less than 25.000 members.

More importantly, there is evidence that national unions tend to adopt or ignore all or most CEW recommendations. Interitem correlations between the various techniques reported in Tables 1-5 range from .2 to .5, and a composite measure of these techniques has a Cronbach alpha of .79. Although it may be argued that this degree of interitem agreement is simply the result of AFL-CIO unions' desire to toe the federation line in telephone surveys, we believe more fundamental forces are at work. Our composite measure shows only a modest correlation with AFL-CIO affiliation (r = .20, p < .05) and seems to be more closely related to union size (r = .48, p < .01) and the breadth of issues dealt with by the union (r = .44, p < .01). We suspect that several environmental factors influence union adoption of CEW recommendations, including the degree of management opposition the union faces and the percentage of its primary jurisdiction that is organized. A more comprehensive examination of why unions differ in the utilization of techniques endorsed by the CEW report seems warranted. In addition, although a growing body of literature has

examined the efficacy of some CEW-endorsed methods in achieving selected union goals, a more comprehensive examination of the impact of the CEW recommendations on union effectiveness is needed.

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Strikes as Collective Voice: Towards an Integrative Theory of Strike Activity

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Few would disagree that strikes can have major economic and social consequences, not just for the parties directly involved, but also for third parties and the public in general. It is thus not surprising that strike activity over the years has been of central concern to policymakers and academics alike. Yet the literature on strike activity remains highly fragmented, characterized by a variety of research traditions, models, and hypotheses. This paper attempts to help remedy this lacuna as it pertains to the analysis of strike activity at the organizational or micro-level, proposing a conceptual framework for integrating this literature and, based upon this framework, a collective voice approach to the analysis of strikes.

Three Traditions in Strike Analysis

Any attempt to identify distinctive traditions in the analysis of strike activity is necessarily overstylized. For present purposes, however, three traditions can be considered of importance: (1) the economic, (2) the behavioral, and (3) the political-economic. This section discusses and assesses these traditions, focusing upon their theoretical adequacy for explaining and analyzing variation in strike activity at the organizational level.¹

The Economic Tradition

Though the economic analysis of strikes includes both neoclassical and institutional approaches (see Cohn and Eaton, 1989), the former has become predominant in recent years and is most relevant to the organizational level. Hence, it is of primary concern here.

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There are a number of versions of the neoclassical model, but most derive from the Hicksian argument that because strikes are costly for both labour and management, it is in the interests of both to determine what the results of a strike would be if it occurred and then settle accordingly without a strike. However, negotiations can involve a considerable amount of uncertainty, complexity, and misinformation, making it difficult for one or both parties to determine precisely what the other's position is or the outcome of a strike will be. To the extent that this is the case, a strike is more likely. Thus, for example, Reder and Neuman (1980) argue that strikes are more likely in newly established relationships where a bargaining protocol has yet to be developed, while Cousineau and Lacroix (1986) argue that strikes are more likely where large complex units are involved or where there is uncertainty about the relative bargaining power of the parties. In turn, Tracy (1987), Haves (1984), and McConnell (1989) argue that strikes provide unions with information about management's ability to grant concessions and hence redress information asymmetries about the firm's future profitability. Finally, Schnell and Gramm (1987) argue that strikes serve as learning experiences and have a "teetotaler effect," inducing the parties to be more realistic in subsequent negotiations.

The neoclassical literature has done a great deal to advance our understanding of how both economic and organizational conditions affect the strategic interactions of the parties in the negotiating process and how this comes to be reflected in the likelihood of a strike (Franzosi, 1989). Not only does this literature provide an overarching frame of reference for explaining strike activity in general, it has also generated a considerable body of research analyzing variation therein. Yet, notwithstanding these contributions, the neoclassical model and research associated with it also suffers from a number of limitations (see Cohn and Eaton, 1989; Franzosi, 1989). Two are of particular relevance to the present task.

First, despite the theoretical merit of the neoclassical model as one general explanation *for* strikes, it proceeds from an unduly narrow conception of the rationale *of* strikes, generally assuming that both parties are concerned only with maximizing their econom⁻c wellbeing, either in a single negotiation or over time. As such, it discounts the behavioral context within which negotiations occur and the role of affective and moral considerations which often lie at the heart of the decision to strike. While the parties undoubtedly consider the economic consequences of a strike, these consequences are by no means the only consideration (nor necessarily even the primary one) taken into account when they decide to strike. Of particular importance, for example, are the militancy of workers and internal union politics, both of which receive short shrift in the neoclassical literature.²

Second, in addition to discounting the behavioral context, the neoclassical model does not adequately allow for the broader institutional context within which negotiations take place in capitalist economies. Unlike most other bargaining contexts, the employment relation is at law an asymmetrical social relation³ in which workers are in a position of subordination to managerial authority (Hyman, 1977, pp. 91-97; Godard, 1993b). Not only does this have important implications for the affective and moral orientations of workers, it also means that the strike serves as a reactive device through which workers express discontent.

The Behavioral Tradition

As defined here, the behavioral tradition encompasses all those analyses that consider strikes to be motivated primarily by affective, moral, or micro-political considerations within a particular economic and social context. It is possible to identify three general variants within this tradition: the human relations or managerial, the microorganizational/political,⁴ and the structural. Human relations explanations attribute strikes and ultimately all industrial conflict to problems of mistrust and hostility arising primarily out of inappropriate managerial policies and practices; if management adopts "progressive" policies, more harmonious relations will result and strikes will be less likely. In contrast, micro-organizational/political explanations focus upon more specific behavioral impediments to negotiation of a settlement, attributing strikes to such things as internal union politics, inadequate authority among union or management negotiators, interpersonal hostility between union and management negotiators, and so forth (see Kochan and Katz, 1988, pp. 251-258). In turn, there are essentially two variants of structural explanation. The first is associated with the "industrialism thesis" (Kerr et al., 1960), and argues that large scale, mass production firms are associated with higher levels of conflict and strike activity than are their smaller scale batch and process production counterparts, primarily because they engender more impersonal workplace relations and a more routine, monotonous work process within which workers lack control over their work (Woodward, 1965; Blauner, 1968).⁵ The second is associated with the "dual economy thesis," advanced by structuralist economists, and argues that firms in the monopolistic core sector of the economy emphasize stability and certainty over cost containment and efficiency, and hence are more prepared than firms in the competitive periphery to "buy" labour peace through generous concessions in bargaining (Galbraith, 1967).

Though behavioral explanations often proceed from different underlying assumptions, they are by and large complementary, enabling us to go beyond the narrow focus of neoclassical models to encompass a variety of factors likely to affect the behavioral context within which negotiations occur and thus the willingness of either workers or management to undergo the costs of strike activity. The problem is that these explanations do little to enhance our overall understanding of strikes. A further problem (one which behavioral perspectives *do* have in common with neoclassical analysis, though perhaps less so), is a failure to adequately consider the broader institutional context within which negotiations occur in capitalist economies. This context is more fully accounted for by the politicaleconomy tradition.

The Political-Economy Tradition

Most generally, the political-economy tradition focuses upon the broader sources of power and conflict embodied in political and institutional relations within the economy and society as a whole. Resource mobilization (Shorter and Tilly, 1974) and political exchange (Hibbs, 1978; Korpi and Shalev, 1980) theories of strike activity form an important part of this tradition: both proceed from the assumption that workers have real and legitimate grievances but engage in strike actions only when they have the resources to make such action worthwhile (resource mobilization) or when they lack direct access to political power (political exchange) (see Edwards, 1983; Franzosi, 1989, pp. 353-356). However both are concerned primarily with variation in strike activity at the macro-level, conducting either longitudinal or cross-national research. More relevant to the present purpose is what can loosely be referred to as the radical perspective associated with Marxist and neo-Weberian analyses of work and employment relations.

Radicals generally proceed from the assumption that fundamental conflicts underly the relationship between workers and management, deriving from the position of subordination within which workers find themselves and reflecting broader inequalities and conflicts between labour and capital (see Hyman, 1989, pp. 96-119). For radicals, therefore, the issue is not so much what causes conflict but rather what conditions facilitate worker consciousness of underlying conflict and thus cause it to surface. Thus, large-sized establishments are associated with conflict because they concentrate workers under one roof and facilitate a sense of class consciousness (Bibb and Form, 1977); mass production homogenizes workers (other things equal, see Edwards [1979]), also facilitating class consciousness; and favourable market conditions in the primary sector enable management to coopt or bribe workers and their leaders into the status quo—ultimately at the expense of secondary-sector workers. In turn, progressive management practices (if effective) serve to disguise underlying conflicts, acting as a means of indirect control (Friedman, 1977).

By addressing the broader institutional context within which negotiations take place and identifying the importance of underlying conflicts, the radical perspective provides a more satisfactory basis for strike analysis than either the economic or the behavioral tradition. Yet it remains undeveloped as an overarching theoretical model of variation in strike activity. At present it provides little more than a basis for strike analysis.

Towards an Integrative Analysis

Despite their theoretical inadequacies, each of the three traditions addressed to this point contributes substantially to the analysis of strike activity. Following Korpi (1981), this section develops a three-tier conceptual framework for integrating these traditions and proposes a collective voice approach for understanding and analyzing strike activity.

As depicted in Figure 1, the three tiers are: (1) the macro-political/ institutional, which embodies political-economic explanations for strike activity and hence the implications of macro-level political and institutional arrangements for underlying conflicts and power relations; (2) the relational, which embodies behavioral explanations and the implications of managerial, organizational, and structural variables for the relations between labour and management; and (3) the interactive, which embodies neoclassical explanations and the implications of economic and organizational uncertainty for the interactions of the parties in negotiations. As also indicated in Figure 1, each level in the model underlies and feeds into the next. Thus, while information uncertainty (interactive tier) may have important *a priori* implications for the interactions of the parties (i.e., negotiations), so do the behavioral relations between them,⁶ as shaped by managerial, organizational, and structural conditions (relational tier). In turn, macro-political and institutional conditions (macro-political/institutional tier) have implications for the behavioral context and ultimately for negotiations through their implications for underlying conflicts and broader power relations.

The model depicted in Figure 1 is useful for conceptualizing the relationship between macro-political/institutional, relational, and interactive considerations, and for integrating the different traditions in strike analysis. In essence it suggests that underlying conflicts and broader power relations have implications for the behavioral context within which negotiations occur, and that this context in turn has important implications for the negotiation process and ultimately strike activity. As such, any attempt to understand or analyze strikes that does not account for all three tiers in the model is at best partial.

Though of use for integrating the three traditions, the framework itself does not provide a theoretical approach for understanding and analyzing strikes. To develop such an approach, it is useful to borrow the terminology of Freeman and Medoff (1986) and Ghilarducci (1988) who view strikes as manifestations of collective voice by workers and their agents. There are three reasons for this.

First, the decision to strike is by and large a unilateral decision by workers and their agents (see Cohn and Eaton, 1989, p. 653). Thus any analysis of strikes should focus on the determinants of this decision.

An Integrative Framework					
INTERACTIVE TIER	Economic and Organizational Uncertainty	Negotiations Strike Activity			
RELATIONAL TIER	Managerial, Organizational, ——• Structural Cdns.	Behavioral Context			
POLITICAL- INSTITUTIONAL TIER	Macro-Political/ Institutional Conditions	Underlying Conflicts, Broader Power Relns.			

FIGURE 1

This is intended as a conceptual framework for integrating the three traditions, not as a representation of empirical relations. As such, it is not meant to account for possible feedback loops, nor is it meant to imply a strictly deterministic model. Second, because of the costs and uncertainties involved, virtually all strikes involve the mobilization of workers by appealing to their conceptions of fairness and legitimacy—not to their economic selfinterests alone. As such, strikes are ultimately manifestations of collective discontent, either in general or with management's unwillingness to grant concessions workers believe they are entitled to.

Third, and most important, is the nature of the employment relation. As argued earlier, workers are in a position of subordination to management—a position which is not altered substantially by the right to engage in collective bargaining. As is the case in authoritarian states, workers cannot elect or appoint their rulers, and they have little or no legal right to participate in the legal governance of the organization for which they work. While there may be a number of ways to express their discontent, the strike serves as the primary means by which they can do so collectively.

Following from this conception of strikes, it is possible to suggest a collective voice approach to strike analysis. Yet in proposing this approach, it is also important to recognize the importance of fundamental conflicts that underly the employment relation. These conflicts reflect broader labour-capital (i.e., investors of capital) conflicts endemic to modern capitalist economies. However, due to ownership prerogatives institutionalized in the form of property rights, these conflicts become internalized in the relationship between workers and managers, with the latter acting (more or less) as the "agents" of investors (see Godard, 1993b). Coupled with the asymmetrical nature of the employment relation, this means that trust and legitimacy are invariably problematic and that striking (and conflict in general) is in effect a natural empirical tendency in capitalist economies.⁷ In short, it is the institutional context of labour relations in capitalist economies that gives rise to strike activity, with strikes serving primarily as mechanisms of collective voice in reflection of the asymmetrical nature of the employment relation and conflicts underlying it.

Discussion

The collective voice approach proposed here is clearly within the radical political-economy tradition. However, it neither requires a Marxian class perspective nor suggests the kinds of radical institutional changes often associated with radical analysis. Of course by suggesting that conflict in general and the costs associated with it can be attributed in whole or in part to the institutional structure of the employment relation, this approach suggests that major reforms to the nature of the employment relation (e.g. worker ownership) should be more actively considered than otherwise. But even here, whether one advocates such reforms or not has little to do with the value of the collective voice approach as a conceptual basis for understanding and explaining strike activity.

More important, while this approach is grounded in the radical political-economy tradition, it is by no means antithetical to either behavioral or neoclassical explanations for strike activity. Because striking is an *a priori* empirical tendency, there is always some likelihood of strike activity. But the extent to which this tendency is realized is conditioned by and therefore can vary considerably with the factors identified in both the behavioral and the neoclassical literature. Thus, consistent with the three-tier model proposed above, the collective voice approach serves as a foundation for analyzing the factors associated with these explanations rather than as a basis for rejecting them. Indeed, in a forthcoming analysis (Godard, 1992), the collective voice approach has been extended to develop propositions that incorporate both behavioral and economic explanations for strike activity. These propositions in turn serve as a basis for the multivariate analysis of variation in both the likelihood and duration of strike activity, drawing upon a unique data set from a survey of unionized Canadian firms.

Endnotes

¹ The primary purpose of this section is not to provide a comprehensive review and assessment of the literature but to establish the basis for the theoretical model. For somewhat more comprehensive reviews see Edwards (1983), Franzosi (1989), Kennan (1985), Cohn and Eaton (1989), Schnell and Gramm (1988), and Kervin (1988).

² It is plausible to argue that as the North American system of collective bargaining has matured, economic consequences have become increasingly important. But as anyone who has actually participated in, observed, or read a study of a strike knows, strikes can be highly emotional. So, of course, can the bargaining process.

³ Contrary to asymmetric information models proposed by Hayes (1984), Tracy (1987), and McConnell (1989), concern here is with the asymmetrical nature of the employment relation as a social relation and its implications for both the function of collective bargaining and the affective and moral positions of workers.

⁴ Franzosi (1989) employs the term organizational/political to refer to political economic models. Thus the prefix "micro" in this paper.

 $^{\rm 5}$ The Kerr and Siegal (1954) study can also be considered here, though they also identify some nonstructural explanations (e.g., community integration).

⁶ Hostility, for example, can be expected to increase the level of uncertainty in negotiations (see Schnell and Gramm, 1987).

⁷ This terminology is consistent with a theoretical realist philosophy of science, as discussed in Godard (1993a).

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DISCUSSION

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First let me make one brief comment. I thank all of you who contributed papers to this competition. Even for those papers that were not selected, I was nevertheless enriched by reading them. Furthermore, for the most part I have already been able to weave the thoughts and ideas that each of you are developing into my own classroom.

Let me first comment on the Cutcher-Gershenfeld, *et al.* paper. The data set that the authors have developed is an excellent one. I commend them for the hard work and effort that was expended in order to develop a truly useful instrument. The authors' finding emphasizes the cumulative effects of the labor relation process, that is, that which happens in time "T + 1" is greatly dependent on what happened in time "T."

I have two concerns about the paper. First of all, the authors note that they hold that their work is positive and not normative in purpose. But what can practitioners really use from this research to become more "mutually gains oriented?" We can't alter our bargaining unit size nor change our contract frequency. Yet these are the kinds of variables that appeared to have been significantly related to a mutual gains oriented tone. So, the positive advice that we find here is, in fact, hard to implement.

But put aside this concern for a moment. Even if we could implement the kinds of notions that seem to predict a mutual gains orientation, the next question is, should we? By this I suggest that tone should be an independent variable in a model with the dependent variable being the outcomes of negotiations.

Let me focus briefly on the Jarley, *et al.* paper. The authors have developed another fine data set. They note that the survey at hand is a snapshot of behaviors. What do we learn from their paper? Is the

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labor movement invigorated by the Committee on the Evaluation of Work (CEW)? From several of the findings the authors report, it appears that labor organizations do not use the CEW tactics to entice new members to unions. And while we may be critical of the "agency fee rebate" court rulings that have come forth, in this study unions themselves separate out collective bargaining activities from all others in terms of importance. If unions dichotomize their work in such a manner it is natural to see why the judiciary would likewise do so.

The real question before us is one of activities versus output. Even assuming some or full implementation of the CEW, would this, in turn, result in a more invigorated labor movement—or perhaps more members? We don't know this from the study. The next logical question is to investigate the effectiveness of these different programs and practices to see whether or not there are differences among labor organizations solely attributable to the implementation of the CEW recommendations.

Let me close by commenting on the Godard paper. The author categorizes strikes in three different ways. However, his "slicing" of strikes caused me to recall Wheeler's earlier work entitled, "Will the Real Industrial Conflict Please Stand Up?" In 1982, Moore and Pierce also categorized strike models, but they drew different boundaries around the existing research.

The question before us is: Are strikes a manifestation of collective voice? Consider this. In 1948, Ross put forth his work where he described unions as political institutions. He specifically outlined three actors in his model of labor relations: employers, employees, and unions. Furthermore, Ashenfelter and Johnson suggested that unions may in fact take on strikes to temper employees' wage expectations. This coupled with Ross' assertion causes us to question whether or not strikes are manifestations of collective voice.

Let me continue. We read in the literature about how members have concerns about big labor. Northrup along with Hurd and Kriesky debated the PATCO strike. One need only look at union constitutions to read about fines that are assessed members who do not participate in union activities. Do all these collectively suggest that strikes are manifestations of collective voice? The author asserts, and rightfully so, that the employment relationship is asymmetrical. I would assert too, however, that the union leader/member relationship is also asymmetrical.

In examining the propositions that the author puts forth, union members have no individual and independent knowledge of Propositions 2 and 3 except what they learn from their leaders. The author's Propositions 3 and 5 would be proposed respectively by Rees and Hicks. Furthermore, Proposition 4 discusses the more micro behavior that may be attributable to why strikes occur, somewhat akin to the Gramm/Schnell work on why individuals cross picket lines. If we are talking about individual behavior, as he seems to imply with Proposition 4, this tends to argue against strikes as manifestation of collective behavior.

The author may not wish to account for all the reasons strikes occur, and that is certainly his privilege. However, it makes his theory less robust. Also, it seems to me that if the author wants to assert that strikes are a manifestation of collective voice, then the propositions that he constructs should more tightly flow from a collective voice theory. This does not appear to be the case before me.

In closing I would recommend that this paper, as it is further developed, consider which types of strikes represent collective voice instead of "collective reaction" to someone else's order or agenda.

DISCUSSION

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The three papers selected for this session are strikingly different from each other. Flowing from three different analytical traditions behavioralism, institutionalism, and radical political economy—the studies focus on three different levels of analysis, bargaining units, national unions, and theoretical constructs; use three different techniques, regression analysis of mail-in questionnaires, descriptive tabulations of phone survey results, and analytical-*cum*-epistemological reasoning; and, not very surprisingly, end on three different notes, a call for replication, a call for more in-depth study of the phenomena, and a call for primary research.

With only a little oversimplification, the three papers might be contrasted in terms of Francis Bacon's portrayal of scientists as ants, spiders, and bees: "The men of experiment are like the ant, they only collect and use; the reasoners resemble spiders, who make cobwebs out of their substance. But the bee takes a middle course: it gathers the material from the flowers of the garden and of the field but transforms and digests it by a power of its own." Bacon, of course, was poking fun at the ants and spiders of science as a way of arguing the merits of his hypothetico-deductive bee. Pace Bacon, my comments are geared to showing that, just as a well-balanced ecological system needs ants, spiders, and bees, so we in the field of industrial relations need the methodological diversity which these three papers represent.

Let's start with the paper by Jarley, Fiorito and Delaney on union responses to the report of the Committee on the Evolution of Work (CEW), a paper that I think deserves some sort of prize for relevance. In fact, it was the relevance of the issues with which the authors grapple—their concern with the organizational and strategic response of American unions to the fundamental transformations in the political economy of work relations in the 1980s—that made it stand out from

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most of the other papers submitted for the session. Unfortunately, that is a sad comment on the drift in industrial relations research. As I look over the program of this conference, and over the contents of the main journals in our field, I am truly impressed with the sophisticated way in which we now wield the tools of empirical research, but at the same time I am worried that we are losing sight of the fundamental purpose of social scientific research. Instead of being guided by pressing social and political problems, especially those facing working people, our research is too often being driven by available techniques, accessible data sets, and research questions that are of interest only to ourselves.

So because they have chosen to shed some light on a topic of vital importance, this paper is a godsend. That is not to say that it is faultless. In view of the avowed purpose of the paper, the authors might have actually *looked* for a linkage between the CEW report and union structures and policies (instead of merely inferring a relationship). I also question whether a telephone survey is the best tool to help understand changes in union structures and strategies (though as a first step it admittedly provides a breadth that detailed case studies cannot provide). Finally, I was a little disappointed by the weight of descriptive analysis; true, we are offered some interesting speculations at the tail end of the paper, but, like Bacon's ants, the authors don't attempt to relate their findings to broader theoretical issues of union behaviour.

So, while Jarley, Fiorito, and Delaney walk off with the prize for relevance, the prize for theory must go to John Godard for his provocative thoughts on theories of strikes and how they might be integrated under the notion of collective voice. Godard's paper also floated to the top of the pile, not because of any lack of weight, but because it too was so different from all of the others that I read. Not only did its single-minded theoretical orientation set it apart, but also the fact that it dares to consider a perspective that is outside the mainstream of North American industrial relations research-the political economy or "radical" paradigm. Moreover, although he strives mightily to build bridges between the three different traditions of strike analysis, his proposed integration is in fact firmly rooted in political economy. And this, frankly, is a breath of fresh air in a discipline whose gatekeepers have long been loathe to admit that the political economy perspective might have something useful to contribute.

This is not to say that, by being refreshing, Godard is thereby always convincing. For instance, although I sympathize with his efforts to move beyond overly narrow theories of strikes, he has not spelled out in a clear enough way his criteria for evaluating theories; indeed, at times he unfortunately seems to evaluate each in terms of the assumptions of one of the others, finding fault in them for not doing what in fact they are not intended to do. I would also suggest that the integration of very different theoretical traditions is a terribly delicate task that must take better account of the ideological and methodological differences between the three approaches. Lastly, the paper is spider-like in its near complete inattention to empirical questions. Such a novel approach needs more than a brief reference to the need for first-hand collection of firm-level data. This is not to insist on some crude empiricist approach to operationalization of variables and quantitative testing; but I would suggest that the web of argument that Godard has spun would be strengthened by a more detailed consideration of the empirical challenges inherent in his approach.

This leads to the third paper. Cutcher-Gershenfeld, Bodah, and Terry have steered a neat course between theory and empirical research and certainly deserve the prize for research design. Indeed, their study is a wonderful example of how to derive research questions from theory, how to choose a set of methods to explore those questions, how to remain sensitive to the qualitative information that lurks outside of the statistical data, and how to carry it all off with care and modesty. In addition to its intrinsic interest to those studying similar phenomena, the paper would serve as a good model in showing students how to design and conduct research.

One of the reasons why this paper would be such a good teaching device is because it is a classic example of "normal science" in the Kuhnian sense. In other words, the study is founded on a widely accepted conceptual base, the behavioral theory of negotiations, and within this framework it takes two streams of well-established research—mutual gains bargaining and public-sector negotiations and derives and tests a set of questions that are meant to add to our base of knowledge about these issues.

As I implied earlier, I have no significant criticisms of the paper itself; but I am uneasy about its basic purpose. To put it another way, like any exercise in normal science, it rests on a set of underlying and partially hidden premises, assumptions, and value judgements that are given virtually no explicit attention. Take, for example, their principal finding that a shift in the tone of negotiations affects the stage at which the negotiations are settled. The only hint given in the paper as to why this might be consequential to anyone other than academics is a fleeting reference to private resolution of disputes being preferable to third-party involvement. Philosophical premises such as this are entirely appropriate; indeed, all normal science is ultimately animated by such considerations. The trouble is that, having achieved the status of an accepted truth, they are rarely subjected to critical scrutiny. In this case, might it not be argued that the substantive outcome of negotiations is a more important result (and hence a more interesting dependent variable) than the stage at which settlement is reached?

But this quibble should not obscure the high quality of the research conducted by Cutcher-Gershenfeld, Bodah, and Terry. Indeed, each of the papers in the session should be praised as a well-crafted exercise in a particular type of industrial relations research. Moreover, taken together they suggest the rich diversity of which our field is capable. But to attain that richness we need to strive to remain open—open to the concerns of those whom we presume to study, open to the experience of other nations, open to methodologies that differ from the model of science that now seems to dominate our field, and open to ideologically animated debate. Such a commitment to intellectual openness, I would argue, is just as important to the task of breathing new life into the field as are the organizational and structural challenges enumerated by Jim Stern in his presidential address earlier today.

XX. CONTRIBUTED PAPERS-HUMAN RESOURCES

The Determinants of Nonunion Grievance and Arbitration Procedures

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For decades the conventional wisdom emphasized that grievance and arbitration procedures were creatures of unionized workplaces (Freeman and Medoff, 1984; Slichter, Healy, and Livernash, 1960). However, recent evidence indicates that grievance and arbitration procedures have become more widespread among nonunion employers than once thought (Ichniowski and Lewin, 1988; McCabe, 1988). In this analysis we examine several factors which are associated with the existence of these procedures in the nonunion private sector.

One of the articles of faith in American union-management relations is the desirability of including grievance and arbitration procedures in labor contracts (Slichter, Healy, and Livernash, 1960). This conventional wisdom reflects the fact that for the past 40 years these procedures have been almost universal in private sector labor contracts (U.S. Bureau of Labor Statistics, 1951, 1953, 1964, 1981).

The nonunion arena, which now encompasses about 87 percent of all private sector wage and salary employment (U.S. Bureau of Labor Statistics, 1991), presents a very different picture. In the absence of

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government compulsion and union pressure to adopt grievance procedures, nonunion private employers are free to offer no such procedures to employees. Even after the large-scale emergence of unions in the late 1930s and the 1940s, surveys revealed that only small proportions of firms had adopted grievance procedures for their nonunion employees. For instance, a 1954 survey reported that 22 percent of 284 firms had established "formal grievance procedures" for their nonunion "hourly workers" and only 9 percent of 454 firms had done so for their "salaried employees" (National Industrial Conference Board, 1954).

More than 30 years later this portrait has changed. A 1986-87 survey of human resource (HR) policies in American "business lines" (usually divisions or subsidiaries of U.S. corporations) found that about half of 495 responding firms provided "formal complaint resolution systems" for their nonunion employees (ranging from 44 percent coverage for managers to 49 percent coverage for clerical employees to 53 percent coverage for production employees [Ichniowski and Lewin, 1988]). Further, about 20 percent of the respondents with these procedures reported that "binding third-party arbitration" is the last step in the procedure, which means that about one-tenth of these respondents provide arbitration for at least some of their nonunion employees (Ichniowski and Lewin, 1988).

If these 1954 and 1986-87 surveys are reasonably representative of the extent to which nonunion employers granted their employees access to formal grievance and arbitration procedures, they suggest that these nonunion procedures are more widespread now than three or four decades ago. What is less clear, though, is why some nonunion employers have adopted these procedures and others have not. Accordingly, an examination of the factors associated with the existence of these procedures should help explain why they exist in some workplaces and not in others.

Analytical Framework

Our analytical model is based upon previous research. Specifically, we are interested in isolating organization and industry characteristics that prior research has suggested may be associated with the existence of formal nonunion grievance and arbitration procedures. We are particularly interested in examining the belief that nonunion grievance procedures are a union avoidance mechanism.

We group our independent variables into four categories. The first category deals with the union avoidance rationale. Previous research and commentary has emphasized that a key reason (sometimes *the* key reason) that nonunion employers adopt grievance procedures is to remain nonunion (Berenbeim, 1980; Curtin, 1970; Freeman and Medoff, 1984; Scott, 1965). Accordingly, we include one direct and three indirect measures of union avoidance. Our direct measure is the employer's response on a five-point scale that ranged from (1) "not important" to (5) "very important" to the question: "How important is it to your business to maintain the nonunion status of your nonunionized employees?" This union avoidance attitude measure should be positively associated with the existence of grievance procedures if the union avoidance rationale is valid.

The three indirect measures are (a) the presence/absence of unionized employees elsewhere in the firm (many respondents were "double-breasted" firms with some unionized employees), (b) the percent unionized in the respondent's industry, and (c) the percent of the firm's employees who are managers and professionals. The first two of these are proxies for the probability of the respondent's nonunion employees becoming unionized, and the third is an inverse proxy for the probability of the respondent's nonunion employees becoming unionized. If firms install these procedures to keep their nonunion employees nonunion, the industry unionization variable should be positively associated with these procedures and the percent of managers/professionals should be negatively associated with these procedures. The association between unionization elsewhere in the firm and grievance procedures is more difficult to predict. for the union avoidance rationale could lead to a positive or negative correlation. On the one hand, a positive association could occur because firms with some unionized employees provide complaint systems to their nonunion employees to keep them nonunion. A positive association, however, could indicate a spillover effect, whereby firms provide complaint systems to their nonunion employees because they provide grievance procedures to their unionized employees. On the other hand, a negative association could indicate that firms with no unionized employees adopt grievance procedures in order to remain nonunion.

Our second category deals with firm characteristics. Large employers are reputed to be more likely to have grievance procedures than small ones (Scott, 1965; Bureau of National Affairs, 1979), so we expect a measure of firm size (the logarithm of the number of employees) to be positively associated with these procedures. We also include the logarithm of assets per employee to see if capital-intensive firms (controlling for size) are more or less likely to have these procedures. This variable permits an approximate test of the idea that capital-intensive firms have an incentive to treat fairly their human resources who use these capital resources. Similarly, we include the average age of the respondent's establishments to test the notion that firms with newer facilities may be more likely than older firms to make increased investments in their human resource systems (Kochan, Katz, and McKersie, 1986).

Another firm characteristic deserves special mention. Recent research suggests that some firms value their human resources and concomitantly the HR (personnel) function more than do others (Ewing, 1989; Kochan, Katz, and McKersie, 1986; Peters and Waterman, 1982). Nonunion firms that view the HR function as more rather than less important also may be more rather than less likely to adopt grievance procedures. Accordingly, we include what we call an "HR value measure," which consists of the firm's response on a sevenpoint scale that ranged from (1) "never" to (7) "always" to the question: "Are human resource executives included in the business planning process for your business?" This variable should be positively associated with the dependent variables.

Our third category of variables includes two occupational measures to determine if employers are more likely to implement grievance procedures for some occupational groups than others (National Industrial Conference Board, 1954). We include dummy variables representing production/manufacturing workers and clerical workers. Professional employees comprise the reference category for these occupational comparisons. We will examine managers in a separate analysis.

The final category of independent variables consists of two industry characteristics. The first is a dummy variable that measures whether the respondent is a manufacturing firm. One survey found that manufacturers were more likely than other types of employers to have a formal grievance procedure (Scott, 1965), but another survey found that they were less likely (Bureau of National Affairs, 1979). The second is a dummy variable that indicates whether the respondent is a "high-technology" firm. This variable equals one if the respondent is in a manufacturing industry which Bartel and Lichtenberg (1987), using the ratio of research and development expenditures to sales, classified as high technology. This variable assesses whether high-technology firms have been more or less likely than other firms to implement such employee-favorable HR policies as formal grievance procedures. The conceptual model examines the existence of formal nonunion grievance procedures. In addition, we use the same model to examine the existence of arbitration in these nonunion firms.

Data Collection

The data analyzed here were collected in the 1986-87 survey of HR policies and practices in American "business lines" mentioned earlier. Descriptive data about the 495 responding firms have been presented elsewhere and will not be repeated here, except to note that respondents tended to be large firms (Delaney, Lewin, Ichniowski, 1989). The survey form asked respondents various questions about the union/nonunion status of their production, clerical, professional, and managerial employees, the existence of "formal grievance procedures" for their unionized employees and "formal complaint resolution systems" for their nonunion employee groups (we call both types "grievance procedures"), whether these procedures included "binding third-party arbitration," and when any such procedures were established. Respondents also were asked about the importance of union avoidance and about the importance of the HR function. In addition, financial data were collected for each respondent from Standard and Poor's Compustat data base.

Results

Because the survey form asked respondents to supply grievance procedure information for four occupational groups (managers, production, clerical, and professional employees), each respondent/ occupation is a unit of observation. Because a single firm could supply up to four observations, there are more than 495 observations in the grievance portion of the analysis. The results for both grievance and arbitration procedures are presented in Table 1.

Looking first at the column (1) coefficients on the existence of grievance procedures covering nonmanagerial employees, there are mixed results for the idea that nonunion firms adopt these procedures primarily for union avoidance reasons. Most noticeably, the union avoidance attitude measure is negatively (though nonsignificantly) associated with the existence of these procedures. Similarly, increases in the percent unionized in the respondent's industry (a measure of the threat of being unionized) show no relation to the existence of a grievance procedure. Also, increases in the proportion of the firm's employees who are managers and professionals (an inverse measure of the likelihood of becoming unionized) are positively and significantly

	Nonunion	Managers	
	(1)	(2)	(3)
	Grievance	Binding	Grievance
	Procedure	Arbitration	Procedure
Constant	-3.3714°°°	2.6398	-3.8299°°°
	(.6939)	(1.7444)	(.9418)
Union Avoidance	0316	.2609°	_
Attitude	(.0658)	(.1481)	
Percent Union in the Industry	.0030	.0142°	.0036
	(.0041)	(.0079)	(.0067)
Some Unionized	-1.0271°°°	.4849	-1.2183°°°
Employees in Firm	(.2384)	(.4543)	(.3589)
Percent of Employees who are Managers and Professionals	.0102°° (.0044)	0010 (.0092)	.0119° (.0069)
Firm Size (log)	.3593 °°°	5530 °°°	.3246°°°
	(.0548)	(.1336)	(.0851)
Assets per	.0256	2754°°	.0826
Employee (log)	(.0590)	(.1154)	(.0899)
HR Value Measure	.2001°°°	0243	.2124 °°°
	(.0435)	(.0964)	(.0717)
Average Establishment	0169	.0132	0109
Age	(.0109)	(.0243)	(.0175)
Production Workers	.2500 (.2096)	0912 (.4300)	
Clerical Workers	.0069 (.1874)	.1037 (.3883)	
Manufacturing Firm	.0196	8994°°	2137
	(.1812)	(.3952)	(.2958)
High-Technology Firm	-1.1160°°°	1.8989°°	-1.1377
	(.4136)	(.9448)	(.7314)
Chi Square	99.2***	30.1 •••	42.4 ***
Sample Size	727	228	292

TABLE 1 The Existence of Nonunion Grievance and Arbitration Procedures (Logit results)

Note: Standard errors are in parentheses.

