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**Organizational responses to technological change: A study of
workplace relations in American newspapers**

Sleigh, Stephen R., Ph.D.

City University of New York, 1991

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ORGANIZATIONAL RESPONSES TO TECHNOLOGICAL CHANGE

A Study of Workplace Relations in American Newspapers

by

STEPHEN R. SLEIGH

A dissertation submitted to the Graduate Faculty in
Sociology in partial fulfillment of the
requirements for the degree of Doctor of
Philosophy, The City University of New York.

1991

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1991

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Abstract

ORGANIZATIONAL RESPONSES TO TECHNOLOGICAL CHANGE:
A Study of Workplace Relations in American Newspapers
by Stephen R. Sleigh

Advisor: Professor William Kornblum

The American newspaper publishing industry underwent a fundamental transformation in production methods during the 1970s and 1980s with the change from letterpress to offset printing. Through four original case studies of workplace relations in American newspapers, the impact of labor-management relations on the process of changing technology is assessed.

The theoretical basis for assessing the organizational responses to technological change in the American newspaper industry is a micro-analytic view of employee, union, and management interaction. Focussing on the level of production, rather than at the macro-level of industrial relations systems theory, the case studies highlight the need for an understanding of the institutional mechanisms that mediate the common and conflicting interests of employees and employers.

With an understanding of the mechanisms of collective bargaining, the case is made for increased worker participation in areas of decision making traditionally reserved for management, especially over such decisions as the introduction of new technology.

PREFACE

I unknowingly began the research for this dissertation in September, 1974. At that time, having graduated from high school in Amherst, Massachusetts three months earlier, I was preparing to follow the familiar path of my peers into a college education. In order to earn some money, and to gain working experience, I took a job on the north side of Chicago at a printing factory. Putting off college, at the University of Illinois at Chicago, for a semester seemed a reasonable thing to do at the time, especially since this factory job paid far more than any part-time jobs that would supplement my income while at school.

Within six weeks of working at the printing factory, the W.F. Hall Printing Company, there was an opportunity to take a test to become an apprentice machinist. My score on the test led to a career choice--work and get paid to go to trade school or pay to go to the university. I decided to become a machinist. For the next four years I served an apprenticeship at W.F. Hall Printing Company and became an active member of the International Association of Machinists (I.A.M.), Local 126.

After completing my apprenticeship I joined a printing press manufacturing company, Rockwell International--Graphic Systems Division (formerly, the Goss Printing Press Company), and worked as a printing press erector for the next six years. My job as an erector took me to over fifty

newspapers, in seven countries, installing, maintaining, and repairing the most advanced offset newspaper presses in the world.

Throughout this time, from 1974 to 1985, I thought about going back to school to work through my experiences and thoughts on labor-management relations and the process of technological change. With stops at the University of Massachusetts (B.A. in Labor Relations) and Harvard University's Kennedy School of Government (M.A. in Public Administration), I formally began work on my PhD at the City University of New York in January, 1988. Throughout the dissertation, only occasional note is made of these past experiences. I have tried to make this research as objective as possible, but it must be stressed that this work could not have been done without reflection upon these eleven years of labor.

I would like also to note that work on this dissertation was greatly helped by a number of important colleagues, supporters, and friends. I owe a debt to the many people in the newspaper industry who graciously allowed me to interview them over the last two years; likewise, I owe a lot to the many Goss erectors and workers at many papers who engaged in endless conversations about these, and other, topics. Special among these people is Terence Augustyn with whom I served my apprenticeship, worked with at W.F. Hall's and at Goss, and have had many productive

fighters over the future of the American labor movement.

I also count myself as extremely fortunate to have a group of mentors who over the years have counseled my on this project and career choices. Among these valued mentors I include Kathryn Pyne Addelson, Ralph Whitehead, and Bob Schrank. Victor Gotbaum also played the role of mentor but deserves additional recognition for being on my dissertation and orals committee, and for providing me the opportunity to be part of an exciting group at the City University of New York--the Center for Labor Management Policy Studies.

No one played a more important role in advising me on the dissertation than William Kornblum. Bill is the kind of scholar who can teach and suggest constructive criticism while at the same time remain a close and valued friend. His help and encouragement greatly improved the final product, as did the thorough reading of the penultimate draft done by Dean Savage and the critique by Charles Heckscher. While the responsibility for the dissertation remains solely my own, I truly thank all of these people for their assistance.

Finally, I thank my family, my mother, Phyllis Sleigh, and father, Robert Sleigh, Jr., who supported me throughout my twisting career path, and brother, David Sleigh, and sister, Joanne Sleigh, who have provided a bedrock of unflagging support.

Special thanks are due to Ann Greiner, a colleague,

supporter, friend, and much more, who put up with my schedule that included working by day and writing by night and weekend over the last two years.

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INTRODUCTION

The introduction of new technology into the production process poses specific problems to an organization that require both strategic decision making and adaptation of existing work relationships. This dissertation focusses on the effect of labor relations on the introduction of new technology. Through an analysis of technological change in the newspaper publishing industry in the United States over the last ten years I will assess the motivation that led metropolitan newspapers to change from letterpress to offset printing and examine three distinct strategies for utilizing human resources in the process of changing to the new technologies. This micro-analysis of one industry's restructuring will provide the basis for a critique of contemporary industrial relations system in the United States.

Three case studies of American newspapers that changed the production process in the 1980s will serve as examples of how labor relations both condition and influence these strategic choices made by management. A fourth case study examines the difficulties encountered by labor and management in the course of negotiating over the introduction of new technology. The experiences in the newspaper industry suggest that even with virtually identical technologies, different firms have adopted varied forms of labor relations: from participative decision making

free" environment, or to maintaining non-union status. Assessing and explaining the development of these different forms of labor relations is the purpose of this work.

Part I sets the context of labor-management relations necessary for assessing and explaining organizational responses to technological change with emphasis on the evolution of the American system of workplace governance. In addition to this background of industrial relations Part I includes an assessment of the motivation to change technology, proceeding first with a discussion of theoretical frameworks for explaining technical change and then with a review of the evolution of new technology in newspaper publishing. Part II presents an analysis of the current state of the American newspaper publishing industry along with the three case studies of newspapers that have already changed production technology. A fourth case study is of an ongoing set of negotiations between management and ten printing unions over the future of a newspaper that requires new technology. Part III concludes this work with an analysis of the responses of the case studies through the framework of the strategic choices these organizations made using the methodology of game theory and then sets out the lessons from these cases and develops a series of recommendations for improving the process of technological change through improved labor-management relations. Each Part is briefly described below.

Part I--Workplace Relations: Past and Present

Workplace relations have undergone periodic transformations over the course of history--the change from small-scale, craft production in the 19th Century to large-scale, mass production in the 20th Century is a notable example.¹ The restructuring of workplace relations has followed an uneven path: periodic upheavals followed by longer periods of stability.²

The first chapter is an overview of the development of labor-management relations in the United States with particular attention to the effect of unionism on the managing of the production process. American style unionism has been characterized as "job control unionism" as opposed to the more ideological unionism that has developed in other countries, particularly in Europe.³ This characterization of American unionism explains the relatively narrow range of

¹ See Herbert Gutman, Work, Culture and Society in Industrializing America, (Knopf: New York, 1976) for a thorough development of the effect of this transformation in the United States, and E.P. Thompson, The Making of the English Working Class, (Vintage Books: New York, 1966) for an exposition of this process in England a generation or so earlier.

² See Alfred D. Chandler, The Visible Hand, (Harvard University Press: Cambridge, 1977) for a history of the upheaval that accompanied the growth of managerial capitalism at the turn of the 20th Century, and Lloyd Ulman, The Rise of the National Trade Union, (Harvard University Press: Cambridge, 1955) for a treatment of the growth of American trade unions around the same time.

³ See for example the work of David Montgomery, The Fall of the House of Labor, (Cambridge University Press: New York, 1989).

subjects that are typically bargained over between the representatives of labor and management, those areas of wages, hours and working conditions. The institutional view of unionism that goes along with the "job control" thesis will be assessed in Chapter I with close attention paid to the writings of its leading proponent, John T. Dunlop.

Unionism is, however, at most half of the equation for governing the workplace. The development of managerial systems that evolved in the period of rapid growth and subsequent world economic leadership for the U.S., roughly corresponding to the last 100 years, is one of the great economic success stories. The ascendancy of "scientific management" and its variants in the first third of the 20th Century has left a legacy for the management of today's workplace.⁴ The development of modern management will be assessed through the writings of Taylor, Elton Mayo, and Chester Barnard in Chapter I.

In sketching the contours of the development of workplace relations it is important to keep in mind the variability and unevenness with which this process unfolded. By suggesting a broad outline, I do not wish to imply that these developments were in any way inevitable or that the

⁴ See Frederick Taylor, The Principles of Scientific Management, (Norton: New York, 1967) for a clear exposition of the tenets of scientific management, and Charles Sable, Work and Politics, (Cambridge University Press: New York, 1984) for a discussion of the effects of scientific management and its variants on workplace relations in various parts of the world.

success of the American economy in the post-World War II years, up until the 1970s anyway, is proof that the American system of workplace relations is therefore superior to all others. Similarly, it is wrong to look at the Japanese system of workplace relations as necessarily superior to all others because of their current success.

Rather, my objective is to show in Chapter I the historical development of workplace relations but also to show how the dynamic interplay of social forces structured the responses available to labor and management in creating systems of workplace governance. The active role of government, for example, in settling labor disputes and determining wages during World War II provided a framework for increased tri-partite cooperation between labor, management, and government.⁵ Yet this path was not pursued. Similarly, the labor movement provided examples of extending the range of collective bargaining topics briefly after World War II.⁶ Again, this path was not pursued.

Chapter II continues the tracing of the evolution of labor-management relations through the heyday of American

⁵ See Cyrus Ching, Review and Reflection, (B.C. Forbes and Sons Publishing: New York, 1953) for reflections of a senior business leader who helped create the Federal Mediation and Conciliation Service.