••••p < .01; ••p < .05; •p < .10 (two-tailed tests).

associated with the existence of nonunion grievance procedures. Moreover, firms that have some unionized employees ("doublebreasted" firms) are significantly less likely to have nonunion grievance procedures than completely nonunion firms. These four coefficients, taken together, offer only limited support for the widely accepted notion (Berenbeim, 1980) that firms adopt nonunion grievance procedures primarily for union avoidance reasons. Other column (1) results indicate that particular types of firms are more likely than others to have these procedures. The firm size coefficient indicates that larger firms are more likely than smaller firms to have these procedures, a result which confirms prior research (Scott, 1965; Bureau of National Affairs, 1979). Perhaps not surprisingly, firms that place sufficient strategic importance on the HR function (HR executives are included in the planning process—the HR value measure) are significantly more likely to have nonunion grievance procedures than firms that attach less importance to the HR function. Interestingly, firms in high-technology industries are significantly less likely than nonhigh-technology firms to have formal grievance procedures. Also, manufacturing firms are neither more nor less likely than other firms to have access to these procedures, and production and clerical workers are neither more nor less likely to be covered by these procedures than professional employees.

We turn next to the column (2) results dealing with the existence of binding arbitration in the firms that reported having formal grievance procedures, again for nonmanagerial employees. Because only a fraction of respondents reported having arbitration, the sample size for this portion of the analysis is much smaller. The arbitration results are not particularly consistent with the grievance procedure results. For instance, the existence of arbitration is positively (though weakly) associated with the self-reported importance the firm attaches to union avoidance, and arbitration also is positively (again weakly) associated with the percent unionized in the industry. These two coefficients suggest that the union avoidance rationale may play more of a role in a nonunion firm's willingness to adopt arbitration than in its willingness to implement grievance procedures.

Directly contrary to the grievance procedure results, the column (2) firm size coefficient suggests that small firms rather than large firms are significantly more likely to adopt arbitration. However, it is important to keep in mind that the average firm size among all 495 respondents was about 8,000 employees, so this result says that among this sample of large firms it is the relatively smaller ones that are more likely to have arbitration for their nonunion employees. Also, other results suggest that it is the less capital-intensive firms, manufacturers, and high technology firms that are more likely than others to have arbitration procedures.

Taken together, the column (1) and column (2) results offer two somewhat different profiles of firms with grievance procedures and with arbitration procedures. These two columns of results indicate that the nonunion firms that are likely to adopt grievance procedures without arbitration may exhibit somewhat different characteristics from those that have grievance procedures with arbitration. In this vein, it is interesting that firms scoring high on the HR value measure are more willing than other firms to adopt grievance procedures, but they are not more likely than others to adopt arbitration as the final step of those procedures.

In column (3) we present the results of our analysis of firms which reported formal grievance procedures covering managers (too few firms reported that arbitration covers managers to estimate a logit analysis for arbitration coverage). These results tend to mimic those for the nonmanagerial employees in column (1). For instance, firms with grievance procedures covering managers are likely to be large firms with no unionized employees, firms that place considerable importance on the HR function, and firms that have a relatively large percentage of their work force in the managerial and professional ranks. This similarity between the columns (1) and (3) findings suggests that many firms with nonunion grievance procedures for rank-and-file employees may be extending the coverage of those procedures to include their managers.

Summary and Conclusions

The descriptive data gathered in this survey show that nonunion grievance procedures have become a fairly widespread feature of the corporate HR landscape, and that nonunion arbitration procedures are not as rare as might have been thought earlier (Ichniowski and Lewin, 1988). The multivariate analysis performed here shows that the existence of these procedures is associated with particular corporate features.

Most informatively, our results indicate that nonunion grievance procedures cannot be explained primarily as the result of corporate motivation to remain nonunion. These procedures are not more likely to exist in firms that attach great importance to union avoidance, and they are not more likely to exist in firms in highly unionized industries. Instead, these procedures are more likely to be found in completely nonunion firms than in partly unionized ones, and in firms with a high percentage of managers and professionals. Further, the average nonunion grievance procedure among these respondents was established in 1975, which means that these procedures are a much more recent phenomenon than grievance procedures in the union sector (respondents with unionized employees reported that, on average, their unionized grievance procedures were established in 1954).

This finding about the lesser importance of union avoidance motivation is intuitively appealing, for it is consistent with the multi-decade downward trend in the probability of a private firm becoming unionized via an NLRB representation election (Goldfield, 1987), and with the more recent establishment of nonunion procedures. If we assume that this declining NLRB election probability is a useful proxy for the overall likelihood of a private firm becoming unionized in recent years compared to the 1940s, private firms in the 1970s and 1980s faced only a modest organizing threat. Yet these are the years when these nonunion respondents tended to establish their grievance procedures. As a result, it makes sense that in recent years nonunion firms would adopt grievance procedures for reasons other than avoiding unions.

The presence of nonunion arbitration procedures is harder to explain. As we noted earlier, only a small portion of firms with nonunion grievance procedures are willing to impose arbitration on themselves. Accordingly, there is room for more investigation to discover why some nonunion firms are willing to adopt employee voice procedures, especially with arbitration, and others are not. The apparent growth of these nonunion procedures offers a bountiful area for future research.

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Supervisory Responses to Employee Absenteeism: A Study of Supervisors' Decisions

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Employee absenteeism has been widely recognized by practitioners and researchers as an important organizational issue (Rhodes and Steers, 1990). Because of the potentially disruptive effects on an organization's work flow (Atkin and Goodman, 1984), a substantial body of research has emerged that examines the implications of various absence control policies on absenteeism levels (see Rhodes and Steers, 1990 for a detailed review). However, there is no research that examines the impact of absence control policies on an employee's status within an organization.

Most absence control policies distinguish between legitimate versus illegitimate reasons for absence occurrences based on supervisory judgment (Rhodes and Steers, 1990). If the supervisor determines that an absence is not legitimate, a decision is made about *whether* the employee should be disciplined for the absence occurrence and, if so, the *extent* of such discipline. Although an organizational policy may specify a range of appropriate disciplinary actions, supervisory judgment plays a critical role. However, there is a dearth of research on the decision process supervisors engage in when responding to employee absenteeism (Ballagh, Maxwell, and Perea, 1987).

This paper will use policy-capturing methodology to answer important questions regarding supervisors' disciplinary decisions in response to employee absenteeism: What factors relate to the severity of the disciplinary decision? Does a supervisor make decisions consistently?

These questions merit answers for two important reasons. First, there is virtually no substantive research that addresses these issues as they pertain to employee absence. Second, arbitration precedents that

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relate to disciplining employees for being absent have set norms that employees be treated consistently and fairly (Ballagh et al., 1987; Redeker, 1989). Because arbitration precedents are believed to affect management practice in both nonunion and union settings (Belohlav, 1985), it is reasonable to expect that supervisors respond to employee incidences of absence in a consistent manner.

A reasonable absence control policy is based on progressive discipline as a way to correct absenteeism problems (Redeker, 1989). Progressive discipline systems are reasonable because they provide an employee with the opportunity to change his/her absence activity. In particular, such systems are believed to be effective for reducing chronic short-term absences (Ballagh et al., 1987) that tend to be disruptive to employers because it is often difficult to arrange replacements on frequent and short-term bases. Despite the apparent reasonableness of progressive discipline systems, it is critical they be used consistently and fairly. In situations where the rules of such a system have not been applied consistently, arbitrators reinstate employees despite the severity of employee absenteeism (Redeker, 1989; Rosenthal, 1979).

The Present Study

Six possible antecedents of disciplinary action will be examined in this study. These factors include: (a) absentee's absence history, (b) absentee's job performance, (c) absentee's criticality to his/her work department, (d) absentee's ability to attend work, (e) absentee status, and (f) absence approval. Each will be discussed.

Absence history: Consistent with the notion of a progressive discipline system, it is expected that an employee's prior absence history will affect a supervisor's disciplinary decision. Specifically, the greater the amount of prior absence in an employee's recent history, the more likely it is that a supervisor will choose a more severe discipline than if there is no absence history.

Job performance: It is expected that an employee's prior job performance will have an impact on the severity of discipline. Specifically, the lower the prior level of job performance, the more likely a supervisor will choose a more severe discipline than if job performance were high. The rationale for this hypothesis stems from the belief and findings that frequent short-term absences hinder an employer's ability to efficiently meet production objectives (Atkin and Goodman, 1984; Moch and Fitzgibbons, 1985). More specifically, cumulative evidence indicates that absenteeism from work and employee job performance (for objective and subjective performance measures) are inversely related (Bycio, 1990).

Absentee criticality: Researchers have argued (Klaas and Wheeler, 1990) that line managers, through their discretion over the severity of a disciplinary sanction, influence the allocation of human resources to various factors of production. Specifically, where demand for labor is inelastic, they argue that the cost of disciplinary action is likely to increase as the severity of the action increases. Based on a study of undergraduate students who were enrolled in a psychology course and asked to assume the role of a supervisor conducting performance appraisals for subordinates, Heerwagen, Beach, and Mitchell (1985) demonstrated that a supervisor's perception of the costs of disciplinary action is inversely related to the managers' willingness to take action. Finally, in a field survey of city employees, Boise (1965) found that a worker's value to his department influenced supervisory choice of penalty for rule violation. Specifically, supervisors were less willing to impose penalties on subordinates whose skills were in short supply.

Ability to attend: Researchers have argued and demonstrated that ability to attend, which is directly influenced by family demands or kinship responsibilities, is likely to increase employee absenteeism from work (Rhodes and Steers, 1990). However, the evidence regarding the impact of family demands as a factor in disciplinary decisions is limited. For example, Rosen and Jerdee (1974) found that disciplinary action was significantly less serious and considered less severe for violators who had been experiencing family problems than violators without family problems. Klaas and Wheeler (1990) showed that a number of personnel managers and line managers imposed less severe disciplinary action when an employee had substantial personal problems (consistent with the operationalization of family problems used in the previously cited research) than when an employee did not have substantial personal problems. An explanation for these actions is based on attribution theory. Family problems are likely considered as a factor that is beyond the control of an employee. Thus, the severity of the supervisory response will be lower.

Absentee status: Newly hired employees of the organization under study are designated as probationary status employees for the initial period of employment (either six months or 12 months depending upon the job classification). During the probationary period, employee performance is monitored frequently (every two months). Aspects of performance that are monitored include job-related output based on the particular job, tardiness, and absenteeism. Because a probationary period is a time when one would expect an employee to put his/her "best foot forward," it is likely that a supervisor has high expectations of employee performance. Thus, it is reasonable to expect that disciplinary action, on average, will be more severe for probationary status employees than employees who are beyond the probationary period (i.e., full status employees).

Absence approval: Absence approval refers to whether the organization's control policy treats a particular absence occurrence as legitimate or illegitimate. Intuitively, one would expect there to be no discipline in response to an approved absence, and the use of discipline in response to an unapproved absence. This expectation is consistent with the treatment of unapproved absence as a breach of one's duty to report to work (Ballagh et al., 1987). Consistent with absence control policies, absence approval is typically a key factor that determines the extent of absence discipline (Ballagh et al., 1987; Rosenthal, 1979).

Method

Sample: A sample of 12 supervisors employed in a large midwestern university was used for this study (six females and six males were included). Neither the supervisors nor their employees are represented by a union.

Research design and measures: A within-subjects experimental design (Keppel, 1982) was used. The within-subjects design permits researchers to infer the relative importance of particular factors that are related to an individual's decisions.

The six within-subjects factors were derived based on a review of the literature regarding disciplinary decisions by employers as well as on an elicitation study. Professionals from the university's Personnel Services Office, who are familiar with the absence control policy and deal with employee grievances on the matter of absenteeism, generated factors for this study.

The six within-subjects factors were completely crossed, which permits assessment of the independent effects of each factor on the disciplinary decisions as well as on the other dependent variables. Crossing the factors resulted in 64 scenarios $(2 \times 2 \times 2 \times 2 \times 2 \times 2)$, which contained all possible combinations of the independent variables. The scenarios were presented in the survey in random order to equally spread potential order effects. An example of a scenario is provided:

Hill is a *probationary status* employee whose job performance is *below average*. Hill has common skills that are plentiful in your department. Today's absence was an approved personal day. Hill has had less than 4 days absent in the past five months. Hill has family members who sometimes require personal attention during the workday.

Disciplinary decision was operationalized in the following manner: "As this employee's supervisor, please indicate what you would do in response by choosing from among nine possible actions." The nine alternate responses were listed as follows: (a) take no action; (b) monitor this absence activity, but take no remedial action; (c) conduct a counseling session with this employee; (d) administer a verbal warning to this employee; (e) administer a written warning to this employee; (f) suspend this employee without pay for 3 days; (g) suspend this employee without pay for 10 days; (h) suspend this employee without pay for 30 days; and (i) discharge this employee. These choices reflect the actual options available to supervisors in this organization, and they are consistent with successive steps in progressive discipline programs (Ballagh et al., 1987; Belohlav, 1985; Klaas and Wheeler, 1990).

Results

Multiple regression analysis tested the hypotheses. None of the interaction effects were statistically significant for any of the subjects. This indicates that the relationship between any single factor and disciplinary decision is not contingent upon any other factor. Table 1 shows the results of the regression analyses for each supervisor's disciplinary decision. R^2 ranged from .06 to .89 (*Median* = .63). The percentage of statistically significant coefficients (i.e., p < .05) for each variable was as follows: approved absence (83%), absence history (75%), prior job performance (42%), probationary status (42%), ability to attend (8%), and employee criticality to the department (0%).

For the approval variable, all significant coefficients were positive. Specifically, discipline in response to absence was more severe for employees whose absence was not approved than approved by the organization.

TABLE 1

Subject	Ability to Attend	Absence History	Prior Job Perfor- mance	Status	Absentee Criticality	Approved/ Not Approved	R²
1	159	.741	102	.031	100	159	.61
2	.023	.292	042	164	054	.700	.63
3	002	.450	193	419	.016	.453	.65
4	.002	.008	003	176	171	019	.06
4 5	059	.295	215	059	.057	.719	.69
6	.038	.282	043	307	088	.443	.42
7	.055	.099	.019	045	.036	.931	.89
8	024	.311	246	545	.094	.354	.61
9	064	014	604	171	.096	.410	.59
10	.037	.002	421	114	032	.573	.54
11	048	.543	094	.041	006	.586	.67
12	.015	.171	.040	085	.027	.084	.86
Pooled							
Sample	· .015	.225	124	141	.002	.468	.32

Note: Coefficients are standardized. .16 \leq beta \leq .27, p \leq .05; .28 \leq beta \leq .40, p \leq .01; beta \geq .41, p \leq .001.

 a N = 768.

All the significant coefficients were positive for the absence history variable. Specifically, discipline in response to absence was more severe for employees who have had four or more days absent in the past year than employees who have had less than four days absent in the past year.

For the job performance variable, all the significant coefficients were negative. Discipline in response to absence was more severe for employees whose performance was below average compared to employees whose performance was above average.

For the status variable, all the significant coefficients were negative. Specifically, discipline in response to absence was more severe for employees who were currently on probationary status (i.e., employed less than six months) than full status employees (i.e., employed six months or more).

Finally, for the ability to attend variable, the one significant coefficient was negative. Specifically, the disciplinary response to absence was less severe because an employee has family members who sometimes require personal attention during the workday.

Discussion

The present study was designed to investigate supervisors' decisions about disciplinary action in response to employee absenteeism by addressing two questions: What factors relate to the severity of the disciplinary decision? Does a supervisor make decisions consistently? The relationships between disciplinary decision and six factors that were considered important to making a disciplinary decision were examined. The results indicate that approved absence and prior absence history emerged consistently as important factors in disciplinary decisions (based on the high percentage of significant coefficients). The other factors were less consistently related.

Clearly, there were differences in the way supervisors made disciplinary decisions with respect to absenteeism. Not only were there differences in which factors explained a significant amount of variance in disciplinary decision making across subjects, but the relative importance of the six factors varied across subjects. Furthermore, within-subjects R^2 s less than 1.0 indicate that a supervisor's decision-making process was less than perfectly consistent; however, the R^2 s were sufficiently high for most subjects that, practically speaking, decision-making consistency was not compromised. Finally, differences in within-subjects R^2 s across subjects varied.

The findings pertaining to approved absence and prior absence history as factors in disciplinary decisions make sense in the framework of a progressive discipline system. However, what was surprising was the fact that the absentee's criticality to the department was not a significant factor for any of the supervisors. This finding is unexpected in light of recent research (Klaas and Wheeler, 1990), which found that employee criticality had a significant impact on both line managers' and personnel managers' disciplinary decisions. In the Klaas and Wheeler study, managers were responding to scenarios that depicted employee insubordination whereas employee absenteeism was the focus of this study. It is possible that because absenteeism is considered by some as a form of temporary withdrawal from the workplace, the criticality of the absent employee was not important in the short term. Insubordination in the workplace, on the other hand, could be considered more serious in terms of disrupting work flow and perhaps the safety of others. Thus, when making disciplinary decisions. supervisors may not consider absentee criticality when disciplining employees for being absent.

Prior job performance and employee status were significant factors among half the subjects. For the prior job performance results, one might interpret these findings to suggest that whereas half of the managers consider absenteeism as related to job performance, the other half does not. Although there is cumulative evidence which indicates that absenteeism and job performance are inversely related, some argue that absence may sometimes positively influence job performance (Atkin and Goodman, 1984). It is possible that those managers for whom prior job performance was not a significant factor subscribe to the latter belief and are less likely to punish an employee because of their beliefs.

To date, there is no research on the relationship between employee status and their treatment by managers in response to absenteeism. However, the "experts" indicated that many managers in the sponsoring organization consider an employee's status in their disciplinary decisions. The results for the employee status variable suggests that managers may have high expectations of newly hired employees in terms of attendance as evidenced by more severe disciplinary action.

Finally, an interesting result pertains to the relatively low importance of prior job performance and ability to attend among supervisors' disciplinary decisions. In unionized settings, arbiters have deemed both excellent prior job performance and family demands as mitigating circumstances (Ballagh et al., 1987). These findings raise questions regarding whether in a nonunion environment, prior contributions and extenuating circumstances matter. It is possible that the bottom-line criterion of minimizing costs to management in the present are central. Thus instances of absence, regardless of prior excellent job performance or extenuating circumstances, may be discounted. Future research should examine more closely the antecedents of disciplinary decisions in union and nonunion settings.

Although the results obtained in this study shed light on supervisors' responses to employee absenteeism, limitations should be mentioned. Consistent with other policy-capturing research on organizational issues, external validity is a salient issue. Potential problems with external validity were minimized in the following way: The within-subjects factors were generated from a review of the literature and having "experts" from the organization under study participate in the development of the factors.

Finally, one might criticize these findings on the grounds that supervisors were asked to make disciplinary decisions in a contrived setting rather than in the context in which such decisions are made the field (Cook and Campbell, 1979). In particular, there was very little resemblance between the context in which this study was conducted and the context in which a supervisor makes a disciplinary

decision (i.e., the subjects took time from their jobs to respond to a survey which contained hypothetical, but realistic scenarios versus responding to actual cases of employee absenteeism). While it is true that subjects were asked to make these decisions in a contrived setting, the results are generally consistent with the expectations deduced from the literature. Therefore, the lack of resemblance between the study's context and the context in which disciplinary decisions are typically made make generalizations to the "real-life" setting stronger (Mook, 1983).

Conclusion

This study found systematic influences related to a supervisor's disciplinary decision in response to employee absenteeism. The findings of this research raise important questions that should be addressed in future research, especially in light of the concern that employees be treated fairly and equitably: What are the implications for treating employees fairly given differences in the way supervisors respond to identical incidences of absenteeism? Do these differences suggest that no-fault absence control policies be adopted rather than ones that require supervisory judgment? Or, should supervisors be trained to respond to incidences of employee absenteeism consistently?

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A Cross-National Comparison of Company and Union Commitment: A Meta-Analysis

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Employers and unions alike value committed members. Mathieu and Zajac (1990) investigated a number of job outcomes and found that three were statistically significant and negatively related to organizational commitment: intention to search, intention to leave, and turnover. Likewise, the effectiveness of unions in organizing, bargaining, retaining membership, and political action depends on the level of union commitment (Gallagher and Clark, 1989). Perhaps to capitalize on the general good that should accrue from committed members, attempts to measure and understand commitment have flourished. But is a committed company member a loyal union member too? Or does the emphasis on one institution result in a corresponding lack of attachment to the other? These questions are particularly timely given interest in cooperative labor-management relations (Kochan, Katz and McKersie, 1986). However, interest in the relationship between company and union commitment has spanned 40 years. Purcell (1954) is credited with defining dual allegiance (cited in Gordon and Ladd, 1990, p. 49) as "approval of the existence, objectives, and overall policies of both company and union."

The dual commitment literature has been dominated by singlecountry studies. Consequently, research on commitment has ignored the impact of industrial relations systems. Two exceptions are noted. Gallagher et al. (1988) commented on the impact that enterprise unionism had on dual commitment in Japan. In the sole cross-national study, Jeong (1990) utilized data from Canada and Sweden to compare measurement approaches rather than industrial relations

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systems. Given the available data, comparisons of the effect that industrial relations systems have on union and company commitment are possible among these countries: Canada, Japan, Sweden and the United States.

Bamber and Lansbury (1983) suggested a typology for comparative studies. Drawing upon studies of the impact of technological change on industrial relations, they separated countries into two classifications:

Although each of the countries within each group differ in many respects, Type I countries share a common inheritance of occupationally-based unionism, relatively weak central union and employer associations, a less consistent role played by governments in industrial relations and adversarial traditions of labour-management relations . . . By contrast, Type II countries tend to have industry-wide unions . . ., a strong central union and employer organizations, and generally a more consensual approach to industrial relations (Bamber and Lansbury, 1987, p. 23).

Canada and the United States are classified as Type I countries while Sweden is a Type II country. Japan is classified as a Type II country based on the consensual nature of its labor-management relations, although its industrial relations system has several unique characteristics. These include seniority-based wage and promotion systems, enterprise unionism, and lifetime employment (Kuruvilla et al., 1990).

A core feature of the Bamber and Lansbury (1983) typology is the distinction between adversarial and consensual approaches to industrial relations. Numerous authors have noted the impact that organizational climate, in particular labor-management relations, has on workers' commitment to company and union. Gordon and Ladd (1990, p. 55) summarized the literature and suggested that "the relationship between company allegiance and union allegiance may be a function of the tenor of the relationship between union and management."

This study has two purposes: (1) to summarize the variable and sizable number of dual commitment studies done in four countries, and (2) to examine the extent to which the industrial relations system moderates the relationship between company and union commitment in Type I and Type II countries. Meta-analysis will be used to accomplish both objectives. Cooper and Rosenthal (1980) note that meta-analysis is an especially useful summarizing technique when substantial variation in results render a narrative summary unreconcilable (Cooper and Rosenthal, 1980). In addition, the process of correcting for various types of statistical artifacts and the subsequent change in variance explained provides insight into the presence or absence of moderator variables. If artifactual corrections account for a substantial portion of the variance in results, it is unlikely that other explanatory variables would add significantly to one's understanding of the relationship between union and company commitment. Given the dissimilarities in the industrial relations systems among the countries represented in this data set, we hypothesize that a substantial amount of variance will remain to be explained.

If this hypothesis is supported, moderator analysis will be done separating studies by country of origin into the Bamber and Lansbury (1983) typology. We hypothesize that the strength of the relationship between company and union commitment is greater for Type II countries (Japan and Sweden) than Type I countries (Canada and the United States), given that the former represent more consensual industrial relations systems and the latter more adversarial systems. Further, based on a common history of labor-management relations, we hypothesize that there will be no significant difference in the company-union commitment relationships found between Canada and the United States with their adversarial history and, correspondingly, between Sweden and Japan.

Method

Literature Search and Sample Selection

The literature search produced 45 studies, 13 of which were acceptable for inclusion in this analysis. The remaining 32 studies were excluded for the following reasons. (A list of the studies excluded from the analysis is available from the authors.) Eleven studies were qualitative. Eight studies focused on measures of company commitment or union commitment but did not provide both measures. Seven studies were excluded because they provided alternative statistical analyses of samples already included in this analysis. Three pre-1961 studies were excluded because they measured general attitudes, not commitment. Single studies were excluded for one of the following reasons: one did not include zero-order correlations, one was not obtainable, one provided a single sample for one country (Australia), one was excluded because it combined data on union and nonunion subjects. The final sample of 13 studies collected data for a total of 13,517 individuals in four countries (Canada, Japan, Sweden, the United States). Seventy correlations from 66 independent and four dependent samples are identified in Table 1. Sample sizes ranged from ten to 1,066 (Mean = 199.9; SD = 221.7). The sample size on which the meta-analysis was based totalled 13,993 because two sets of data were used from two longitudinal studies. Table 1 also presents the reported correlations, the instruments used to measure union commitment and company commitment, and the reliabilities for the instruments.

Analysis

Hunter meta-analytic techniques (Hunter and Schmidt, 1990; Hunter et al., 1982) as elaborated by Whitener (1990) were utilized to test for the impact of interstudy differences. We wanted not only to test for the accuracy of the relationship between company and union commitment (using the 95 percent confidence interval) but also to understand the extent to which other factors moderate this relationship (using the 90 percent credibility interval). One assumption underlying the Hunter procedures (1990, 1982) is that samples are independent. As was noted above, this assumption is not met. Fields and Thacker (1988) and Magenau et al. (1988) provided correlations from the same respondents at time 1 and time 2 (involving 476 subjects). Hunter et al. (1982) termed this phenomenon conceptual replication and suggested two approaches for data analysis: (1) treat each correlation as if it were obtained from a separate study; or (2) average the correlations within a study. The former approach was chosen for several reasons. Averaging the correlations in the Fields and Thacker study (1988) would likely lead to conceptual ambiguity (Hunter et al., 1982) because of contextual differences due to a quality of work life intervention between time 1 and time 2. The correlations from the Magenau et al. study (1988), were treated separately because only 32 percent of the union stewards and 43 percent of the rank-and-file subjects in the study were included in both time 1 and time 2 correlations. This judgment call (Wanous et al., 1989) is tested by conducting two metaanalyses: (1) one in which the correlations from the two studies are treated separately; and (2) one in which the correlations are averaged. We found that this judgment did not substantively change the results.

Moderator analysis preceded accuracy analysis because the homogeneity or heterogeneity of the studies needed to be evaluated to generate appropriate confidence intervals (Whitener, 1990). First, correlations were corrected for unreliability in the commitment measures

Author		Ν	Measures Used	Correlation
Angle & Perry (1986)		1,052	Company commitment (alpha = .89) 15-item (Mowday et al., 1979) Union commitment (alpha = .76) 4-item scale created by authors	.30
Beauvais, Scholl & Cooper (1991)	(1)	146	Company commitment (alpha = .91) 15-items (Mowday et al., 1979) Union commitment (alpha = .93) 27-items (Gordon et al., 1980)	.12
	(2)	121	(CC alpha = .88) (UC alpha = .93)	.10
Barling, Wade & Fullagar (199	90)	100	Company commitment (alpha = .83) 9-item (Mowday et al., 1979) Union commitment (alpha = .87) 10-items (Cordon et al., 1980)	25
Clark (1989)		1,066	Company commitment (alpha = .85) multi-item (Porter et al., 1974, 1979) Union commitment (alpha = .90) 7-item (Gordon et al., 1980)	.23
Dalton & Todor (1982)		54	Company commitment (alpha = .89°) 15-item (Porter et al., 1974) Union commitment (alpha = .89°) 15-item (Porter et al., 1974)	.08
Fields & Thacker (1988)	(A1)	309	Company commitment (alpha = .82) 9-item (Porter et al., 1974) Union commitment (alpha = .88) 8-item (Gordon et al., 1980)	.20
	(A2)	309		.19

 TABLE 1

 Characteristics of Studies Included in the Meta-Analysis

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Author		Ν	Measures Used	Correlation	
Fukami & Larson (1984)	mi & Larson (1984)		Company commitment (alpha = .89) 12-items (Buchanan, 1974; Alutto et al., 1974) Union commitment (alpha = .79) 10-item (Gordon et al., 1980)	.30	
Gallagher, Fiorito, Jarley, Jeong, & Wakabayashi (1988)	(29 samples) (10-656)	7,379	Company commitment (alpha unknown) 14-items (Mowday et al., 1982) Union commitment (alpha unknown) 14-items (Gordon et al., 1980)	.23 to .80	
Gallagher & Wetzel (1988)	(A)	131	Company commitment (alpha = .85) 9-item (Porter et al., 1974) Union commitment (alpha = .82) 17-item (Gordon et al., 1980)	.18	
	(B) (C)	116 147	11 11 11 11 11 11 11 11 11 11 11 11	04 .30	
	(B) (C) (D) (E)	102 170	""""""""""""""""""""""""""""""""""""""	18 17	
Jeong (1990)	(21 samples) (17-211)	1,218	Company commitment (alpha = .77) 8-item (Porter et al., 1974) Union commitment (alpha = .84) 12-item (Gordon et al., 1980)		
Magenau, Martin & Peterson (1988)					
rank-and-filé, 1981		225	Company commitment (alpha = .85) 3-item (Mowday et al., 1982) Union commitment (alpha = .89) 3-item (Gordon et al., 1980)	.01	
rank-and-file, 1982 stewards, 1982		104 218	(CC alpha = .85; UC alpha = .88) (CC alpha = .69; UC alpha = .84)	.03 .13	
stewards, 1983		268			

 TABLE 1 (Continued)

 Characteristics of Studies Included in the Meta-Analysis

TABLE 1 (Continued) Characteristics of Studies Included in the Meta-Analysis					
Author	N	Measures Used	Correlation		
Schriesheim & Tsui (1980)	75	Company attitudes (alpha unknown) (Derber et al., 1960; 1965) Union attitudes (alpha unknown) (Derber et al., 1960; 1965)	.77		
Thacker & Rosen (1986)	569	Company commitment (alpha = .91) 9-items (Porter et al., 1974) Union commitment (alpha = .94) 23-items (Gordon et al., 1980)	.03		

using reported coefficient alphas or using the Spearman-Brown formula (Anastasi, 1982) to compute coefficient alphas. Where computations were made, the coefficient alphas are noted (*) in Table 1.

An analysis was conducted to determine whether moderators were operating. Two methods were used to evaluate the hypothesis that the population variance (corrected variance) equals zero. The first method of testing for a homogeneous population posits that heterogeneous subgroups exist whenever statistical artifacts account for less than 75 percent of observed variance of the mean effect size (Hunter et al., 1982). The second method consists of generating a credibility interval using the corrected standard deviation around the mean corrected correlation. If this interval is sufficiently large or does include zero, several subpopulations comprise the mean corrected effect size and moderator analysis is warranted (Whitener, 1990). Because our analysis demonstrated that moderators were in operation and that the studies came from heterogeneous subpopulations, a confidence interval was generated using the standard error for the heterogeneous case (Schmidt et al., 1988) to measure the accuracy of the estimate of the mean of the population parameters.

The final step contained an examination of potential moderators. Credibility intervals were calculated to determine the homogeneity or heterogeneity of each subgroup, and confidence intervals (using the appropriate standard error formulas) were computed to assess the accuracy of the sample-size weighted mean effect.

Results

Findings

The major results of the meta-analysis are presented in Tables 2, 3 and 4. All tables provide information concerning the number of studies (k), sample sizes (N), sample-size weighted mean correlations (r_a) , sample-size weighted mean correlations corrected for attenuation (r_b) , variance due to sampling error, unexplained variance, credibility intervals, and confidence intervals.

Table 2 summarizes the data on union-company commitment and indicates that the correlation between union commitment and company commitment is approximately .40 after eliminating the effects of sampling error, while corrections for error of measurement in both union commitment and company commitment elevated the mean correlation to .47. Almost five percent of the variance is due to

k	N	Γa	гь	Variance due to sampling error	Unexplained variance	90 percent credibility interval	95 percent confidence interval
70	13,993	.40	.47	5.26%	94.73%	.09 to .84	.38 to .41

 TABLE 2

 Meta-Analysis for Union Commitment-Company Commitment Correlations

a Sample-size weighted mean correlation

 ${}_{\mathsf{b}}$ Sample-size weighted mean correlation corrected for attenuation on union and company commitment measures

sampling error, thus 95 percent of the variance in sample correlations is unexplained. The credibility interval was extremely wide, .09 to .84, providing additional support for the existence of moderators (Kemery et al., 1989; Whitener, 1990). This supports our initial hypothesis.

Given moderator evidence from the credibility interval, the confidence interval was calculated based on the belief that the studies came from heterogeneous subpopulations (Whitener, 1990; Schmidt et al., 1988). The confidence interval did not contain zero, indicating that the sample-size weighted mean correlation is significantly different from zero. In addition, the interval of .38 to .41 is relatively narrow.

The Industrial Relations System as a Moderator of Commitment

The results of the moderator analysis contrasting Type I and Type II countries are shown in Table 3. These results support our second hypothesis that the relationship between company and union commitment is stronger in Type II countries than Type I countries

	Moderator Analysis: Industrial Relations Typologies										
k	N	r _a	г _ь	Variance due to sampling error	Unexplained variance	90 percent credibility interval	95 percent confidence interval				
			Т	Type I Countrie	s (Canada and U	J.S.)					
20	5,396	.19	.23	13.89%	86.11%	.01 to .44	.17 to .22				
			Ту	pe II Countries	s (Japan and Sw	eden)					
50	8,597	.53	.62	6.31%	93. 69%	.30 to .93	.51 to .54				

	TABLE 3	
Moderator Ana	lysis: Industrial Rela	tions Typologies

a Sample-size weighted mean correlation

b Sample-size weighted mean correlation corrected for attenuation on union and company commitment measures

 $(r_b = .62 > r_b = .23;$ statistically significant). According to Hunter and Schmidt (1990), a moderator effect would be indicated if correlations vary from subgroup to subgroup, and the average of the corrected variance in the subsets is lower than the corrected variance for the total set of studies. In this analysis the corrected correlation between company and union commitment is almost three times as large in the Type II countries as in the Type I countries. Both confidence intervals are quite narrow, confirming the accuracy of these effect sizes. The confidence intervals do not overlap, confirming the presence of the moderator variable (Hunter and Schmidt, 1990). The credibility intervals for both samples did not include zero but were sufficiently wide to warrant additional moderator analysis (Whitener, 1990).

A second moderator analysis was conducted to assess within group differences. Table 4 compares Canada with the United States and also compares Japan with Sweden. The results provide partial support for our hypothesis regarding within group differences. There is no difference between the commitment relationships in Canada and the United States ($r_b = .22$ and $r_b = .23$) and the confidence intervals overlap. However, there are differences between Japan and Sweden ($r_b = .66$ and $r_b = .21$) and the confidence intervals do not overlap. The results also suggest that our initial moderator analysis masked important differences among these four countries. The moderating

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k	N	Γ _a	гь	Variance due to sampling error	Unexplained variance	90 percent credibility interval	95 percent confidence interval
				Unite	ed States		
14	4,630	.19	.23	18.85%	81.15%	.06 to .39	.17 to .22
				Ca	anada		
6	766	.19	.22	8.87%	91.13%	19 to .64	.12 to .26
				Sv	veden		
21	1,218	.17	.21	33.92%	66.08%	07 to .49	.11 to .22
				J	apan		
29	7,379	.59	.66	14.17%	85.83%	.51 to .80	.57 to .60

TABLE 4 Moderator Analysis: Within Industrial Relations Typologies

a Sample-size weighted mean correlation

 ${}_{\mathsf{b}}$ Sample-size weighted mean correlation corrected for attenuation on union and company commitment measures

relationship is confirmed, but two-thirds or more of the variance remains unexplained across all countries. Both the credibility intervals and the amount of variance unexplained support additional moderator analysis.

Discussion and Conclusions

In this meta-analysis we found a stable, positive relationship between company and union commitment in all countries. Results shown in Table 2 support our first hypothesis; almost 95 percent of the variance is unexplained. Our second hypothesis was supported when Type I and Type II countries were contrasted. The correlation between company and union commitment was approximately three times as large in the latter as the former. These results highlight the salience of the distinction made between the adversarial and consensual labor-management relationships suggested by Bamber and Lansbury's (1983) typology.

Results shown in Table 4 provide partial support for our third hypothesis. In the comparison between United States and Canada, their respective industrial relations systems did not moderate the company-union commitment relationship. In contrast, differences between Japanese and Swedish systems did moderate the commitment relationship. The strength of the company-union commitment relationship in Japan accounts for the difference between our Type I and Type II countries. The corrected mean correlation (.21) for the Swedish sample parallels those found in the Canadian and U.S. samples (.22 and .23, respectively). This similarity suggests three possibilities: (1) the typology is inaccurate, (2) we have applied the typology inappropriately, or (3) a transformation has occurred in the Swedish industrial relations system. These results may be explained by changes in the Swedish system that shift its classification from a Type II to a Type I country. Bamber and Lansbury (1987) assert that industrial relations systems are not immutable. Significant changes in key features in Sweden's system have been noted: increased conflict between employers and unions (Hammarstrom, 1987) and a long-term trend towards decentralization (Lash, 1985).

Although our results support the utility of Bamber and Lansbury's (1983) typology and confirm that the strength of the commitment relationship varies with a cooperative versus adversarial industrial relations system, what is the practical significance of the effect sizes found for each country? Our analysis suggests that in Canada, Sweden, and the U.S., neither management nor labor need be particularly

concerned (or hopeful) that efforts to create unilateral commitment will have an impact, positive or negative, on their workplace partner. Given the strength of the commitment relationship in Japan, we would suggest that it would be in the best interest of both parties to attend to efforts that have an impact on either group's commitment. These results are consistent with Angle and Perry's (1986, p. 44) contention that commitment to both company and union "grow where the relationship between systems is cooperative."

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DISCUSSION

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The Delaney and Feuille paper provides a good introduction to the topic of nonunion grievance and arbitration procedures. The independent variables included as determinants of grievance and arbitration procedures are well thought out measures of firm, occupation, and industry characteristics. A table showing the correlations among these exogenous variables needs to be added to the paper. Revealing these relationships would be interesting and helpful to the reader. As it stands, the authors do not clarify whether there were any signs of multicollinearity among the three indirect measures of "union avoidance rationale." The study results reveal that partially unionized firms have a significantly lower likelihood of having a grievance procedure at their nonunion facilities compared to completely nonunion firms. This finding needs to be discussed further. In particular, the authors need to clarify why there is not a spillover effect. Perhaps firms using a double-breasting strategy attempt to reduce short-term costs by not providing a "voice" mechanism. A discussion on this issue would add to an already interesting and well-written paper.

The Martocchio paper provides a good review of the relevant literature and a coherent development of the research hypotheses. The within-subjects experimental design is an appropriate design for examining the disciplinary decisions of supervisors. The methodology is presented in a clear straightforward manner, which will help researchers not familiar with this approach to become familiar with this type of research design and analysis. The findings reveal considerable variance across subjects on the absence approval and absence history coefficients which were significant in the pooled sample (n = 768). This cross subject variance needs to be discussed further and the implications explored. In addition, the author needs to

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explain how one supervisor could be so inconsistent as to only have six percent of the disciplinary decision-making variance explained by a within subject regression equation. The author's suggestion for future research to explore the antecedents of disciplinary decisions should help to answer this question, but the author needs to discuss the inconsistencies across supervisors further in the present paper. The paper's conclusion needs to be expanded. Further discussion of the research findings is needed to provide some closure before moving into future research issues. Overall, the paper is quite interesting and methodologically sound.

The Young, McHugh, and Reed paper needs an introductory section. As it stands, the topic is not introduced and the reader is thrust into the literature review. While the general idea of a cross-national study of organizational and union commitment is appealing, I am troubled by the basic research design. In particular, I disagree with the grouping of Japan with Sweden as a "Type II" country. Japan has a decentralized enterprise union approach compared to a highly centralized union structure in Sweden. The classification scheme used ignores union density differences across the four countries studied (U.S., Canada, Japan, and Sweden). Furthermore, variations in legal and cultural environments among the countries are not considered. Why not develop hypotheses for company and union commitment by country? It is not surprising that the authors find within-group differences for "Type II" countries for the reasons stated above. What is most interesting and somewhat puzzling is the finding that the commitment correlation coefficient for Sweden is not different from the U.S. or Canada! This requires an explanation and discussion.

DISCUSSION

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These three papers are all very good and should, in expanded version, be published in some very good journals. I will focus my comments on what I would like to see in those expanded versions.

The Feuille and Delaney paper covers a very important topic and does a good job of it. The weak part of this paper is the theoretical development. Much more needs to be done to specify why the variables would be expected to lead to/not lead to the creation of grievance procedures. Furthermore, the material presented regarding whether grievance procedures will be extended to cover management or whether binding arbitration will be offered should be included.

The last point is particularly troublesome because the factors underlying the offering of grievance procedures are very different from the factors underlying offering binding arbitration. In nonunion systems the rights are very limited. The issue here is whether management maintains control over the outcome. The typical grievance procedure concerns solving issues in-house, providing escape valves to let off steam, etc., i.e., issues that can be easily configured into win-win or gain-gain processes. Arbitration is an entirely different matter. There are both cost and control issues at work. The cost of having an arbitration can be very high. Yet this may not be as high as the expense of creating precedent and the loss of control. It is not surprising that some of the independent variables signed opposite in these equations. Factors leading to the creation of grievance procedures to resolve problems in-house, i.e., with great flexibility to meet the parties' needs, are not the same as those leading to the formalization, expense, and loss of control represented by binding arbitration. This theory should be developed and added to this paper.

Other minor issues are: information as to data distributions/characteristics should be provided. You should discuss why the logarithms

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of firm size and assets/employee were used. Anil Verma (1985) wrote a piece regarding capital allocation to union/nonunion plants that may add to your discussion.

We are still left with an unanswerable question: To what extent do good, informal problem resolution systems exist? Also, under what conditions do they work? Are problems formalized in nonunion situations only after the informal system has failed? If anyone answers these and similar questions, the value of research in this area will be immensely increased.

The Martocchio paper has well grounded theory, an interesting experimental design, and a few intriguing findings. However, there are a number of problems with the methodological design and the data analysis.

The conceptualization and operationalization of the independent variables as dichotomous pairs is what allows this research design to work. The drawback, however, is that one must cut each pair at some point along the construct's continuum. The resulting distance (psychological or otherwise) along the continuum between the pair is then uncontrolled, imprecise, and unmeasured. This is particularly problematic when it is necessary to pool responses across individuals. The significance of the results is very dependent on the mean, variance, and significance, across individuals, of the distance from one category to another. The N of 12 then becomes a serious constraint. Reviewing Frank Bass' work on pooling cross-sectional data may provide guidance here. A MANOVA or categorical model would better address this issue as well as the next.

The construction of the dependent variable represents similar problems. As the distance from category to category is not expected to be consistent across the response space, ordered probit (or logit) is the preferred estimator in a similar design. You may find that some of the nine categories are not significantly different and need to be collapsed.

The unstandardized coefficients and their errors need to be included so that readers can draw their own inferences. The variability across respondents leads me to the conclusion that moderate support is available only for significant impact of absence history and approved/not approved. There is too much variation in the other variables to support the conclusions found using regression.

The Young, McHugh and Reed paper makes a marginal contribution to a literature that is already packed. It is a well-written, well-executed study. The theory is well thought out and highly compelling. The data analysis is excellent. This work is very thorough.

I have only three suggestions. First, the comments concerning Whitener's work on credibility should be expanded. This topic is important enough to this study, and the work unfamiliar enough to most readers, that more depth would be helpful. Second, and related, the process of correction of both the standard deviation and the correlation (which determine the credibility statistics) need to be specified and expanded. This is a minor point but will also provide some insight into the above. Third, and more importantly, identification and specification of the moderators are theoretical issues. Choices must be made, and tests can be conducted, as to which particular moderators better explain the differences in correlation and why. The choices of moderators in this study (aspects of the industrial relations systems in particular countries) are solidly based in compelling theory. Lack of data to specify other possible moderators that may be equally as compelling may lead to slightly misspecified moderators. Factors such as type of work, social status of the work, employment conditions, the specifics of the HRM processes used by the employer, the quality of those processes, education, etc., have all been hypothesized and/or empirically supported as affecting dual allegiance/commitment. Not including these factors may lead to some misspecification. It was good that you expanded upon the Bamber and Lansbury typology in your presentation. You should conduct more specific tests of those relationships.

A point you addressed in your presentation was the differences between commitment to the union, commitment to the company, and commitment to both. There are a variety of factors that affect each of these three different constructs. You should include this material in your revision.

In sum these are three very good papers that survived strong competition. The authors should be congratulated for their efforts.

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XXI. CHANGES IN LABOR RELATIONS AND LABOR MARKETS IN EASTERN EUROPE

Gross Flows in a Labour Market in Transition: Panel Data Estimates from Eastern Germany

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The process of transition between plan and market has been associated with very sharp falls in output. Explanations have pointed to the collapse of the CMEA trading bloc and a decline in domestic demand associated with significantly reduced real wages (Gomulka, 1991; Schaffer, 1991). Akerlof et al. (1991) have also pointed to the "price-cost squeeze" that East German enterprises experienced due to monetary union at favourable terms for consumers, but not producers. In terms of the labour market, transition will imply increases in unemployment, both because of the higher outflow from employment and from a decline in inflows to employment as the harsher financial climate reduces the ability of even potentially profitable firms to recruit new workers. Analysis of the Polish situation (see Góra and Lehmann, 1991) also suggests that labour market transitions will be accompanied by moves out of the labour force by certain groups, most notably women, associated with changes in the benefits system.

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Economic transition entails displacement of workers in the socialized sector and their ultimate absorption in the private sector. The analysis of flows and their determinants is, therefore, particularly useful. In the East German case, large amounts are being spent on labour market policies for which flow analysis might also be helpful; for example, certain subpools of the unemployed characterized by low unemployment outflow rates could be identified and targeted. Our aim in this paper is to use the first available longitudinal panel on workers in transition to quantify and explain the flows between various labour market states. The first section describes developments in the East German labour market since July 1990, while the second section discusses data and estimation procedures. The third section presents and interprets the results. The main findings are summarized in the final section.

Developments in the East German Labour Market

Since the collapse of the former German Democratic Republic (GDR), employment has fallen from 9.2 million in September 1989 to 8 million in November 1990 and 7.1 million in July 1991 (see Bosch and Knuth, 1991; and Emmerich, 1991). This last number excludes 400,000 employed residents who commute to West Germany. There are no certain figures on migration, but there are estimates of about 10,000 net outward migrants per month in 1991. The true fall in the demand for labour is even greater than this. As Table 1 shows there has also been widespread use of "short-time work" (Kurzarbeit). The full-time equivalent of unemployment calculated from the stock of "short-time workers"¹ (FTEUSW in Table 1) has been persistently higher than open (registered) unemployment. People on training and job creation schemes, i.e. active labour market policy (ALMP) measures, would in the absence of these schemes be unemployed. In adding these two groups and full-time equivalent unemployment connected with shorttime working to open unemployment, we arrive at the stock of total unemployment.² Open unemployment rose gently throughout the period, while total unemployment jumped dramatically in August 1990 (caused by a sharp rise in short-time work) and showed an upward trend until June 1991. Until this last date, the gap between the two stocks widened and then remained virtually constant for the rest of the period. Finally, a widening gap between "additional unemployment" and total unemployment since April 1991 indicates the rising importance of open unemployment in the stock of all unemployed. At

TABLE	1
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July 1990-October 1991										
Month	U	Short	Vac	Train	JCS	FTEUSW	AdU	Tot U•		
			I	n Thousan	ds					
7/90 8/90 9/90 10/90 12/90 1/91 2/91 3/91 4/91 5/91 6/91 7/91 8/91	272.0 361.3 444.9 536.8 589.2 642.2 757.2 788.0 808.4 836.9 842.3 842.5 1068.6 1063.2	556.3 1499.9 1728.0 1703.8 1709.9 1794.0 1840.6 1947.1 1989.8 2018.9 1968.5 1898.9 1610.8 1448.8	27.7 20.4 24.3 24.7 23.8 22.6 23.0 20.8 20.9 22.9 25.3 31.7 40.3 43.6			242.4 653.5 752.9 755.0 793.2 866.3 956.3 1061.2 1104.6 1119.1 1102.0 1078.1 903.1 818.7	242.4 653.5 752.9 755.0 818.3 915.4 1058.0 1221.0 1335.0 1414.4 1454.6 1498.7 1426.2 1404.6	$\begin{array}{c} 514.4\\ 1014.8\\ 1197.8\\ 1291.8\\ 1407.5\\ 1557.6\\ 1815.2\\ 2009.0\\ 2143.4\\ 2251.3\\ 2296.9\\ 2341.2\\ 2494.9\\ 2341.2\\ 2494.9\\ 2467.8\\ \end{array}$		
9/91 10/91	1028.8 1048.5	1332.5 1199.5	43.0 41.1	350.5 375.0	313.0 348.4	758.6 671.4	1422.2 1394.8	2450.9 2443.3		
10/91 1048.5 1199.5 41.1 375.0 348.4 671.4 1394.8 2443.3 • U — Open unemployment; Short — Short-time workers; Vac — Vacancies;										

Vacancy and Unemployment Stocks East German Labour Market: July 1990-October 1991

Source: Bundesanstalt für Arbeit (BA) and own calculations.

Note: Stock figures are end-of-month data.

the end of the period the open and the total unemployment rates were stabilized at around 12 percent and 28 percent respectively.

Additional information can be obtained from the aggregate data on flow variables in Table 2. Inflows into open unemployment from the employment state are almost always higher than outflows. There were large temporary increases in inflows. Large layoffs occurred after the first all-German elections in January 1991 and in July 1991 when shorttime work contracts for many workers expired. Table 2 shows that inflows into training schemes are nearly as large as outflows from open unemployment. We can conjecture that many of the unemployed flowing out of open unemployment move into training schemes. From April 1991 the combined inflows into training and job creation schemes are *larger* than outflows from open unemployment. This can be explained by the modified regulations governing the application of

TABLE 2

		, ,					
Month	lnfl	lnfl/emp	Outfl	InVac	OutVac	Place	Train•
			In Tho	usands			
7/90	13 2 .0	118.3	2.1	8.8	22.3		_
8/90	107.0	95.9	17.7	10.4	17.7		
9/90	107.1	102.0	23.5	18.6	14.6	_	_
10/90	121.9	119.3	30.0	24.2	23.7		—
11/90	94.0	92.1	41.6	23.3	24.3		—
12/90	95.4	93.7	42.4	<u>22.2</u>	23.3	<u> </u>	
1/91	174.3	172.1	59.3	31.5	31.1	25 .9	38.2
2/91	92.8	90.1	63.0	29.6	31.7	26.2	45.5
3/91	91.2	88.6	69.8	35.6	35.5	29.9	55.0
4/91	109.4	107.4	80.8	49.4	47.4	42.8	73.0
5/91	78.7	77.0	73.3	55.3	52.8	47.4	69.5
6/91	81.8	79.6	81.6	74.1	67.6	61.1	81.3
7/91	324.9	318.9	98.7	113.1	104.6	95.9	95.6
8/91	86.8	83.7	92.2	93.1	89.8	82.6	78.1
9/91	94.5	90.8	129.0	92.6	93.2	86.9	85.7
10/91	129.4	127.0	109.7	70.6	72.4	66.2	91.9
• Infl	_ Ir	flows into ope	en unemnl	ovment			
Infl/emp		flows into ope			om employn	ent.	
Outfl		utflows from				ient,	
InVac		flows of vaca		ipioyment	,		
OutVac		utflows of vacal					
Place		b placements		ument offi	005.		
					ues,		
Train		flows into trai		nes;			
	- N	lo data availab	le.				

Flow Variables in the East German Labour Market: July 1990-October 1991

Source: Bundesanstalt für Arbeit.

ALMP in East Germany. In contrast to West Germany, persons need not be on the unemployment register to qualify for an ALMP measure. We have no way of telling how much of the outflow from open unemployment is flow out of the labour force, inflow into employment, and outflow into ALMP measures. This and the low-informational content of the available aggregate flow data make it impossible to calculate the magnitudes of transitions between states using aggregate data. Our panel data set, on the other hand, allows us to estimate gross flows between states and to analyze the determinants of labour turnover. We undertake this in the next two sections.

Data and Estimation

The data are taken from a survey of 10,000 randomly selected individuals who were residing in the former German Democratic Republic in November 1990. The respondents were reinterviewed four months later, and it is these responses that enable the construction of a transition database.³

The labour market is divided into three sectors: employment (E), unemployment (U), and outside the labour force (N). People on training measures are combined with the unemployed. Our data set does not allow us to distinguish participants of job creation schemes and regularly employed people. We follow Marston (1976), Toikka (1976), and Clark and Summers (1979, 1982a, 1982b), among others, in assuming that movements between states are governed by a Markov process. Hence the probability of transition depends only on the state currently occupied. Three states implies nine potential transitions where UE_i, for example, represents the probability that an individual is observed employed at time t, conditional upon being unemployed at time t–1. The gross probability of transition from state i to state j is given by

(1)
$$P_{ij} = \frac{F_{ij}}{S_i} \qquad i, j = e, u, n,$$

where F_{ij} is the number of individuals in state i in November 1990 and in state j in March 1991, while S_i is the origin stock in November 1990. The duration of state occupancy is given by the reciprocal of the outflow rate:

(2)
$$\frac{1}{\sum_{j} P_{ij}} \qquad j \neq i$$
.

Individual transition equations are estimated by multinomial logit regression. The Markov probability of moving between states of the labour market is then a function of place (November 1990). Separate equations for men and women are presented since the labour market facing the two groups is quite distinct.

Results

Table 3 presents gross transition probabilities of various age and sex groups into all three states over a four-month period. If the transitions were governed by a pure Markov process (homogeneous, stationary rates), then each individual would face transition probabilities given by row 1. The majority of individuals remain in the same state over the sample period, as evidenced by the high figures for EE, UU and NN. However, a substantial proportion of workers both entered and left employment over the same period. The estimated

TABLE	3
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Probability of Transition										
Sex and Age	EE	EU	EN	UE	UU	UN	NE	NU	NN	
1) Total	.931	.043	.026	.150	.714	.136	.059	.023	.918	
2) Male 3) Female	.942 .921	.033 .052	.025 .027	.199 .116	.632 .771	.169 .113	.037 .069	.013 .027	.950 .904	
Males 4) 16-24 years 5) 25-49 years 6) 50-64 years	.934 .945 .913	.043 .028 .029	.023 .027 .058	.333 .220 .096	.541 .568 .543	.126 .212 .361	.096 .014 .007	.016 .010 .003	.888 .976 .990	
Females 7) 16-19 years 8) 20-49 years 9) 50-59 years	.899 .932 .861	.069 .052 .053	.032 .016 .086	.122 .069	 .737 .563	.141 .368	.145 .058 .008	.043 .026 .006	.812 .916 .986	

Labour Market Transition Probabilities by Sex and Age: November 1990-March 1991

E = Employment, U = Unemployment, N = Not in Labour Force. Sample sizes: E = 3271, U = 202, N = 458 men, E = 3052, U = 293, N = 1025 women. — Indicates no transition observed.

four-month employment outflow rate of 6.9 percent (EU + EN) compares with an annual figure of 7.0 percent observed for Great Britain (Wadsworth, 1989) during the recession of the early eighties and a figure of 5.3 percent for the United States in 1974 (Clark and Summers, 1982a). Given a rapidly declining stock of employment, four-month rates are certainly smaller than annual rates. The employment outflows in the former GDR are therefore taking place at a far higher rate than in Western economies in recession. Most of these outflows are a result of labour shedding, but a small proportion of these flows may be voluntary. The existence of severance packages financed by the Treuhand may have encouraged early retirement among older workers.

The loss of employment is only partially offset by the creation of new jobs, the flows UE and NE. The relative magnitudes of employment inflows, the unemployed and out of the labour force stocks multiplied by the appropriate inflow probabilities, implies a *net* employment loss of 4.4 percent over four months, again higher than in the West. Both higher employment outflows and lower employment inflows contribute to this observation. Using equation (2), the average completed duration of unemployment is around 10 months. In Britain for 1983-84 the comparable figure was 19 months. In Britain the high proportion of long-term unemployed,⁴ who often had very long uninterrupted spells, contributed substantially to this figure. The relatively long average completed duration in East Germany at this stage of the transformation process is therefore very striking. Further, row 1 demonstrates that an unemployment spell is almost equally likely to end in a labour force withdrawal as in employment.

The existence of differential labour market experiences between men and women is highlighted by rows 2 and 3. Women are more at risk from loss of employment than men. At the same time, their chances of obtaining a job, the combined effect of UE and NE, are some five percentage points lower. In Britain, unemployed women have larger unemployment outflow rates than men, mainly because the pattern of job creation, mainly in service industries, favours the employment of women. As yet, job creation in the former GDR does not mirror this pattern. Women who remain in the labour force face a longer potential duration of unemployment than men, 13 rather than eight months, though labour force withdrawal is less of a permanent state for many women.

Rows 4 to 9 outline the influence of age on transition probabilities. As in the West, prime-age workers enjoy greater employment stability and labour force attachment. The duration of unemployment for many older workers is shorter due to an increased likelihood of labour force exit. Younger workers face preferential hiring rates.

Table 4 gives transition probabilities with a different disaggregation. The employment state is divided into nine sectors and unemployment and training schemes are shown separately. It is striking how small flows are between sectors, i.e., that direct reallocation of labour between sectors takes place on a very limited scale. For all sectors, we have positive net outflows from employment as employment outflows clearly dominate inflows into employment. The estimated four-month outflow rates from employment (EU + ES + EN) are highest for agriculture and other manufacturing, lowest for transport, finance, and metal manufacturing.

The multinomial logistic regressions underlying Table 5 attempt to identify the factors that explain the employment outflows in Table 3. It emerges that those workers most at risk from loss of employment are the least productive from the firm's outlook, i.e., relatively lower paid, on short-time work, and with a below-average level of job tenure. Men are most at risk if employed in establishments with over 1000 workers, while the opposite is observed for women. The greater propensity of younger and older workers to leave the labour force after losing a job is confirmed. It is striking to note that private ownership of the firm or its western control appear to make little

		Destination State: March 91										
Origin State	Agric	Mine	Metal man.	Other man.	Const	Distr	Trans	Fina	Other serv.	Unemp	Schem	NLF
Employment:	050		000	000	00.4							0.40
Agricult	.852	.915	.008 .006	.008 .006	.004 .006	-		_	_	.074 .035	.008 .003	.048 .029
Mining Metal man	_	.915	.006	.008	.008	_		.002	_	.035	.003	.029
Other man	_			.891	.002	_		.002		.019	.003	.013
Construct	.002	.002	.004	.009	.008	_		.003	_	.046	.004	.023
Distribut	.002	.002	.004	.003	.001	.912	_	.002	_	.040	.006	.017
Transport	.001		.001	.002	.003	.512	.967	_		.010	.003	.013
Finance	_	_	_	.002		_		.966		.010	.000	.011
Other ser	.001	_	_	.002	.005			.002	.939	.028	.004	.017
Unemployment	.009	.002	.017	.012	.012			.007	_	.709	.076	.156
Schemes	.038	_	.115	.038	_	_		_	_	.154	.654	_
Not in Labour Force	.006	_	.007	.005	.003	.003	_	.004	.003	.018	.003	.949

TABLE 4
Labour Market Transition Probabilities by Sector: November 1990-March 1991

Note: Sample Size = 8920. Scheme incorporates all participants on official training measures. - Indicates no transition observed.

		М	en		Women		
Variable	Sample Mean	dPeu/dx	dPen/dx	Sample Mean	dPeu/dx	dPen/dx	
Age: 16-19 20-24 50-64	.02 .08 .26	$-0.014 \\ -0.003 \\ 0.006$	0.040°° 0.006 0.040°°	.02 .07 .21	-0.036 0.007 0.006	0.010 0.031°° 0.064°°	
Education: Degree Semi Technik	.14 .05 .28	0.008 0.011 0.007	0.007 0.012 0.007	.10 .04 .32	-0.048°° 0.027 -0.023°°	-0.024 -0.027 -0.018°°	
Single Dep child	.23 .51	0.020°° 0.011	$-0.006 \\ -0.001$.25 .50	$-0.008 \\ 0.002$	0.008 0.005	
Industry: Constr. Mine. Distrib. Bank	.14 .08 .25 .07	$\begin{array}{c} 0.010 \\ -0.004 \\ -0.001 \\ 0.009 \end{array}$	-0.011 0.002 0.003 0.009	.03 .03 .44 .18	0.007 0.001 0.023° 0.012	$\begin{array}{c} 0.000 \\ 0.015 \\ 0.004 \\ -0.002 \end{array}$	
Firm Size (# of employe > 1000 100-1000	ees): .33 .37	0.022°° -0.007	0.017° 0.017°	.23 .38	-0.029°° -0.015	$-0.007 \\ -0.008$	
Private West	.46 .09	0.001 0.011	0.001 0.009	.33 .07	$\begin{array}{c} 0.003 \\ 0.015 \end{array}$	$\begin{array}{c} 0.000 \\ -0.001 \end{array}$	
Job Tenure: < 1 year 1-3 yrs 3-10 yrs	.15 .21 .08	0.005 0.003 0.020°	0.009 0.010 0.003	.12 .26 .09	0.023° 0.022°° 0.038°°	$\begin{array}{c} 0.009 \\ -0.004 \\ 0.007 \end{array}$	
Short-Time Log (Wage)	.21 7.02	0.020°° -0.006°°	0.019°° —0.005°°	.19 6.75	0.047°° -0.007°°	0.002 -0.003	

TABLE 5 Marginal Variable Effects from Employment

All regressors, with the exception of Log (Wage), are 0-1 dummy variables. Marginal effects given by

$$dP_j/dx_i = P_j[b_j - \sum_k P_k b_k],$$

where b_t are the estimated regression coefficients and the transition probabilities, P_t , are set at sample mean values given in rows 2 and 3 of Table 3.

- •• Denotes significant at 95% level.
 - Denotes significant at 90% level.

difference to this general pattern. This may be because the sample period is insufficiently long to incorporate any behavioral changes brought to a firm by a change of ownership.

Summary of Findings

Our results confirm that transition in East Germany was associated with a sharp rise in unemployment, primarily because of an increase in the flows of workers into the unemployment state. If we take into account short-time working and active labour market policies, the scale of the emerging unemployment problem is truly enormous and provides a worrying signal to countries embarking on the path of reform later or more slowly than East Germany. This is particularly so when one reflects that, while the exchange rate chosen was unfavourable, the East Germans have the advantage, relative to all other countries in transition, of direct access to Western capital, management, and know-how. The estimated average completed duration of unemployment, already quite long at the given stage of the transition process, points to the very real danger of a large component of long-term unemployment among the unemployed. We also find that, contrary to the assertion of those who fayour rapid privatization. labour market adjustment is not significantly affected by either private or foreign (West German) ownership. This could reflect the fact that either on average, state firms guided by the Treuhand, are adjusting to the new market conditions very rapidly despite state ownership, or that the controls and conditions laid down at the point of privatization prevent private owners from laving off workers faster than the state would have done. In the latter case, a difference in employment behaviour could emerge over a longer period.

Endnotes

¹ In official statistics short-time workers are partitioned into quartiles according to the percentage shortfall of full-time work. For example, workers who work between 75 and 100 percent of 39.5 hours are in the 0 to 25 percent category. Taking the midpoint of the proportions in each category and multiplying it with the stock gives us a rough estimate of full-time equivalent unemployment associated with each short-time workers category.

² In Table 1 we call the stock of persons in training and job creation schemes and the full-time equivalent unemployment associated with short-time working additional unemployment rather than hidden unemployment. The latter term is often used in the western economics literature to describe the above type of unemployment (e.g., Calmfors and Forslund, 1990). When discussing transition economies the term hidden unemployment is better reserved for the phenomenon of overmanning at the workplace.

³ There were two further waves, in July and November 1991. The data from these reinterviews, once available, will allow us to construct a more elaborate transition data base. The sample is not entirely random. Attrition between the two interview dates reduced the sample to 8,301 valid responses. The results should therefore be interpreted along with the caveat that it has proved difficult to control for any possible bias caused by the omission of nonrespondents and migrants.

⁴ In 1984, the proportion of long-term unemployment in Britain was 39.8 percent (Bellmann and Lehmann, 1991).

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The Changing Face of Labor Markets and Industrial Relations in Bulgaria

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The sweeping changes in Eastern and Central Europe have profoundly affected industrial relations and labor markets. In this paper major changes in Bulgaria are reported and evaluated, paying particular attention to developments from early 1991 until January 1992. The next sections discuss the major economic and political changes following the demise of the dictator Todor Zhivkov in November 1989, with an emphasis on those reforms and outcomes in areas for which data are available and which appear to have been most extensive, particularly unemployment, earnings, and trade unions. Inevitably in such a short paper I can only highlight some major themes. Moreover, given the fragmentary nature of the available data, some of the discussion necessarily must be tentative.

Political Changes: The Emergence of a Non-Socialist Government

The replacement of the dictator Zhivkov (after a bloodless coup in November 1989) was followed by the rapid emergence of political pluralism, much of which coalesced into the United Democratic Front (UDF). However, it was the Bulgarian Socialist Party (the BSP, formerly the Communists) that received a mandate in the free elections that followed in June 1990. For several months after the elections in 1990 the Socialists tried unsuccessfully to form a coalition government, and in September the BSP was forced to establish a oneparty government. During this time their popular support significantly eroded. This culminated in December with the fall of the Socialist government. Subsequently a coalition caretaker government headed by the UDF under Dimiter Popov emerged. Following new elections in October 1991, for the first time a non-Socialist party (the UDF) won

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most seats in the National Assembly. However, reflecting a polarization of politics, the Socialists gained almost as many seats as the UDF. Importantly, the smaller parties (some of whom were formerly aligned with the UDF) and including some centrist parties collectively polled almost 25 percent. Yet none secured any parliamentary representation since they each failed to gain the required 4 percent of votes cast. Thus the current situation is one in which the UDF, led by Prime Minister Filip Dimitrov, heads a minority government, and the balance of power is held by the Movement for Rights and Freedoms, a party mainly supported by ethnic Turks. Most recently in presidential elections in January 1992 the UDF candidate Zhelu Zhelev was victorious, though the BSP candidate received 46 percent of votes cast.

Macroeconomic Changes: The Emergence of Unemployment and Inflation

In the period since 1988 the official economic indicators point to a rapidly worsening situation (Jackson, 1991). Thus in 1989 the official annual rate of growth in net material product (NMP) was negative for the first time, and during 1990 the GDP is estimated to have fallen by 13.6 percent in real terms. In addition, open inflation and unemployment emerged for the first time. For example, in 1990 inflation rose rapidly with some estimates in excess of 50 percent (Planecon, 1991).

In the first half of 1991 the pace of economic reform had quickened with economic ministries led by UDF appointees. Following an agreement with the IMF, a program of heterodox (i.e., including an incomes policy) macro stabilization was introduced. At the heart of this program was the liberalization of most prices. As a result, according to preliminary data from the Central Statistical Institute, consumer prices are estimated to have risen by 111 percent during February and by 50 percent during March alone. A second spike in inflation followed further price reforms during the summer of 1991. However, in between these times, as well as since the summer, inflation seems to have moderated and to be running at no more than 2-4 percent per month. However, the slump has intensified. Preliminary official estimates show GDP falling by about 30 percent during 1991.

Reflecting an abandonment of a governmental commitment to full employment (as well as the reciprocal obligation of all able-bodied adults to be available for employment), open unemployment began to emerge in late 1990. Monthly data for those officially registered as unemployed for the period since July 1990 show a growing rate of unemployment and, for the most part, an accelerating rate of growth in unemployment (Jones, 1991). Thus, while the volume of unemployment at the end of 1990 was officially estimated at only 65,000 (a rate of about 1.5 percent), by March 1991 it had grown to about 3 percent, and by December it was estimated to be between 10 and 12 percent. Also there is substantial regional variation in the incidence of unemployment and the unemployed are disproportionately female.

Moreover, there is evidence that the official figures understate the true rate of unemployment. Many employees are counted as employed, even though they are on long-term unpaid leave. Also there is much involuntary part-time employment. At the same time there is preliminary evidence that many employed individuals have more than one source of labor market income and that some of the "unemployed" are, to some extent at least, earning income that is not reported.¹ On these and similar matters it is clear that much more careful survey work is needed to develop a clearer picture of the true labor market dynamics. Equally, since as yet there has been so little structural change, it seems clear that most unemployment has resulted from the implementation of stabilization policies. As budget constraints on enterprises harden further, much more structural unemployment can be expected. The process of structural adjustments leading to labor-shedding can be expected to accelerate once a privatization law is in place. Consequently, unless the private sector is able to grow at a dramatically faster rate than hitherto (see Anachkova, Jones, and Parchev, 1992), unemployment rates of more than 20 percent are quite possible by the end of 1992.

Incomes and Payment Systems

Under the centrally administered system, wages were fixed centrally and labor unions did not participate substantively in that process. Most employees were paid a predetermined amount that did not vary with, for example, enterprise performance. Typically wages surprisingly constituted only between 10 and 17 percent of total production costs. Wage differences, though often larger than commonly supposed (Jones, 1991), were typically unrelated to productivity. Since the fall of Zhivkov there have been major changes in most of these procedures with consequent changes in outcomes.

Until June 1991, while Bulgaria still was formally characterized by a centralized system of wage determination, a "loosening-up" process began. While the provisions of the labor code remain unaltered since the Zhivkov era, the centrally determined agreements were, in fact, being treated only as a general guideline. After this, especially on matters such as working conditions, it was as if there was a second round of agreements that were more responsive to local conditions and concerns. The emergence of waves of strikes in pursuit of economic interests (Jones, 1992) clearly played a part in precipitating these institutional changes.

There were also significant changes at the top level in the way in which incomes were fixed. The year 1990 saw the beginning of a form of institutionalized tripartitism whereby the union confederations formed social partnership arrangements with the government and representatives of "employers" to hammer out various agreements including an "incomes policy." But perhaps the change that is likely to have the most long-lasting effect was the resumption of firm-level collective bargaining in June 1991. Following a government decree, all firms were required (for the first time) to conclude contracts at the enterprise level on issues relating to the terms and conditions of employment.

On some of these matters, e.g., the nature and content of collective contracts, the available data as yet are very fragmentary and the outcomes remain unclear. However, while specificity is often lacking, in some key respects we see that the economic changes previously discussed (in conjunction with these major institutional changes) already have had clearly visible implications for real incomes and their distribution. For example, it is estimated that, on average, since 1989 real wages have fallen by 50 percent—considerably more than the 30 percent that was predicted by the signatories of the social partnership. Real incomes of pensioners have fallen by a similar or perhaps even a greater amount. In turn, this has led to even more of a "leveling effect" on incomes for workers in state firms. At the same time and as expected, there is evidence of changing wage relativities as the shift to a mixed economy continues. Thus in a pilot study of executive compensation, evidence was found that chief executives, who under the command system seldom were the highest paid, were now emerging more and more as the top earners.²

The Transformation of Industrial Relations

The political and economic changes described above have had significant effects on the system of industrial relations.³ Even before the elections of October 1991 (and the subsequent emergence of a UDF minority government), from November 1989 thru June 1990 there were several crucial developments in the Bulgarian industrial relations system, the net upshot of which was to radically transform the whole apparatus. A fundamental development was the transformation of the erstwhile statist (BTU) unions into a new grouping (CITUB) that strives to represent the interests of its members and is independent of any political party (Jones, 1992). As part of this apparently unprecedented process,⁴ we witness changes such as a marked decentralization of the former centralist unions.