⁶ See David Brody, Workers in Industrial America, (Oxford University Press: Oxford, 1981) for an analysis of Walter Reuther's attempt to force General Motors to cap automobile prices while granting auto workers large wage increases.

economic hegemony, roughly from 1945 to 1973, to the more recent decline over the last fifteen years. For American firms, the reality of increased global competition has meant shrinking market share in traditionally strong industries such as steel and auto manufacture, and a steady squeeze on the bottom line. In response to increased competition, American firms have dramatically restructured over the last fifteen years.⁷ Unions too have restructured--the rapid decline of the percentage of the workforce represented by unions shown in Figure I, with a projection to the end of the century,⁸ testifies to the continuing crisis facing labor organizations in the years to come.

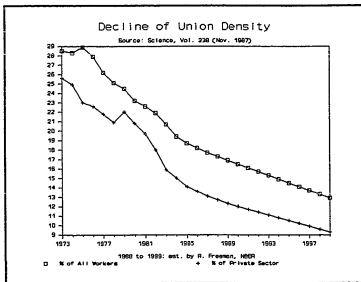


Figure I

⁷ See for example Malcolm Salter, et al, Changing Alliances, (Harvard Business School Press: Boston, 1987).

⁸ Richard Freeman, "Future Trends in Union Representation," NBER Working Paper, 1989.

Throughout the 1980s the restructuring of management has led to the tightening of corporate spending. Coupled with a changed political environment which saw the rise of increased antipathy, if not outright hostility, to labor organizations, the period of relative stability in labor-management relations has given way to a new era of uncertainty. Whether or not the changes brought about in workplace relations by increased competition are permanent or temporary, the evidence indicates that a critical transformation has taken place.⁹ Results from a nationwide survey conducted in the summer of 1989 will be used to assess the status of labor relations in general and the extent of employee involvement in decision making more specifically. The survey gathered responses from 260 personnel administrators and 60 local union leaders on their perceptions of the current state of workplace relations. The implications of these changes in labor relations for unions, businesses, and more generally, society as a whole, are less clear than the picture painted by many industrial relations scholars. Chapter II will attempt to put these implications in the proper historical and contemporary context.

What are the criteria organizations use for adopting new technology? Chapter III, Explaining Technological Change, will examine theoretical frameworks for explaining

⁹ See Thomas Kochan, et al, The Transformation of American Industrial Relations, (Basic Books: New York, 1986) for a detailed description of this process.

technical change with an application to the newspaper publishing industry. These theories are briefly overviewed below.

Explaining the process of technological change crosses the disciplines of sociology and economics. Two broad cuts at explaining technological change are static theories and dynamic theories. A common starting point are the competing static theories that come from the schools of thought associated with liberal economics and exploitation economics that developed in the early stages of industrialism.¹⁰ These two schools, best exemplified through the works of Adam Smith and Karl Marx, continue to influence contemporary theorizing on technical change.

For Smith and his followers in the school of classical and neo-classical liberal economics, technological change is best described in terms of the choices that capitalists make in allocating scarce resources to a given task. In this model the production function describes and explains the choices an owner makes: given the three major categories of inputs in the production process, land, labor, and capital, an owner chooses the combination that minimizes costs and maximizes profit. Technical change is thus explained as equaling the relative change in total unit costs when all

¹⁰ The analysis in this section draws heavily upon the work of Jon Elster's, Explaining Technical Change, (Cambridge University Press: New York, 1985).

other factor prices are held equal.¹¹

The radical critique of the classical view put forward by Smith and later liberal economists was most clearly articulated by Marx. In this view technical change was more than the selection of the efficient means of producing. Rather, it was the key to understanding the development of capitalism, of history itself, and the relationship between production and exploitation. As Marx wrote, "It is not the articles made, but how they are made, and by what instruments, that enable us to distinguish economic epochs."¹²

According to Marx capitalists change production techniques, or innovates, because he must to survive in the competitive environment of capitalism. Innovation has, however, a two-fold purpose in this view: to increase profit and to increase control over the production process. Distinct from the liberal economic view, Marx' theory hinges critically on this latter view. Through this model Marx explains the historical development of the division of labor and the increasing control of the capitalist class over the means of production. More recent theorist have taken up

¹¹ See F.E. Ferguson, The Neoclassical Theory of Production and Distribution, (Cambridge University Press, Cambridge, 1969) or W.G. Salter, Productivity and Technical Change, (Cambridge University Press, Cambridge, 1960), for detailed descriptions of the neoclassical model.

¹² Karl Marx, Capital, Volume I, (International Publishers, New York, 1867, p.180).

this framework and concluded that this control over the production process has led to a deskilling of work,¹³ and is at the root cause of exploitation in capitalist economies.¹⁴

While the classical and Marxian schools of technological change have fundamental points of disagreement, they also share a common point of reference. Both, in their own way, have powerful explanatory abilities in a static environment. In a state of equilibrium the neo-classical tools of economic analysis, the production function, does explain the choice among various factors of production. The model is much less effective in situations of dynamic change--in other words, with the real world where the concept of "ceteris paribus" ill-fits reality. Similarly, the Marxian model seems to imply that the owner of a productive enterprise is working within a world with fixed coefficients of production, and that capitalists have similar goals in controlling the process of production. In both regards this model has fatal flaws for adequately explaining the variety of competitive environments that lead owners to cooperate with their workforce in some instances while in similar situations they may try to extend their

¹³ See Harry Braverman, Labor and Monopoly Capital, (Monthly Review Press, New York, 1974) for a widely reviewed discussion of the deskilling thesis.

¹⁴ See John Roemer, Free to Lose, (Harvard University Press, Cambridge, Mass., 1988), for an original statement on the origin of exploitation.

control over the production process.

Two similar yet distinct theories offer dynamic alternatives to the popular theories advanced by neo-classical and neo-Marxian observers of technological change. The first was put forward by Joseph Schumpeter; the second has been advanced more recently by a variety of writers that I identify here as the "evolutionists."

Schumpeter's theory models innovation as the engine of economic development, as well as the cause of cyclical fluctuations in capitalist economies. The key figure in this model is the entrepreneur who spurs innovative ways of putting together resources that results in leaps from an existing technology to new ways of producing. The entrepreneur innovates, according to Schumpeter, out of a need to satisfy a need for excitement, power, and prestige, in addition to a profit motive.¹⁵

On one level this model seems to capture the complexity of the process of technological change in greater detail than either the neo-classical or neo-Marxian view, particularly in regard to changes originating from small-scale operations. On another level, however, Schumpeter minimizes the role of bureaucracy in maintaining the status quo.

¹⁵ See Joseph Schumpeter, The Theory of Economic Development, (Harvard University Press, Cambridge, Mass., 1934) and Capitalism, Socialism and Democracy, (Allen and Ulwin, London, 1961).

More recent work has reexamined the Schumpeterian model using an analogy derived from the biological sciences' evolutionary theories. In this view changes occur cumulatively over time: preferences on the part of entrepreneur's are adapted to the operating environment of the enterprise with occasional discontinuities occurring which force new ways of producing. In this model, particularly in the works of Nelson and Winter, the process of innovation is the key to explaining technological changes over time.¹⁶ The notion of search and selection, concepts central to biological theories of evolution, play a central role in determining the pace and direction of technological change.

The theories of Schumpeter and the evolutionists take on a more sociological note in that they go beyond the static economic models of the neo-classical and Marxian schools to include the vagaries of human motivation and action. It is on this level, where the decisions are made in real life as opposed to in static theoretical models, that explanatory power is to be had.

Against this background of theory in the areas of industrial relations and technological change we begin the study of the newspaper industry. The question that draws together these diverse theoretical strands relates to how

¹⁶ See Richard Nelson and Sidney Winter, An Evolutionary Theory of Economic Change, (Harvard University Press, Cambridge, Mass., 1982).

labor and management come to agreement over the introduction of new technology. Collective bargaining provides a formal system for the negotiation of a limited number of mandatory subjects--wages, hours, and working conditions--but does require bargaining over the introduction of new technology. Formal negotiations over these subjects, such as the case of new printing technology, occurs voluntarily. Given this context the question becomes sharpened to what policies would facilitate closer institutional cooperation between labor and management. The cases provide a diverse range of experiences in the extent of cooperation between labor and management in the American newspaper industry. The ambiguity of the lessons from these cases lends credence to the evolutionist's theories of technological change: the direction and pace of these changes are often uneven and difficult to predict. Notwithstanding these problems, certain patterns do emerge and lessons of the mechanisms at work do become more apparent, even if somewhat circumscribed.

Part II: Organizational Responses to Technological Change

Chapter IV--The Structure of the American Newspaper Industry--provides an historical perspective on the evolution of technological change in newspaper production, an overview of the structure of current production processes, and the competitive structure of the industry.

The newspaper publishing industry provides an example of the kinds of starts and stops that occur in the process of technological change. There are five principal components to newspaper production, all of which have experienced to greater or lesser degrees changes in technology over the years.

The process proceeds from the reporting and editorial stage to layout and composition of the paper. From there the text begins to take shape as hard copy in the typesetting department. The fourth and fifth step in the process of newspaper production is the one that this work focusses on--the actual printing and assembling of the final product. A sixth component of the process, maintenance and repair, also plays an important role in the actual printing and assembling of a daily newspaper.

The most significant changes in newspaper production occurred in two distinct phases. First, with the introduction of the linotype machine in the 1880s papers were able to dramatically increase the amount of type set a given period of time. This increase in typesetting capacity, combined with an expanding demand for daily news and advertising, led to the development of the continuous web printing press. By the early 1900s the single sheet press that had dominated newspaper production gave way to the web press which could print and fold a paper in one operation. Second, with the introduction of electronic

typesetting in the late 1960s newspapers were once again able to dramatically increase their ability to produce type and to improve print quality. As a consequence of these changes newspapers began to make the change from letterpress printing technology, where the image is transferred directly from the mechanically typeset plate to paper, to offset printing technology, where the image is transferred from an electronically typeset plate to a blanket cylinder which then transfers the image to the paper. It is this change, from letterpress to offset printing, that occurred in the late 1970s and 1980s, that provides an example for analyzing organizational responses to technological change.¹⁷

Few industries compare to newspaper publishing in terms of the rapid pace of changing from an industrial to automated means of production. For this reason the industry provides a unique sociological environment in which to study the impact of new technology on the organization of work. There are, however, limitations to such a study due to the industry's uniqueness. Chief among the limitations is the ability to generalize to a larger set of conclusions across industries and workplaces that don't share the unusual characteristics that typify newspaper publishing.

¹⁷ Sources for this chapter include, Carl Schlesinger and Harry Kelber, Union Printers and Controlled Automation, (Free Press, New York, 1967); Carl Schlesinger, The Biography of Ottmar Mergenthaler, (Oak Knoll Press, Wilmington, Del., 1989); Daniel Scott, Technology and Union Survival, (Praeger Press, New York, 1987); in addition to my own ten years as a printing press erector and machinist.

No two industries are exactly like any other; the conditions of work, managerial relations, and competitive environment will always be somewhat unique. What makes an industry or trade typical or representative, however, is the fact that certain of its experiences are shared with other workers and managers.

In Part III I make the case that, in many important respects, the changes in newspaper production can be understood within the context of a new form of work organization that has resulted from the application of micro-electronics to the production process. Two camps of industrial relations theorists have identified these trends as that of "flexible specialization" and "quality diversified production."¹⁸ My main task in this work does not include a full exposition of these views, rather I put this forward as a way of locating the specific case of newspaper production in the context of larger changes across a variety of industries.

There are two factors that differentiate newspaper production from other industries: the local character of the

¹⁸ See Charles Sabel, "A Fighting Chance", International Journal of Political Economy, Fall 1987, v.17,n.3, for a description of flexible specialization and Wolfgang Streeck, New Technology and Industrial Relations, (Basil Blackwell: New York, 1988) for a description of diversified quality production.

not include a full exposition of these views, rather I put this forward as a way of locating the specific case of newspaper production in the context of larger changes across a variety of industries.

There are two factors that differentiate newspaper production from other industries: the local character of the market and the perishable nature of the product.¹⁹ Since the rise of metropolitan daily newspapers a hundred years ago these two factors have remained constant. Only in the last ten years have these twin conditions begun to change with the emergence of USA Today and with satellite transmission of copy to remote printing facilities.²⁰ In the cases presented here the location and time constraint remain central to production decisions. Another characteristic of the industry, one that is not so unusual in American organizations, is the transformation in ownership structure from family-owned to corporate-owned newspapers.²¹

¹⁹ One industry with similar constraints is food. Newspapers, however, are even more local and more perishable than food. James Hoge, a newspaper executive at the New York Daily News, said that his paper has an active life of twelve hours after publication (as stated on "60 Minutes," April 14, 1990.

²⁰ A notable exception is the Wall Street Journal which has operated as a national chain for many years. The distinction between the Journal and other newspapers is its more narrow focus on business-related news compared to the general coverage provided by local newspapers.

²¹ Ben Bagdikian, The Media Monopoly, (New York, New York, 1987).

electronic mediums of radio and television. In the future there is also the development of electronic mail and data retrieval services that are becoming more readily available through computer networks. The push for more timely delivery and higher quality printing production in response to inter-newspaper competition and intra-industry competition are significant contributors to the development and rapid installation of new technologies.

One consequence of the increasing corporate ownership of newspapers is the consolidation of production operations. The decline of multiple papers in a given geographic area is an example of the changes brought about by consolidation. In 1923, for example, there were 1,182 firms operating in multi-paper cities. In 1988 that figure stood at 78.²² The pressure of declining profits in the industry and the high cost of modernizing equipment has effectively limited new entrants into newspaper industry outside of the major chains such as Gannett, Knight-Ridder, Times-Mirror, Tribune Corporation, and the New York Times.²³ Today the newspaper chains account for nearly 75% of all newspaper circulation and almost all of the major metropolitan newspaper

²² Editor and Publisher International Yearbook, various editions.

²³ On the profitability of firms in the newspaper industry see, James Dertouzas and Kenneth Thorpe, Newspaper Groups: Economies of Scale, Tax Laws, and Merger Incentives, (Rand Corporation, Santa Monica, Calif., 1982).

circulation.²⁴

Against this profile of the newspaper industry are case studies of newspapers that modernized production in the 1980s. The four case studies reflect a diversity of labor-management relations systems in place at the time the transformation to new production methods was considered. In three of the cases the new technology and time period of the installation were essentially identical. The printing technology, the Rockwell International Goss Metroliner, was the most advanced newspaper technology available at the time.²⁵ Chapters V, VI and VII, detail the process of changing over from letterpress to offset printing that these firms went through with particular attention to the role of labor-management relations in influencing the effectiveness of the transition. These three cases are briefly described below.

Chicago Tribune. In 1982 the Tribune made the largest single commitment to changing production processes in the newspaper industry with a \$700 million investment. The new printing facility, located on the edge of Chicago's downtown

²⁴ Data from the American Newspaper Publishers Association, various editions. "Major Metropolitan" newspaper is defined as any paper with circulation over 100,000.

²⁵ Here it should be noted that all three case studies were conducted in 1989 and 1990--some years after the installation of the new presses. It also bears noting that I worked at all three papers at some stage of the installation of these presses in my capacity as a printing press erector and machinist for Rockwell.

Loop area, replaced the aging facility in the basement of the Tribune Tower in downtown Chicago.

The installation was completed in early 1985. The Tribune workforce was unionized, with the exception of the editorial staff, in the traditional manner of the industry with some fourteen unions with distinct jurisdictions. In 1983 the Tribune altered its ownership structure from a privately held firm, in the hands of the McCormick family, to a publicly traded corporation. With this change in ownership came changes in top management.

As some of the unions approached contract negotiations in 1985 they were faced with a new set of management negotiators.²⁶ The unions, who had cooperated in the process of introducing the new presses, were now confronted by hard bargaining on the part of the Tribune negotiators led by a Tennessee law firm--King and Ballow. Negotiations broke down in the summer of 1985, a strike ensued, replacement workers were brought in, and the striking unions were effectively broken.

The Tribune case study typifies a management strategy that has dramatically reappeared in the late 1970s through the 1980s, that of actively challenging existing labor-management relations. The introduction of new technology at the Tribune provided management with an "opportunity" to

²⁶ The unions did not have common expiration dates of their contracts.

take on the unions and to increase shareholder value by reasserting control over the production process.

Miami Herald. The Miami Herald, the flagship paper of the Knight-Ridder chain, installed new offset printing technology in 1983. However, the Herald only installed two new press lines in the place of two aging presses rather than completely replacing all eight press lines. The pressroom in Miami is thus a mixture of old and new technologies.²⁷

The Herald is a non-union paper that typifies another approach to human resource management--a dedication to increasing employee involvement and paying of competitive wages and benefits in order to remain union free. This case reveals how, in the absence of union representation, the process of technological change takes place. The point that is apparent in this case study is that even without unions there still remains a social organization of work and division of labor that management must deal with.

Minneapolis Star-Tribune. The Star-Tribune built a new

²⁷ Since the installation of the offset presses in 1983 the Herald has installed two units of flexo-graphic presses in-line with the letterpresses. Flexo-graphic printing, using a water-based ink and raised plate impressions, provides an alternative to offset printing that is just beginning to catch on with American newspapers. Flexo-graphic printing has certain cost advantages over offset, particularly in consuming less energy, and more significantly has environmental advantages in the ease of recycling ink. Disadvantage of the printing process include slower speed and poorer color reproduction compared to offset presses.

production facility with state of the art printing presses in 1986. The new facility came on line in 1987 with a minimum of start up problems. The unions at the **Star-Tribune** were involved in the process of installing the new presses in a variety of innovative ways.

Due to pressure from the ownership of the paper, which remains largely in the hands of the Cowles family, management at the paper wanted to get the new facility up and running in a very short period of time. Typically the installation of a printing facility the size of the **Star-Tribune's** would take up to two years. Management wanted it done in six months--and they achieved this goal largely because of the involvement and cooperation of the workforce.

The lessons from this case study seem straight-forward and typify a third strategy of human resource management: employee and union involvement can add to the competitiveness of a firm while increasing the meaning and significance of work to employees.

These three case studies detail the organizational responses to technological change for newspapers that have already made the transition from letterpress to offset technology. The fourth case study, described in Chapter VIII, details the process of a newspaper trying to decide how, when and if to invest in new technology--the **New York Daily News**.

New York Daily News. The **Daily News** is part of the

Tribune Company's chain of papers. The printing facility in place in Brooklyn is one of the oldest in the United States, using slightly modified letterpress technology that was installed in the mid 1950s. Both the ten unions that bargain under an umbrella organization, the Allied Printing Trades Council, and the managements of the Daily News and Tribune agree that a substantial investment in new technology is needed to remain competitive in New York. What the sides have not been able to agree on is under what conditions that investment will be made. This case study places the strategic decisions of the unions and managements in perspective with respect to the decision to invest in new technology.

Part III: Bargaining Strategy, Procedures and Outcomes

Collective bargaining is the formal procedure through which organized labor and management jointly determine issues of common concern. In the United States, as described in Part I, the arena of decision making under collective bargaining is fairly narrow--primarily focussed on the issues of wages, hours, and working conditions. Decisions regarding the introduction of new technology into the workplace have historically resided solely with management. That decision, however, is always mediated by the acceptance of the workforce of the new technology to the extent that non-managerial work remains in the production process.

In the case of newspaper printing the labor content in the production process remains significant. Thus, while the decision to purchase and install new technology resides in the hands of management the cooperation of the workforce is essential to gain the optimum usage of the new technology. Given the different or competing interests of labor (organized and un-organized) and management, how can the common interests of both be realized in the process of adopting new technology? This is the question Chapter IX attempts to answer through the framework of game theory which is briefly described below.