Another key change has been the emergence of trade union pluralism. An entirely new federation, Podkrepa (Support), appeared in 1989 (Jones, 1992). In November 1990 it organized a general strike that was instrumental in leading to the collapse of the Lukhanov government. While CITUB and Podkrepa are by far the most important, they are not the only organized representatives for Bulgarian workers. There exists a handful of unions that do not belong to any federation and other federations, notably Edinstvo (Unity), which has close links with the BSP.

A third major development was the emergence of tripartite structures. The initial development in this process took place in March 1990 (during the Lukhanov government and the conclusion of a socalled general agreement between the CITUB, the government, and the National Union of Economic Managers). This was followed by the conclusion of an Agreement on Social Peace in January 1991 with CITUB, the government, and Podkrepa. This included a no-strike pledge and acceptance of wage cuts averaging 30 percent, reflecting conditions suggested by international lenders. It has since proved quite clear that the existence of this agreement played a crucial role in the implementation stage of the economic reforms. In order to implement the provisions of the agreement and continue the process of social partnership, a standing body, the National Council for the Coordination of Interests, was established. This tripartite institution (with representatives from organized labor, the government and the employers) emerged in April 1990 and has seven subcommittees (e.g., on privatization). Moreover, these social partnership arrangements were subsequently reaffirmed in June 1991 with the passage of the Agreement on the Further Course of Economic Reform and the Preservation of Social Peace.

However, beginning in November 1991 under the Dimitrov government, Bulgarian industrial relations entered a new era. The key development was the decision of the government to confiscate the assets of the trade union movement. As such this action represented a marked change over activities during the election campaign. Then the UDF vowed to confiscate assets of former communist organizations but not those of the trade unions. Moreover, this action was supported by Podkrepa. The new government has also introduced measures by which it deemphasizes the role played by the tripartite machinery that had been evolving since early 1991. Another important development is the splitting of Podkrepa. On January 5, 1992, following unsuccessful attempts to force the entrenched leadership to change its allegedly undemocratic and overtly political policies, the opposition wing (representing about one-fifth of total Podkrepa membership) formally separated from the main body.

Assuming that the government continues with these policies, the likely net effect will be to seriously weaken the strength of CITUB relative to Podkrepa. Another consequence will be to further fragment the labor movement-in particular, to heighten tension in already strained relationships between Podkrepa and CITUB. However, it is less clear what, in the long run, the government expects will be the consequences of these actions. At a minimum it seems that the vision is one in which organized labor has much less of a central role to play than was the case under the previous emerging corporatist arrangements. As such this may be at odds with the wishes of the working population, the majority of whom arguably wish to see trade unions continuing to play an important role in contemporary Bulgaria, especially one in which the political middle ground is weakly represented.⁵ The continuing commitment of members to unions is also reflected in membership data. After an initial drop in union membership (i.e., following the demise of the statist BTU unions which essentially enjoyed 100 percent membership levels), the best available evidence suggests an overall membership rate of about 70 percent. The bulk of these members (2.3 million) are in unions associated with the CITUB (compared to about 500,000 in Podkrepa).

Conclusions

While there are important gaps in our knowledge and recognizing that the situation in Bulgaria has been and continues to remain very volatile, it is apparent that there have already been significant changes in Bulgarian labor markets. In some respects the Bulgarian case is similar to other experiences in Eastern and Central Europe, for example, the shift from economies characterized by labor shortage to states of massive labor surplus.⁶ But the nature and extent of the changes in labor relations seems to be qualitatively different than elsewhere. In particular, the demonstration, at least by key leaders of the CITUB unions that they have nothing in common with the old (BTU) unions and that they can act independently of Socialist parties and contribute to broader social reform, seems unparalleled.

While real change has occurred, it is less clear what the future direction of change will be. Concerning the evolution of labor unions and industrial relations, much depends on the specific policies of the new government. For example, what happens to the assets formerly owned by the trade unions will be of great importance to the composition and overall strength of organized labor. Both labor unions as well as labor markets will be vitally affected by the particulars of the law on privatization. For example, Parvulov (1991) argues that a privatization law should provide feasible incentives for employees to assume significant ownership stakes. If this happens together with institutional arrangements that build on previous experiments and provide for significant employee participation (Jones and Meurs, 1991), this could have major implications for the functioning of labor markets and the organization of work.⁷

But in all of these matters it is clear that our factual knowledge of a very dynamic situation leaves much to be desired. It is important therefore to develop improved survey methods in order to improve our knowledge of what precisely is happening in Bulgarian labor markets and in the nature and pattern of institutional changes.⁸

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Endnotes

 $^{\rm I}$ This is based, in part, on work in progress by the author and Bulgarian collaborators.

² This is based on interviews with executives in 13 firms during June-November 1991. The results that form the actual survey of a sample of executives in about 100 enterprises are expected to be available in December 1992.

³ The best account of the system as it was until the late 1980s is Petkov and Thirkell (1991).

⁴ Previous attempts at such reforms from within were always unsuccessful in Eastern Europe. For the case of Czechoslovakia in the late 1960s see Windmuller (1971).

⁵ For example, data drawn from diverse attitudinal studies suggest this conclusion.

⁶ For example, compare with those country experiences reviewed in the July 1991 issue of *International Labor Review*, edited by Standing and Sziraczki. For broader comparisons see Sturmthal and Scoville (1973).

⁷ See, for example, Blinder (1990).

⁸ To this end the author, in collaboration mainly with Bulgarian social scientists, is currently undertaking a series of related surveys on issues such as labor market flexibility, transitions in the labor market (especially by following a panel of the registered unemployed), and the changing nature of executive compensation.

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Transformation of the Hungarian Industrial Relations System

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Recent events in Hungary give us an unprecedented opportunity to analyze the strategic choices of a new, freely elected government in a country ruled by a Communist party for 42 years. In April 1990, Hungary (population 10.5 million) elected the Hungarian New Democratic Forum (NDF), a conservative quasi-paternalistic party. In coalition with two small right-wing parties, it declared its determination to create a "social" market economy: a market economy with an adequate social safety net. At the time of the election, Hungary already had private businesses which produced 10 percent of the GDP in 1989 (Illes, 1990), a stock exchange, and state-owned commercial banks.

Hungary, like other Eastern European countries, is now experiencing a prolonged recession. It also has the biggest external per capita debt in Eastern Europe (\$2054 in U.S. dollars) (Hungarian Statistical Institute, 1990). The economic crisis is mainly the product of the old centrally planned economy. Two new factors further contributed to the crisis in 1991: the collapse of the COMECON market (Hungary's principal trading partners) and the recession in world markets (Erdos, 1991).

Against this political and economic background, this paper examines the transformation of Hungary's industrial relations system. Its aim is to facilitate further policy and theoretical analysis by providing a concise description of these changes.

Changes in Hungarian Unions

Until 1987 only one national trade union organization existed in Hungary, the Central Trade Union Council (CTUC), based on the

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"one company-one union" model. At the company level, workers elected shop stewards who in turn elected a company trade union committee. Company committees formed district trade union bodies, which in turn were represented at the national level by 19 industry federations, the members of the CTUC. The CTUC was based on the principle of democratic centralism—decisions of higher level organizations were binding on lower levels.

The trade unions' role in Socialist Hungary was both to promote production and at the same time defend the interest of workers. Company-level unions concluded collective agreements with local management. However, the government's extensive regulatory regime covering almost every aspect of employment substantially curtailed the scope of collective bargaining. Unions were not independent of the Communist party. Until the middle of the 1980s the prevailing ideology was that unions, the state, and the party had a common objective: to build a Socialist society.

The CTUC participated at the national level in the determination of living and working conditions through regular meetings with government representatives and as a member of the tripartite Wage and Labor Council. The General Secretary of the CTUC also attended cabinet meetings in an advisory capacity and had veto power on matters affecting labor. In case of disagreement between the government and the CTUC the party made a final decision.

Worsening economic conditions in the mid-1980s drastically changed the role of trade unions, most notably in the formation of new independent (of the CTUC) unions. The first such union was established by scientists and others employed in the field of scientific research. Others quickly followed, as many employees felt the CTUC's close ties to the Communist party seriously hindered its ability to represent their interests.

These new unions forced the CTUC to abandon its close ties to the Communist party and to reorganize itself on a federational basis in early 1990. However, its structure at the workplace remained the same, leaving the new unions with the problem of how to gain a foothold at the company level. Some used a provision of the modified Labor Code of 1989 (which granted participatory rights in firms' management to employee groups) to legitimize themselves at the workplace through the formation of works councils. This alternative route was necessary as the code gives the trade union that represents the majority of employees (usually still the CTUC union) the right to collective bargaining. In other cases, existing sectoral unions severed their ties with the CTUC and became independent. By September 1991 six new national federations of independent trade unions existed with an overall membership of 1,635,000 (Heti Vilaggazdasag, 1991). While membership in these organizations is increasing (by about 25 percent since December 1990) it does not compensate for the membership loss of the National Coalition of Hungarian Trade Unions (successor to the CTUC), whose membership has declined from over four million to just two million. While it seems clear that the overall unionization rate has declined from about 95 percent in 1984 to approximately 80 percent in 1991, there are conflicting data about the current rate. Based on the numbers supplied by the unions themselves, the current rate would be about 90 percent (Toth, 1991). However, other estimates are as low as 30 to 50 percent.

The new independent unions gained recognition at the national level after the new government took office. All seven trade union federations (including the CTUC's successor) participate in the tripartite Conciliation Council set up in August, 1990 (Herzogh, 1991). (This is in sharp contrast to its predecessor, the National Council of Conciliation, established in 1988, in which the CTUC alone represented labor.)

One consequence of the change is competition among unions for members and influence. Some union leaders allege that feuding among union organizations is fomented by the political parties that lack the unions' mass support (Hay, 1991). According to the movement's own evaluation, the unions' ability to represent their members' interests is weak at both the workplace and the national level, while representation at the regional or industrial level barely exists (Hay, 1991). The bargaining position of workers has been deteriorating steadily with the rise of unemployment and the accelerating decline of real wages (Figyelo, 1991).

Changes in Employee Participation Structures

Relatively little change has occurred in nonunion forms of worker participation, although important legislation is pending. Most stateowned companies are under the joint control of workers and managers, the main form being indirect participation through company councils. The councils control all major strategic decisions at the company level. At least 50 percent of council members must be employee representatives elected by secret ballot. Managers and professionals working for management can also be elected as employee representatives. In theory, company councils are supposed to replace impersonal state ownership with the "real owners," workers and managers. In reality they do not fulfil this expectation (Lonti, 1989).

With respect to companies not under state ownership, the Corporations Act of 1988 stipulates that, in joint-stock companies employing 200 or more employees, one-third of the supervisory board members should be employee representatives. However, the act does not specify the procedures for selecting employee representatives, and we have no knowledge of whether employees are exercising their representation rights.

Changes to Employer and Management Representation

Under socialism, workers and management shared substantial common interests. Managers, including CEOs, were union members along with the workers they supervised. However, companies enjoyed an additional avenue of national representation-the Hungarian Chamber of Commerce, a voluntary organization having about 750 affiliated companies in 1984, which is managed by an elective committee comprised of CEOs of the largest Hungarian companies. The chamber's main functions were to promote trade and exports, disseminate information, and represent management in negotiations with unions and government. It did not operate at the company level and was confined to a consultative role at the national level as a member of the Wage and Labor Council and, from 1988, the National Council of Conciliation. The chamber's president attended meetings of the cabinet, but the chamber was not invited to the regular meetings of the CTUC and the cabinet. Small entrepreneurs and agricultural, industrial, and consumption cooperatives had their own employer organizations which enjoyed the same consultative rights as the chamber of commerce.

The political and economic developments described above brought about changes in employer organizations. In 1989 CEOs of state-owned companies established an independent section of the Hungarian Chamber of Commerce. In 1990 the chamber of commerce reorganized itself and became a loose federation of regional, professional, and industrial management organizations, ending the direct membership of individual companies. The chamber now consists of 30 industrial and nine regional organizations, representing approximately 2,000 state-owned and private companies (Figyelo, 1990).

The representation of small entrepreneurs also changed. The National Federation of Entrepreneurs, established in the mid-1980s, has gained increased support with the growth of the private sector. The National Organization of Small Entrepreneurs abolished compulsory membership and renamed itself the National Association of Industrial Organizations. At the same time, new organizations such as the Manufacturers' National Association (MNA) have appeared on the scene. The MNA claims among its members the CEOs of hundreds of major state-owned companies, along with all major entrepreneurs.

By 1991 nine employer organizations were participating in the tripartite Conciliation Council. Some of these organizations are competing for the exclusive right to represent employers. However, this competition appears to be far less intense than that among unions.

Government Policies

Government legislation and policy regarding privatization, tripartite consultations with labor and management, and other issues pertaining to unions all have implications for Hungarian industrial relations.

Privatization

The new government announced it intended to privatize 2,180 of Hungary's approximately 2,300 state-owned companies (*The Economist*, 1991). It opposes the current joint control of state-owned companies by workers and managers through company councils, and plans to revoke these councils by the end of 1992 as part of the privatization process. It also ended companies' "spontaneous" privatization, alleging that managers profited by transforming their companies to joint stock ventures and cutting sweetheart deals with outside (sometimes phoney) investors.

The government decided to carry out privatization in stages, aiming to reduce the state sector from 90 percent of GDP in 1990 to 40 percent by 1995. The government's "Ownership and Privatization" program (September, 1990) created three routes for privatization: state-initiated privatization of selected companies, self-initiated privatization through a competitive process, and third-party-initiated privatization. Because of the slow pace of sales of state companies, the government is now planning to allow more "self-privatization" and encourage more foreign investment.

Although labor and management were consulted at the national level on privatization policies, the government's privatization initiatives did not provide for direct employee, union, or management participation in the process. Participation at the workplace level is nonexistent, except at firms controlled by company councils. In response to unions' demands for more input, the government's new "Agenda on Privatization" of October 1991 promises to examine options for information sharing and consultation with local management and employees. The draft labor code requires that plant councils be consulted on privatization. However, the first councils will not be elected before the summer of 1992.

The government's "Directives on Property Policies" creates an alternative avenue to worker ownership by allowing 15 percent of the stock of new companies to be sold to employees at 50 percent of the market price. Unfortunately, we do not have any information about the extent to which employees are aware of this possibility and, if they are, whether they are taking advantage of it. In the same vein, the "Agenda on Privatization" calls for the development of an Employee Stock Ownership Program.

Tripartite Consultations

Under the Communists, government was a major player in the industrial relations arena. A logical consequence of the political change is the gradual reduction of extensive government control of the society and the economy, and a redefinition of the "rules" governing industrial relations, including the role of the government in tripartite consultations.

Industrial relations seems a priority for the new government. It restored the Ministry of Labor (only a lower-level state office between 1981 and 1990). According to its mandate the newly-restored ministry must develop, in consultation with the workplace parties, structures that would promote the social partnership of these parties and seek their input into government policies. As a result, the national-level tripartite Conciliation Council was established in August, 1990. (The idea is not new; tripartite national-level consultation had been pursued, although in different forms, since 1985.)

The role of this council is to be codified under the new labor code. The council, contrary to previous consultation efforts, allows employee and employer organizations to decide which organizations shall participate. Current membership includes seven trade union organizations, nine employer organizations, and the government. The council is self-governed; members decide on rules and procedures. Each labor or employer member's position is first developed in consultation with its own membership, and then in caucus with other labor or employer organizations. Any member organization has veto power in its caucus. If labor or employer members cannot reach agreement in caucus and the dissenting organization exercises its veto, the vote of that group is void, leaving the decision up to the other group and the government.

The purpose of the council is to provide a forum at the national level for tripartite consultation on fundamental issues affecting employment and industrial relations. The government is required to consult the council before introducing new legislation on matters in the council's jurisdiction, and to present the council's views to the legislature. On some issues the cabinet needs the council's agreement before introducing legislation. The council is also to be the forum for national wage negotiations.

In its first year the council discussed company councils, the cabinet's three-year economic policy program, the draft of the employment act, and other issues related to industrial relations. The council was also instrumental in settling a taxi-drivers' strike in the autumn of 1990.

Other Policies

Three pieces of recent or pending legislation fundamentally alter the industrial relations system in Hungary: the legislation on trade union assets, on payment of union dues, and the new labor code introduced in the autumn of 1991 (Government of Hungary, 1991).

According to the government, the legislation on trade union assets is intended to enumerate those assets and freeze them pending equitable redistribution among all trade union organizations. The government claims that most of those assets are state owned and were only granted for the use of unions; assets acquired with compulsory membership dues are illegitimate. The legislation establishes a trustee organization for the assets, and contemplates their redistribution based on the membership of each union as established by trade union elections to take place by July 1992.

Trade unions are divided on the legislation. One union that would benefit under the legislation regards it as intended to end interunion rivalry and strengthen the movement (Figyelo, 1991). Other unions argue that the legislation interferes with the internal affairs of trade unions and contravenes the freedom of association rights guaranteed in the constitution.

The union dues legislation requires a union member wishing automatic deduction of dues from wages to give a written request to the employer, which may then approve or deny the request. The legislation is "voluntary" insofar as neither employee nor employer is forced to accept automatic deduction. According to the government, the legislation also promotes equality as it applies to all employers and union members. Although compulsory dues checkoff was introduced by the CTUC in 1988, the government contends that the practice never had a legislative basis.

The draft labor code proposes less detailed regulation of the employment relationship and a system based more on common law and equality among the parties. Unlike the previous code it does not set out compulsory employment standards but prescribes minimum standards that can be enhanced through collective bargaining.

While the new code guarantees employees' right to form and join trade unions, it distinguishes between union representation and employee participation in management decisions through plant councils. Each structure is to have different rights and areas of responsibility. For example, unions would bargain labor adjustment measures but information and consultative rights on these matters would be granted to plant councils.

The code grants unions the right to conclude collective agreements dealing with most issues related to the employment relationship. It requires union approval of occupational health and safety regulations at the workplace, gives unions the right to inspect employment practices, requires information disclosure on matters related to the employment relationship, and gives the union power to veto employer actions it considers unlawful. It allows use of the employer's premises for union purposes and posting union information.

The legislation allows one collective agreement for each firm. The bargaining agent is either (1) the trade union representing the majority of employees or (2) the combination of unions that together represent the majority. Majority representation is established through plant council elections. If no union obtains a majority, employees must directly ratify any agreement. The code prohibits closed shops and bans benefits or entitlements dependent upon union membership. It also indicates when a collective agreement can be extended to cover an entire industry.

The code establishes new employee participatory structures called plant councils, elected directly by employees' secret ballot. Councils are elected for three-year terms; however, the code requires that the first plant councils be elected for a one-year term. The same elections determine which union(s) may represent employees (by having their candidates elected). Plant councils may conclude "plant agreements" with management on issues related to the employment relationship. They are to be responsible for the use of social and welfare benefit funds (the amount of funds being decided by union-employer collective bargaining). They must be consulted on any measures proposed by the employer that would affect a substantial number of workers, including privatization. At least every six months management must inform the plant council about the financial situation of the company, major investment plans, and plans that would substantially change the profile of the company. The council can require management to provide information on any issue related to the employment relationship.

Labor disputes can be initiated by individual employees, trade unions, or the plant council. Disputes are to be resolved by the courts rather than the previous company-level labor arbitration committees. As well, the law requires compulsory conciliation of collective disputes involving the trade union or plant council.

Union and employer response to government policy initiatives has been mixed. Unions are not opposed to privatization because they see it as a last resort for leading the country out of economic crisis and saving jobs. However, they are demanding (1) the right to information on company privatization plans, (2) worker representation on the board of the State Property Agency which ultimately carries out a large proportion of the privatization efforts and sets general rules for the process, and (3) the creation of an Employee Stock Ownership Program that would allow employees to purchase stock in their privatized company (Nepszabadsag, 1991a).

Like the unions, employer organizations feel that the major policy initiatives on privatization, indemnification, and labor market policies were carried out without prior consultation of the workplace parties (employers, management, unions, and employees). According to the Manufacturers' National Association (MNA), the government, in pursuing its own political agenda, is impeding the process of consensus building between labor and management. The MNA now suggests that employee and employer organizations meet to work out their differences without government participation, outside the purview of the Conciliation Council (Nepszabadsag, 1991b).

As well, unions and employers are not satisfied with the Conciliation Council's efficiency, claiming that it is functioning too formally. Disputes around the council have focused on its scope; whether it should deal only with issues of industrial relations or discuss other social and economic policies as well. Relations between the workplace parties and the government are strained in other respects as well. The new government did not trust CEOs who were appointed during Communist rule. It replaced those at state-controlled companies and ordered new CEO elections to be held by company councils. Although the councils reelected approximately 80 percent of the CEOs, it is estimated that in the first six months under the new government 40 percent of the CEOs were replaced (Meixner, 1990).

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DISCUSSION

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Tom Weisskopf referred to the evident importance of welldeveloped labor party and trade union institutions for the development of democracy in Eastern Europe. I would like to take a very few moments to call attention to the importance of studying present developments for contributions to the social science/predictive theory of the labor movement.

For more than a century, from the time of John Stuart Mill to at least that of Joseph Schumpeter (with Marx, the Webbs, Lenin, Perlman and others along the way), observers and theorists had attempted to predict or explain the evolution of the roles and functions of parties and unions, and of the relationship between the two "political" and "industrial" arms of the labor movement (Scoville, 1991). The present state of play on this subject matter (itself a subject of some undeserved neglect) has two main lines-remembering that all normative, hortatory analysis is left aside: (1) the Sturmthal-Scoville analysis, which stresses the long term state of the labor market and the initial menu of social and political needs that confronts labor (Sturmthal and Scoville, 1973), and (2) Lipset's formulation, which focuses on the early vs. late achievement by labor of political citizenship and economic citizenship (Lipset, 1983). It may be that the latter formulation is a collapsed version of the former, or that the former allows for possible cases that never happened, but this is not the important issue.

The important point is that all existing theorizing about how the labor movement shapes itself and chooses and allocates its functions among its parts was aimed at or based upon an evolving (and/or collapsing) "capitalist" system. We have little or no theory at all about the "second round." What developments do we expect to see when, in some senses of the terms, labor's "social and political needs" have been

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met or "political and economic citizenships" attained for some 40 to 70 vears? Perhaps the "state of the labor market" will turn out to be a reliable variable, but the other variables just mentioned will doubtless need redefinition for the new historical circumstances. Yet others may need to be identified that address the case of the reprivatizing (re-"class"-ifying?) societies of Eastern Europe. If Kervin and Lonti and Jones are on track, the "old parties" and the "old unions" will play varying roles, as will the "new owners/managers." Today's two case studies also suggest that the "responsive/repressive nature of the surrounding polity" (a variable common to both Scoville and Lipset) will also take on a range of values in the formerly socialist states. But other, totally new variables may be critical to understanding the redevelopment of the labor movement in a post-capitalist, and postsocialist "social enterprise" system. Thus, the East European revolutions of 1989-91 offer us the chance to reexamine the theory of the development of the labor movement in societies experiencing great change under great tension: a situation akin to, but radically different from, the process of capitalist evolution which spawned both the earlier labor movements and the development of theorizing about those movements.

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DISCUSSION

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A basic theme in the three papers is that, following the political upheavals in Eastern Europe, government programs to transform their economies have provided the labor movements with a limited, if any, role in the decision-making process and its implementation. With varying degrees of detail, this theme carries through in the discussions on Bulgaria and Hungary and, to a lesser extent, East Germany. It also holds for Poland and the Czech and Slovak Federated Republic.

That the new trade unions have been critical both of their lack of participation in the shaping of economic policy and of many of the aspects of the transformation processes was stressed in discussions I had last year with leaders of the Czech and Slovak Confederation of Trade Unions. Many of their observations track union thinking in other Eastern Europe countries. I will refer to them in the course of my comments.

The one-time Communist-controlled countries are all beset by similar circumstances as they seek to replace the structures of the old regimes with more viable ones. Policies that are being put into effect without trade union participation, I believe, are making the transformation more difficult and are increasing social tensions as hard decisions, good or bad, however defined, are put into effect.

Despite the early euphoria and the view that a transition could be made relatively quickly and enjoy broad popular support, the inability to transform the societies in the short term has already created severe tensions and pressures in all of the countries. These tensions are intensifying as the policies of rapid economic transformation put into effect have come under increasing criticism.

Severe recession, real and anticipated, sharply declining living standards, growing unemployment and the threat that it will increase, and fear of inflation characterize the economy of each of the countries.

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At stake, too, are the privatization programs, both "large" and "small," and the part the trade unions should play in the process.

An appraisal of the role of trade unions in economic change in the Eastern European nations should also take into account the broader political and economic issues. In this context, a significant and trenchant comment is that of Janos Kornai (1990) who observed:

"It is impossible to institute private property by cavalry attack. Embourgeoisement is a lengthy historical process . . . [E]ven in the event of an acceleration in the process, it may take many years before the private sector can provide the larger portion of production; possibly a longer period must pass before a truly developed, up-to-date mature sector takes shape."

Political change brought with it a substantial change in how government relates to society and to the economy. The change was enthusiastically received by workers and the population as a whole. But it also had aspects of a two-edged sword.

A leader in the Czech and Slovak Confederation of Trade Unions suggested that the greatest single problem facing his nation and its labor movement—and perhaps the same was true in the other liberated nations as well—is how to transform the way people think. Two generations of workers had been guaranteed employment, subsidized rent, transportation, food, etc., albeit along with a low living standard. The union leader believed that it may take a generation before workers will be able to feel comfortable in a competitive, if more uncertain, society.

Trade union leaders also stressed the difficulty in building worker confidence in the new unions. Anger over the past and current problems of unemployment, inflation and uncertainty, along with a lack of experience in how a free labor movement in a free society should function, have led to an "anarchistic" view on the part of many union members. This, in turn, has resulted in wildcat strikes and a general lack of discipline in union ranks.

Rapid privatization, especially of "large" enterprises, union leaders said, increases the fear of layoffs. Many workers see the closing down or consolidation of production facilities as a threat to their living standards even if these plants cannot produce efficiently. Given the disrupted economy, the union leaders believe that the state should withdraw its control of manufacturing plants and services slowly in order to limit the growth of unemployment. Workers, they feel, should be permitted to participate in the purchase of "small" privatized establishments through subsidies or loans. There is a deep concern that the beneficiaries of "small" privatization are black marketeers and those who amassed huge sums of money through close connections with the old regime.

There is also an underlying concern that the liberated Eastern European nations will become low wage suppliers to the west, assuming a status similar to that of the Asian LDCs. This concern is compounded by a fear that if the economies are not turned around soon, skilled workers will move to the west.

The ability of the unions to play a leading role in transforming their societies is also limited by the actuality or the threat of fragmentation. The papers point to conflicts over the legitimacy of successor unions in Hungary and to disputes in Bulgaria over the role of the old leaders in one of the new trade union centrals.

Integration of East Germany into the Federal Republic raises other questions that are in some ways specific to Germany. In Poland, growing political uncertainty is increasingly affecting how the transformation process is viewed. In the Czech and Slovak Confederation, there is the ongoing conflict between Czechs and Slovaks, each maintaining separate unions within the confederation. Discords within the labor movements in all of the countries has also contributed to limiting trade union influence on eonomic change in Eastern Europe.

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XXII. 1992 IRRA RESEARCH VOLUME (A ROUNDTABLE PRESENTATION)

Research Frontiers in Industrial Relations and Human Resources: A Preview of the 1992 IRRA Research Volume

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About every decade or so, the annual research volume of the Industrial Relations Research Association (IRRA) is devoted to an assessment of research in major topic areas within the field. Typically, these volumes have provided lengthy comprehensive research summaries in a few topic areas.

For the 1992 annual research volume, the editors have chosen a somewhat different tack, in part because research summaries of specialty areas within industrial relations (IR) have been published with increased frequency in recent years, and also because new IR topics have drawn scholarly attention. This last point is perhaps implied by the title of the present volume, which for the first time (in the IRRA research review series) includes the phrase "human resources" (HR).

The 1992 IRRA research volume includes 17 chapters subsumed under four major topic headings: (1) unions, collective bargaining, and

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dispute resolution; (2) human resource management; (3) labor market research; and (4) the regulation of IR-HR. Of particular note, the author(s) of each chapter has been asked to provide (a) a selective summary of recent research in his/her topic area, (b) some new evidence about the topic, and (c) an agenda for future research on the topic. It is our hope that this collection of research agendas (and the editors' attempt to integrate them in the opening chapter of the volume) will be of special value to a new generation of IR-HR scholars, who will help to shape the field during the 1990s and beyond the year 2000. In this paper we preview some of the key ideas, findings, and research agendas contained in the 1992 IRRA research volume.

Unions, Bargaining, and Dispute Resolution

Collective Bargaining and Industrial Relations Outcomes

In few areas of industrial relations have recent changes been as notable or dramatic as in the area of unions and collective bargaining. As is well known, union density declined in most developed nations of the world (save Canada) during the 1980s. In the U.S., private sector union membership fell from 20.1 to 12.4 percent of the work force between 1980 and 1989. Further, collective bargaining during the 1980s was often characterized by such terms as "concession bargaining," "givebacks," "two-tier pay plans," "lump-sum payments," "the death of pattern bargaining," and the like.

These developments are claimed by many to have produced major changes in work rules and work practices in unionized workplaces. Yet as Harry Katz and Jeffrey Keefe point out, such rules and practices have long been diverse. This is particularly true in the U.S. (on which Katz and Keefe focus), given its (continuing) traditions of decentralized bargaining, the workplace focus of bargaining, and the importance of local unions.

But is there more or less diversity in work rules and practices in unionized U.S. workplaces today than previously? Katz and Keefe provide answers to this question by systematically examining collective bargaining contract provisions that prevailed in 1975 and 1989 in the U.S. They find that during this period the incidence and scope of grievance procedures remained relatively stable, the incidence of union-management cooperation committees rose substantially, and the incidence of quality of working life (QWL) initiatives rose slightly. However, they also find significant increases in the incidence of lump-sum and two-tier pay provisions, and significant strengthening of both management's rights clauses and seniority provisions between 1975 and 1989. The authors contend that these developments are better explained by a "transformation" model than by yo-yo, rigidification, maturity, and business cycles models of workplace industrial relations.

Katz and Keefe turn next to the question of how work rules and work practices in unionized settings affect industrial relations outcomes. Prior to the 1980s, they point out, answers to this question came largely in the form of case studies, with their attendant limitations on generalizability. The 1980s witnessed the emergence of quantitative studies of work rules and practices, which were intended to develop more "scientific" answers to this question. This objective has perhaps been most notably achieved by research on workplace grievance activity, which finds that grievance rates are significantly negatively associated with labor productivity and product quality, and significantly positively associated with unit production costs. Researchers have been less successful, according to Katz and Keefe, in measuring the effects of work restructuring, team forms of work organization, and other recent employee involvement/participation initiatives on industrial relations outcomes.

In sum and following Katz and Keefe, researchers would do well to devote greater effort to measuring the effects of new work rules and practices on industrial relations outcomes and firms' economic outcomes. In addition, as the authors point out, there is a paucity of research on (unionized and nonunion) workers' perceptions of and attitudes towards recent changes in work rules and work practices. Popular literature presupposes that such changes spur workers to work harder and/or smarter, but evidence on this score is scant indeed. Thus, Katz and Keefe's proposal that more systematic attention be paid to workers' responses to changes in workplace industrial relations seems especially well-founded.

Strike Models and Outcomes

Paralleling the decline of unionism in the U.S. during the 1980s, and not unrelated to it, was the precipitous decline in strike activity. Also as with unionism, however, there was a resurgence during the 1980s of research on strikes. Bruce Kaufman reviews and assesses this research, which ranges across a wide variety of disciplines and fields, and offers readers a good news-bad news story.

The good news comes in the form of theoretical contributions to the study of strikes provided by scholars from several disciplines. In particular, these include joint cost, asymmetric information and information uncertainty models developed by economists, expectancyvalue theory and cognitive script models developed by psychologists, resource mobilization theory developed by organizational studies specialists, and political event models developed by political scientists.

Additional good news comes in the form of empirical studies of strikes, with the most notable feature being the use of comprehensive micro-level data at the level of the bargaining unit and firm. These data enabled researchers to match individual strike outcomes, including the absence or presence of a strike, with various firm, union, and industryspecific characteristics that were previously unexamined. A related advantage of this work, notes Kaufman, is that it permits the matching of strikes with the expiration of individual bargaining agreements, thereby controlling for variation in the opportunity to strike.

The bad news about the 1980s research on strikes, says Kaufman, takes the forms of disciplinary parochialism, remoteness from realworld events, and the perhaps surprising absence of studies of the decline in strike activity and the growth of replacement workers for strikers. Proceeding from this assessment, Kaufman calls for more multidisciplinary research on strikes to enhance and integrate our understanding of this social phenomenon, enhanced use of the "go and see" case approach to the study of strikes, and a refocusing on the realworld issues of strike declines and replacement workers.

Grievance Procedures in the Union and Nonunion Sectors

As was suggested by Katz and Keefe, the grievance procedure is the centerpiece of collective bargaining agreements in the U.S. Almost all industrial union contracts and a majority of craft union contracts contain such a procedure. What appeared to be new in the 1980s was the growth of formal grievance (or grievancelike) procedures in nonunion firms. Some researchers conclude that such procedures are adopted by nonunion firms to forestall unionization, but other researchers dispute this conclusion.

The paper by Richard Peterson assesses recent grievance procedure research along several dimensions, in particular, the determinants, personal outcomes, and organizational outcomes of grievance filing. Prior to the 1980s most grievance procedure research dealt with the characteristics of grievance filers and the dynamics of grievance settlement. That research featured a plethora of case studies and a large literature on grievance arbitration.

The focus of grievance procedure research shifted during the 1980s to emphasize more conceptual and systematic empirical approaches to

this form of workplace conflict resolution. These included applications of exit-voice theory to unionized grievance procedures, applications of contingency theory to the grievance-arbitration process, modeling of the grievance procedure within a compensating wage differentials framework, and the modeling and measurement of grievance procedure effectiveness.

The systems approach to grievance procedure research utilized by Lewin and Peterson (1988) led to the identification of certain determinants of grievance filing, settlement, and post-grievance settlement outcomes. Further many of the recent studies reviewed by Peterson seem to support this systems approach. But perhaps most telling about grievance procedure research conducted during the 1980s are the results of studies that focused on the personal outcomes of grievance filing and settlement for grievance filers, both in unionized and nonunion settings. This work employed quasi-experimental research designs to match within-organization samples of grievance filers and nonfilers prior to. during, and following periods of grievance filing. It strongly suggests that grievance filers suffer reprisals in the form of lower performance ratings and promotion rates and higher voluntary and involuntary turnover rates than nongrievance filers. Peterson concludes his chapter by calling for longitudinal research using larger samples of firms and workers to assess the generalizability of these important findings.

Human Resource Management

Human Resource Strategy and Choice

The idea that human resource decisions of firms can be subjected to strategic choices seemed to have come of age in the 1980s. Prior to that time, research and practice focused on components of the "personnel management" process—selection, rewards, appraisal, discipline—and was characterized by a short-term, reductionist, and often nonempirical orientation. Further and through the 1970s, industrial relations and personnel management stood apart from each other as separate fields, and scholarly interchange and crossover were rare. But as Peter Cappelli and Harbir Singh point out, a view of industrial relations as a "closed" field—closed to the behavioral sciences—emerged in some quarters during the 1970s, whereas personnel management appeared increasingly open to models, concepts, and analytical frameworks applied by scholars from several social science disciplines.