Analyzing Strategic Choices: A Game Theoretic Perspective. Game theory approaches the problem of bargaining in a systematic way. A simplified version of collective bargaining is to think of the bargaining process as occurring between two parties, labor and management, as taking place in a one time period, and that the parties have only their own interests in mind.²⁸

²⁸ While useful for the purpose of theory the process is, of course, much more complex in every respect. Perhaps the most difficult objection to the simplified model is the number of agreements that must be reached in order to reach one joint decision. Dunlop, for example, states that even in the simplified two-person model it takes three agreements to reach one (within labor, within management, and between labor and management) (Dunlop, Dispute Resolution, Ballinger Books: Boston, 1986). In the example of the newspaper industry, where as many as 13 unions represent discreet groups of workers and with multiple management layers on the ownership side, the number of agreements that need to be reached in order to reach one is staggering. Hechter, however, has shown that the sociological concept of solidarity is a key to understanding how such diverse

The simplified model is described as a form of the Prisoner's Dilemma where the joint outcomes depend on each prisoner's decision. In terms of labor-management negotiation the situation can be modeled in terms of accepting or rejecting the introduction of new technology based on the expected wage (profit) increase that either side is willing to accept. The model, which is more fully explained and diagrammed in Chapter IX, shows that the immediate strategy of self-interest may result in one side gaining and the other losing (the zero-sum outcome). Another outcome is that both sides gain less than desired but more jointly (the positive-sum outcome).

Absent from the Prisoner's Dilemma model is the dynamic of bargaining--the second assumption of the model being a one time frame analysis. In order to model the sequence of moves and counter moves, game theory uses an extensive form of representing the possible outcomes. In this model the steps or choices are laid out as a series of choices made through a sequence of moves. The strategic choices that labor and management make at each stage of the bargaining process can thus be modeled and assessed according to these constructs and variants. Chapter IX details the game theoretic approach with an application to the four case

coalitions cohere (Michael Hechter, The Principles of Group Solidarity, University of California Press: Berkeley, 1987).

studies.²⁹

In the final Chapter, *The Common and Conflicting Interests of Employees and Employers*, I pursue what lessons are there to be drawn from the cases and analysis of the newspaper industry's organizational response to technological change. Five recommendations emerge from the preceding work that could form the basis for reforms to the industrial relations system in the United States.

The scope of this project is ambitious--to examine in some detail one industry; to place this industry in the historical context of labor relations in the United States; to understand the process of technological change from the point of production to the corporate board room; and to recommend fundamental changes in workplace governance structures.

It is well to note at the outset, however, the limitations of the study. Two important limitations are the extent of applicability of the four case studies to other American newspapers, let alone other industries, and the connection between workplace relations and organizational performance.

The chief limitation of the case study method is well

²⁹ The literature on game theory is large and growing. Particularly influential for my analysis are: Thomas Schelling, *The Strategy of Conflict*, (Harvard University Press: Cambridge, 1980); and Jon Elster, *The Cement of Society*, (Cambridge University Press: New York, 1989).

known: too small a sample from which to deduce generalizations about the overall population.³⁰ A survey of 200 American newspapers that went through the process of installing offset printing technology in the 1980s is being undertaken for future research.³¹

The survey also seeks out information on objective performance standards such as press productivity, paper waste, and manning levels. While these measures are good production performance indicators they do not necessarily translate to that spot owners and upper management are most concerned with: the bottom line. Disaggregating unit financial performance from corporate statements, for example trying to determine the New York Daily News' performance within the Tribune Company, is a daunting task.

In order to make a compelling case for a new form of workplace relations one would need to have these two pieces of information. These are, as the saying goes, areas for further research.

³⁰ See Robert Yin, Case Study Research, (Sage Publications: Beverly Hills, 1989).

³¹ Preliminary results from this survey are available from the author, complete results should be published in 1991.

PART I: LABOR-MANAGEMENT RELATIONS: PAST AND PRESENT

The American system of industrial relations has developed through successive stages over time. The reforms now underway in workplaces in the United States, whether under the name of "employee involvement", "worker participation", "quality of work life", "joint consultation", or "quality circles," to name only the most popular forms, must be understood in the context of the development of both managerial systems and, more specifically labor-management relations.

The first chapter in this part is a brief overview of the development of workplace governance in the United States from the 1800s through to the passage of the Labor-Management Relations Act (LMRA--also known as Taft-Hartley) in 1947.¹ The second chapter continues the tracing of the evolution of workplace governance systems to the present. The third chapter is an overview of theories of technological change, both in a broad sense and more particularly in respect to American labor relations. Having this general context in mind will allow a clearer understanding of the particular circumstances of workplace governance and technological change in the newspaper publishing industry.

¹ The literature on the subject is voluminous. Two useful starting points are Lloyd Ulman, The Rise of the National Trade Union, (Cambridge: Harvard University Press, 1955) and Alfred D. Chandler, Jr., The Visible Hand: The Managerial Revolution in American Business, (Cambridge: Harvard University Press, 1977).

CHAPTER I: THE EVOLUTION OF WORKPLACE GOVERNANCE IN THE U.S.

Mass Production and Scientific Management

Up until the Civil War, the American economic and social character was typified by small enterprises that depended on craft workers in local communities. The transition from a small, agrarian society and economy to industrial powerhouse occurred in the post-Civil War years with the expansion of a national railroad and banking system.

By the turn of century the United States was poised to assume world leadership in the production of steel, followed by the development of the automobile and electrical products. The new shape of economic activities, going from small scale, individualized production to large scale mass production, radically changed relations within the workplace.² Owners or craftsmen were no longer able to directly supervise work thus creating the need for intermediaries to act on behalf of owners in directing and planning work. These intermediaries, managers, were a new force within enterprises who quickly proved that the efficient operation of large-scale industry could not be left to the older system of craft production.³

² See Robert Reich, The Next American Frontier, (Times Books, New York, 1983), for a concise analysis of the changes in managerial imperatives.

³ See Herbert Gutman, Work, Culture and Society in Industrializing America, (New York: Knopf, 1976)

The new system of mass production that grew by leaps in the forty years between 1890 and 1930 was accompanied by a philosophy developed by a mechanical engineer and machinist by trade, Frederick Winslow Taylor. In one slim volume, The Principles of Scientific Management, published in 1911, Taylor outlined a pragmatic approach to managing mass-production that involved the breaking down of skill based tasks into ever smaller, more routine procedures.

While the Taylor system was resisted, often times fiercely, by both workers and foremen who saw themselves being replaced by engineers, American industry adopted, to greater or lesser extent in different industries and by specific firms, the principles behind and realities of mass-production similar to that described by Taylor. The assembly line of Henry Ford and films of Charlie Chaplin like "Modern Times", were testimony to the power of the new system of mass production.

The essence of scientific management as stated by Taylor was five fold: "Science, not rule of thumb; Harmony, not discord; Cooperation, not individualism; Maximum output, in place of restricted output; and, The development of each man to his greatest efficiency and prosperity."⁴ While Taylor does sound a note of cooperation towards employees, his underlying premise was that workers had a "natural

⁴ Taylor, Principles of Scientific Management, (New York: Norton, 1967, p.140)

instinct" to "loafing or soldiering" on the job.⁵ The benefits of cooperation were denied workers, while the costs of losing skill or changing work habits were generally borne by the worker.

Through these five general principles Taylor believed that management would gain control of and master mass production techniques. The involvement of workers, particularly skilled craftsmen, was unnecessary or even counterproductive in this conception because these workers lacked time and ability for abstract thinking. More importantly though, Taylor recognized that the ".personal interest [of the worker] would lead him inevitably to keep his discoveries secret."⁶

Taylor's system rejected the prevailing managerial wisdom of the day which was based on the "initiative and incentive" system. Such a system, with its complex set of rewards for exceeding production quotas and punishments for failing to come up to standards, was, in Taylor's view, too far removed from the point of production and rewarded workers for controlling output. In other words, the owners were not directly in control of the production process, a right and responsibility which is at the core Taylor's scientific management.

The success of Taylor in raising output in notable

⁵ Taylor, *ibid.*, p.19

⁶ Taylor, *op.cit.*, p.94.

workplace consultancies created an important following in the early 1900s. But for all the success of these experiments, scientific management remained outside the mainstream of American managerial theory and practice. Two problems were apparent: where labor was strong, gaining control of the production process through the Taylor method was difficult and often imposed high costs on management; conversely, where labor was weak why should employers share the benefits of increased production with workers?⁷

This second point is often overlooked in discussions of the rise of mass production and scientific management. While scientific management is rightly remembered for its emphasis on driving workers and segmented the labor process, Taylor also repeatedly emphasized the mutual interests of employees and employers in this new system of workplace governance. The mutuality of interests was picked up by such noted champions of liberalism as Justice Louis Brandeis and President Woodrow Wilson. Wilson, an early proponent of new forms of management, both of business enterprises and government,⁸ and Brandeis saw scientific management as a way of reducing class tensions and as a way of rationalizing society. Brandeis wrote, for example, "Under scientific

⁷ See David Montgomery, Workers Control in America, (Cambridge University Press, New York, 1979), for examples of worker resistance to scientific management.

⁸ Woodrow Wilson, "The Study of Administration," Political Science Quarterly, Volume 2, (June 1887).

management nothing is left to chance."⁹ Careful planning, an idea largely absent in the pre-industrial era, could improve the functioning of not only the economy but of society as a whole, according to the Progressive Era idealists.

Despite the mutuality of interest that Taylor and others identified, they failed to look more deeply into the contribution of workers in the process of developing greater output, a failure that was both a practical and theoretical shortcoming that subsequent managers and management scholars addressed. In a series of famous experiments by Elton Mayo and his associates at the Harvard Business School at an AT&T plant outside of Chicago, a new theory of management began to develop.

To the amazement of Mayo and his associates almost anything they did at the Hawthorne plants light-bulb assembly shop, from changing work schedules and hours to changing lighting arrangements, all resulted in rising levels of productivity. During the 1930s and 1940s management theorists came to recognize that the individual worker represented an important resource for the firm. The "human relations" developed and promoted the principle that paying attention to workers' needs would pay off for workers, managers, and owners alike.

⁹ Louis Brandeis, Letters, (Doubleday, New York, 1936, vol. II, p. 383-386).

The critique of Taylorism developed by Mayo and associates at Harvard, and articulated (if in obtuse language) for practical application by Bell System executive Chester Barnard, hit at three crucial points: 1) An understanding that society does not solely consist of individuals trying to maximize their own gains, but rather there are social groups and interactions between groups of individuals that matter as much, and sometimes more, than individual gain; 2) A recognition that social groups are governed by norms as much as by the sum of individual calculation; and 3) A realization that the rationality of individual actors cannot always be assumed.¹⁰ In Part III, *Bargaining Strategies, Procedures and Outcomes*, we will look more closely at the implications of this critique in terms of understanding the process of strategic planning.

The "human relations" school brought the individual back into the picture of workplace governance with all the attendant difficulties of dealing with emotions, sentiments, and feelings rather than the strict rationality implied by the stop-watch time and motion studies carried out under the banner of scientific management.

The human relations school of management helped foster

¹⁰ See Chester Barnard, *The Functions of the Executive*, (Harvard University Press, Cambridge, 1938); and, Elton Mayo, *The Social Problems of an Industrial Civilization*, (Harvard University Press, Cambridge, 1945). See also, Charles Perrow, *Complex Organizations*, (Random House, New York, 1986), for critical examination of the development of these managerial theories.

increasing professionalization of management. New systems of controlling, directing, and planning work changed the role of the manager from one of being a "pusher" or "driver" (terms that still exist to describe first line supervisors in craft industries) to that of a leader who had to persuade and cajole workers and other managers.

While the basic premises and theories of management did undergo important changes in the process of moving from Taylor's scientific management to the more varied approach of the human relations school, the basic premise remained: workers were basically not to be trusted, the challenge was to get the most out of production either through the good-cop approach of Mayo or the bad-cop approach of Taylor. In either case the separation between doing and planning, producing and deciding, remained clear. As a re-study of the data of the Hawthorne studies indicates, "The results of these studies, far from supporting the various components of the "human relations" approach, are surprisingly consistent with a rather old-world view about the value of monetary incentives, driving leadership, and discipline."¹¹

Managerial systems, clearly, are more complex than the broad outline provided above: in some industries the pre-industrial drive system prevailed throughout the period under discussion, and in some cases up to the present (for

¹¹ Alex Carey, "The Hawthorne Studies: A Radical Critique," American Sociological Review, (June, 1967, p.416).

example, as mentioned above, the craft and construction industries still have many pre-industrial characteristics); while in other industries the Taylor system still prevails (for example in clothing, garment and textile production where the unions, particularly the Amalgamated Clothing and Textile Workers Union, took the lead and responsibility, in many instances, in doing time and motion studies).

Despite these reservations it is fair to say that the growth of bureaucratic and professional management from the 1890s through the 1930s into World War II in the United States profoundly transformed the organization of work and workplace governance. Three characteristics of this growth in bureaucratic controls are:

1. Centralized personnel functions, formal job analysis, and employment record keeping extended the scientific management principle of rationalizing production to the workforce in assembly-line industries.
2. Seniority provisions and formal rule systems flourished in industries characterized by union strife in continuous process and technical industries.
3. Internal labor market systems combining centralized personnel functions with the formalization of jobs, salaries and promotions appeared in industries relying on white-collar personnel, such as in banking and

insurance.¹²

Before turning attention to the labor side of the workplace governance equation it is important to note that the above description provides little more than a useful construct for placing these questions into perspective. A broad outline does serve this purpose, I believe, quite well as a means of categorizing the items under examination. This is not to say, however, that the questions of how and why managerial systems developed have been answered. Significant debate exists about these questions and answers in the field of complex organizations and organizational analysis to which the reader is referred for greater understanding.¹³

¹² For a thorough and revealing analysis of the growth of managerial systems see James Barron and P. Devereaux Jennings, "Mission Control: The Development of Personnel Systems in U.S. Industry," American Sociological Review, (#53, August, 1988).

¹³ See for example, Max Weber, The Theory of Economic and Social Organization, (The Free Press, New York, 1947) for the classical analysis of the spread of bureaucratic arrangements in organizations and to the rationalization and increasing scale of economic activity around the turn of the century; Meyer and Rowan, "Institutional Organizations: Formal Structure as Myth and Ceremony," American Journal of Sociology, (83,#2, Sept. 1977), and Dimaggio and Powell, "The Iron Cage Revisited," American Sociological Review, (#48, June 1983), on normative and coercive elements of managerial systems; for a neo-Marxian perspective see Katherine Stone, "The Origins of Job Structures in the Steel Industry," Radical America, (7, #6 Nov.1973), Steve Marglin, "What Do Bosses Do?" Review of Radical Political Economics, (6,#2, Summer 1973) or Richard Edwards, Contested Terrain, (Basic Books, New York, 1979); and, for an institutionalist approach using models imported from the biological sciences see, Hannan and Freeman, "Structural Inertia and Organizational Change," American Sociological

Pragmatic Adversarialism: The American Labor Relations System

The notion that groups of people performing a similar task have certain common interests that lend themselves to collective actions is as old as work itself. With the coming of industrialism in the 19th century the imperative for formalization of organizations to represent workers interests became clear. The form and type of organization, however, were anything but clear. In a seminal work on labor organizations in Britain published in 1897 Sidney and Beatrice Webb laid the groundwork for future generations of industrial relations scholars and activists with their book Industrial Democracy.¹⁴

The Webbs made the case for democracy in the emerging industrial workplaces of London and for the importance of a voice, independent of both business and government, for workers. In its own right Industrial Democracy remains a compelling document on the rights of industrial workers. The Webbs were to have an impact on the American industrial relations system beyond their own work, however, after a young economist named John R. Commons read Industrial Democracy.

Commons became in the early 1900s America's first great scholar of industrial relations, an important figure whose

Review, (volume 49, April 1984).

¹⁴ Sidney and Beatrice Webb, Industrial Democracy, (London, 1920).

influence extends to the present through Selig Perlman and Sumner Slichter to John Dunlop. The line of scholarship that runs through these four American industrial relations theorists and practitioners has continuities and distinctions that are worth noting for their importance in creating a framework both for studying industrial relations issues and in understanding the legal structures of workplace governance in the United States. What follows are brief summaries of the work of Commons, Perlman, and Slichter. The work of Dunlop is taken up in Chapter II.

John R. Commons was a serious scholar and social activist at the same time. Similar to the Webbs, Commons saw class conflict as the great enemy of modern industrial society and spent his life trying to find ways to ameliorate the more violent aspects of antagonism between labor and capital. Commons was acutely aware of the possibilities and limitations of government in dealing with class conflict. While optimistic that labor and capital could work together to solve mutual problems, Commons view of how to work these differences out is instructive:

The true leaders of a class must have two leading qualities: they must have tenacity of purpose, but they must also understand the claims of the opposing class. That is, they must be broad-minded and patriotic enough to see that civil war must be avoided, that other classes have rights...Labor unions have just such leaders, and so do capitalists.¹⁵

¹⁵ John R. Commons, Labor and Administration, (Macmillan, New York, 1913: p.60).

For Commons and associates at the University of Wisconsin the key to the industrial relations system was finding the right mix of labor-business cooperation and in finding new roles for government in balancing market forces with social needs. Collective bargaining, in this view, as a regular and routine activity between respectable representatives of labor and business could serve as a new form of workplace governance that derived from an extension of the U.S. constitution with its system of checks and balances in the political sphere.

Coming at the time of the formation of the American Federation of Labor (AFL), after years of labor unrest that had characterized the period from the great railroad strike of 1877 to the Pullman strike in 1894, Commons' view was an early vision of a democratic corporatist arrangement between labor and capital. The ascendancy of business unionism, or pure and simple unionism, in the late 1890s under the leadership of AFL President Samuel Gompers, lent legitimacy to the view that labor was willing to recognize the existence of capital and to work together where possible.¹⁶

In addition to his scholarly activities Commons actively sought to implement many of his ideas within the

¹⁶ See for example Nick Salvatore, ed., Seventy Years of Life and Labor: An Autobiography of Samuel Gompers, (Cornell University Press, Ithaca, New York, 1986) for insight into the growth of the AFL or John Laslett, Labor and the Left, (Basic Books, New York, 1970) for an alternative view.

framework of state regulation in Wisconsin. Some of the earliest interventions into the labor market, for example the creation of unemployment insurance and social security systems well in advance of other states, and the American Association of Labor Legislation which he founded in 1907, were creations shepherded by Commons. A "conservative radical,"¹⁷ Commons explained his philosophy as recognizing the need for government to play a creative and positive role in alleviating injustice at the workplace, a task that had traditionally been left purely to market forces. Reforms had to take place within "the foundations of capitalism...I was trying to save capitalism by making it good," explained Commons.¹⁸

Following in Commons' footsteps at Wisconsin was Selig Perlman with an influential book, Theory of the Labor Movement, which was published in 1928. Perlman saw business unionism as the product of unique historical conditions in the United States. The acceptance by Perlman of this "American exceptionalism" led him to believe in the triumph of pragmatism over ideology.

Indeed much of the experience in the field of industrial relations and workplace governance in the 1920s supported the pragmatic viewpoint. With an increase in

¹⁷ Jack Barbash, "John R. Commons: pioneer of labor economics," Monthly Labor Review, (May 1989, p.45).

¹⁸ John R. Commons, Myself, (University of Wisconsin Press, Madison, 1964, p.143).

membership in the World War I years, and with the suppression of radical labor elements such as the Industrial Workers of the World, the AFL unions were in a favorable bargaining position.