In addition, the 1980s featured a plethora of popular writings which claimed that human resources could be used-managed-to

achieve competitive advantage for the firm. While scholars may discount these writings for their lack of scientific underpinnings, they nevertheless reflected the influence of new competitive forces, stemming largely from international sources and deregulation, on personnel management generally and on the utilization, assessment, and motivation of employees in particular. Hence, the short-term, quick-fix orientation to personnel management practice appeared increasingly to give way to longer-term, strategically driven human resource management policies and practices during the 1980s.

But just how strong is the link between human resource management and business strategy, either in research or practice? Conceptually the link should be a strong one, say Cappelli and Singh, in part because the field of business strategy increasingly focuses on firm characteristics, such as organizational structure, rather than on environmental characteristics, such as barriers to entry, as sources of competitive advantage and differential economic performance. In this regard, much of the research reviewed and assessed by Cappelli and Singh focuses on the differential human resource characteristics of firms, and thus appears to be consonant with the trend of business strategy research. Nevertheless, say Cappelli and Singh, even the new, more analytically-driven human resource management research falls short in identifying the effects of, say, high commitment work systems and redesigned jobs on firm performance. Indeed, researchers have not been particularly successful to date in explaining why human resource and, for that matter, industrial relations practices vary so widely among firms, or the extent to which business strategy serves as an antecedent to the formulation of human resource policy and practice in the firm.

In future research Cappelli and Singh propose that researchers explicitly frame their human resource management studies within strategic choice models developed in the business strategy literature, but also that these models incorporate concepts and variables drawn from economics, the behavioral sciences, and industrial relations. For example, the use of path dependent models from the behavioral sciences and tournament models from economics may be especially helpful in modeling the process by which firms formulate human resource strategy and manage human resources to deal with the phenomenon of organizational slack.

Pay, Participation, and Performance

The extent to which pay policies and employee participation in decision making are related to the economic performance of firms

remains uncertain despite the large amount of research on these topics conducted during the 1980s. Barry Gerhart, George Milkovich, and Brian Murray review and assess this literature, and add some evidence of their own. A major theme of their paper is that organizations differ markedly in compensation decision making, so that organizations "need to be brought back" into compensation research.

Based on 1980s research, Gerhart, Milkovich, and Murray conclude that, within constraints imposed by market pressures, firms have considerable discretion in setting pay levels for comparable jobs, but that such discretion is not adequately explained by either efficiency wage models or organizational strategy models. A more fulsome explanation of organizational pay differences, say the authors, will likely be derived from ongoing work on contingency models of compensation decision making in the firm, particularly in light of interfirm differences in pay mix.

To underscore their point about organizational pay diversity, Gerhart, Milkovich, and Murray devised a market sensitivity index and tested it against some 78,500 observations on top and middle managers in 282 firms, using a combination of base salary and short-term bonus as the dependent variable. They found that market sensitivity ranged between .62 and .96 (at the 95 percent confidence level), and a subsequent analysis of variance reinforced the finding of significant organizational pay diversity. While not providing a comparable test of fringe benefit diversity, the authors' review of the 1980s research on fringe benefits leads them to conclude that there is an even stronger case for organizational diversity here than in the pay area.

In terms of employee participation in decision making, Gerhart, Milkovich, and Murray review a large literature on this topic and note that positive effects of one or another form of participation on productivity (and other measures of organizational performance) are often reported by researchers. A subset of these studies concludes that participative-type pay plans work "best" when accompanied by employee participation in decision making. Hence, readers are likely to be challenged by the authors' judgment that the organizational performance measures used in employee participation research are often narrow and poorly conceived, and as well by their conclusion that pay alone can have important effects on productivity, morale, profitability, and other human resource management/organizational outcomes.

Among their suggestions for future research, Gerhart, Milkovich, and Murray propose that more work be done on formal pay-forperformance programs, work force composition differences across various pay programs, the magnitude of organization differences in pay and benefit structures combined, and intraorganizational differences in compensation decision making.

HR Practices and Productive Labor-Management Relations

As noted by Gerhart, Milkovich, and Murray, much of the evidence about the effects of employee participation in decision making on human resource management and organizational outcomes has been derived from narrow outcome measures, cross-sectional studies, and limited longitudinal studies. These limitations are largely overcome by Casey Ichniowski, whose paper begins with a detailed account of a labor relations transformation in a U.S. paper mill between 1976 and 1990.

For the first six years of this period, the paper mill's grievance rates and strike frequency were among the highest in the industry, and its productivity and return on capital stock were among the lowest in the industry. Between 1975 and 1980, manning levels in this mill rose by about 27 percent, and between 1975 and 1982 the mill had seven different general managers. By 1983, there were only one or two workers per each of the mill's 94 job classifications.

In light of these results, management sought sweeping changes in the mill's human resource practices in the 1983 contract negotiations with its two United Paperworkers International Union (UPIU) locals. Following a two and one-half month strike, the parties signed a collective bargaining agreement, which featured a new "team concept" to include broad, flexible jobs; training programs to develop worker multiskilling; attitude surveys and manager "listening" sessions with workers; and guaranteed job and wage security.

Ichniowski documents the dramatic business performance and human resource management performance changes brought about by implementation of the team concept in this paper mill. These included major increases in productivity (tons of paper produced per day) and operating profitability, and major reductions in grievance strikes, accident rates, and strike activity (no strikes took place between 1983 and 1990).

In the remainder of his paper, Ichniowski places this case experience in larger perspective and provides a detailed, more generalizable analysis of why the well-known free rider problem did not materialize in this mill. He concludes that the combination of multiskilling and employment security motivated employees to believe that the results of their new efforts would redound to them rather than being withheld from them or distributed only to others (such as shareholders). But Ichniowski also concludes that psychological and sociological forces operated in this mill in such a way as to penalize workers who did not offer new ideas or otherwise participate actively in the team concept.

Thus, Ichniowski in a sense is revivifying the concept of group norms, which has held a prominent place in the industrial relations literature (at least since the Hawthorne experiments). Moreover, in his proposed research agenda Ichniowski calls for ethnographic studies of workplace norms and culture based on extensive contact with workers as perhaps the best way of more fully developing constructs of multiskilling, employment security, and performance-based compensation, and of gaining a better understanding of the interplay between human resource practices and economic performance of the firm.

Internal Labor Markets

The types of industrial relations and human resource management changes in the paper mill described by Ichniowski are in a sense treated more generally by Paul Osterman in his paper on internal labor markets. The rise of internal labor markets was spurred by the growth of industrial unions as a counter to the foreman-centered "drive" system and the American Plan which prevailed earlier in the 20th century. The concept of internal labor markets grew out of the work of institutional labor economists who studied unionized workplaces following World War II, and who focused on the ways in which the internal organization of ports of entry and job ladders created boundaries between the firm and the external labor market.

During the 1980s, however, a competing model of internal labor markets emerged, which placed much greater emphasis on employers' direct communications with workers and on such workplace initiatives as team production and quality circles. Clearly, these newer policies and practices were motivated in part by the desire of nonunion employers to keep unions at bay, but they also characterized "progressive" nonunion employers, such as IBM, and they gained momentum from the spread of Japanese transplants in the U.S. Consequently, the older union-based model of internal labor markets has increasingly been called into question, and one contribution of Osterman's paper is to assess whether or not this traditional model is actually declining in importance.

According to Osterman, evidence against such a decline can be found in 1979 and 1988 Current Population Survey data which show that long-term employment relationships retain their centrality for men and are of increasing importance for women, and in studies that document the existence of multiple clusters of internal labor markets, including those of the "traditional" type. By contrast, evidence of the decline of traditional internal labor markets can be found in the lower average job tenure of middle-aged men, the increased use of contingent workers and temporary help agencies, and new initiatives in team-based production, flexible work, and broadened job classifications, including in unionized firms in the U.S. and abroad.

To interpret this "mixed-data" story, Osterman proposes a theoretical framework in which performance criteria basically drive changes in the structure of internal labor markets. The key variable in this framework is the set of customs, norms, and political forces in the firm that modify the thrust of market forces. What most distinguishes transformed from traditional internal labor markets, says Osterman, is the extent to which performance considerations lead to intrafirm power shifts such that management gives up some of its control, and employees' commitment to the firm and to new internal labor market structures is enhanced.

Such power shifts do not occur everywhere, however, as the continued presence of traditional internal labor markets in certain firms and industries makes clear, and the evidence of such shifts is far more anecdotal than systematic. Thus Osterman proposes that researchers collect nationally representative data concerning the distribution of and changes in internal labor market structures, and more fully model and measure the factors associated with the adoption of new internal labor market arrangements.

International Human Resource Studies

The field of comparative labor/industrial relations research suffered a decline in the 1970s but experienced something of a resurgence in the 1980s, due in large part to increasing international competition. Yet both the older and the newer comparative research suffer from the twin afflictions of narrow empiricism and lack of theoretical grounding. The paper by Thomas Kochan, Lee Dyer, and Rosemary Batt draws on several disciplines and literatures in an attempt to advance the development of a theoretical framework for international human resource studies.

In doing so, the authors pose a series of "starting point" questions concerning the factors influencing human resources as a source of competitive advantage, the policies used by different countries and firms to gain competitive advantages from human resources, the effects of these policies on key outcomes of interest to stakeholders in the employment relationship, the rate of diffusion of competitive advantage-type human resource policies within a country, and the transferability of such policies across national boundaries. Kochan, Dyer, and Batt conclude that classical and neoclassical economics provide a necessary but not sufficient basis for developing theoretically driven answers to these questions. Rather, economic concepts must be placed in a larger analytical framework that incorporates concepts of business strategy, strategic human resource management, government, political choice, social policy, employee interest, and participation.

An illustration of the applicability of this broad theoretical framework to international human resource management studies is in the area of training for the purpose of achieving competitive advantage. As the authors observe, human capital theory approaches this issue by focusing on the incentives for employers to raise the marginal product of labor by investing in training, especially firmspecific training, that does not raise labor's marginal product to other firms. But as the authors also observe, this theoretical perspective takes no account of broader developmental processes featuring career ladders and continual learning, and which focus in part on the social and psychological experiences of workers in organizational environments. Moreover, human capital theory has nothing to say about other human resource policies that should accompany firm-level training in order for it to be effective, or about how production must be organized in order to take advantage of training.

In another example, neoclassical theory argues that if certain human resource management practices improve productivity and efficiency in the firm, the practice will spread naturally via market forces to other firms and across national boundaries. But research on European-style corporatist structures, Canadian unionism and tripartite training institutions, Japanese-style permanent employment, and recent industrial relations system reform in Australia suggests that societal values, ideologies, institutions, and considerations of power and control strongly influence the diffusion of human resource practices within and across countries.

The extent to which different human resource practices can be used to achieve the twin goals of competitiveness and high living standards is a notably key question for future international human resource research, according to Kochan, Dyer, and Batt. But so too is the "classical" question of whether or not human resource management and industrial relations systems are converging toward an industrialization-driven common model.

Labor Market Research

Compensation, Productivity, and the New Economics of Personnel

Much labor market research of the 1970s explored the determinants of average wage and employment patterns, with a special focus on econometric problems arising in the process of measuring and estimating these models. While pay and employment continued to be the subject of labor market research in the 1980s, a new theme pervaded the analysis. Instead of focusing on wage outcomes, researchers studied how particular pay and employment contracts are structured and their incentive effects on worker and firm behavior.

Edward Lazear's paper on compensation, productivity, and the new economics of personnel offers a summary and synthesis of this rich new body of labor market research. The central contribution of this literature, according to Lazear, is that certain real-world phenomena have been recognized and incorporated in labor market models for the first time, in particular, the difficulty of monitoring employee output. Because employers often cannot observe employee productivity with great precision, they find it profitable to devise compensation schemes that motivate workers to put forth effort even when monitoring costs make it difficult to tell in the short run whether or not the work is getting done. Such pay schemes include piecework arrangements, upward-sloping pay profiles, tournament or relative performance systems in which only a few can reach the top, and profit-sharing plans. Also according to Lazear, efficient compensation systems should encourage a worker whose productivity is below target to leave the firm in order to ensure continued firm profitability. This conceptual framework is offered to explain the existence of pensions, severance pay, and private disability schemes which induce exit by those who can no longer perform effectively on the job.

While much remains to be done in explaining links between pay and productivity, this literature offers much to intrigue researchers. The work has relevance for a wide range of topics, including what formerly were called dual labor market structures that have been reborn as efficiency wage models, turnover and promotion rules, academic tenure, and perhaps most of all, the meaning of a job. What is certainly clear, as Lazear points out, is that jobs cannot be defined independently of the effort expended and compensation anticipated by workers. The new economics of personnel thus appears to offer a conceptual framework that is redefining older economic concepts of work and pay.

Race and Gender Pay Differentials

The decade of the 1970s featured a plethora of theoretical and empirical research on pay differentials by race and sex. During the 1980s somewhat less attention was devoted to these subgroups of the work force, supplanted by more in-depth study of wage structures and increasing pay gaps between low- and high-wage workers. Nevertheless, the motivation for studying race/sex pay differentials remains strong, since puzzling and contradictory developments marked pay patterns during the 1980s. Thus, black workers' earnings relative to whites' fell over the last decade, while in contrast women's pay rates relative to men's rose steadily over the last ten years.

In attempting to explain these trends, Francine Blau and Lawrence Kahn show that returns to education and skill increased over the decade of the 1980s. This was primarily due to a decline in the demand for low-skilled workers and a reduction in unionization. This shift apparently reduced many minorities' wages because educational quality was low; even more disturbing, there is some evidence that the relative quality of schooling may have deteriorated for blacks entering the job market during the 1980s as compared to whites. Another factor that may explain falling relative wages for blacks is the suggestion in the literature reviewed by Blau and Kahn that an increased supply of college-educated blacks drove down their relative pay. In contrast, relative pay for women rose over the decade because they were employed in industries that grew relatively faster, and because they had developed more on-the-job experience.

To further evaluate these findings, the authors present new estimates of log wage equations for different race/sex groups using Current Population Survey data from 1972, 1982, and 1989. Their results confirm the aforementioned finding that changes in industry mix had positive effects on women's relative pay. However, these industry mix findings do not explain why relative pay for black men deteriorated during the 1980s. This is puzzling in light of others' conclusions, and is a finding that remains to be explored in future research.

One of the strengths of this chapter is the frequent reference to international findings regarding pay differentials by sex and ethnic groups. For example, we learn that the U.S. wage distribution penalizes those with below-average skills more harshly than is the case in other industrialized countries. Such insights are central if we are to evaluate the long-term consequences of increasing internationalization of the labor market. Blau and Kahn also recommend that future research on pay differentials be more carefully integrated with recent developments, described by Lazear, in labor market theory and the new economics of personnel.

Immigration

What are the economic costs and benefits from immigration to the United States? George Borjas succinctly addresses this question and summarizes reasons why economists' view of immigration changed so dramatically during the 1980s. While not everyone will agree with Borjas' conclusion, and some may disagree with his stress on economic factors to the exclusion of social and demographic factors, the chapter is a clear and well-argued statement of what has been learned, and what remains to be learned, in immigration economics.

One explanation for the controversy surrounding immigration research is the fact that at the end of the 1970s, most saw immigration through rose-colored glasses. At that time, notes Borias, it was generally agreed that immigrants lacked skills on arrival to the U.S., but assimilated quickly and contributed positively to national wellbeing. Their children did even better, the story went, overtaking their parents and many other groups as well. The facts appear to have changed by the end of the 1980s, however, mostly for the worse. Borjas reports that skills of recent immigrants fell sharply as compared to previous cohorts of immigrants, and their labor-market performance was much worse. Not only did more recent immigrants fail to catch up with native-born Americans, their children are also doing worse. Borjas rounds out this disturbing new view of immigration by showing that immigrants depend on welfare programs far more than in the past, and that recent immigration may have widened pay differentials between skilled and unskilled workers. Borias reaches these conclusions in part through his own testing and multiple crosssection and panel data sets harnessed to a migration model which posits that recent immigrants are "negatively selected," in contrast to the "positive selection" of immigrants from prior cohorts.

Looking to the future, Borjas' chapter indicates that more needs to be understood about women workers' role in migration and about the underground economy in which many illegal aliens are found. Further, there has been little linkage of the immigration literature with studies of international trade. These are but some of the agenda items which, if taken up by researchers, may help to develop better answers to questions about how immigrants do in the U.S. economy, their impacts on native workers' opportunities, and the benefits and costs of immigration to the U.S.

Work Force Preparedness

Much has been said about worker quality in the industrial relations literature of the last decade, and this is the subject of John Bishop's research on work force preparedness. Two questions are central to his chapter: (1) Does schooling and academic achievement increase productivity?, and (2) Are returns to schooling improving over time? Bishop answers both questions affirmatively, drawing from an impressive and diverse body of literature.

Focusing initially on the academic-productivity relationship, Bishop points out that other researchers have found it difficult to tie these together, especially when workers' productivity is represented by their earnings. Indeed, he finds no link between pay and demonstrated competence in math, science, or language arts, at least for young men, and offers two explanations for this finding. One emphasizes employers' inability to detect academic competence and tie it to performance on the job, while the other relies on the sort of long-term contracts, described by Lazear, in which wage earnings in any given period do not necessarily reflect that period's productivity. Nonetheless, Bishop contends that academic achievement does enhance worker productivity, based on the analysis of several data sets that measure such productivity in unusually fine detail.

Turning to trends in returns to schooling over time and lacking direct productivity data, Bishop relies on earnings data and, like other researchers in this volume, concludes that there is a widening pay gap between more and less well-educated U.S. workers. Of particular note are high rates of pay among those with technical training, including scientists and engineers, computer programmers, and others employed in these fields. Based on this finding, plus the finding that the supply of college graduates is dwindling, Bishop concludes that the payoff to higher education is not likely to decline in the near future.

The research agenda that flows from Bishop's work is a rich and varied one. He recommends more work to devise improved educational tests, more analyses of how employers use "objective" data in setting their recruiting, hiring, training, and turnover targets, and better linkage of schooling achievements to workplace productivity. Clearly, researchers from diverse fields will have to cooperate on multidisciplinary research during the next decade if further insights into these and related aspects of work force preparedness are to be obtained.

Industrial Relations and Human Resource Regulation

The Role of the State

The initial paper in this section on regulation deals not with a particular topic or subject of regulation, but, instead, with the role of the state. Roy Adams examines this role, using a variety of historical and contemporary evidence from several developed countries. He points out that, during much of the 19th century, the role of the state (central government) in advanced economies was largely to outlaw restraints of trade so as to spur private market activity. Between the late 19th and the mid-20th centuries, most central governments undertook measures to support private sector unionism and collective bargaining, but often with limitations on strike activity.

Following World War II, the role of central governments in developed nations expanded considerably, with most of them undertaking new policy measures to spur economic growth, regulate the labor market, and enhance industrial democracy, including (in Western Europe) through works councils and codetermination. At roughly the same time, notes Adams, most developed nations (except the U.S.) adopted policies of neocorporatism or tripartism to formulate and implement incomes policies and, more broadly, to define the terms of the social contract.

By the 1980s much of this had changed, and deregulation proceeded apace in developed countries, with consequent implications for industrial relations. According to Adams, deregulation initiatives in the United States and Britain during the 1980s substantially undermined unions and collective bargaining to the point where their future viability is called into question. While some readers may disagree with this interpretation, they are more likely to concur with Adams' proposition that government should properly be viewed as making strategic choices with respect to industrial relations.

Indeed, Adams proceeds from this proposition to distinguish two distinct perspectives on the role of government as an actor in the industrial relations system (Dunlop, 1958). One perspective is *normative*, which views the proper role of the state in economic affairs

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as looking after the public interest—the state is the agent of the public. The other perspective is *positive*, which appears to mean that there is no "proper" role for the state. Instead, the "positive analyst" asks why the state does what it does—in the present case, why it does what it does with respect to industrial relations.

Adams proceeds to review and critique pluralism, Marxist and quasi-Marxist thought, statist theory, and other political science-based theories of the role of the state in industrial relations. He commends these theories, which are not well-known in the U.S., to the attention of industrial relations scholars, whom he urges to develop a better understanding of government as an actor—a positive actor—in the industrial relations system. To this end, scholars could well begin with the question, "Why does industrial relations regulation come into being?"

Labor-Management Relations

There is little doubt that, during the past decade or so, the focus of U.S. regulation in the area of labor-management relations shifted away from union-management relations and toward employee-employer relations. Such issues as wrongful termination, employee drug testing, employee AIDS testing, employee polygraph testing, and access to personnel file information, among others, have drawn increased attention from U.S. courts and state legislatures, if not the federal Congress. In fact, the decade of the 1980s was also notable for the shift from the federal government to state governments as the locus of most major actions insofar as the regulation of the employment relationship in the U.S. is concerned.

Matthew Finkin not only documents both of these shifts, he shows how they were paralleled by developments in labor law scholarship during the 1980s. Whereas in the 1960s, labor law scholarship focused on collective bargaining, the "issue" of union power, and the appropriateness of the Taft-Hartley Act as a national labor policy, by the 1980s labor law scholarship had become far more specialized to focus on such issues as wrongful termination and particular categories of employment discrimination—as examples, age, sex, race, and handicapped status. In the area of union-management relations, Finkin points out that recent regulatory developments and recent labor law research have focused on the issue of substitutes for unionism and unionized employees in the forms of employer-initiated employee involvement/participation plans, on the one hand, and replacements for striking workers on the other hand. But Finkin's paper does far more than this. He analyzes such recently emergent areas of labor law scholarship as nontraditional legal writing (including in the area of law and economics), critical legal studies (CRITS), feminism, critical race theory, and "storytelling" (by which is meant the interpretation of law through the narration of personal experience). Finkin's main conclusion about these developments in labor law scholarship is that they run a substantial risk of being judged as nonscholarship, that is, of advocating personal political and intellectual preferences without an adequate basis in law. Worse still, the bulk of recent labor law scholarship may be "out of touch with real workplace legal problems." To counter these developments, says Finkin, future scholarship should develop generalizable, testable theories and emphasize careful empirical and case research on both labor law and employment law.

OSHA and Workers' Compensation

Despite twenty years of federal regulation, the U.S. workplace appears at least as dangerous as it ever was. Industry-specific injury rates throughout the 1980s were in many cases higher than in all previous years, and the annual number of workdays lost rose by almost one-third since the mid-1970s. Why has the record been so dismal in making jobs safer? According to Robert Smith, recent research offers some answers to this question, though there does not yet appear to be a simple explanation readily amenable to policy change.

A central problem plaguing research on workplace safety is the lack of good data. Statistics do not exist with which to compare injuries prior to and after the 1970 Occupational Safety and Health Act (OSHA). In addition, the U.S. Department of Labor risk data are quite imperfect, capturing fewer than one-third of the trauma-induced, work-related deaths reported by other government agencies. Finally, the Occupational Safety and Health Administration twice implemented policy changes in the 1980s which altered firms' tendencies to report injuries. Most important among these changes was the use of employer injury logs to target which firms would receive in-depth inspections in 1981 (which appears to have induced underreporting), and the imposition of new penalities for underreporting injuries in 1986 (which seems to have decreased underreporting).

Numerous empirical studies in the last decade have examined how OSHA and Workers' Compensation programs affect risk levels in the workplace. Smith reviews the best of the recent studies linking workplace injury rates and the probability of OSHA inspection, and concludes that there is no evidence for a powerful "threat" or deterrent OSHA effect prior to an inspection. He also finds little evidence of an inspection on subsequent years' injury patterns. A large part of the explanation for this null finding is that OSHA fines remain quite low, averaging less than \$300, and most firms have a small chance of being inspected.

If low OSHA fines cannot increase workplace safety, then it might be thought that the Workers' Compensation program would do better. This is because firms with higher injury rates are generally required to pay more under the Workers' Compensation program, thereby presumably forcing companies with dangerous jobs to do more to make the jobs safer. However, the program is far from perfectly experience rated, with changes in risk sometimes taking four years to be reflected in premiums. About the only evidence of the Workers' Compensation program's effect on "real" safety levels is that higher benefit levels are associated with lower medical cost reimbursements.

In describing what remains to be done in this area, Smith calls for better firm-level work injury data, more precisely-measured Workers' Compensation premium rates, and firm-specific OSHA inspection probabilities. He recommends that researchers seek to disentangle true program effects from "reporting" effects in order to determine what might improve workplace safety. Finally, Smith cautions that many work injuries can be attributed to worker carelessness or transient conditions, suggesting that regulatory standards can be expected to reduce work injuries by at most 25 percent even in the best of situations.

Social Insurance and Benefits

Daniel Mitchell reviews developments in the literature on social insurance and employee benefits over the last ten years. Because this field is so broad, he sensibly limits most of his discussion to the two major components of the benefits/social insurance package, namely, retirement income and health care insurance.

One valuable contribution of this paper is its portfolio approach to employer-provided benefits and social insurance. Too often researchers investigate pensions alone or social security payments as a freestanding subject, or focus on the rising costs of health care, without paying enough attention to the mix of private versus social benefits and the costs and trade-offs among elements of the benefits package. Mitchell's historical perspective is quite instructive, tracing the spurts and starts of employer initiatives against the backdrop of federal programs in related areas. His international perspective is also informative, emphasizing that the U.S. split between public and private provision is by no means the only way to structure benefits, nor is it necessarily the most sensible.

Readers of this chapter may enjoy but also challenge Mitchell's interpretation of past research. He condemns much previous research as useless because of the tendency to develop untestable complex economic models and for the pursuit of what he regards as dead-end questions, such as the effects of Social Security on savings rates. He also de-emphasizes some of the useful 1980s research evaluating alternative health care systems, and overlooks some of the "new institutionalism"-type research on efficiency wages and long-term contracting in the labor market—issues which are addressed by Lazear elsewhere in this volume.

Nevertheless, Mitchell offers some thought-provoking prescriptions for what benefits researchers should examine in the years ahead. For example, he forecasts that the future of job-linked benefits is grim in light of increased employee mobility, corporate restructuring, and deregulated competition. Surely this view merits increased research attention, particularly in light of the internationalization of the labor market. In keeping with the traditions of the IRRA, Mitchell also calls for more discussion among policymakers, academic researchers, and practitioners insofar as social insurance and benefits are concerned. Because members of these respective groups are often not interested in the same questions, however, the extent to which they will develop closer policy-oriented relationships in the 1990s appears uncertain.

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XXIII. CONTRIBUTED PAPERS-LABOR ECONOMICS

Industrial Mobility Following Job Displacement: Evidence from the Displaced Worker Surveys

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Changes in the U.S. economy since the late 1970s have sparked renewed debate over the impact of structural change and the costs of structural unemployment. One important component of the economy's response to structural change is the ability of displaced workers to move to new industries (and/or occupations). The pattern of industrial mobility following job displacement is expected to reflect changes in job opportunities driven by macroeconomic forces as well as individual incentives such as investments in specific skills. For some workers, the ability to remain in the same industry is likely to be important for the retention of skills acquired before displacement. If industrial mobility is desirable from a policy perspective, it is important to understand the responsiveness of individuals to different microeconomic and macroeconomic factors.

The displaced worker literature contains little work on sectoral mobility. There are suggestions that mobility is "costly"; the post-displacement earnings of individuals who change industry are lower than the earnings of otherwise comparable individuals who stay in the same industry (see Podgursky and Swaim, 1987; Addison and Portugal, 1989; and Kletzer, 1991a). Fallick (1990) considers sectoral mobility in an analysis of jobless durations that allows for industry change.

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This paper examines the pattern of interindustry mobility following job displacement and reports estimates from a model of the determinants of industrial mobility. The econometric analysis uses a model of mobility developed in Kletzer (1991b). Key variables in the model are wage expectations from staying in the same industry versus changing industry, the duration of joblessness, and a measure of occupational specificity.

Pattern of Interindustry Mobility: Evidence from the Displaced Worker Surveys

The first Displaced Worker Survey was conducted in January 1984 as a supplement to the Current Population Survey (CPS). The survey was repeated in January of 1986, 1988, and 1990. In each survey, individuals in the regular monthly CPS were asked if they had lost a job in the five years preceding the January survey date due to "... a plant closing, an employer going out of business, a layoff from which he/she was not recalled, or other similar reasons." If the answer was yes, a series of questions followed concerning the old job and period of joblessness. Because the survey is based on the CPS, it yields a large, nationally representative sample of displaced workers. This paper uses merged data from the first three surveys.

Because production-related occupations account for a disproportionate share of displaced workers, they are the focus of this paper. Individuals aged 20 to 60 at the time of displacement were included in the sample if they lost full-time, private-sector, nonagricultural jobs in a production-related occupation because of a plant closing or relocation, elimination of position or shift, or slack work (layoff without recall).¹ These exclusions produced a sample of 2164 observations, of whom 70.5 percent were reemployed at their survey date.

In the empirical model, industrial mobility is defined as a change in 2-digit SIC industry, pre- to post-displacement. This sample of production workers exhibits a high degree of industrial mobility: 72.6 percent of reemployed workers were in a different 2-digit industry, post-displacement. Table 1 presents a matrix of transitions from predisplacement industry group to post-displacement industry group, where industry groups, a higher level of aggregation than 2-digit industry, are used for expository reasons.² Sizeable proportions of the sample stay within the same industry group. "Stay" proportions are highest in transportation, trade, and services. Most industry change is a movement to trade and services industries. There is little movement into manufacturing by nonmanufacturing displaced. The incidence

Old/New	MIN	DG	NDG	TPU	WRT	F&S	AGR	CON	PUB
1.	30.9	11.5	2.1	9.4	10.5	17.3	4.2	12.6	1.6
MIN	15.0	5.0	0.0	11.0	15.0	6.0	13.0	4.0	0.0
N = 191	31.5	30.7	38.7	22.4	33.9	31.3	27.1	37.2	61.0
.61	.85	.54	.64	.66	.46	.36	.18	.46	2.30
2.	.5	39.2	8.2	6.2	13.9	18.5	1.6	8.8	3.0
DC	17.0	11.0	9.0	9.0	3.0	7.0	6.0	11.0	15.0
N = 1093	16.0	31.1	31.4	30.9	29.6	41.5	51.3	29.4	26.6
.83	.87	1.0	.84	.79	.63	.67	.50	.75	.95
3.	.7	15.1	36.6	3.2	16.7	18.6	1.2	6.0	$1.8 \\ 0.0 \\ 28.6 \\ .67$
NDG	25.0	7.0	16.0	6.0	15.0	8.0	0.0	6.0	
N = 563	8.3	26.9	24.1	26.1	28.3	30.7	40.1	29.2	
.87	.88	.88	.99	.86	.73	.79	.42	.97	
4.	2.1	5.4	3.3	43.4	14.0	16.1	1.2	9.9	4.5
TPU	0.0	0.0	25.0	18.0	9.0	8.0	33.0	17.0	36.0
N = 242	14.4	21.1	28.5	24.9	32.4	41.6	12.0	20.7	31.0
.75	1.37	.97	1.16	.76	.70	.50	.77	.67	1.17
5.	1.0	9.1	6.3	7.7	40.8	23.3	1.0	8.7	2.1
WRT	0.0	35.0	11.0	14.0	18.0	13.0	33.0	0.0	0.0
N = 287	32.7	31.3	29.1	15.4	18.2	21.4	21.0	22.0	47.2
.81	.98	1.11	.89	.93	.75	.73	.72	.81	.95
6.	.6	12.2	7.2	6.1	18.3	43.9	2.2	8.3	$1.1 \\ 0.0 \\ 16.0 \\ 2.60$
F&S	0.0	27.0	8.0	0.0	18.0	14.0	25.0	0.0	
N = 180	52.0	28.4	33.7	16.1	18.3	20.7	29.3	13.7	
.81	.86	.81	1.04	.75	.83	.77	.35	.77	

TABLE 1

Employment Transition Matrix (rows: pre-displacement industry; columns: post-displacement industry)

Notes:

MIN = Mining; DG = Durable goods manufacturing; NDG = Nondurable goods manufacturing; TPU = Transportation, Utilities and Communications; WRT = Wholesale and Retail Trade; F&S = Finance and Services; ACR = Agriculture; CON = Construction; PUB = Public Administration.

First cell entry: percent of pre-displacement industry group displaced who were employed in the post-displacement industry group.

Second cell entry: percentage in the cell who experience no joblessness following displacement.

Third cell entry: mean weeks of joblessness for those in the cell (conditional on experiencing some joblessness).

Fourth cell entry: mean ratio of post-displacement earnings to pre-displacement earnings for those in the cell.

The numbers under the industry group headings in the first column are N, the number in the pre-displacement industry group; and the mean earnings ratio for the predisplacement industry group.

and duration of joblessness tend to be lower for those who remain in the same industry group. It appears that weeks without a job increase as the pre- and post-displacement industry groups become more dissimilar (this is seen most clearly in manufacturing). Mean jobless durations for transitions out of durable goods manufacturing are shorter for movements into mining and nondurable manufacturing, and considerably longer for movements into services.

A Model of Interindustry Mobility

The model developed in Kletzer (1991b) is a variant of the "mover/ stayer" model, where the propensity to move (to change 2-digit industry post-displacement) or stay (to stay in the same 2-digit industry post-displacement) depends on the net wage gain that might result from mobility (or the lack of it). Individuals face two options: they can stay in their pre-displacement, 2-digit industry and earn W_s , or they can change industry and earn W_c . Assume they stay in the same industry if:

$$S^{\bullet} = E(W_s - W_c) - (C_s - C_c) \ge 0,$$

where C_s and C_c are search costs involved in staying or changing industry. Wages are unknown, so the wage differential is an expected value. Assume that search costs are known.

This simple wage-based model of industry mobility can incorporate several factors. Differences in employment opportunities across industries enter through the expectations term. These wage-offer probabilities are a function of industry employment growth rates (cyclical and structural changes in labor demand), relative industry wages high-wage industries may have queues of job applicants), and individual characteristics (workers with some experience in an industry may be more likely to receive job offers). Specific skills enter through the wage differential term as these skills are likely to have more value in the same industry than in a different industry.

The wage differential may be inversely related to the probability of receiving an offer. If there is a positive wage differential, there may be a queue for jobs, thus lowering the likelihood of receiving an offer. Therefore, the effect of the wage differential may be ambiguous. The greater the differential, the less likely a "same" industry wage offer will be received (relative to a "change" industry wage offer). At the same time, as the differential increases, so does the likelihood that a "same" industry offer will be accepted. Controlling for the probability of receiving a job offer, the expected relationship between the wage differential and staying in the same industry is positive.

An individual is observed to stay in the same industry if:

(1) $S = 1 \text{ if } S^{\bullet} = \beta_0 + \beta_1 (W_s - W_c) + \beta_2 Y 1 + \beta_3 Y 2 + \epsilon \ge 0,$

where W_s and W_c are defined as above, Y1 is a vector of pre-job search variables measuring search costs, employment opportunities, and reservation wages; Y2 is a vector of post-displacement variables related to reservation wages (not including W_s and W_c), the β 's are coefficients, and ϵ is assumed to be distributed N $(0,\sigma_{\ell}^2)$. The value of staying in the same industry, S°, is not observed; only S, an indicator, is observed. S takes the value of zero for industry changers (S° < 0).