Instead of pursuing confrontational tactics to gain "more," the traditional goal of the AFL unions, many unions joined together with employers in cooperative efforts. For example, the Baltimore and Ohio Railroad and a coalition of railroad unions formed joint councils in 1924 on such issues as improving on-time performance, the development of new kinds of compensation systems, and in discussing other non-contract issues.¹⁹ Similarly, the Cleveland Women's Garment Industry Association and the Naumkeag Steam Cotton Company set joint cooperative committees with the Amalgamated Clothing Workers Union during the same time.

While these and other examples of the pragmatism of unions and management are well documented through extensive case studies it is well to note the efforts by businesses to circumvent unions through the establishment of in-plant works councils or company unions. By the fall of 1919, 225 of these works councils had established in American enterprises.²⁰ The purpose of the works councils, which

¹⁹ Sumner Slichter, Union Policies and Labor Management, (Brookings Institute: Washington, D.C., 1941) p.463.

²⁰ David Montgomery, The Fall of the House of Labor, (Cambridge University Press: New York, 1989) p.411.

were part of a larger scheme on the part of business to limit industrial conflict called the American Plan, was clearly expressed by Mackenzie King's advice to David Rockefeller in relation to the Colorado mining strike in 1915. The purpose of these works councils was to:

...create some institution of collective consultation between representatives of the workers and local works managers that could ensure cordial cooperation which is likely to further industrial efficiency and provide the company a maximum of publicity with a minimum of interference in all that pertains to the conditions of employment. ²¹

Seen in this light, the advances that were made by the human relations school of management are questionable. Was the move away from Taylorism in the 1920s an attempt to humanize the workplace or another way to avoid sharing power--even with a relatively compliant and cooperative partner such as the AFL unions? The answer seems clear that the continued resistance of most employers to unionization or further sharing of real power in decision making in unionized workplaces signaled a significant barrier through which the craft unions were unable to penetrate. The limits of craft unionism were becoming clearer.

While a believer in trade unionism, and a keeper of the faith in the democratic corporatism of Commons, Perlman also was a good deal more critical of the American labor movement than Commons. By the end of the 1920s the

²¹ As quoted in Montgomery, *ibid.*, p.412.

AFL was in full retreat after nearly ten years of increasing membership from 1914 to 1924 and the consensus between labor, business, and government forged during World War I was rapidly collapsing. Perlman placed much of the blame for labor's declining position on union leadership:

The psychology of a big majority of union leaders today is a curious blending of "defeatism" with complacency. Every union leader admits that the organization of labor must be expanded into the basic industries. [In addition to the]..employers' active opposition and of the inertia on the workers' part begotten by the Coolidge prosperity and by "welfare capitalism," the union leaders are to blame because there is a suspicion that these leaders might not welcome too many members, whose alignment in the politics of the union would at best be uncertain.²²

As much as Commons overestimated the potential of labor leaders to act as reform agents, Perlman underestimated the ability of union leaders to see beyond narrow interests to organize the mass production industries. Together with changes in economic and social conditions, the depression and consequent New Deal legislation, the trade union movement was able to move beyond the "pure and simple trade unionism" of the Gompers era.

The pragmatism of labor, which Commons extolled and Perlman criticized is a distinctly American phenomena, typified by the philosophy of William James.²³ Such

²² Selig Perlman, Theory of the Labor Movement, (Macmillan, New York, 1928, p.232).

²³ See for example, William James, Pragmatism, (Hackett Publishing: Indianapolis, 1988).

Gompersisms as "Reward your friends, punish your enemies," on politics and "business unionism" as an expression of the role of the labor movement speak to the pragmatic approach of the craft unions that comprised the AFL in its formative years. For Gompers, as with other AFL leaders, the point of the labor movement was to deliver the goods to the membership--higher wages, fewer working hours, and better working conditions. Fight where necessary to achieve recognition and then for improvements in these basic and fundamental aspects of workers lives, cooperate with employers where the results would benefit both capital and labor: these were the cornerstones of the AFL unions' pragmatic adversarialism and job control unionism.

Perlman's criticism of the unwillingness of the AFL's leadership to organize in the newly emerged mass production industries and to deal with the "welfare capitalism" of large employers in tandem with government found support within the AFL unions who saw opportunities to expand. In 1935 the AFL formed the Committee for Industrial Organization to investigate the possibilities for organizing the mass production industries. Frustrated by the slow pace with which the AFL was approaching this organizing drive the Committee's chairman, United Mine Worker President John L. Lewis, led seven unions out of the AFL to form the Congress of Industrial Organizations.

The provisions in Section 7(a) of the National

Industrial Recovery Act of 1933 provided the first national framework that guaranteed workers the right to organize a union and bargain collectively with their employer. While the NIRA was ultimately found unconstitutional the provisions in Section 7(a) lived on in subsequent legislation, the National Labor Relations Act (NLRA) of 1935, which was found constitutional in 1938. In the years preceding World War II the success of unions in organizing workers was nothing short of spectacular as the figure below indicates.

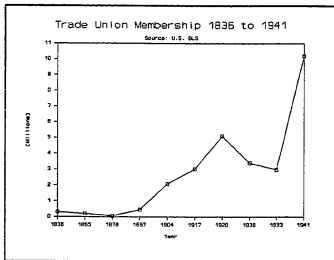


Figure II

The expansion of unionism up to the World War II years altered the balance of power between labor and management. Sumner Slichter carried on the tradition of Commons and Perlman in trying to find the common interest of labor and

capital within the framework of accepting the primacy of the rights of private property, the framework which is embodied in the NLRA, or Wagner Act.

At the heart of the Wagner Act were three concepts that continue to shape industrial relations in the United States: (1) In the preamble of the Act is a statement that collective bargaining is a valuable institution for the reduction of inequality of bargaining power in the workplace; (2) Sections 7 and 9(a) state that workers should enjoy a statutory right to use collective bargaining to improve their conditions of employment if the majority of employees want to; and (3) Section 8 protects these rights and limits employers ability to coerce or punish employees who exercise their right form collective organizations or to engage in collective activity.²⁴

While the right to organize and form unions independent of managerial control, and to engage in collective activities such as bargaining over wages, hours, and working conditions or striking, were integral to the Wagner Act, perhaps as important at the time were the economic and social justifications for the institutionalization of workplace governance. The economic argument was stated in a

²⁴ This synopsis of labor relations law obviously is not meant to be exhaustive but rather as informative. For a critique of the Wagner Act see: Karl Klare, "Judicial Deradicalization of the Wagner Act and the Origins of Modern Legal Consciousness," Minnesota Law Review, (1978: #62,p.265-339).

straight-forward manner by Senator Wagner:

When wages sink to low levels, the decline in purchasing power is felt upon the marts of trade. [S]ince collective bargaining is the most powerful single force in maintaining and advancing wage rates, its repudiation is likely to intensify the maldistribution of buying power, thus reducing standards of living, unbalancing the economic structure, and inducing depression.²⁵

The social argument for the passage of the Wagner Act was closely coupled with the economic--continued economic depression would lead to increasing conflict in the nation's industrial enterprises, conflict which could threaten the stability of society and bring about revolutionary change. Many employers were concerned about radical elements in their enterprises but argued that independent unions would institutionalize class conflict rather than alleviate conflict. The Associated Industries of Missouri, for example, wrote to the Missouri congressional delegation of their concerns over the pending legislation:

Industry in Missouri is greatly concerned over the proposal to strengthen by law the power and influence of labor organizations and give to their leaders, many of who are radical, what amounts to almost equal control with management and ownership in the operation of the industry. These bills if passed would encourage class conflict by giving opportunities to self-seeking representatives that would create racketeering with resultant turmoil and strife.²⁶

Employer opposition was not enough to halt the passage

²⁵ Senator Robert F. Wagner, Congressional Record, (May 15, 1935, p.7572).

²⁶ Quoted in Kenneth M. Casebeer, "Clashing Views of the Wagner Act," Labor's Heritage, (Volume 2, #2, April 1990, p.52).

of the Wagner Act--a centerpiece and major accomplishment of Roosevelt's New Deal legislative agenda. With the passage of the Act came the organization of America's mass-production industries: steel, auto, and rubber.

For Sumner Slichter the new system of collective bargaining that was emerging in the late 1930s had two principal characteristics: "collective bargaining is a method of setting wages and price making, and a method of introducing civil rights into industry, that is, of requiring that management be conducted by rule rather than by arbitrary decision."²⁷

Slichter was less sanguine about the possibility that unions and business would get together and work out their differences in a systematic way. With a reading of workplace governance that extended the analysis put forward by Commons and Perlman, Slichter observed:

In industry as a whole, the number of unions pursuing the policy of systematic cooperation is small..The traditional view of unions is that getting out production and keeping down costs is the employers' responsibility..Unions had been bitterly opposed by most employers and have had to fight for the to exist..Employers have not desired their help.²⁸

Written on the eve of World War II, Slichter's description of industrial relations was quickly changed by the needs of maximum production that the war demanded. The

²⁷ Sumner Slichter, Union Policies and Labor Management, (Brookings Institute: Washington, D.C., 1941)p.1.

²⁸ Sumner Slichter, ibid., p.561.

Wagner Act provided a framework through which workers could choose a collective bargaining representative. Government provided the legal mechanism--the National Labor Relations Board--to administer the election process and to act as a quasi-judicial system for adjudicating workplace conflicts. Still the system remained consistent with the basic principle that the parties, business and labor, are best served in a system of self-governance, that is the parties come together voluntarily, with a minimum of government interference.

The war effort in the early 1940s radically altered the premise of voluntarism in workplace relations. During World War II some 5,000 labor-management committees were organized in industrial plants and installations under the initiative of the War Labor Board.²⁹ The WLB took charge of industrial relations in most of the war related industries during the period from 1941 to 1945. The WLB was a tripartite organization composed of equal public, industry and labor membership. In the opinion of one of the industry representatives to the WLB it "..represented a sensible, reasonable approach to the settlement of labor disputes at the time, and did an excellent job during its short span of existence."³⁰

²⁹ Richard A. Lester, Labor and Industrial Relations, (Macmillan: New York, 1951)p.272.

³⁰ Cyrus Ching, Review and Reflection, (B.C. Forbes and Sons Publishing, Garden City, New York, 1953)p.52.

Unions, particularly from the recently organized mass-production industries, became legitimate and important actors in the execution of the war effort. The combination of union victories in NLRB elections, a sympathetic administration in the White House and on Capitol Hill, and a reinvigorated economy, brought the labor movement rapidly into the position of a partner, if junior, in the governance of the workplace and society as a whole.

Slichter concluded in 1947 that labor was poised to become more than a junior partner in this arrangement.

Unions had three potential impacts on management, wrote Slichter:

- 1) That unions will help build a friendlier and more cooperative community in which different economic groups know more about each other's problems, take a greater interest in each other's problems, and have a greater capacity to work together.
- 2) That, as a result of the more effective representation of the interests of employees, the policies of industry will better reflect the needs of various groups in the community.
- 3) That, as a result of more adequate knowledge by various groups of the problems of other groups and as a result of business policies which more effectively take account of the needs of workers, cooperation between employees and management in production will be more readily achieved and output per man-hour will be greater.³¹

So convinced was Slichter of this vision that he asked in 1948, "Are we becoming a 'laboristic' state?" The unions had placed the country, Slichter said, "on the threshold of

³¹ Sumner Slichter, The Challenge of Industrial Relations, (Cornell University Press: Ithaca, New York, 1947) p.170-171.

major changes in the economic and political institutions." The 'laboristic' state "means far more than the substitution of collective bargaining for individual bargaining. It means that the United States is shifting from a capitalistic community to a laboristic one--that is, to a community in which employees rather than businessmen are the strongest single influence."³² Despite Slichter's hopeful predictions of labor-management harmony, the path of a 'laboristic' state was clearly not followed.

The evidence, in fact, was surrounding Slichter in the immediate post-War years that the business community would resist further encroachment into territory they considered their sole prerogative. The two years following World War II--1946 and 1947--stand out as having the highest level of strike activity in American history.³³ One strike stands out--the United Automobile Workers (UAW) strike against General Motors that started in late 1945 and continued through into 1946. The strike, as an aide to UAW leader Walter Reuther said, was "..the first act of a new and significant era in American unionism, an era in which labor might break away from bonds of business unionism, to wage an economic struggle planned to advance the welfare of the

³² Sumner Slichter, "Are We Becoming a 'Laboristic' State?", The New York Times Magazine, May 16, 1948, p.11.

³³ David Brody, Workers in Industrial America, (Oxford University Press: New York, 1981), p.174.

community as a whole."³⁴

The key issue in the UAW-GM strike of 1945-46 was the raising of wages--which had effectively been frozen by the WLB during the duration of the war--without raising the price of GM's product. The strike dragged on over 114 days finally ending with significant concessions by management on wages, hours and working conditions--but none on the matter of GM's pricing policies. In the words of one GM executive, the decision was made to: "Give the union the money, the least possible, but give them what it takes. But don't let them take the business away from us."³⁵

The fight over management's rights was short lived. The backlash against striking unions, the perception that the balance of power was tipped in labor's favor, and the public's desire to see a change in Democratic dominance of national politics combined to give conservatives the votes they needed to pass restrictive amendments to the NLRA. The resulting re-write of the nation's labor relations framework--the Labor-Management Relations Act (LMRA)--constrains unions in many fundamental respects, for example with the removal of secondary boycotts and the creation of union unfair labor practices similar to those already existing for management in the Wagner Act. The passage of the LMRA in 1947, also known as the Taft-Hartley Act, was

³⁴ Brody, *ibid.*, p.176.

³⁵ Quoted in Brody, *ibid.*, p.188.

the last significant change to America's labor relations legal framework and provides a useful break point in the historical context of workplace governance.

CHAPTER II: THE ADVENT OF CONTEMPORARY INDUSTRIAL RELATIONS

With the passage of the National Labor Relations Act in 1935 and the amendments of 1947, the new components of the modern system of industrial relations were put into place. The labor laws in the United States guarantee workers the right to organize, to act collectively, and to choose representatives for the purposes of negotiating the terms and conditions of employment. In the years immediately following the passage of the NLRA thousands of workers exercised their rights and formed unions. New players emerged on the industrial relations scene through struggles that often turned violent--the unions of workers from the mass-production industries that were affiliated with the Congress of Industrial Organizations (CIO).

Management philosophy adapted to the changes in the industrial relations system by re-thinking the precepts of scientific management. The unions responded to scientific management by trying to protect workers interests. Unions didn't create all the work rules that are, or were in contracts; more usually, managers, using scientific management, had made rules that labor responded to. The human relations school of management, through such spokesmen as Mayo and Barnard, came to recognize the individual worker as a unique resource that required a different set of skills than those used in scientific management.

The human relations school of management helped bring about the increasing professionalization of management in the mass-production industries. New systems of controlling, directing, and planning work were matched by the parallel growth of union power in representing the economic interests of workers. The cornerstone of the model of industrial relations that developed during the New Deal was the procedure of collective bargaining. Management was left free to make basic entrepreneurial and strategic business decisions; workers and unions were free to negotiate over the impacts of these decisions as they affected wages, hours, and working conditions which was spelled out in a written contract. The day to day enforcement or adaptation of the contract was managed through a quasi-legal process of grievances.

The premise of the NLRA was that adversarial relations between labor and management were best contained through a system of rough checks and balances. The main characteristics of the system, as Professor John Dunlop of Harvard University has noted, are: exclusive representation, where only one union can bargain collectively for a specified group of employees; limited duration contracts, typically three years, during which the terms and conditions of employment specified and during which work stoppages by employees or lockouts by employers are forbidden; and decentralized bargaining compared to other industrialized

countries (within the American labor movement there are, for example, nearly 60,000 local unions which are involved with collective bargaining); employer opposition to unions, particularly strong among the vast number of small, privately held enterprises; and, a relatively passive role of government in resolving labor disputes.¹

Similarly Frederick Harbison and John Coleman characterized union-management relations as an "armed truce." The key parts of this armed truce, they said, are: a feeling on the part of management that unions and collective bargaining are at best necessary evils in modern industrial society; a conviction on the part of union leadership that their main job is to challenge and protest managerial actions; and a basic disagreement over the appropriate scope of collective bargaining and the matters which should be subject to joint discussion.²

The popular view expressed by these scholars of industrial relations in the late 1940s and 1950s captured the sense that labor and business could work out their differences in a system that roughly paralleled the American form of government. This view, which I call "contained adversarialism" and which others have called "industrial

¹ John T. Dunlop, Dispute Resolution, (Dover, MA: Auburn House Publishing, 1984).

² Frederick Harbison and John Coleman, Goals and Strategy in Collective Bargaining, (Harper: New York, 1951)p.20.

pluralism,"³ was sustained by a number of factors not the least of which was the purging of radical elements in the unions and the subsequent merger between the traditional craft unions of the AFL and the industrial unions of the CIO in 1955. Perhaps more fundamentally, however, the underlying economic conditions of the era placed the United States in the enviable position of having the only industrialized economy in the world not ravaged by war.

These two factors--the stabilizing of internal politics in the labor movement and the unchallenged hegemony of the American economy--produced a period of relative tranquility and prosperity through the 1950s and 1960s. Within this context the model of contained adversarialism served the interests of workers, unions and businesses quite well. Dunlop was thus able to say that labor and management "shared an ideology,"⁴ or at the least that "a congruence or compatibility" of views exists in certain industrial relations systems.⁵

Dunlop's two influential works, Industrial Relations Systems (1958) which laid out a theoretical framework for

³ See for example, Katherine Stone, "The Post-War Paradigm in American Labor Law," 90 Yale Law Journal 1509 (1981) for a definition and critique of the "industrial pluralists."

⁴ John T. Dunlop, Industrial Relations Systems, (Southern Illinois University Press: Carbondale, Illinois, 1958)p.17.

⁵ Dunlop, ibid., p.17.

analyzing workplace governance in industrialized economies, and Industrialism and Industrial Man (1960), with Clark Kerr, Frederick Harbison and Charles Myers, which surveyed industrial relations in a variety of countries and industries, defined the research agenda for the next generation in the emerging study of industrial relations. While Dunlop's work had and continues to have critics, it is fair to say that an understanding of contemporary American industrial relations must recognize the importance of the detailed examination of workplace governance that is provided in these works.

The "system" Dunlop describes is composed of three principle components--the actors in the system, the context of the system and the ideology of the system. The interaction of these three parts combine to create rules that govern the relations at the work place and work community.⁶ The independent variables are these rules that develop over time. The dependent variables are the contextual components that can change over time and the ideology of each of the actors.⁷

Within the system of workplace governance are three

⁶ Dunlop does not define the distinction between work place and work community. A useful distinction are the values that carry from work place to work place that form the characteristics of a certain type of work. Craft based work is a good example of the values place on skill that carry over in a work community from work place to work place.

⁷ Dunlop, ibid., p.15.

major groupings of actors: managers and their representatives; nonmanagerial workers and their representatives (if any); and specialized governmental agencies that deal with workplace concerns from the National Labor Relations Board or the Department of Labor to more specialized concerns such as unemployment insurance or retraining programs.

There are, additionally, three sets of variables in the environmental context which are fundamental in determining the rules which govern the workplace: the technological characteristics of the production process; the market or budgeting constraints which affect the actors; and, the location and distribution of power in the larger society.

The theoretical framework Dunlop developed in Industrial Relations Systems seems a solid one from which to launch a program of scholarly research. Indeed, Dunlop's language stresses the testability of his formulations--the key phrases in the first chapter are "abstraction," "critical variables," "formulate propositions," and "statistical testing." "The present volume," Dunlop wrote, "presents a general theory of industrial relations; it seeks to provide tools of analysis to interpret and to gain understanding of the widest possible range of industrial relations facts and practices."⁸

Perhaps it was Dunlop's training as an economist that

⁸ Dunlop, *ibid.*, p. vii.

led him to put forward the importance of testability--of forming a hypothesis, collecting data, and statistically analyzing the results. But it was Dunlop the social scientist, influenced greatly by the work of his colleague at Harvard Talcott Parsons, who then wrote a detailed social examination of workplace relations without referring back to the hypothetical formulations put forward in the introduction. The fact that Dunlop abandoned the more systematic approach remains a curiosity. Is it because there are no hypotheses to test or that the hypotheses are untestable; or that he, and his critics and colleagues, found that this approach to understanding workplace governance was less interesting and illuminating?