For each individual, only mobility status and a wage (either W_s or W_c) are observed. The difference $(W_s - W_c)$ must be estimated. Assume that an individual faces the following wage opportunities:

$$lnW_s = \delta_s' Z + u_s,$$

(3)
$$\ln W_c = \delta_c' Z + u_c,$$

where $\ln W_s$ ($\ln W_c$) is the logarithm of the same (change) industry wage, Z is a vector of individual, labor market, and pre-displacement industry characteristics, the δ 's are coefficients, and u_s and u_c are random error terms. Predicted "same" and "change" wage offers can be calculated for each individual using estimated coefficients from equations (2) and (3). In general, $\ln W_s$ and $\ln W_c$ cannot be estimated consistently using OLS and observed wages because there may be unobserved variables affecting both wages and sectoral mobility. This is a standard sample selection problem and its solution follows Lee (1978) and Willis and Rosen (1979).

Briefly, the wage equations lnW_s and lnW_c are substituted into equation (1) to yield a reduced form probit equation for the probability of staying in the same 2-digit industry:

(4)
$$S^{\circ} = \gamma_0 + \gamma_1' W + \gamma_2' Y_1 + v,$$

where W contains variables in Z, Y1 is as defined above, and the γ 's are coefficients.³ Normalizing σ_{τ}^2 to 1, consistent estimates of the γ 's are obtained. This reduced form probit yields selectivity variables to be included in the wage equations estimated on the "same" and "change" samples.

(2')
$$\ln W_s = \delta_s' Z + \sigma_{sv} (-f(\Psi)/F(\Psi)) + \eta_s,$$

(3')
$$\ln W_{c} = \delta_{c}' Z + \sigma_{cv} (f(\Psi)/1 - F(\Psi)) + \eta_{c},$$

where $\sigma_{sv}(\sigma_{cv})$ is the covariance between the error terms of the "same" ("change") wage equation and the industry mobility equation; $\Psi = \gamma_0 + \gamma_1 ' W_i + \gamma_2 ' Y I_i$; $E(\eta_s | S^{\circ} \ge 0) = 0$ and $E(\eta_c | S^{\circ} < 0) = 0$; F is the cumulative distribution of a standard normal random variable, and f is its density function. Estimated coefficients from the wage equations can be used to construct $(\ln W_s - \ln W_c)$ for each individual, and then the structural equation, (1), can be estimated.⁴

Results

Results from estimating the reduced form and structural sectoral mobility equations are reported in Table 2. Age and tenure are positively related to remaining in the same industry (although the effect of tenure is small and estimated imprecisely). These variables may be capturing lower search costs, or higher firm-specific investments. Pre-displacement earnings and the pre-displacement receipt of health insurance are positively related to remaining in the same industry. These variables may be capturing reservation wages.

The positive coefficient on the state unemployment rate at the time of displacement suggests that individuals are more likely to search for (and find) jobs in their old industry when local labor market conditions are adverse. Individuals displaced due to plant closing or relocation are more likely to stay in the same industry than workers displaced by layoff. Receipt of advance notification lowers the probability of staying in the same industry.

Individuals displaced from occupationally specific industries (industries with predominantly specific or narrow occupations that are only found in a small share of industries) are more likely to stay in the same industry. All else the same, the relative return to staying in an industry is higher for these individuals, who are likely to have industryspecific skills (because their occupations are not found in many other industries).⁵

Weeks of joblessness are negatively related to remaining in the same 2-digit industry.⁶ This is consistent with the descriptive pattern of mobility discussed above. One possible mechanism for this result is that some job seekers queue to remain in the same industry. Workers who do not get these jobs turn to other, lower wage, "different" jobs over time, leading to the finding that those who change industry have longer jobless durations because first they seek out jobs that do not involve sectoral mobility.

Contrary to expectations, the effect of the estimated wage differential $(\ln W_s - \ln W_c)$ is negative and statistically significant.⁷ Although the mean predicted value of the wage differential is positive, indicating positive expected returns to staying in the same industry, the differential is larger for industry changers than for industry stayers.

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	Mean (std. dev)	Mobility Probit		
Variable	Same2d	Change2d	Reduced Form	Structural	
Age	35.8	33.4	.0125**	.0067 **	
Education	(10.6) 12.1	(10.5) 12.3	(.0034) 0591 • •	(.0028) 0181	
Tenure	(2.2) 6.9 (0.7)	(2.1) 5.7	(.0184) .0044	(.0139) .0046	
Male	(6.7) .784	(6.7) .739	(.0049) .1705°	(.0042) .0475	
Married	.778	.694	(.0912) 0139 (.0759)	(.0816) .0190	
Nonwhite	.091	.126	(.0752) .0224 (.0990)	(.0589) 0624 (.0794)	
Displaced by plant close	.711	.624	(.0990) .1483°° (.0599)	.0629 (.0578)	
Received adv.	.506	.585		1414°° (.0500)	
Old earnings (log)	5.788 (.518)	5.679 (.487)	.0683 (.0734)	.1275 •• (.0611)	
Receive health insure (old)	.809	.768	0283 (.0773)	.0484 (.0636)	
Occupational specificity	.170 (.095)	.154 (.080)	1.3797°° (.4642)	1.1933 °° (.3998)	
State unemploy rate	.084	.082	7.3828°° (1.9218)	2.5249°° (1.2497)	
$(\ln W_s - \ln W_c)$	1.945 (.248)	1.980 (.257)		-1.1679** (.4277)	
Weeks jobless (predicted)	28.27 (35.5)	36.46 (40.5)		0032°° (.0007)	
Industry: Mining	.090	.065	.4430°°	.8761 ••	
Durable goods	.349	.469	(.1679) .1604	(.2548) .4266°°	
Nondurables	.249	.226	(.1192) .3567°°	(.1498) .5399°°	
TPU (Trade and Services Constant	.144 omitted)	.075	(.1221) .5899°° (.1298) 9197	(.1393) .7732°° (.1630) 7576	
Log L % predicted correctly			(.6676) 1199.0 73.1	(.5893) —1191.1 73.0	

TABLE 2 Variable Means and Industry Mobility Probit Results (asymptotic standard errors)

•• Coefficient is significantly different from 0 at 5% level (2-tailed test).

• Coefficient is significantly different from 0 at 10% level (2-tailed test).

Models also include controls for region, sample selection, old industry employment growth rate, occupation; reduced form includes controls for year of displacement. Full set of results available from author. Some insight into the wage differential result can be gleaned from Table 1. The last entry in each cell is the mean ratio of post-displacement earnings to pre-displacement earnings for individuals in that cell (all earnings are adjusted to 1982 dollars using the GNP deflator). Staying in the same industry group yields the "best" earnings outcome for workers displaced from mining, durable goods, and nondurable goods manufacturing. However, the proportion of mining and manufacturing workers staying in the same industrial group is lower than the proportion staying in transportation, communications, and public utilities (TPU), trade, and services, where the "best" earnings outcome is experienced by those making sectoral changes. This means that although stayers do better than changers on average, those who had the most to gain from staying were more likely to change.

Conclusions

These results suggest that a simple wage-driven model of mobility is incomplete. Although it might be expected that individuals would be more likely to be employed in the same industry as the wage advantage to doing so increased, this expectation is not borne out in the structural estimates. Even with controls for employment opportunities (by skill and by employment growth rates), industry mobility is not consistent with a net wage gain (most mobility is not to sectors with positive wage differentials). It appears that displaced workers with the most to gain from staying are the ones most likely to change industry. This result appears to be due to the high degree of mobility amongst displaced mining and manufacturing workers, a group who, with respect to post-displacement earnings, would be better off staying in their old industry, but who move, in sizeable proportions, to the trade and service industries where employment opportunities are better.

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Endnotes

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¹ Individuals displaced from the construction industry were excluded because the notion of permanent job displacement is not well defined in that industry. As is common in the displacement literature, individuals displaced within one year of their survey date were excluded, as were individuals self-employed at their survey date. See Kletzer (1991c) for a more detailed discussion of the Displaced Worker Surveys.

² Transition matrices can be constructed only for the subsample of reemployed.

³ Y2 is not included in the reduced form probit because its variables are endogenous to the model.

⁴ The mobility status probits are conditional on observing individuals to be employed at their survey date (post-displacement industry and earnings are available only for the reemployed). The results reported here account for this sample selectivity, using a method discussed in Kletzer (1991b).

⁵ Construction of the occupational specificity measure is discussed in Kletzer (1991b).

⁶ Jobless weeks are included in the structural probit, but not in the reduced form equation, because they are a post-displacement outcome. A predicted duration measure, based on a maximum likelihood estimate of a reduced form duration model (reported in Kletzer, 1991b), is used in the structural mobility probit.

⁷ Due to space constraints, the results from estimation of "same" and "ehange" earnings functions are not reported (they are available from the author). The reported standard errors in the structural probit do not account for the use of predicted regressors.

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Search Duration and Intermediate, Transitional Work

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The purpose of this paper is to explore the effect of transitional work on the duration of an individual's search spell. A transitional job is one that begins and ends during a reported search spell. While transitional employment may lengthen a person's search through a reduction in time and energy available for finding a permanent job, taking a transitional job may provide the searcher with increased employer contacts and allow the searcher to distance him- or herself from the stigma of unemployment.

The theory of search unemployment (Clark and Summers, 1979) implies that part of the observed unemployment rate is a result of searchers holding out for a desirable job offer; the level of "true" unemployment, that which reflects job searchers' inability to find *any* job, is lower than reported unemployment statistics suggest. A necessary condition for search unemployment to be consistent with rational behavior is that searching for a job while unemployed is somehow more efficient than searching while employed. Recent research (Blau and Robins, 1990), however, finds that employed searchers have a slightly higher probability of finding a job than unemployed searchers, suggesting, *prima facie*, that searchers should accept their first job offer and continue to look as employed searchers; a suggestion which challenges the validity of search unemployment.

This paper contends that the typical comparison of search outcomes for individuals who begin searching while unemployed ("unemployed searchers") with the outcomes for individuals who begin searching while employed ("employed searchers"), as in Blau and Robins (1990), is inappropriate. Searchers in both of these categories may be observed with a transitional job sometime during their search spell, and it is the impact of this transitional employment, not the initial condition of search, that is sought here.

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The Duration of Search

Standard search theory results in four main predictions related to the duration of search. These predictions are (see Mortensen, 1986): (a) a reduction of the cost of search (k) increases expected duration; (b) an increase of the searcher's time horizon (n) increases expected duration; (c) an increase of the searcher's skill level (s) has an ambiguous effect on duration; and (d) an increase of the searcher's discount rate (r) decreases expected duration. These predictions are made holding the demand side of the labor market constant.

Having a transitional job while searching could affect search duration either through the cost (k) or through the (perceived) skill level (s) of the searcher. Taking a transitional job increases income during the search, thus reducing the monetary cost of search, and thereby *increasing* the expected duration of search. Taking a transitional job eliminates the stigma associated with unemployment, allows the person to accumulate more experience, and potentially increases the number of employer contacts through work, thus *decreasing* the expected duration of search. The net effect on search duration of taking a transitional job, therefore, is ambiguous.

The duration of an individual's search spell is expressed in loglinear form as follows:

$\ln D_i = X_i \beta + u_i$	$\text{if } X_i \beta + u_i < MAXDUR_i,$
$\ln D_i = MAXDUR_i$	if $X_i \beta + u_i \geq MAXDUR_i$.

where MAXDUR_i is equal to the number of days between individual i's interview date and the day that individual's search spell began. This is an individual-specific upper bound on the observed length of a search spell. "In" refers to the natural logarithm, D is the duration of search in days, X_i are explanatory variables (these include the k, n, s, and r variables described above, as well as others to control for some demand-side influences, such as the unemployment rate), and β is a vector of parameters to be estimated. Duration spells (D_i) are assumed to be distributed as a Weibull to allow for straightforward calculation and determination of duration dependence. The likelihood function for the above specification is:

$$L(\beta, \mathbf{c}, \mathbf{a} \mid \mathbf{D}_{i}, \mathbf{X}_{i}, \mathbf{MAXDUR}_{i}) = \prod_{i=1}^{N_{u}} f(\ln \mathbf{D}_{i} \mid \mathbf{X}_{i}\beta) \cdot \prod_{i=1}^{N_{c}} [1 - F(\mathbf{MAXDUR}_{i} \mid \mathbf{X}_{i}\beta)],$$

where the first term is the contribution to likelihood made by the N_u individuals who experienced complete search spells, and the second term is the contribution made by the N_c individuals whose spells are censored. Not accounting for the possibility of right-censored spells results in a systematic underestimate of the spell length.

Data

The sample used for this analysis is constructed from the Employment Opportunity Pilot Project (EOPP) baseline household survey. About 30,000 familes from 11 states across the United States were interviewed. Surveys were conducted between April and October 1980, and contain information on labor market activity dating back to January 1979. Unlike more recent surveys, the EOPP asks job search questions of both unemployed and employed respondents (see Hotchkiss, 1989).

Monthly state unemployment rates were obtained from various issues of *Employment and Earnings*, a publication produced by the Department of Labor. State level unemployment insurance formula parameters were obtained from tables published by the Employment and Training Administration, made available by UBA legislative specialists.

The sample of individuals to be analyzed are those searching for a job. Within this sample, there are those who begin searching while unemployed and those who begin searching while employed. Among both groups of searchers there are some who take transitional employment while searching. A transitional job is one that falls *completely within* a person's spell of searching. About 16 percent of all individuals included have two search spells. Estimations performed using only the most recent spell of search produce essentially the same results.

In terms of mean demographics, searchers taking a transitional job are similar to searchers not taking a transitional job. Those in the transitional-employment category, however, have twice the representation of employed searchers (25 percent) than in the no-transitional job category (12 percent). In addition, employed searchers have more education (12.48 years) and more labor market experience (11.19 years) than unemployed searchers (11.31 years and 7.91 years, respectively), on average, and are twice as likely to take a transitional job than unemployed searchers. Employed searchers and those with transitional jobs are almost twice as likely than their counterparts to have a right-censored search spell. This will be taken into account in specifying an appropriate empirical model. The average recorded durations of search of those with transitional jobs last more than twice as long (373 days vs. 121 days) as the spells of those who do not experience transitional employment. In addition, employed searchers' spells last almost two and a half months longer, on average, than unemployed searchers' spells.

Empirical Analysis

Parameter estimates for a number of specifications of the duration equation are found in Table 1. Specification (1) estimates the duration model assuming the work decision is exogenous. Specifications (2) through (4) treat the work decision as endogenous by instrumenting out the dummy variable. Exogeneity of WORK was rejected via a Hausman (1978) test. (The results from the estimated Probit used to instrument out WORK are available upon request.) The estimation results are consistent across specifications in sign and magnitude and coincide with results reported in other empirical analyses of the determinants of search duration (see, for example, Lancaster, 1979; Burdett et al., 1985; and Blau and Robins, 1986).

Using the parameter estimates from specification (4), a person who takes a transitional job during search can expect his or her search spell to last about five weeks longer than a searcher who did not take a transitional job (see Maddala, 1983, for derivation of the conditional expectation of a random variable). An employed searcher can also expect to have a search spell lasting about five weeks longer than an unemployed searcher. If a person is both employed at the beginning of his or her search and takes a transitional job sometime during the search spell, he or she can expect to be searching about seven weeks longer than an unemployed searcher who does not take a transitional job. In addition, a person receiving unemployment insurance (UI) will experience a search spell less than a month longer than non-UI recipients.

It is of interest to note that endogenizing the work decision (or accounting for correlations between the work decision and the length of search duration) has the effect of reducing the impact of taking a transitional job on the length of search. This suggests that heterogeneity between those who take transitional jobs and those who do not plays an important role in the measured impact of transitional employment on search duration; accounting for individual decision making reduces the direct impact of transitional employment.

	Model Specification				
Variable	(1)	(2)	(3)	(4)	
Intercept	2.6442 •••	3.5543 •••	3.4951 •••	3.2903	
Age	(0.1062)	(0.1969)	(0.1999)	(0.1918)	
	0.0272***	0.0288°°°	0.0288°°°	0.0303°°°	
Education (years)	(0.0026)	(0.0028)	(0.0028)	(0.0027)	
	-0.0438°°°	-0.0537 ***	0.0540 •••	-0.0517°°°	
Female = 1	(0.0055)	(0.0061)	(0.0061)	(0.0058)	
	0.1294 °°°	-0.0902°°°	-0.0889***	0.0715°°	
Nonwhite $= 1$	(0.0289)	(0.0325)	(0.0325)	(0.0314)	
	0.2053°°°	0.2011•••	0.2018°°°	0.1789°°°	
Single $= 1$	(0.0282)	(0.0300)	(0.0300)	(0.0288)	
	0.1568 •••	0.1212°°°	0.1212***	0.1358 • • •	
Number of children less	(0.0274)	(0.0302)	(0.0302)	(0.0287)	
	0.0422°°°	0.0270°°	0.0266°°	0.0358°°°	
than 14	(0.0105)	(0.0111)	(0.0111)	(0.0106)	
Nonwage income (\$000)	0.0228	0.0452	0.0452	0.0433	
Unemployment rate at	(0.0345)	(0.0389)	(0.0398)	(0.0385)	
	0.2980°°°	0.3324 ••••	0.3321 •••	0.2989°°°	
end of search	(0.0103)	(0.0113)	(0.0113)	(0.0105)	
Unemployment	0.2979***	0.3324 •••	0.3316°°°	0.3438°°°	
insurance = 1	(0.0452)	(0.4985)	(0.0497)	(0.0477)	
Years of labor market	-0.0145°°°	-0.0171°°°	$-0.0171^{\circ\circ\circ}$	0.0183°°°	
experience since age 18	(0.0030)	(0.0032)	(0.0032)	(0.0031)	
Driver's license = 1	-0.1890	-0.1637°°°	-0.1643°°°	$-0.1805 \cdots$	
Work limiting	(0.0328)	(0.0346)	(0.0346)	(0.0330)	
	0.2104 •••	0.2070 •••	0.2077***	0.2071 •••	
disability = 1	(0.0453)	(0.0481)	(0.0481)	(0.0455)	
Number of search	0.1291 •••	0.1525°°°	0.1527°°°	0.1340°°°	
methods used	(0.1489)	(0.0155)	(0.0155)	(0.0150)	
EMP (employed	0.8927°°°	0.7336 °°°	1.4353°°°	1.5258°°°	
searcher) = 1 (began search with job)	(0.0488)	(0.0667)	(0.3097)	(0.2905)	
WORK = 1 (had a transitional job)	1.6718 °°° (0.0772)	-	—	—	
WORK	_	0.6166°°° (0.0960)	0.5760°°° (0.0983)	0.4117 °°° (0.0950)	
$EMP \times WORK$		-	0.6310°° (0.2668)	0.6990°° (0.2500)	
HRS \times WORK (HRS = hours/week of trans job)	_	-	_	0.0320°°° (0.0015)	
Sigma	1.1252 •••	1.1778***	1.1776•••	1.1283***	
scale parameter	202.02	210.08	210.08	202.02	
shape parameter	0.89	0.85	0.85	0.89	
Log-likelihood	-13,402	-13,817	-13,814	-13,418	
No. of observations	9,808	9,808	9,808	9,781	

TABLE 1 Duration Equation Estimates

Notes: Standard errors are in parentheses. $\circ \circ \circ = >$ significant at the 1% level. $\circ \circ = >$ significant at the 5% level. $\circ = >$ significant at the 10% level.

This issue of heterogeneity is an important consideration highlighted by Blau and Bobins (1990). Once we determine that those with transitional jobs have longer search spells than those without transitional jobs, we are left with the question of whether that difference is a result of the effect of transitional employment itself, or whether the measured effect results from the unmeasured heterogeneity of the two groups. This issue is common to all multisector models, however decomposition of the difference in expected outcome used to distinguish between endowment and treatment effects (Oaxaca, 1973; Blinder, 1976) is not appropriate for this empirical model specification. The significance of the difference in parameter coefficients between separate duration equation estimations for workers and nonworkers also vields insight into the role heterogeneity plays in determining the different search spell lengths. The null hypothesis of equal parameter coefficients across the two regressions is the same as a null hypothesis of heterogeneity between the samples: if the mechanism through which the explanatory variables affect duration is the same within the two groups (identical coefficients), the observed difference in search duration must be driven by differences in the characteristics of the two groups (heterogeneity). A Wald test statistic of 0.65 corresponding to a test of equality between parameter estimates for those with and those without transitional jobs does not allow a rejection of the null hypothesis of heterogeneity. (The parameter estimates are available upon request.) This rejection implies that the measured longer search duration is more a function of the individual characteristics of those who choose transitional employment than it is a function of the impact of transitional employment on the way those characteristics affect search duration (measured by differences in the coefficients). Consequently, there is no evidence that the positive influence of a person's education level or labor market experience on reducing search duration will be adversely affected by that person taking a transitional job. In addition, transitional employment does not appear to exacerbate the negative influence of receiving unemployment insurance or being nonwhite on lengthening the search duration.

Concluding Remarks

This paper provides the first comprehensive analysis of the impact of taking a transitional job on the duration of a person's search spell. A log-linear duration model is estimated via maximum likelihood in order to account for the censoring of search spells. The results indicate that a person who takes a transitional job while searching can expect their search spell to last about five weeks longer than someone not taking a transitional job. This suggests that in the interest of keeping one's search spell to a minimum, taking a transitional job is not the best strategy. However, for those facing transitional employment as a financial necessity, the possibility of lengthening their search spell by only five weeks, on average, should be somewhat of a relief.

Separate duration equation estimates for those who do and those who do not take a transitional job suggest that heterogeneity plays an important role in the measured difference in search spell lengths. In other words, while those who take transitional jobs experience moderately longer search spells, transitional employment does not affect the positive impact labor market experience and education (for example) have on shortening a person's spell.

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Vocational Education and Apprenticeship: An Empirical Investigation of Complementarity

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Concern over the failure of our education and training systems to adequately prepare noncollege-bound youth for entry into the labor force is being met by efforts to more closely link education with the workplace. These efforts range from counseling students on the world of work to involving them in job-related activities.

The U.S. Department of Labor's (DOL) recent Apprenticeship 2000 Initiative has greatly increased the attention given to apprenticeship as a method of skill acquisition and employment preparation. America's apprenticeship system has successfully prepared many individuals for work in skilled trades that provide good pay and steady employment. The apprenticeship concept of formal on-the-job training linked with related classroom instruction is currently being promoted by DOL as a model of work-based learning to help meet the increasing demand for semiskilled workers.

Vocational education seeks to prepare noncollege-bound youth for entry into the work force. As such, it might be viewed as an alternative to DOL's version of expanding apprenticeship. One might, however, suggest a partnership between apprenticeship and vocational education in which vocational education programs serve as a feeder system of well-prepared and well-informed candidates to apprenticeship, and as a provider of related instruction. For this partnership to form, apprenticeship program sponsors would need to consider vocation education programs as competent and credible sources of

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apprentices and related instruction. This perception has not been widely held (Glover, 1980).

Empiricial evidence concerning the returns to vocational education are mixed. Evaluations of high school vocational education have typically found commercial training to have significant positive earnings effects for females (in the 16 to 17 percent range), while technical or home economics programs have frequently registered zero or even negative earnings impacts (Grasso and Shea, 1979; Meyer, 1982; Gustman and Steinmeier, 1982). The evidence for males has been inconclusive as to whether vocational education graduates earn more than similar nonvocational-trained graduates (Campbell et al., 1986; Meyer, 1982). It has been suggested that this ambivalence results from not distinguishing whether or not the vocational training is transferred to the eventual position of employment. Estimates of the extent of training-related placement for vocational education range from approximately 25 to 45 percent, depending on occupation (Campbell et al., 1987; Rumberger and Daymont, 1982).

Campbell et al. (1986) found that when employment matched the training received, high school vocational graduates had significantly higher labor force participation rates, and 7 to 8 percent higher median earnings than a nonvocational-trained comparison group. In centrast, no economic benefits were found to accrue in the case that no training-related employment was obtained. Findings by Bishop (1982) support these conclusions. His study suggested significantly lower on-the-job training time and greater productivity over the first year of employment among employees with vocational-relevant high school training than among those without such training. Considering the Campbell (1986) and Bishop (1982) findings, it appears that to serve as a feeder system to apprenticeship (to increase the proficiency), vocational education should be directly related to the work processes of particular apprenticeable crafts.

The purpose of this paper is to explore the relationship between high school and postsecondary vocational education and apprenticeship. Specifically, does vocational education increase the probability of completing an apprenticeship? And are the economic outcomes of apprenticeship greater for apprentices with vocational education? Evidence of complementarity between apprenticeship and vocational education may signal closer alignment between the structures of apprenticeship and vocational education.

Empirical Analysis

Can differences in apprenticeship completion rates or in labor market outcome measures across well-defined groups of individuals, to any significant extent, be attributed to participation in vocational education prior to apprenticeship participation? The issues are explored here using data from the 1986 National Longitudinal Survey of Labor Market Experience, Youth Cohort (NLSY). The original NLSY contains information on 12,686 young men and women who were ages 14 to 21 when first interviewed in 1979. These individuals have been surveyed every year since, such that the NLSY contains detailed information on the school-to-work transition. The NLSY is structured so as to be representative of the U.S. population in this age group.

Within the NLSY data set there are approximately 4000 individuals who, as of the 1986 survey, had participated in formal vocational training at either the high school or postsecondary school levels. With regard to apprenticeship training, 287 individuals had participated in apprenticeship. Of these, 147 individuals completed an apprenticeship program.

To explore the issue of prior participation in vocational education affecting the completion rate of participants in apprenticeship, the 287 NLSY apprenticeship participants (of which 124 completed vocational education programs and 114 did not participate in vocational education) were included in a logistic regression equation analysis to estimate the relationship between the probability of apprenticeship completion (the dependent variable) and a series of explanatory variables including race, gender, location of residence, educational attainment, and prior participation in vocational education, our main variable of interest. The analysis was completed using NLSY sampling weights to assure the representativeness of the sample to the population of apprenticeship participants in these age groups.

A number of alternative specifications of the basic model were used. Irrespective of the specification, no statistically significant relationship was documented to exist between participation in vocational education and apprenticeship completion.

To explore the issue of prior participation in vocational education affecting the labor market outcomes associated with completion of an apprenticeship, empirical analysis was performed on the 147 individuals in the NLSY data set who completed apprenticeship training. Of the 147 apprenticeship completers, 79 indicated having received formal vocational education in high school or postsecondary programs prior to entering apprenticeship. All analyses were completed using the NLSY 1986 sampling weights.

Table 1 compares significant differences between apprenticeship completers having received prior vocational education training and those who did not. No statistically significant differences were found in mean wage and salary income or mean hourly wage rates between apprenticeship completers in the sample who had prior participation in vocational education at the high school or postsecondary levels and for those who had not. Significant differences, however, were discovered in measures of work attachment and utilization. Apprenticeship completers with prior vocational education, on average, (1) worked a

	Apprenticesh		
Variable	With Voc. Education	Without Voc. Education	Significant Difference?
Past 12 Months Wage & Salary Income	\$18,889	\$18,140	
Hourly Rate of Pay, 1986	\$8.83	\$9 .51	
Number of Hours Worked, 1986	1,979.9	1,879.1	0
Number of Weeks Worked, 1986	46.7	42.6	000
Number of Weeks Unemployed, 1986	1.1	1.6	
Number of Weeks Out of Labor Force, 1986	4.2	7.8	
Wages Set By Collective Bargaining	30.2%	15.9%	o
Years of Education Completed	12.9	13.4	000

TABLE 1

Comparison of Means: Apprenticeship Completers with and without Prior Vocational Education

Number of observations: 147

Significant at the .10 level

" Significant at the .05 level

••• Significant at the .01 level

significantly greater number of weeks, (2) worked significantly more hours in 1986, (3) experienced significantly fewer weeks out of the labor force, and (4) were significantly more likely to be employed in work settings where their wages were set by collective bargaining than were apprenticeship completers without vocational education.

To isolate whether any significant differences in measures of labor market outcomes may be attributable to a factor such as previous participation in vocational education, a multivariate estimation model was constructed. The following labor market outcome measures were examined: total wage and salary income in calendar year 1986, total wage and salary income in the last 12 months, hourly rate of pay, hours worked in 1986, weeks worked in 1986, weeks unemployed in 1986, and weeks out of the labor force in 1986.

Based on *a priori* expectations of their ability to explain differences in labor market outcomes, the explanatory variables serving as controls in the analysis included characteristics of respondents: age, race, sex, marital status, level of education; and two work environment variables: whether or not the individual resides in a Standard Metropolitan Statistical Area (SMSA) and whether or not the individual's wages are set by collective bargaining. The major variable of explanatory interest was whether or not the individual had participated in vocational education prior to apprenticeship.

A priori expectations concerning the control variables were that labor market outcomes should be positively associated with age and education as reflected in age- or education-to-earnings profiles, with residence in a SMSA (representing the higher wage structure of urban areas and the wider diversity of employment opportunities), and with having wages set by collective bargaining (proxying the effects of collective action). It was expected that membership in a minority racial/ethnic group and being female would, on average, be negatively associated with measures of labor market reward. Controlling for sex, it was expected that being married may proxy for stability, responsibility, and wage and salary income need and, therefore, would be associated with higher labor market outcomes.

Weighted regression equations were run for each of the dependent variables specified above. Table 2 provides a summary of significant explanatory variables across the different specifications of the basic estimation model. Table 2 indicates that previous receipt of vocational education had limited impact on the labor market outcomes of apprenticeship completers in our sample. The analysis uncovered no statistically significant direct relationship between vocational

Dependent Variable	Significant Explanatory Variables and Sign of Coefficients
Wage & salary income calendar year 1986	Black/Hispanic (-) °° Female () °° Wage set by coll. barg. (+) °°°
Wage & salary income past 12 months	Black/Hispanic (-) ° Female (-) °° Married, spouse present (+) °° Wage set by coll. barg. (+) °°°
Hourly rate of pay, 1986	Age (+) ••• Wage set b y coll. barg. (+) •••
Number of hours worked in 1986	Black/Hispanic (–) ° Female (–) °°°
Number of weeks worked in 1986	Female (–) °° Wage set by coll. barg. (+) ° Vocational education (+) °
Number of weeks unemployed in 1986	Age (+) ••• Female (+) ••• Married (-) • Reside in SMSA (-) •• Vocational education (-) •
Number of weeks out of the labor force in 1986	Female (+) °°° Wage set by coll. barg. (–) °

TABLE 2

Summary Findings

Number of observations: 147

* Significant at the .10 level

•• Significant at the .05 level

••• Significant at the .01 level

education participation and the labor market outcomes of wage and salary income level or hourly rate of pay among apprenticeship completers. However, vocational education was a significant factor in explaining variation in employment stability measures such as weeks worked. Apprenticeship completers with vocational education training prior to their apprenticeship worked a significantly larger average number of weeks in 1986, after controlling for other factors, than did apprenticeship completers without previous vocational training. Similarly, vocational education completers averaged fewer weeks of unemployment in 1986.

With regard to the control variables, in each case where statistical significance was achieved, the direction of the estimated relationship conformed to *a priori* expectations. Having wages set by collective bargaining was the most consistently influential control variable. The mean hourly wage for individuals in the sample was \$9.23. Individuals

reporting their wages being set by collective bargaining averaged \$11.13 hourly, while the remainder of the sample averaged \$8.52.

Conclusion

Apprenticeship participants with prior vocational education were found to be no more likely to complete apprenticeship than were apprentices without prior vocational education. However, the apprenticeship completers with prior vocational education also experienced significantly less unemployment and spent less time out of the labor force than apprenticeship completers without prior vocational education

In this analysis, the commonality between occupation of training and vocational education courses was ignored. Future research on the complementary relationship between vocational education and apprenticeship should consider more closely the quality and content of the vocational education. The matching may be an important factor toward completion of apprenticeship training if the match is strong and positive. However, completion is likely to be affected by other factors since apprenticeship is a long-term commitment by program sponsors and the trainees.

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XXIV. LESSONS FROM ABROAD: COMPARATIVE POLITICAL ECONOMY

The Resurgence of the Local Union: Lessons for Comparative Industrial Relations Theory

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Dramatic losses in membership and faltering political power indicate that labor unions in both Western Europe and the United States need to change if they are to remain viable institutions in advanced industrial nations. Everywhere unions face organizational disarray, intensified conflict with employers, and strained alliances with previously friendly political parties, interest groups, and governments.

In this paper, I argue that the current difficulties facing organized labor result from a mismatch between nationally dominated industrial unions and firm-level changes generated by the current wave of industrial reorganization. Contrary to conventional wisdom, labor appears to have adapted best to the challenges of the 1980s *not* in countries with "neocorporatist" arrangements, but rather where local union structures were able to participate in and negotiate the introduction of new technologies and the reorganization of work at the firm level.

In what follows, I will first develop the argument of this paper and contrast it with more traditional explanations. Second, I will review recent labor experiences in Western Europe and the United States in order to provide some support for my alternative explanation. In the third and concluding section I will consider the implications of this type of analysis for comparative industrial relations theory.

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Explaining Labor's Problems

Much of prevailing industrial relations theory rests on the premise that there exist different "national models" of industrial relations. Underlying this premise are three distinct but interrelated assumptions: that national borders are synonymous with the scope of markets, that national unions are necessary to cope with challenges generated by national markets and the modern corporation, and that certain national institutional arrangements are more effective than others at adapting to changing political-economic circumstances.

Yet, the new terms of international competition and technological innovation have challenged each of these underlying assumptions. Markets have become simultaneously globalized and segmented, and new technologies have provided opportunities for individual firms and entire industries to experiment with alternative business strategies and structures. Together, these developments test or transcend the boundaries of traditional industrial relations practices.

For instance, at a time when national industrial unions have proven unwilling, or perhaps unable, to adjust to or even accommodate these changes, individual firms have pursued a variety of alternative arrangements with labor. This combination of microlevel effervescence and macrolevel paralysis has provoked a series of political struggles within the union movement over how best to respond to individual firm needs for flexibility while also preserving sufficient organizational integrity at the national level to enforce standards and prevent whipsawing. The outcomes of these intraorganizational struggles, in turn, have shaped the ability (or lack thereof) of unions to respond to their current challenges.

Essentially, where organized labor has been able to reconfigure itself away from its previous vertical, highly bureaucratic structures and given local union structures greater responsibilities and power, it has better managed the current transformation of industrial relations. To support this argument, the next section will analyze the rise and fall of the national union first in abstract terms and then with specific reference to several European nations.

The Rise and Fall of the National Union

National unions arose throughout the West in response to the emergence of the modern corporation and the creation of national markets (Ulman, 1955). These national industrial unions were characterized by two basic features: organizational hierarchies in which vertical industry structures dominated local and regional bodies and national contracts standardized wages and working conditions throughout the industry, and firm-level functionalism in which managerial authority was respected and unions merely negotiated the impact of managerial decisions or filed grievances in their aftermath.

These two basic features were mutually reinforcing. For example, in response to the growth of national markets, national unions standardized wages and working conditions across plants and industrial sectors. These practices, in turn, helped sustain the consumer demand that created national markets based on mass production of standardized goods. Similarly, as industrial production became centered around large firms employing semiskilled workers to produce standardized commodities according to a strict division of labor within the plant, national industrial unions increasingly focused their organizational strategies around the workers in these firms, often at the expense of other segments of the working class. Union contracts also sought to regulate rather than transform the emergent division of labor within plants.

The recent transformation of national markets and consequent proliferation of diverse business practices not only across but also within industries have undermined the organizational rationale for the supremacy of national industrial unions. In fact, these vertical structures appear unable to adapt to the variety of corporate structures and strategies emerging within their sectors. The union's place within the firm is also changing. Functional distinctions between different kinds of jobs or between labor and management more generally are becoming blurred in firms where new technologies require broadly skilled workers capable of performing a variety of jobs (Stone, 1988).

This transformation of work, combined with the increased participation of new types of workers (women, youth, and part-time workers) in the labor market, has shrunk the traditional power base (semiskilled male workers) of most industrial unions. And even these traditional workers have become disgruntled with national union structures that appear unable to represent, let alone defend, their interests. In short, both constituent elements of the postwar industrial relations system—the supremacy of national industrial unions and firm-level functionalism—have been swept away by the current wave of industrial adjustment.

Of course, this pattern is unfolding in slightly different ways in the various countries given their divergent institutional histories. Nonetheless, in all advanced industrial nations, regardless of their previous degrees of centralization, ideological orientation, and relations with other interest groups and parties, the central role of national industry unions is eclipsing and new possibilities for labor's renewal at the local level are emerging. Whether or not organized labor is able to take advantage of these opportunities and reconstitute itself from the bottom up will depend upon: (1) the organizational capacities of local labor structures, and (2) the choices unions make in reallocating responsibilities between national and local structures. This, in turn, appears to depend upon whether or not local labor organizations were able to preserve for themselves (either through legislation as in Germany or through organizational arbitrage as in Italy) a significant role during the heyday of national unionism or whether they were able to (re)acquire (as have certain parts of the labor movement in the United States) this role in recent years. The corollary point is that where local unions were always weak (France) or where during the heyday of national unionism they lost most of their organizational autonomy and capacity (i.e., certain sectors in the United States, some northern European nations), they will experience significant difficulties adjusting to the current environment. A quick review of various national experiences will reveal the renewed importance of local level labor structures.

Resurgent Local Unions? Different National Experiences

Traditionally, national industrial relations systems are categorized by their institutional structures and ideological orientations. As a result, Italy and France are often lumped together as both representing poorly institutionalized, highly politicized, "Mediterranean" systems; the United States and the United Kingdom are linked as cases of decentralized, pluralist, bread-and-butter unionism; and various central and northern European industrial relations systems are viewed together as variants of "neocorporatism." However, the analysis advanced in this paper cuts across these traditional distinctions and pairs together seemingly divergent systems depending on whether or not, and to what extent, local labor structures play a critical role in contemporary industrial relations. The following survey reflects this alternative classification.

Resurgent Localism: Italy and Germany

In Italy, national industry unions developed quite late and did not achieve predominance in the industrial relations system until the 1960s. Only then were national industry unions able to use their control over the *contratti collettivi nazionali di lavoro* (CCNLs)—triennial industry-wide master agreements—to standardize wages, work hours, and job classification schemes throughout their industries. However, as a result of both the "hot autumn" struggles of the late 1960s-early 1970s, and the massive restructuring of the Italian economy in the 1980s, national unions quickly lost their leadership role (Locke, 1990). Throughout the 1980s individual firms lamented the need for greater "flexibility" in compensation schemes, work hours, and the organization of work, while local unions demanded greater "responsiveness" to local workplace conditions and worker needs. By the end of the decade, local unions gained the upper hand in contract negotiations and even the largest union confederation (CGIL) began to dismantle its industry-wide bargaining structures.

While German industrial unions enjoyed a longer and more institutionalized history than their Italian counterparts, they too have experienced major pressures to decentralize (Kern and Sabel, 1991). Nonetheless, they appear to have fared better than labor movements in just about all other nations. At first, this might appear to contradict my argument. But closer analysis reveals that German unions did well in the 1980s not because of their degree of centralization or the existence of neocorporatist arrangements, but rather because of the institutional flexibility provided by Germany's "dual system" of industrial relations (Thelan, 1991; Turner, 1991).

Within Germany, radically different regionally-based forms of industrial organization and industrial relations coexist (Herrigel, 1989). Vocational training programs, union recruitment channels, and the organization of interests in general are all organized along regional (*Länder*) lines. Thus, German industrial relations were never as uniform and centralized as we have often imagined them to be. Moreover, because labor is integrated into firm-level managerial decision making through both works councils and participation in supervisory boards, unions have played a significant role at the local level during this period of major work reorganization. This role is backed by law and reinforced (not usurped) by Germany's neocorporatist arrangements. Thus, as in Italy, the German industrial relations system has also experienced a shift towards the local level. The difference, however, is that this reconfiguration has occurred *within* the existing institutional framework (Katzenstein, 1989).

Apparent Contradictions: The United Kingdom and France

Nowhere has organized labor suffered as much as in France and the United Kingdom. And yet, because these two labor movements appear to be polar opposites: possessing different ideological orientations and organizational structures, and enjoying (or suffering from) governments of radically different political persuasions, traditional accounts relying on precisely these institutional categories would have difficulty explaining their parallel decline. It might appear that these two national cases also contradict my own argument. Despite the absence of industrial unionism in the United Kingdom (only now, through a series of mergers among financially troubled craft unions, is something resembling industrial unionism developing), British unions experienced the same setbacks as everyone else. Likewise, in France the Auroux Laws (1982, 1986) reinforced unions precisely at the firm level. Yet they suffered dramatic reversals all the same. Closer examination of both these cases, however, both supports and helps to refine the argument.

National industrial unions in France share with their Italian equivalents many of the same developmental legacies and ideological traditions (Lange, Ross, Vannicelli, 1982). Yet unlike in Italy where the pro-labor *Partito Democratico della Sinistra* (PDS) continues to be excluded from government, French unions have enjoyed almost a decade of ostensibly pro-labor Socialist rule. Notwithstanding this support, French unions have declined more precipitously than any other labor movement in the West. Closer examination of the unintended consequences of the Auroux Law reforms reveals why.

Through the Auroux Laws, the Socialist government sought to help French unions overcome their traditional weakness at the firm level by mandating collective bargaining and workers' participation in all firms with more than 50 employees. Not only did this well-intentioned reform effort fail—in ways remarkably similar to the failed attempt to create union locals (*sections syndicales*) following the *Grenelle Accords* of 1969—but also it stimulated French employers to develop various nonunion, human resource management schemes. Since these management-driven, workplace-participation arrangements both complied with the new law and enjoyed significant support from workers, they consequently routed the unions from organizing at the firm level (Howell, 1989).

In short, notwithstanding favorable legislation enabling unions to develop a strong presence within firms, French unions failed to reconstitute themselves at the local level. This was due not just to managerial ingenuity but also to a legacy of centralization and statefocused strategies that deprived local unions of significant organizational resources.

Similarly, while it is true that in the United Kingdom, workers are traditionally organized along craft, and not industrial lines, this should in no way be confused with local unionism. In fact, because workers in the same firm are organized by competing craft unions, their allegiances are directed towards these nationally organized craft associations and away from their coworkers in the same plant. As a result, British unions were unable to rely on firm-based, cross-craft solidarity to protect themselves from Thatcher's antiunion policies. Attacks on labor by both the government (through a series of legislative "reforms") and employers (through massive rationalization and restructuring) were exacerbated by internal divisions and defections within the labor movement. Moreover, what latent forms of local unionism did exist in Britain, i.e., the shop stewards movement, had been singled out and repressed in the 1970s as a threat to the development of centralized, quiescent labor relations in Britain. As a result, British unions did not possess the organizational resources necessary to confront the challenges of the 1980s.

Out of the present morass of British labor relations, however, local unionism may still arise. For instance, the current decentralization of collective bargaining may provide shop stewards with new opportunities to reemerge as critical actors in the British system. Another possibility rests on the diffusion of firm-level, single unionism currently promoted by Britain's new break-off unions (i.e., the EEPTU) and found in the Japanese transplants.

Mixed Signals: the United States and Sweden

In the United States, industrial relations has always been somewhat decentralized and fragmented. Yet, because national industry unions usurped many local union functions (sometimes even resources) during the heyday of their power, the organizational capacity of many local unions is guite limited. Much of this depends on the actual historical process through which the national union developed in the different industries. For instance, in steel and in clothing, where the national union was the product of either legal challenges (the United Steel Workers used the courts to challenge the independence of many established local unions and forced them to affiliate) or, as in apparel. organizational mergers, several district structures maintained a fair amount of organizational autonomy throughout the postwar period. These latent capabilities were reactivated with the breakdown of patterned bargaining in both these industries. Elsewhere, in autos for example, where much of the postwar period was spent centralizing the power of the national union, many local unions remain quite weak. This situation is exacerbated with every turnover of the national leadership as loyalists of the old vice-president are systematically replaced by followers of the new leaders, leaving locals little opportunity to develop long-term leadership or strategy.

In Sweden the breakdown of centralized bargaining and other constitutive elements of the prior neocorporatist system is no longer news. Employers are demanding decentralized, firm-level bargaining and many industrial federations are delighted to go along with them (Swenson, 1989). But attempts at rebuilding a new system are slow, apparently caught between the seemingly conflicting desires of low inflation (often associated with centralized arrangements) and more decentralized arrangements that provide firms with increased flexibility. Here too it is unclear whether the unions possess sufficient organizational strength and capacity at the local level to manage these conflicting pressures. The "workshop clubs" and other decentralized structures do not appear to be especially well prepared for the job. Perhaps, as in the case of several American industry federations, the labor organization's prior success at centralizing union policies is hindering its ability to develop strong local structures today.

Industrial Relations Theory in a Changing International Economy

I have argued that the recent wave of industrial restructuring sweeping across all advanced industrial nations has provoked a reconfiguration of industrial relations in favor of local unions. Yet, because of diverse national and sectoral organizational histories, labor unions both across and within these nations appear to possess varying abilities to respond to this common challenge. To support this argument, I have provided a highly stylized sketch of recent industrial relations developments in Western Europe and the United States. Of course, to really make the case I need systematic data enabling me to compare across national systems as well as within nations, across different industrial unions. I also need detailed organizational histories and more precise definitions of otherwise highly subjective terms like "organizational capacity" and "success." As such, this paper should be read more as a set of hypotheses still to be tested than a finished piece of research and analysis.

Yet even the highly sketchy account provided here suggests the need for a new approach to comparative industrial relations theory. Instead of treating national systems as the basic unit of analysis and searching for macroinstitutional features as the key dimensions to use in constructing comparative typologies, this paper has focused on microlevel developments and the politics of strategic choice to explain variation within nations. While this paper has focused on local unions and variation within organized labor, one could extend this analysis to other (not necessarily union) types of labor-management relations as well. The point here is simply that there is too much variation within nations for it all to be passed off as an aberration of otherwise solid national models.

New research in comparative industrial relations theory needs to investigate the determinants of these diverse subnational patterns. We could begin by comparing seemingly analogous subnational models across nations in order to grasp the underlying factors shaping the strategic choices implicit within each model. Once we better understand the determinants and consequences of each of these microlevel patterns, we could then move on and analyze the different mixes or distributions of these subnational models across nations. Only if one or a particular subset of patterns emerges as dominant in a given country should we return to the convention of comparing industrial relations systems in terms of national models. If this happens, we will be on our way toward reconstructing national models that highlight rather than obscure the dynamic relationship that exists between local practices and national institutions. If not, we must construct completely new typologies, based perhaps on precisely these more local patterns, to guide future research and theorizing.

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German Unions in the 1990s: Between Unification and Europe

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By the late 1980s, the export and domestic market success of West German industry had called attention to the stability, flexibility, and successful "participatory" quality of German industrial relations. At the same time, West German unions, with stable membership density and success in the 35-hour work week campaign, emerged in an era of widespread union decline with the strongest labor movement among the major industrial societies. But just as the success of West German industrial relations and unions became most visible and widely recognized, unions in Germany have found themselves quite suddenly posed and torn between the rather extraordinary and simultaneous new challenges of German unification and European economic integration.

How German unions cope with these new challenges is an important focus for research because in the past decade, while organized labor in the United States, Britain, Italy, and France has declined in influence under the weight of changing world markets and employer and government challenges, unions in Germany have retained and expanded influence, especially in the workplace, via the institutions of codetermination. British and Italian unions, whose leaders once advocated more militant approaches and criticized the plodding Germans bogged down in class collaboration, now propose their own versions of works councils and expanded participation in management. German industrial relations has become something of a model, in different ways, for both employers and unionists of other industrial societies, especially in Europe. At the same time, as the government and employer-led drive toward a single European market proceeds, German unions have played a role at the European level, attempting to organize cross-national union efforts in the battle for a "social dimension."

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In addition to its immediate relevance for contemporary workers' interest representation, the study of German unions and industrial relations affords a useful window on both German unification and European economic integration. Broadly speaking, this paper, which reports on the preliminary findings of an ongoing study, is an exploration of the relationship between existing national institutions and major market and political transformations underway in contemporary Europe. In a period in which many are proclaiming the devaluation of national institutions (at the expense of both supranational and local institutions and developments), I see national institutions not only as continuing important structures or frameworks for action but as major explanatory variables determining the shape of future outcomes.¹

In particular, I suggest that outcomes for industrial restructuring as well as for union and works council influence in eastern Germany (and therefore in unified Germany as a whole) remain guite open. This is true because while market influences are pushing in one direction (high unemployment, for example, is undermining union influence). the spread of western institutions to the East is pushing in another direction (German codetermination law, for example, gives unions a strong new toehold).² In spite of current risks and dangers, there is a strong possibility that successful modernization strategies in the new eastern states of Germany will include solid union and works council influence. This argument runs counter to the position of many scholars who argued first that German unions were headed for decline in the 1970s and 1980s (see, for example, Hohn, 1988), and now, although the earlier analysis may have been wrong, that unions are certainly facing a pessimistic scenario in current circumstances (Mahnkopf, 1991). These arguments fail. I think, because they are based either on misspecified institutional analysis (the contradictions of the German dual system of industrial relations) or on broad social and economic forces that downplay the importance of institutions. The strategy of U.S. firms moving to the South to avoid unionization and thereby concributing to the weakening of the U.S. labor movement cannot be reproduced in eastern Germany, I would argue, for particular · institutional reasons: codetermination backed up by law, and a cohesive national structure of industrial unionism and regional collective bargaining.

In the European arena, outcomes may be similarly open, because the European Community (EC) is becoming neither Euro-corporatist nor neoliberal federalist. Rather, the single European market is developing on the basis of intergovernmental alliance, "subsidiarity" (decision making and specific implementation of general policy pushed down to the lowest possible level), and the continuing importance of national institutions.³ German unions, for example, defend codetermination at home while pursuing cross-national labor alliances, both to establish Euro-works councils at particular firms and to push for expanded information, consultation, and participation rights for all employees in the EC. While the social charter has so far been a major disappointment to German and other unions (Silvia, 1991), the battle continues; and Euro-works councils have in fact been established at a number of firms (Turner, 1991b). This argument runs counter to more common analyses that see spreading marketization undermining the relevance of national institutions (see Streeck, 1990 for a particularly persuasive analysis along such pessimistic lines).

Due to space limitations, I will not report here on findings of research at the European level, except to say that the above argument appears to be supported by empirical evidence available so far. I will, however, report on preliminary findings from recent research in eastern Germany.

German Unification

Formal unification of the two Germanies occurred on October 3. 1990. But the reality of economic, political, and social unification is an ongoing process that began in 1989 and will continue for many years. The process has so far included economic collapse and massive unemployment in the new states of eastern Germany, considerable tension between western and eastern cultures (in and out of the workplace), open season for neo-Nazi/skinhead attacks on foreigners. and real concern about both continuing internal migration from East to West and threatened massive immigration from Eastern Europe and the collapsing Soviet Union. But the process has also included, and been dominated by, a massive transfer of institutions from West to East: codetermination law (the 1972 Works Constitution Act and the 1976 Codetermination Law) now covers the entire eastern region; (West) German firms have moved in to provide the major source of new investment; and western unions have moved in rapidly to organize the eastern work force.

I spent the month of June 1991 in Germany, much of it in the new eastern states, conducting interviews with newly elected works councillors as well as union representatives and managers at six large eastern firms. I conducted these interviews in collaboration with Ulrich Jürgens of the Wissenschaftszentrum Berlin and Larissa Klinzing of Humboldt Universität.⁴ We picked the firms for a mix in their likelihood of success in the new market economy: one firm that had secured solid Western investment (through takeover) and appeared well poised for future successful production, two firms that had been taken over or entered joint ventures and were pushing for more investment funding from the Western firm, two firms that were seeking new investment and struggling to survive, and one firm that was going under. The firms were in the auto, machinery and electronics sectors; and all had been organized by the (West) German Metalworkers Union (IG Metall).

We found a very fluid situation in which the contours of future outcomes for specific plants, firms and work forces as well as for the eastern economy as a whole were very much up for grabs. Given what we saw at the manufacturing plants and firms that we visited, we can extrapolate two distinct possible future scenarios for the new eastern states. First is a *polarization* scenario in which the eastern region is sweated for its cheaper labor costs, with production facilities serving the function of extended assembly lines for western-based mass production. In this scenario, eastern Germany would emerge at the bottom of a nationally segmented labor market, as a permanently less developed region (a sort of German Mezzogiorno or southern Italy).⁵ Exploitation of the East could increase growth in the West without contributing to rapid development in the East; and German unions could be weakened as employers play eastern work forces off against their counterparts in the West. This scenario would likely include increasing conflict and a potentially serious destabilization of German industrial relations.

The alternative is a *modernization* scenario, in which firms make use of the "advantages of backwardness" (Gerschenkron, 1962) to invest in the eastern states as a potential high growth area. In this scenario, firms take advantage of eager and flexible work forces and work force representatives in the East to bring in the latest organizational innovations (such as shop floor teamwork) and new technology. Works ouncils and unions are integrated into relations of partnership in this drive toward advanced levels of productivity and flexibility, spurring new growth for Germany as a whole. Union influence could expand in this scenario, provided unions adapt bargaining strategies to the innovations in the East, facilitate transfer of lessons in both directions (East-West and West-East), and prevent East-West whipsawing strategies by employers.

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In our plant visits, we have seen each of these scenarios taking shape; and we have also seen cases where management has not yet worked out its strategy and where employer works council negotiations have not yet borne fruit. As to which of these scenarios (or some version in between) will be dominant, we think the future is quite open. In the complex interplay between markets, institutions, and politics in this new situation, many things are possible; and there is considerable scope for actor choice (by government, employers, unions, and works councils). We see definite potential for the modernization scenario, including stable (West) German-style industrial relations and a strong influential role for unions and works councils.

What have western unions accomplished so far in the East? After a slow start, a great deal. The old Communist unions have either collapsed or been absorbed in parts into the western unions, which have effected a rapid organizational spread into the new eastern states since the summer of 1990 (Fichter, 1991). Eastern workers, driven by insecurity and the need for new representation in a market economy, have joined the western unions in large numbers. Union membership density in the all-German unions is now reported to be higher in eastern than in western Germany. IG Metall alone grew by a million members, from 2.6 to 3.6 million, in less than a year (from 1990-1991). All the works councillors we interviewed were IG Metall members. and this seems to be a common pattern. The unions have set up extensive training programs for newly elected works councillors; and they have engaged in comprehensive regional-level collective bargaining designed to phase in wage parity for eastern workers with their counterparts in the West. Unions have also pushed for an increasing "social partnership" role, illustrated by their negotiations with the Treuhandanstalt (the government-established agency in charge of privatizing the assets of the former East German state) for the establishment of employment and training societies.⁶

The picture, however, is not all rosy for unions in the East. Millions of new members in exceedingly insecure employment situations now have high expectations of their new unions. And we observed considerable tension between western unionists in the East and newly elected eastern works councillors (also now union members). Reflecting a broader tension between "Wessis" and "Ossis" in contemporary Germany, union representatives from the West (who run most regional and local union offices in the East, at least for the IG Metall) have different attitudes, values, and interests, in many cases, than the new works councillors in eastern workplaces. In an example that we heard repeated several times, eastern works councillors and work forces, to secure their jobs, were willing to work long hours, three shifts, weekends, to show employers that they were worthy of western investment. They resented pressure from western unionists who evoked successful, decades-long battles in the West against nightshift and weekend work, both of which are disruptive of family life.

Tensions inherent in the German "dual system" of industrial relations (works councils with bargaining rights in the plant; unions with bargaining rights outside the plant) are thus aggravated when the parties come from different political and workplace cultures and face very different economic situations. But most of those we interviewed expressed a basic works council-union solidarity. We see the tension as a major challenge for unions and works councils in the East, but not as a necessary source of future union decline. On the contrary, legally mandated works councils have given the unions a very important toehold in a new environment. Employers are negotiating the new terms of employment and work organization with newly elected works councillors; and employer associations (as in the West) are negotiating basic wage levels and framework agreements at the regional level with industrial unions. (West) German industrial relations appear well on the way to full introduction and establishment throughout eastern Germany.

Implications

In unified Germany as, I would argue, in the single European market, industrial relations outcomes at this moment in history are quite open. In the complex and ongoing interplay between changing markets, politics, and institutional stability and change, events, evidence, and outcomes have to be analyzed empirically and quite specifically. Facile arguments predicting union decline in the face of overwhelming international and domestic market forces are simply inadequate. I see no evidence in the German case to indicate inevitable union decline or industrial relations destabilization. On the contrary, particular German institutions (legally mandated works councils; broad, cohesive industrial union structure) give German unions a solid base from which to operate both within a unified Germany and in a single European market. If this is true, given Germany's predominant position within today's European economy, then the many prophets of gloom and doom for the future of unions in advanced industrial societies may be far too pessimistic.

Ordinarily, I would end the paper at this point. But paper presenters for this IRRA panel have been asked to speculate on the implications of their international and comparative research for labor in the U.S. Can such implications be found in this research? Perhaps. The British Trades Union Congress in 1991, for the first time, issued a call for works council legislation in Britain (arguing that works councils are coming everywhere).⁷ Italian and Irish labor federations have made the establishment of works councils by legislation and/or national collective bargaining agreement a top priority. "Euro-works councils" have been established at a number of European multinational firms, and the promotion of such councils, or information committees, is a major priority for both the European Commission and the European Trade Union Confederation (Turner, 1991b). A primary motivation for the new cross-national push for works councils in Europe lies in the relative success in the past decade of both German industry and German unions.

Can some American version of works councils be developed for future use in the U.S. economy? Although this may sound like a fantasy, all visions begin as dreams. Serious voices have called for American works councils of one sort or another (Freeman, 1990; Marshall, 1987; Weiler, 1990). It is perhaps not too soon to begin planning and debating the contours of necessary institutional reform for industrial relations in the U.S., for some future date when political and economic circumstances put such reform squarely on the agenda. But just as the British and Italians have to develop nationally specific forms that mesh with (at the same time as they reform) existing institutions, so must any proposed U.S. version of works councils (or consultation committees, employee forums, or however they are named). What we do not need are further attempts, analogous to some employer quick-fix efforts to introduce "team concepts" and "lean production," to introduce a foreign model without appropriate modification and careful adaptation to domestic circumstances.

Endnotes

¹ This perspective draws on recent work on the importance of national institutions as explanatory variables, including Zysman, 1983; Hall, 1986; and Steinmo, Thelen, and Longstreth, forthcoming.

 $^{\rm 2}$ This argument is elaborated in Jürgens, Klinzing, and Turner, 1991 and forthcoming.

³ The EC, therefore, may look more like an "international regime," or set of regimes (Keohane and Nye, 1977; Krasner, 1982), than either social-democratic transnational corporatism or a single federal state governing a single deregulated market.

 4 For a full reporting of the research findings, see Jürgens, Klinzing, and Turner (1991).

⁵ See Katzenstein (1991) for a brief discussion of this possibility and its implications.

⁶ The Week in Germany, July 26, 1991, p. 4.

7 Financial Times, September 3, 1991.

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IRRA EXECUTIVE BOARD MEETING MINUTES April 25, 1991—7:00 PM Palmer House Hotel—Chicago, IL

The meeting was called to order by President James L. Stern. Present were: President-Elect Ernest J. Savoie, Past President Robert B. McKersie, and Board Members: Richard N. Block, Francis X. Burkhardt, Sheldon Friedman, Walter J. Gershenfeld, Michele Hoyman, Maggie Jacobsen, Harry Katz, Benton F. Kunnecke, Leon E. Lunden, F. Donal O'Brien, Lamont Stallworth, and Hoyt N. Wheeler. Also present were: IRRA Secretary-Treasurer David R. Zimmerman, Editor-in-Chief John F. Burton, Jr., Newsletter Editors Charles R. Schmidt, Jr. and Rachel Grenier, national office Staff Marion Leifer and Lynn Case. Board members absent were: Phillip E. Ray and Norman Weintraub.

Guests for the purpose of giving special reports were: Mary Wright and Helen Elkiss, representing the host Chicago Chapter, and William Schoeberlein and Rita Byrnes Kittle, representing the Rocky Mountain Chapter, Denver, Colorado, site of the 1992 IRRA Spring Meeting.

Following introduction of those in attendance, Mr. Schoeberlein outlined the arrangements and proposed program for the next spring meeting, May 6-9, at the Radisson Hotel in Denver, CO. Responding to the recommendations of the Program Committee and various study groups, the program will include an opening plenary session, "how-todo-it" workshops limited to 30 attendees, and discussion panels. Plans also include special activities such as sports and tours of the surrounding area. Schoeberlein stated that all sessions still had vacancies for participants and facilitators and he asked for recommendations from the Executive Board.

A motion to approve the Washington, D.C. minutes as mailed to members was made by Hoyt Wheeler, seconded by Don O'Brien, and passed. President Stern reported on the program plans for the winter meetings in New Orleans, January 3-5, 1992. He called attention to some minor changes in presenters and discussants, but indicated that the topics would remain the same.

John Burton outlined the history of the Editorial Committee, which is responsible for overseeing all IRRA publications, including the research volume, the *Proceedings* of the two annual meetings and the Newsletter. He reported on the selection by President Stern of new committee members who will serve three-year terms, with two terms expiring each year. Craig Olson is the new member whose term will expire in 1994 and William Bigoness's term has been extended for one year to 1994, to facilitate the two-per-year expiration cycle. Continuing members are Janice Bellace, Rudy Oswald and Phil Ray. Ex-officio members include: the President, President-Elect, Newsletter Editor, Managing Editor, and the Secretary-Treasurer, Reporting on the 1991 research volume, The State of the Unions, edited by George Strauss. Chair Burton indicated that it was now at the printer and should be published within two months. The 1992 volume, selected at last year's spring meeting is a review of the previous ten vears of research in the field of industrial relations and is co-edited by David Lewin, Olivia Mitchell and Peter Sherer. At the recommendation of the Editorial Committee, a motion was made, seconded, and passed, to approve the selection of the volume on employee representation, edited by Bruce Kaufman and Morris Kleiner, as the 1993 research volume. The 1994 volume on collective bargaining is being readvertised for submissions in the May IRRA Newsletter.

Newsletter Co-editor Rachel Grenier reported that the May issue with the election ballot will be in the mail soon.

Chapter Advisory Committee Chair Don O'Brien summarized the committee discussions held at the December 1990 meeting in Washington, D.C., including the bylaws change which now requires all local chapter officers to be members of the national association, and all national officers to be members of a local chapter where one is geographically available. Other discussions concerned the 1991 spring meeting site, the proposed change in chapter fees to the national, which will become effective in 1992, and the institution of the Chapter Working Paper series to be published and made available through the national office.

Discussion on the change in chapter fees revealed the necessity of passing a motion a second time following initial approval at the

Washington, D.C. meetings. A motion to change the fee structure as follows was made by Chair O'Brien, seconded, and passed:

Less than 25 members, increase from \$35.00 to \$50.00 25-50 chapter members, increase from \$75.00 to \$90.00 51-100 chapter members, increase from \$100.00 to \$150.00 101-200 chapter members, increase from \$125.00 to \$175.00 201 chapter members and over, increase from \$150.00 to \$225.00

The incentive for promotion of national membership will be continued, giving a 25% reduction in fees if 26-50% of local members are also national members in good standing, a 60% reduction for 51-75% national members, and a 100% rebate for 76% or more national members.

Hoyt Wheeler reported on the Ad Hoc Committee deliberations concerning the structure and location of the national office, as directed by the Executive Board at the 1990 Annual Meeting. Committee members included Hoyt Wheeler, Chair; John Burton, Walter Gershenfeld, Steve Hendrickson, Joan Ilivicky, President Stern, President-Elect Savoie, and Past President Robert McKersie. Various informational mailings were distributed to the members. The committee met briefly in Washington to develop plans. Chair Wheeler and Steve Hendrickson met with the IRRA national staff and the Industrial Relations Research Institute in Madison in March. The committee as a whole met in Chicago on April 10 and proposed the following recommendations:

1. That the IRRA Secretariat consist of: (1) a Secretary-Treasurer, who will serve without financial compensation; (2) an Administrator who will be a full-time professional employee of the IRRA, will have primary responsibility for the operation of the national office and its functions, such as membership, meetings, etc., and will report to the Secretary-Treasurer; (3) one full-time assistant to the Administrator; (4) one half-time administrative employee; and (5) temporary employees as needed.

2. That the IRRA enter into a contract with the University of Wisconsin for continuation of the location of the national office at that university for a period of four years, 1991-1994, under the present arrangements as modified along the lines of the memorandum of April 9, 1991, from Richard U. Miller, Director, Industrial Relations Research Institute, University of Wisconsin.

3. That the IRRA establish a Standing Committee on Administration for the purpose of oversight and assistance to the national office. That the Standing Committee be directed to consider the issue of the location of the national office during the third year of the contract with the University of Wisconsin.

4. That there be no change at present in the location of the Managing Editor function as to IRRA publications, but that this is a matter that should be open to change as experience dictates.

5. That the editorship of the *Newsletter* be opened for bids for the next three-year term, and that indications of interest or proposals for this be directed to the Editorial Committee.

A motion to adopt the recommendations was made by Hoyt Wheeler, seconded by Ernest Savoie, and passed. A lengthy discussion followed concerning the issues of future location of the national office, and selection and advertising procedures and the need for affirmative action in the selection of the new Administrator. The board agreed to advertise the Administrator position in the *Chronicle*, a weekly higher education publication listing faculty and administrative positions, and to send a mailing to the IRRA membership. The board also recommended that Lynn Case, present IRRA staff member, be given strong consideration as one of the Assistants to the Administrator.

Secretary-Treasurer Zimmerman read a note of thanks from Marion and Larry Leifer and he expressed the association's appreciation for their years of service to the IRRA.

David Zimmerman announced a total IRRA membership of just over 4,900 as of April 1991. Of that total, 64 are life memberships, and 3,400 are paid memberships for 1991. This leaves approximately 1,000 members who paid in 1990 but have not yet paid for 1991, and 479 who paid for 1989 but not thereafter. These totals reflect a decrease in total membership of 350 from April of last year.

Reporting on finances, Zimmerman estimated an increase in income that reflects the raise in dues from \$40 to \$45. Accounting for that fact, the projected increase is slightly less than one would expect. Subscription memberships show a modest increase. Book sales have remained low for several years. Meeting income will be reduced this calendar year because we do not have an annual meeting. However, the IRRA can expect an ASSA refund from the December 1990 meeting. In terms of expense items, Zimmerman described compensation items that may change once the restructuring takes place. As a cost-saving measure concerning publication expenses, he recommended that the IRRA consider publishing its *Directory* every four years instead of every three years. A motion was made, seconded,

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and passed to extend student memberships to a maximum of four years instead of the current three years.

Announcement was made of members appointed to the Finance Committee, with Ben Kunnecke to serve as the new chair. Other members include Richard Block, John Burton, Walter Gershenfeld, Steve Hendrickson, Ernie Savoie, Norm Weintraub and David Zimmerman as ex-officio member.

Secretary-Treasurer Zimmerman reported on the site selection for the 1993 IRRA Spring Meeting. Two offers were received from local chapters to host this meeting. They are Hudson Valley Chapter in New York and the Northwest Chapter in Seattle, Washington, Mention was made of the sequence of future meetings as follows: New Orleans (ASSA-'92), Denver (IRRA-'92), Anaheim (ASSA-'93), and probably an Eastern site for ASSA-'94. Discussion followed concerning the lack of pertinent information for making an informed decision, the process by which the decision is made, and the local chapter's reaction when it is rejected following their invitation. As a result. President Stern appointed a Site Selection Committee consisting of Chair Ernie Savoie, and members David Zimmerman. Don O'Brien, and local chapter representatives Rachel Grenier, Michele Hoyman and Maggie Jacobsen to (1) review and develop criteria for selection of the spring meeting sites, and (2) to review the 1993 meeting site applicants and make a recommendation to the Board. George Strauss, president in 1993, is also to be consulted on the site of the 1993 meetings.

A letter and check in the amount of \$1,494.17 was sent to the Arizona chapter as reimbursement for expenses incurred in planning the 1991 Spring Meeting which was subsequently moved to Chicago.

Reporting on old business and referring to a letter from the University and College Labor Educators Association (UCLEA), President Stern agreed in part to meet its request for closer cooperation with the Association. He agreed to a joint session sponsored by the IRRA and the UCLEA, subject to approval from Lee Balliet, President of the UCLEA. President Stern also provided the UCLEA with information about how it could achieve representation on the IRRA Board through using proper channels. Information about the UCLEA wanting to achieve representation on the IRRA Board is to be given to the Nominating Committee.

The Membership Committee was announced: Ernie Savoie to serve as Chair, and members to include Frank Burkhardt from the Board, possibly Rudy Oswald and Don Vosburgh, and Roy Adams from Canada. This committee is charged with getting 30-40 top management and labor people involved in the association, as well as increasing membership in other ways.

Maggie Jacobsen's name has been added to the Chapter Advisory committee and Don O'Brien is to seek out other appointees and report back to President Stern. It was noted that Mr. O'Brien's term as Chair of this committee needs to be reviewed before the Winter Meetings in New Orleans, since it was originally authorized for a two-year trial period. It was later agreed that the issue would be discussed at the upcoming Local Chapter Advisory Committee Meeting.

Appointments to the Nominating Committee include Chair Gladys Gruenberg, Tom Kochan, Frances Bairstow, Bruce Kaufman, Marlene Heyser, Walter Franke, and a union person to be named at a later time. A motion to approve Stern's committee appointments was made, seconded, and passed, with the stipulation that the board will be notified of the union appointment when it becomes known.

Referring to a letter from John Niland, President of the International Industrial Relations Association, President Stern indicated the IRRA office will mail a brochure about the Ninth World Congress to all United States members with the November *Newsletter*. The IIRA also will be provided space at an information table at the meetings in New Orleans, and President Niland will be invited to sit at the head table at the presidential luncheon.

Moving to new business, Michele Hoyman proposed that the association examine the feasibility of providing a child care service through the hotel to members attending future meetings. A question about liability for this service was raised. A motion was made, seconded, and passed to appoint a Child Care Facility Committee with Michele Hoyman as Chair, to examine this issue.

There being no further business, the meeting adjourned at 11:16 P.M.

IRRA EXECUTIVE BOARD MEETING MINUTES January 2, 1992—7:00 PM Fairmont Hotel—New Orleans

The meeting was called to order by President James L. Stern. Present were: President-Elect Ernest J. Savoie, Past President Robert B. McKersie, and Board Members: Richard N. Block, Francis X. Burkhardt, Sheldon Friedman, Walter J. Gershenfeld, Michele Hoyman, Maggie Jacobsen, Harry Katz, Benton F. Kunnecke, Leon Lunden, F. Donal O'Brien, Phillip E. Ray, Lamont Stallworth, Norman Weintraub, and Hoyt Wheeler. Also present were: 1992 President-Elect George Strauss; 1992 Board Members-Elect: Donna Sockell, Mark C. Endresen, and Randolph M. Hale; Secretary-Treasurer David Zimmerman; IRRA Editor-in-Chief John F. Burton, Jr.; IRRA Newsletter Editor Rachel Grenier; IRRA Administrator Kay Hutchison; and Lynn Case from the national office. Absent was Board Member-Elect Thomas R. Colosi.

Guests at the meeting for the purpose of giving special reports were: Gladys Gruenberg, Chair of the Nominating Committee; Wayne Vroman, member of the Statistical Committee; Thomas Kochan, representing the IIRA; William Schoeberlein and Rita Byrnes Kittle of the Denver Chapter and Ben Youtsey of the Seattle Chapter.

President Stern welcomed the board and asked those present to introduce themselves. He reminded the newly elected board members that they would not be eligible to vote at this meeting.

A motion to approve the minutes of the Chicago Spring Meeting was made by Walter Gershenfeld, seconded, and passed.

Bill Schoeberlein reported on the 1992 Spring Meeting to be held in Denver, May 6-9 at the Radisson Hotel. The meetings will run 2½ days and each day will begin with a plenary session on an important topic with noted speakers. Workshops with attendance limited to 30-35 will be repeated each day. Special events for vacationers and family participation include a reception at the Mt. Vernon Country Club, trips to the Air Force Academy, Central City, a Denver pub walking tour, and Keystone and Arapahoe Basin for skiing. Registration for the Spring Meeting is \$170. Registration after the 30-day deadline or onsite will be \$195. Student registration is \$85 and a special rate of \$125 per person has been set for organizations sending five or more people.

Following dinner, Wayne Vroman highlighted the written report of the Statistical Committee presented in the absence of Chair Paul Weinstein. Noting the impending retirement of the current Commissioner of the Bureau of Labor Statistics, Janet Norwood, on December 31, Chair Weinstein recommends a letter be sent from the board to the President and Secretary of Labor urging that "the professional and neutral character of the BLS be maintained." Weinstein and Vroman will draft the letter for President Savoie's signature. President-Elect Savoie gave the Program Committee report on the Anaheim meeting in January 1993. The committee reviewed 24 proposals indicating 6-7 were well developed with another six being asked to provide more information and select a mix of discussants. Others were thought to be better presented as contributed papers or workshops at the Seattle spring meeting, and another 4-5 were not acceptable at this time. A final decision on the program will be made at the Denver Spring Meeting. Savoie indicated he would meet with California chapter representatives to see what workshops might be included in the Anaheim meeting.

Chair Gladys Gruenberg gave the report of the Nominating Committee. The committee recommended that the Executive Board give consideration to getting younger people of stature within their disciplines, whether it be academia, unions, management etc., involved in IRRA at an early stage to facilitate the selection of candidates by the Nominating Committee. In selecting the candidate for President-Elect, the committee decided to select a nominee who, although well-known in his field, had only been a member of the IRRA for two years. Concern was expressed that this might be setting a precedent for future nominations. Tom Kochan cited the Kerr-Dunlop report which states there should be no formal rotation of disciplines for President-Elect candidates, but rather that the association should seek nominees of pre-eminent stature, and that all categories should be represented at one time or another. Following a lively discussion, a ballot vote to accept the Nominating Committee's report with the nominees and the alternates did not pass. A second ballot was taken on the nominees without regard to the alternates. Lynn Williams of the Steelworkers Union was selected as the President-Elect candidate. The selection of board nominees passed by a separate vote. (See the attached sheet for board nominees and alternates.) President Stern indicated that he would reconvene the Nominating Committee should Lynn Williams decline the nomination.

Tom Kochan gave the report on the IIRA Meetings in Sydney, Australia in September 1992 and said that Rhodes Travel Agency of Madison, WI would give the association a donation for each flight booked through them. Kochan said that dates selected for the 1995 IIRA meetings to be held in Washington, D.C. were May 31-June 4. Three hotels in the area of the Capitol have been selected. Kochan expects a theme to be selected for the conference prior to the Sydney meetings. Following some discussion, it was agreed that Kochan would send a letter from the IIRA to President Savoie requesting the establishment of a working committee within the IRRA. This committee would report at the spring meeting in Denver and a decision on the association's involvement and financial support for the 1995 IIRA meetings would be made at that time. It was suggested that the IIRA meetings be held in conjunction with or in lieu of the IRRA spring meeting for that year.

Reporting for the Chapter Advisory Committee, Chair Don O'Brien stated that the committee met in Chicago at the 1991 Spring Meeting. O'Brien indicated that there was still one vacancy on this committee which will be discussed at the Chapter Advisory Committee meeting.

Ernie Savoie, chair of the Membership Committee reported the committee's concern for the continuing decline in membership, down 320 this year. He urged increased efforts to reinforce current membership. The committee also proposes a campaign to promote both national and local membership beginning this summer. Savoie asked members of the board to adopt 4-5 local chapters and to make personal contacts to nurture their development and respond to their needs. Other targeted areas for the membership drive include ILR schools (both directors and students), labor education associations and schools, various government groups and associations. The committee intends to seek a grant to help defray the cost of this 1-2 year campaign. Savoie further appealed to board members, indicating that membership promotion was part of their duty as board members. It was moved, seconded, and approved that the board would support an aggressive membership campaign as outlined by Chair Savoie.

Secretary-Treasurer David Zimmerman gave the financial report for the association. Citing a new \$10,000 deficit, he pointed to some of the major reasons for the shortfall including a decrease in revenue from membership dues somewhat offset by higher book sales. Other reasons include a decrease in interest income, increased publication costs (particularly for the spring *Proceedings*), and increased meeting costs due in part to the move from Scottsdale to Chicago. Zimmerman also stated there were substantial committee costs associated with the hiring of a new IRRA administrator.

Kay Hutchison, IRRA Administrator, reported that the national office had received a letter from the Philadelphia Chapter indicating its desire to host the 1994 Spring Meeting. Action is to be taken at the spring meeting in Denver. Hutchison also conveyed the newly created Louisiana Chapter's request to affiliate with the national association. A motion was made, seconded, and passed to accept the Louisiana Chapter as our 60th local chapter.

Reporting for the Finance Committee, Chair Ben Kunnecke expressed concern for the financial integrity of the association. The committee proposed two recommendations: 1) to increase regular membership dues from \$47.00 to \$50.00 and 2) to increase chapter dues to the national as follows:

Chapter membership	1991	<i>1</i> 992	Proposed 1993
25 members or less	\$ 35	\$ 50	\$ 65
25-50 members	75	90	105
51-100 members	100	150	200
101-200 members	125	175	225
201 + members	150	225	300

The current rebate for percentage of chapter members who are also national members in good standing would remain the same. (Note: local chapter fees are billed in late spring at the conclusion of the local chapter's program year. Accordingly, the 1992 local chapter fees will not be billed until May or June.) Following some discussion, a motion was made by Michele Hoyman, seconded, and passed to increase regular dues by \$3.00, from \$47 to \$50, with the condition that documentation for this increase be provided at the Spring Meeting. A vote on the increased chapter dues was approved, subject to discussion and approval by the local chapters and Chapter Advisory Committee. Final approval will be given at the spring meeting.

John F. Burton, Jr. gave the Editorial Committee report, stating that the 1992 research volume, a 10-year review of research in industrial relations and human resources (edited by D. Lewin, O. Mitchell, and P. Sherer) was behind schedule, but that some editing would be done by UCLA. The 1993 volume, selected last year and entitled "Employee Representation: Alternatives and Future Directions" is being edited by Morris Kleiner and Bruce Kaufman. A volume titled "Collective Bargaining in America" edited by Paula Voos was recommended by the Editorial Committee at its October meeting for approval by the board. This volume would contain an introductory chapter by the editor, commentaries from three practitioners or scholars, and 14 chapters covering individual industries. Following some discussion, a motion was made, seconded, and passed to approve the Voos' proposal as the 1994 research volume.

Burton indicated that the next *Newsletter* would carry an article requesting proposals for the 1995 volume and that they would be brought before the board at the Anaheim meeting next January.

Newsletter Editor Rachel Grenier reported that Marge Lamb of the national office would be retiring at the end of January. She has been the staff person responsible for the *Newsletter*'s publication. The board directed that a letter of thanks and commendation be sent to Lamb.

Chair of the Administrative Oversite Committee Hoyt Wheeler reported that his committee is trying to define its role. He expects that it will serve as a resource to the national staff and in the third year of the association's 4-year contract with the University of Wisconsin, report to the board on the location of the national office.

Ben Youtsey, Seattle Chapter, reported on 1994 Spring Meeting plans. His committee suggests that the meetings be held at the Seattle Center facility and that the Best Western Motel be used for hotel rooms. Another possibility is the Westin Hotel but the cost is double that of the motel site. The Seattle Committee will work with the President, Secretary-Treasurer and Administrator on final site selection.

Chair of the Child Care Committee, Michele Hoyman presented a proposal to the board requesting support for the provision of child care services at association meetings. The proposal calls for the association to arrange for a local vendor to provide child care. Such vendor would be required to have liability insurance. All costs associated with child care would be borne in full by the parents using this service. Following discussion, a motion was made, seconded, and passed to endorse the principle of available child care services at association meetings. Local chapters in meeting site locations will be contacted to assist in such arrangements.

Walter Gershenfeld spoke as a representative of the Professional Organization Liaison Committee. Gershenfeld urged the association to meet with other professional organizations to identify common ground and preserve the IR identity in undergraduate and graduate programs. Gershenfeld will meet with UCIRHRP Directors to enlist their support.

With the two-year trial period of the Chair of the Chapter Advisory Committee ending, Don O'Brien requested action of the board. A motion was made, seconded, and unanimously passed to make the chair of this committee a regular, nonvoting member of the Executive Board with a term of two years. John Burton reported that the current term of the editorship of the *Newsletter* expires in May, 1992. The Editorial Committee held a discussion on the direction the *Newsletter* ought to take in the future. Suggestions ranged from making it more substantive to beginning a new publication geared toward practitioners. The Editorial Committee will look further into these ideas and report at the spring meeting. President Stern stated that publication of the *Newsletter* would remain as is until a decision has been made.

Retiring Board members, Leon Lunden, Hoyt Wheeler, Don O'Brien, and Norman Weintraub were given a round of applause in appreciation for their three years of service. New members, Randolph Hale, Mark Endresen and Donna Sockell were welcomed as new members of the board.

The meeting adjourned at 11:25 p.m.

IRRA ANNUAL MEMBERSHIP MEETING January 4, 1992

Fairmont Hotel—New Orleans

President James L. Stern called the meeting to order at 4:50 p.m. and announced that questions or comments would be accepted from the floor.

Don O'Brien, Chair of the Chapter Advisory Committee welcomed the new Louisiana IRRA Chapter as the association's 60th chapter.

John F. Burton, Jr., reporting for the Editorial Committee, announced a slightly different procedure for the publication of the annual *Proceedings* for 1991, indicating the addition of an expanded review process. He mentioned the continuing publication of the Spring *Proceedings* as part of the *Labor Law Journal*. Burton said the 1991 research volume, *State of the Unions*, edited by George Strauss, Daniel G. Mitchell and Jack Fiorito, had been adopted as a text for a number of courses. The 1992 volume, *Research Frontiers in Industrial Relations and Human Resources*, edited by David Lewin, Olivia Mitchell and Peter Sherer, represents a continuation of a review of research in the previous decade and a look to the future. "Employee Representation: Alternatives and Future Directions," edited by Morris Kleiner and Bruce Kauffman has been selected as the 1993 research volume. Following the recommendation of the Editorial Committee, the Executive Board adopted a proposal by Paula Voos entitled "Collective Bargaining in America" as the 1994 research volume. This is also the continuation of a series and includes a number of industry studies. The February IRRA *Newsletter* will call for suggestions for the 1995 research volume. The Editorial Committee will decide on the topic and solicit proposals from potential volume editors by the fall of 1992. The committee will make a recommendation for adoption to the Executive Board at the annual meeting in Anaheim in January 1993. Burton announced that the Editorial Committee would be rethinking the content and possible expansion of the *Newsletter* to attract more local practitioners to the national association.

Secretary-Treasurer David Zimmerman reported a 1991 deficit of approximately \$10,000 for the association. Reasons cited for the deficit include lower revenue from dues because of a decrease in membership, and increased expenses from the restructuring of the national office, as well as increased publication and postage costs. During the period 1980-86, the association experienced modest increases in surplus revenues for its reserves. Because of continuing deficits over the past five years, the reserve is now quite low. As a result, the Finance Committee recommended and the Executive Board adopted an increase in dues from \$47.00 to \$50.00 for 1993 [conditional on documentation for such an increase being provided at the Spring Executive Board Meeting (editor's note)]. A change in the dues that local chapters pay to the national will be reconsidered by the Executive Board at the Denver Spring Meeting in May. Additionally, a Membership Committee has been commissioned to address the problem of declining membership in the association.

Kay Hutchison was introduced as the new IRRA Administrator. She announced future IRRA meeting dates and sites as follows:

Spring Meeting 1992: May 6-9 - Denver, CO

Annual Winter Meeting (ASSA): January 5-7, 1993 - Anaheim, CA

Spring Meeting 1993: 3rd or 4th week of April - Seattle, WA Annual Winter Meeting (ASSA): January 3-5, 1994 - Boston, MA

Annual Winter Meeting (ASSA): January, 1995 - Washington, D.C.

Hutchison indicated the national office would work with the Membership Committee to launch a massive campaign to increase membership. She expressed the need to attract more local chapter members to the national association.

President Stern announced that Lynn Williams of the Steelworkers Union had accepted the nomination for President-Elect for 1993.

Tom Kochan, reporting for the International Industrial Relations Association (IIRA), announced August 31-September 3, 1992 as the dates for the 9th World Congress in Sydney, Australia. Travel may be booked through Rhodes Travel in Madison, WI and a contribution to the association will be made for each ticket issued. Kochan gave the 1995 IIRA dates as May 31-June 4 in Washington, D.C.

Considering new business, the floor opened for discussion on the membership's reaction to Stern's presidential luncheon speech. Responding to a suggestion from Maggie Jacobsen, President Stern indicated the national office would send copies of his speech to the local chapters to use as a basis for discussion prior to the spring meeting. A question from the floor concerned the process by which ideas are acted upon. Stern stated that suggestions are taken to various IRRA committees and their recommendations are then brought to the Executive Board for action. He suggested that any member wanting to submit an idea or opinion, should send a letter to incoming President Ernie Savoie. Further discussion concerned the suggested change in the name of the association and the emphasis and focus of association meetings.

The meeting adjourned at 5:45 p.m. with the gavel being turned over to incoming President Ernie Savoie.

IRRA EXECUTIVE BOARD MEETING May 7, 1992—8:40 AM Radisson Hotel/Denver, CO

The meeting was called to order at 8:40 a.m. by President Ernest J. Savoie. Present were President-Elect George Strauss, Past President James L. Stern, President-Elect Nominee Lynn Williams, and Board Members Richard N. Block, Mark Endresen, Walter J. Gershenfeld, Randolph M. Hale, Maggie Jacobsen, and Benton F. Kunnecke. Also present were Secretary-Treasurer David Zimmerman, Editor-in-Chief John F. Burton, Jr., Newsletter Editor Rachel Grenier, Chapter Advisory Chair F. Donal O'Brien and Vice-Chair James Power. IRRA Administrator Kay Hutchison and Lynn Case represented the national office. Board members absent were Francis X. Burkhardt, Thomas R. Colosi, Sheldon Friedman, Michele Hoyman, Harry Katz, Phillip Ray, Donna Sockell, and Lamont Stallworth. Guest at the meeting for the purpose of giving a special report was Marlene Heyser, Orange County Chapter.

Minutes of the New Orleans meeting were approved as printed.

President Savoie reported on the program for the Anaheim meeting, stating that one goal was to include as many new people as possible. He indicated there were four contributed paper sessions this year instead of three. Two workshops will be generated by the Orange County Chapter. Marlene Heyser reported that one would be on "Faculty Values and Collective Bargaining in California" and the other on "Employment Consequences of Rapid Regional Growth." Concern was expressed whether the faculty values workshop would be too locally oriented and it was suggested to include people from outside California and from different educational bargaining units. Heyser reported the IRRA meeting site at the Disneyland Hotel is 3-4 blocks from the other ASSA hotels.

George Strauss gave the 1993 spring meeting report. Meetings will be held in the Seattle Center, April 29-May 1 with the Executive Inn as the host hotel. Several organizations, unions, and companies will sponsor speakers. Registration fees will be kept to around \$95, in an effort to keep the meeting affordable. The IRRA spring meeting will be held in conjunction with the chapter's normal spring conference. Hotel rates will run about \$60 per night.

Strauss said a number of program proposals for 1994 have been received and acknowledged. A proposal from the Philadelphia Chapter for the 1994 spring meeting in late April was recommended by the Site Selection Committee and accepted.

The Program Committee has been advised of Tim Keaveny's decision to step down as chair of the poster sessions after the Anaheim meeting and has concurred with his suggestion that the poster sessions be assigned a chair and associate chair for two year terms. He also recommended that the associate chair rotate to the chair of the poster sessions. Keaveny suggested that Cheryl Maranto, Marquette University, be designated associate chair of the poster sessions for the January 1993 meetings and assume the chair of the poster sessions for the January 1994 and 1995 meetings. The Board approved the Program Committee's and Keaveny's recommendations.

A lively discussion took place regarding a policy question raised by George Strauss on the number of times a person can be on a program at a given meeting. It was suggested that the national office develop a policy manual in time for the Anaheim meeting regarding past Executive Board decisions on this as well as other issues.

Ben Kunnecke reported on the earlier joint Finance and Membership Committee meeting. The committees explored ways of increasing membership, improving the products of IRRA, and ways of developing new chapters and helping existing struggling chapters. A proposal regarding the development of an institutional IRRA membership will be brought before the Anaheim meeting next January.

Reporting for the Chapter Advisory Committee, Don O'Brien stated that following a spirited discussion of the Stern proposals, the committee was not in favor of a mandated national membership dues structure, and was not in favor of a name change. He expressed concern for the perceived value of the national to many local chapter people. The committee was receptive to the idea of a per capita assessment of \$2-\$5 by local chapters to the national. O'Brien will consult the chapters on this proposal requesting their reply, and report at the Anaheim meeting. He also recognized Jim Power as the newly appointed Vice-Chair of the Chapter Advisory Committee who will assume the chair after the January meeting. Power hopes to expand the role of federal mediators in the development of new chapters.

Kay Hutchison gave the administrator's report expressing concern for the downturn in new members. There are 286 new members to date in 1992 compared to 542 in 1990. The majority of new members come from local chapter mailing lists, still the best source for new members. Hutchison asked the Board's cooperation in providing the national office with new sources for lists. The administrator expressed thanks to all those who gave special contributions to the national.

Secretary-Treasurer David Zimmerman pointed out some financial concerns for the Association. Based on first quarter projections from this year, the IRRA can expect a smaller income from dues because of the membership decrease, but a slightly higher income from books sales. Of note also, is a decrease in interest income. On the expense side, office costs are expected to slightly decrease. Looking at total regular operating income versus expenses there would be a shortfall of \$8,500. However, the IRRA has two new sources of income this year: special contributions estimated to be approximately \$10,000 (\$5,000 from individuals and \$5,000 from chapters); and a \$15,000 Ford Motor Company grant for promotions. Don O'Brien asked that a complete

list of chapters, individuals and organizations who have responded to the national's call for financial support be incorporated into these minutes. The Board approved his request and the list of contributors to date appears at the conclusion of the minutes. A proposed dues increase from \$47 to \$50 for 1993 was given final approval.

John Burton reported on the status of the various research volumes. The 1992 volume, "Research Frontiers in Industrial Relations and Human Resources" is running behind schedule. Burton will contact the editors to expedite the volume. The 1993 volume "Employee Representation: Alternatives and Future Directions" edited by Bruce Kaufman and Morris Kleiner is scheduled to be submitted for editing after Labor Day. The 1994 volume, edited by Paula Voos is titled "Collective Bargaining in America" and is also proceeding on schedule. The 1995 volume is now in the selection stage. The February IRRA Newsletter advertised suggested topics and three have been selected for possible further development. The September Newsletter will invite specific proposals on either these three preferred topics or new suggestions. The three selected topics are: international and comparative aspects of industrial relations, frontiers in dispute resolution, and individual job rights, both legal and nonlegal aspects. Prospective editors will be asked to identify specific chapters, their contents and potential authors. The Editorial Committee will screen those suggestions and come to the Anaheim meeting with a recommended proposal for the 1995 research volume.

The Editorial Committee is considering changes in the way the IRRA publishes and distributes its annual research volume. Of the proposals submitted for consideration, one offered by ILR Press at Cornell is being examined further. Publication and distribution to IRRA members would continue as in the past, but ILR Press would promote and distribute all additional copies sold. A four-year trial period has been discussed, with the ILR Press returning a percentage of the profits from the sales to the Association. The committee feels the arrangement would promote volume sales and give additional publicity to the Association. Burton and Hutchison will continue to pursue a possible arrangement with ILR Press.

Burton said the Editorial Committee has decided to publish an expanded *Newsletter* twice a year for a two-year trial period beginning this fall. This four-page supplement will include chapter information and summaries of papers from the research volume and the *Proceedings* that might be of interest to practitioners. Extra copies will be sent in bulk to chapters for distribution among their members.

A membership application form would be included in each supplement. Rachel Grenier, the current Newsletter Editor, has agreed to work on this project. Grenier said the project has a dual purpose; encouraging people to join the national to get a complete volume, and imparting some practical information. A motion was made, seconded, and passed to accept Rachel Grenier as Newsletter Editor for a threeyear term expiring in spring of 1995, following the publication of the May Newsletter.

Walter Gershenfeld reported for the Professional Liaison Committee whose purpose is to promote the field and teaching of Industrial Relations. The committee consists of Gershenfeld, Thomas Kochan, David Lewin, Bruce Kaufman and Mollie Bowers. They intend to give the AACSB, the accrediting body for business schools, specific information about the committee and its proposals on what should be taught in IR programs. The committee is currently requesting course guides from major schools to collect and analyze data. The committee intends to reach out to other organizations and associations. A suggestion was made that the heads of these organizations come together at one of our national IRRA meetings.

President Savoie reported on his selections for the Nominating Committee, indicating that Leon Lunden has accepted the chair. Following discussion on the suggested names and makeup of the committee, the Board moved, seconded, and passed a motion to empower the President to select the members of the Nominating Committee giving consideration to the recommendations of the Board.

It was suggested that a letter be sent on behalf of President Savoie and the Association expressing concern for the lack of funding for the Bureau of Labor Management Cooperative Programs within the Department of Labor. Further discussions suggested that a session on public policy and various government agencies be developed for a future IRRA meeting. Randy Hale, Walter Gershenfeld and Jim Stern will seek to develop a proposal on this topic.

President Savoie announced that Tom Kochan is working on a Sloan Foundation \$50,000 development grant for the International Meeting (IIRA) in Washington, D.C. in late May of 1995.

Announcement was made of future ASSA meetings as follows: January 1993 in Anaheim, January 1994 in Boston, and the possibility of January 1995 in Washington, D.C.

A resolution concerning IRRA cosponsorship of another organization's conference or workshop was moved, seconded and adopted. This resolution reads: WHEREAS, Each year, educational and membership organizations express an interest in having the national IRRA cosponsor or endorse a particular conference or workshop without financial involvement; and

WHEREAS, The Industrial Relations Research Association does not have an express policy with respect to how such requests are to be made and handled; be it therefore

RESOLVED, That requests for the IRRA to cosponsor or endorse another organization's conference or workshop without financial involvement should be made to the IRRA Administrator who shall exercise good judgment in determining whether the program/ workshop is compatible with the interests of the IRRA and grant or deny such requests accordingly; be it further

RESOLVED, That IRRA members, local IRRA chapters, and other groups be advised of this policy through the IRRA *Newsletter* and/or direct mail.

A list of IRRA cosponsored events will be prepared by the national office. Annual events, once approved, will have standing endorsement.

With the 50th anniversary of the IRRA in 1997, President Savoie urged members of the Board to begin to think of major events, themes and publicity that could be incorporated into a celebration of the occasion. Savoie suggested that a 50th Anniversary Committee be named at the Anaheim meeting to begin formulating plans.

Regular business of the Executive Board Meeting concluded at 11:00 a.m. An informal discussion then took place on the Presidential Survey of IRRA (Jim Stern's "Whither or Wither" Presidential Address presented at the New Orleans Meeting, January 1992). The survey was sent to 70 past presidents and past Board members.

On the topic of unitary membership President Savoie expressed his opinion that the local chapters should decide the issue, and noted that chapters have voiced strong opposition to the proposal. Chapters did endorse the idea of a per capita assessment in the \$2 to \$5 range to help the national financially. Some chapters feel that the products offered by the national (meetings and volumes) are too academic and not useful to local practitioners. President Savoie pointed out the wide disparity between chapters in the percentage of national members, from 60 and 89 percent to almost zero. Agreement was reached on trying to improve the products the national offers to locals. The issue of a change in the dues structure or an assessment will be discussed in the Chapter Advisory and Finance Committees.

Opinion on the IRRA holding an independent meeting (separate from ASSA) was split. Stern's suggestion to rotate the annual meeting among other organizations poses several problems including finding a suitable time, keeping costs down (particularly negotiated hotel rates). and organizing such a meeting, a task ASSA now does for the IRRA. Once the IRRA left the ASSA, it is unlikely that they could continue on a part-time basis, according to Secretary-Treasurer Zimmerman. Suggestions to make the spring meeting more academic and have a more national appeal included incorporating more academic paper sessions, inviting the UCIRHRP directors to hold their spring meeting jointly with the IRRA, and taking a stronger national role in planning. It was suggested that low academic attendance at the Denver meeting is likely due to budget cuts on many campuses as well as the economic situation in general. It is also true that many academics are active in more than one association. Zimmerman clarified a question about program responsibility with respect to the spring meeting. In recent years, the spring meeting program has been developed by the local host chapter but then reviewed and revised at the direction of the Program Committee. There was some discussion as to whether the Association could continue to hold two national meetings per year. It was suggested to hold an expanded annual meeting with ASSA combining local and national interests. The workshop idea used at both the Anaheim and Washington, D.C. meetings has seemed to work well. President-Elect Strauss said it was unlikely that the IRRA would ever attract practitioners to a national meeting other than from the local area. President Savoie asked for three volunteers to work on some alternatives for future meetings. Interested people should speak to him.

Regarding the suggested name change, local chapters were against the idea and the survey indicated no clear direction. Walt Gershenfeld had an alternative suggestion, that of "The Industrial and Employment Relations Association," or "The Industrial and Employment Relations Research Association." Both would be pronounced the same as "IRRA," and would have broad appeal to our constituency. On the question of how to test the suggested name, it was decided to send a letter of information and explanation to the chapters and request their input. In addition, President Savoie would like to ask the opinion of respected individuals within the association.

The discussion concluded at approximately 12:05 p.m.

Contributors to IRRA Special Fund

Individuals: Benjamin Aaron **Jack Barbash** Solomon Barkin Fred Blackwell Francine Blau **Richard Block** Mario Bognanno Clair Brown Francis Burkhardt John Burton, Ir. Thomas Colosi Virgil Day Mark Endresen Peter Feuille Lydia Fischer Walter Gershenfeld Lois Grav Harry Gudenberg George Hildebrand Eileen Hoffman Wayne Horvitz Maggie Jacobsen David B. Johnson Mark Kahn Harry Katz Clark Kerr Ben Kunnecke **Richard Lester**

Local Chapters: Atlanta Central Ohio Washington, D.C. Greater Rhode Island Chicago Philadelphia Northwest (Seattle) New York City Leon Lunden F. Ray Marshall **Robert McKersie Jovce Miller** Richard U. Miller Daniel Mitchell Charles Myers **Iovce** Naiita F. Donal O'Brien Charles Rehmus Ierome Rosow Ernest Savoie Ted Schmidt George Shultz **James Stern Jack Stieber George Strauss** Lloyd Ulman William Vaughn Paula Voos Martin Wagner Phyllis Wallace Norm Weintraub Hovt Wheeler Henry Woodbridge Edwin Young Arnold Zack David Zimmerman

Wisconsin Central New York (Syracuse) Hudson Valley (Poughkeepsie) Hamilton and District Detroit

Organizations: Ford Motor Company National Association of Manufacturers Combined Counties of Police Associations, Barrington, IL United Steelworkers of America Scariano, Kula, Ellch and Himes, Chicago

IRRA 44TH ANNUAL PROCEEDINGS

AUDITED FINANCIAL STATEMENTS December 31, 1991 and 1990

We have audited the balance sheets of the Industrial Relations Research Association, as of December 31, 1991 and 1990, and the related statements of support and revenue and expenses, statements of changes in fund balances, statements of changes in financial position, and supporting schedules for the years then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Industrial Relations Research Association, as of December 31, 1991 and 1990, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles.

February 20, 1992

Stotlar & Stotlar, S.C.

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION Madison, Wisconsin

Balance Sheets December 31,

	1991	1990
	ASSETS	
Current assets:		
Petty cash	\$ 50	\$ 50
Cash—checking	81,022	15,027
Cash—money market	6 (100	22,144
Other investments	64,489	84,597
Accounts receivable (Less allowance for doubtful accounts)	5 000	10.210
	5,082 15,599	10,318 19,862
Prepaid expenses Inventory	20,330	17,659
inventory		
Total current assets	\$186,572	\$169,657
Property, plant and equipment:		
Equipment	\$ 21.649	\$ 21,042
Accumulated depreciation	13,526	11,738
Net property, plant and equipment	\$ 8,123	\$ 9,304
Total Assets	\$194,695	\$178,961
LIABILITIES /	AND FUND BALANCE	
Current liabilities:		
Accounts payable	\$ 62.885	\$ 38,404
Payroll taxes payable	4	150
Dues collected in advance	94,157	90,968
Subscriptions collected in advance	1:3.721	14,463
Total Liabilities	\$170.767	\$143,985
Unrestrieted fund balance	23,928	34,976
Total Liabilities and Fund Balance	\$194,695	\$178,961

(The accompanying notes are an integral part of the statements)

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION Madison, Wisconsin

Income Statements For the Years Ended December 31,

	1991	1990
Income		
Income from operations		A. 10 A
Membership dues Subscriptions	\$157,631 19,475	\$149,262 17,154
Chapter fees	5,535	5,317
Book sales, net of refunds	13,798	4,120
Royalties	1,105	1,641
Newsletter advertising	3,084	3,305
Mailing list rental Meetings	6,759 21,065	6,930 29,538
ASSA refunds	9,506	7,387
Grant income	0	500
Total operating income	\$237,958	\$225,154
Expenses		
Compensation		
Salaries	\$ 71,944	\$ 75,088
Payroll taxes Contract services	4,294 7,933	6,204 1,240
Officer honorariums	7,500	7,500
Editor	14,169	11,108
Total compensation expense	\$105,840	\$101,140
Publications	\$105,040	\$101,140
Proceedings	\$ 32,548	\$ 32,906
Spring proceedings	9,969	8,761
Research volume	17,825	19,445
Newsletter	13,623	12,622
Directory	10,397	11,548
Total publication expense	\$ 84,362	\$ 85,282
Meetings General expenses		
Spring	e 11.001	\$ 6,490
Meals Travel	\$ 11,081 872	3 0,490 1.316
Miscellaneous	5.078	8,066
Profit reimbursement	2,180	0
Total spring meeting	\$ 19,211	\$ 15,872
Annual		
Meals	\$ 0	\$ 4,856
Travel Miscellaneous	0 410	1,765 427
Total annual meeting	\$ 410	\$ 7,048
Total general expenses	\$ 19,621	\$ 22,920
National expenses		
Spring General	\$ 2,389	\$ 3,131
Hospitality	2,003	1,224
Total spring meeting	\$ 4,640	\$ 4,355
Annual	4 1,010	• 1,000
General	\$ 1.637	\$ 4,492
Hospitality	1,292	4,199
Total annual meeting	\$ 2,929	\$ 8,691
Total national expenses	\$ 7,569	\$ 13,046
•	\$ 27,190	\$ 35,966
Total meetings expense		\$ 1,442
Administrative review	-1	
A dministrative search	\$ 3,891	\$ 0
Membership promotions	\$ 3,507	\$ 3,629
Chapter expenses	\$ 1,055	445
Editorial committee	\$ 946	\$ 0
Committee expenses	\$ 530	\$ 521

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Office and general expenses Computer and label costs Office supplies Postage and freight Telephone Accounting and auditing Bank charges Insurance Depreciation Duplicating Miscellaneous Storage Donations Dues Total office and general expense Total expenses	\$ 1,631 1,627 5,495 768 2,433 216 949 1,788 4,741 1,279 300 1,000 1,368 \$ 23,595 \$254,596	\$ 750 1,312 6,202 875 2,230 515 966 2,445 6,011 1,218 480 1,246 828 \$ 25,599 \$253,509
Loss from operations	\$(16,638)	\$(28,349)
Other income Interest income Gain on securities Total other income	\$ 5,425 <u>165</u> 5,590	\$ 9,038 0 9,038
Net income (loss)	<u>\$(11,048</u>)	\$(19,311)

(The accompanying notes are an integral part of the statements)

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION Madison, Wisconsin

Statements of Changes in Fund Balance For the Years Ended December 31,

	1991	1990
Unrestricted fund balance, beginning balance Release of restricted fund Prior period adjustment Net income (loss)	\$ 34,976 0 <u>(11,048)</u>	\$ 44.287 5,000 5,000 (19,311)
Unrestricted fund balance, ending balance	\$ 23,928	\$ 34,976

(The accompanying notes are an integral part of the statements)

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION Madison, Wisconsin

Statements of Changes in Financial Position For the Years Ended December 31,

	1991	1990
Financial resources provided by:		
Operations:		
Item not affecting cash and short term		
investments: Depreciation	\$ 1,788	\$ 2,445
Decrease in prepaid expenses	4,263	0
Decrease in prepaid expenses Increase in subscriptions collected in		
advance	0	843
Increase in dues paid in advance	3,189	0
Increase in accounts payable	24,335	21.296
Increase in accounts payable Decrease in accounts receivable	5,236	0
Total funds provided	\$ 38,811	\$ 24,584

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Uses of Funds:		
Net loss	\$ 11,048	\$ 19.311
Increase in accounts receivable	0	1,809
Increase in prepaid expenses	0	11,152
Increase in inventory	2,671	8,767
Purchase of equipment	607	3,046
Decrease in dues paid in advance	0	10,298
Decrease in subscriptions		
collected in advance	742	0
Total uses of funds	\$ 15,068	\$ 54,38.3
Increase (Decrease) in cash and short term		
investments	\$ 23,743	\$(29,799)
Cash and short term investments		
Beginning of year	\$ 121,818	\$151,617
End of year	\$ <u>145,561</u>	\$121,818

(The accompanying notes are an integral part of the statements)

INDUSTRIAL RELATIONS RESEARCH ASSOCIATION Madison, Wisconsin

Notes to Financial Statements

NOTE 1-SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The summary of significant accounting policies of the Industrial Relations Research Association is presented to assist in understanding the Association's financial statements.

Organization

The Association is a not-for-profit organization. Its purpose is to provide publications and services to its members in the professional field of industrial relations.

The Association is exempt from income tax under Section 501(c)(3) of the Internal Revenue Code. However, net income from the sale of membership mailing lists is unrelated business income, and is taxable as such.

Investments

Investments include balances held in the Kemper Government Securities Fund and the Kemper Money Market account. Shares in the Covernment Securities Fund were traded at 9.46 per share at year end. Funds are stated at lower of cost or market.

Inventory

The Association's inventory of research volumes, proceedings, and prior newsletters is carried at the lower of cost or market value.

Property, Plant and Equipment Property, plant and equipment are carried at cost. Depreciation is provided using the straight line method over an estimated five to seven year useful life.

Membership Dues-Advance Subscriptions Collected

Membership dues and subscriptions are assessed on a calendar year basis and are recognized on an accrual basis. Funds received for the upcoming 1992 and 1991 calendar years are reflected as deferred income on the balance sheet.

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- 1987R Human Resources and the Performance of the Pirm
- 1987A Proceedings of the 40th Annual Meeting, Chicago
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- 1988R Public-Sector Bargaining
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- 1991S Proceedings of the Spring Meeting, Chicago
- 1991R The State of the Unions
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[•] Because the Annual Meeting date was changed from December, 1991 to January, 1992 there is no "1991A" volume.

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