These questions remain unresolved. The criticism remains, however, that Dunlop provides "no basis for rejecting alternative hypotheses, treatments, or interpretations of the data...Dunlop recognizes this when he sometimes refers to his conceptualization as framework rather than a theory."⁹ The conclusions from Dunlop's work, consistent with those of his predecessors Commons, Perlman, and Slichter, identifying a three-fold typology of dominant industrializing elites in the development of industrial relations systems, are thus subject to doubt.

Despite the serious objections raised about the science

⁹ David Lewin, "Industrial Relations as a Strategic Variable," Industrial and Labor Relations Review, Spring 1989, p.4.

of Dunlop's inquiry what remains useful is the framework for understanding workplace governance. A second, more serious, limitation of Dunlop's work, as with his predecessors, is the relegation of an analysis of the workplace itself and the production process to a matter of small consequence. The sources of Dunlop's empirical studies were a wide variety of secondary sources, principally government, industry and union reports. Seldom is there any mention of workers or managers as anything more than actors in the overall system. Of most importance, in my view, is an understanding of the potential for and limitation of explanations in the social sciences. The search should focus on the mechanisms that lead us towards a clearer understanding of the problems under investigation rather than an all encompassing general theory. For now, the point is to develop an understanding of workplace governance--the principal actors in the American system of workplace governance, the historical context of workplace relations, and an understanding of the environment within which the system evolved. In Chapter IX, Analyzing Strategic Choices: A Game Theoretic Perspective, these methodological questions will get a fuller treatment.

Contemporary Theories of Workplace Governance

If the 1950s and 1960s were a time of relative stability and prosperity in the American economy and in

workplace relations, the 1970s and 1980s provided a rather rude wake-up call to an increasingly complacent workforce and management. The combined effect of a number of economic factors broke the veil of hegemony that large American businesses had grown accustomed to. Some of the more important changes were the floating of exchange rates that began to fluctuate wildly, the rapid escalation in price of energy as a result of the OPEC oil cartel, dramatic swings in the rates of unemployment and inflation that resulted, at least partly, from shifting federal policies, and the rapid de-regulation of product markets by the federal government in the late 1970s (e.g. the airline industry) through the Reagan years. The era of global competition that is now taken as a given burst upon American business and labor with these changes in the economic environment.

Similar changes were occurring in the social composition of the workforce. By the 1970s basic transformations had occurred in the increasing level of education of the workforce, a steady trend away from manufacturing employment to service sector employment was underway and sped up in the late 1970s through the 1980s, women became an increasingly larger percentage of the workforce, and the workplace became more diverse in terms of racial and ethnic composition.¹⁰

¹⁰ See David Obey and Paul Sarbanes, The Changing American Economy, (Basil Blackwell: New York, 1986) for a nice summary of the changes in the American economy and

The challenges to business managers and union leaders posed by these changes should not be underestimated. The adaptability of workplace governance, both in theory and practice, has become one of profound importance to the success not only of particular organizations but to the competitive position of the United States as a whole. How well have unions and businesses responded to these changes? Is there really anything fundamentally changed in workplace governance that separates the developments in the 1970s and 1980s to the present from the past relations described in the preceding pages? These questions are briefly assessed here in the context of two groups of contemporary theoreticians and later on in Chapter IV, *The Structure of the American Newspaper Industry*, in the particular setting of the newspaper publishing industry.

Under attack is the basic premise of the American workplace governance system: that collective bargaining is a socially beneficial activity. The acceptance of collective bargaining by employers provided one of the key parts of the industrial relations model of the 1950s and 1960s: the rejection of ideology. Labor and management were not, Dunlop and associates argued, "natural adversaries," but rather had distinct interests that could be resolved without

society.

violent conflict through the process of negotiation.¹¹

In an important work published in 1986, The Transformation of American Industrial Relations, Tom Kochan, Harry Katz, and Robert McKersie made the case that a fundamental change had occurred in workplace relations and that these transformations would continue to reshape the respective roles of workers, unions, managers, and government policy. "We see," write the trio,

..the current moment as one of those historic periods of transformation in which existing institutional structures have been challenged and opened up to experimentation in ways that allow considerable choice in how to reconstruct and modify them to best serve the interests of workers, employers and society in general.¹²

The idea that a new system of workplace governance had developed was so prevalent in the early 1980s that Business Week, a leading popular magazine of current trends in business, went so far as to write:

Quietly, almost without notice, a new industrial relations system with a fundamentally different way of managing people is taking shape in the United States. Its goal is to end the adversarial relationship that has grown between management and labor and that now

¹¹ See for example, Clark Kerr, Labor Markets and Wage Determination: The Balkanization of Labor Markets and Other Essays, (University of California Press: Berkeley, 1977). The pragmatism of Kerr and Dunlop is clearly stated: "Marxists and anti-monopolists alike were rejected...The field became more unified in outlook and more neutrally professional in approach...Workable polices were of central importance." (p.3, 11).

¹² Kochan, et al, The Transformation of American Industrial Relations, (Basic Books: New York, 1986) p.227.

threatens the competitiveness of many industries.¹³

While Kochan and his associates at the Massachusetts Institute of Technology (the MIT group) concentrate most of their attention on the evolving role of workplace relations in the new, more competitive world economy, up the Charles River at the Harvard Business School, another group of scholars is looking at the same problem from the vantage point of the firm. We will return to the HBS view after a brief look at the MIT position.

In explaining the transformation of American industrial relations Kochan points out two trends that have taken place in the 1970s and 1980s: joint experimentation and extensive innovation with new forms of labor-management relations on the one hand, and growing polarization and intensification of tensions and conflict in private sector industrial relations. Kochan's attempt to synthesize these opposite forces is put thus: "The principles of the New Deal are no longer well suited to the contemporary environment or to the interests of workers, employers, or the broader society."¹⁴

That is, the stability or equilibrium that had attained since the 1950s that contained adversarial workplace relations within the framework of bargaining over wages, hours, and working conditions, and which accepted the

¹³ "The New Industrial Relations," Business Week, May 11, 1981, p.85 (no author).

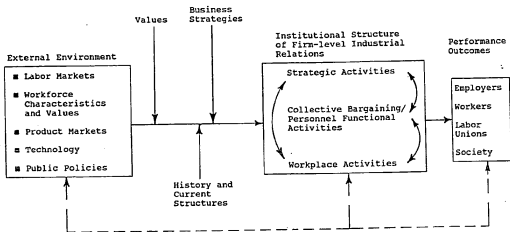
¹⁴ Kochan, et al, *ibid*, p.1.

legitimacy of union representation in those industries already organized, no longer existed. The decline of private sector unionization that is graphically depicted in Figure I on page 6, with projections to the end of the century that indicate stabilization at around 5% of the workforce, is explained partly by the mis-match of the institutional framework of the New Deal industrial relations system and the realities of increased competitiveness, according to Kochan.

In explaining this mis-match Kochan develops a model of industrial relations that builds on and expands Dunlop's typology. While Dunlop focussed on the actors within the system, Kochan recognizes the importance of the external environment and the outcomes or performance of the system. The figure below is a graphic representation of the three levels in this scheme. Using these three levels Kochan attempts to explain a typology of industrial relations through the strategic decision making of the actors, collective bargaining, and workplace activities.

FIGURE III

General Framework for Analyzing Industrial Relations Issues



Six practices or innovations that labor and management have used in responding to the challenges of a changed operating environment are listed and studied by Kochan. These are: employee participation in decision making; flexible forms of work organization; participation in new technology decisions; increased employment security; gainsharing or other forms of contingent pay; and participation in strategic management decision making. The focus of the new school of industrial relations is looking at the institutionalization of these innovations, and in marked contrast to their predecessors, with a focus on all three levels in the diagram above in an interactive approach.

The importance of the interaction between activities, collective bargaining or other employee representation, and management's strategic decision making is central to the hypothesis that increased worker participation will enhance firm performance. This explains, says Kochan, why some unionized firms have led in innovative experiments while those unions that are reluctant to engage in cooperative activities are fought by management.

Despite the apparent success of the Kochan model to take into account the importance of worker participation and in analyzing workplace activities against the elite theories put forward by theorists from Commons to Dunlop, the new industrial relations model comes up short as well. The new

model is unable to explain why some firms and industries are more predisposed to innovate along the lines of empowering workers through participatory schemes while other firms and industries are aggressively fighting worker's representation and empowerment. A look at the business side of the workplace governance equation may give us a better idea of how industrial relations strategy is formulated.

Evidence that the institutions of American capitalism were failing to respond to the new economic order in the late 1970s and 1980s were a series of articles in the Harvard Business Review on competitiveness. If Business Week is the popular journal of the American corporate world, then surely HBR is the elite journal of America's corporate world. Business Week is often a mis-leading indicator--as shown in the quote above, while HBR is more of leading lagging indicator! As such, HBR was about five years behind the significant changes that had started to reshape the way business operates and the contribution of workplace relations to the competitiveness of American firms.

In a book that first appeared as an article in HBR in 1980, William Abernathy, Kim Clark, and Alan Kantrow, all professors at the Harvard Business School, put forward the notion that an "industrial renaissance" was in the making in the United States, and that further, if managers paid more attention to the strategic interaction of new technology and human resources this renaissance would place in sectors of

the economy. Similar to the MIT group, the Harvard group identified the external changes driving the need to reform:

[T]he nation's lackluster industrial performance in recent years is, in large part, the result of the failure of many of its traditional industries to adjust to a troubling new set of competitive realities.¹⁵

Abernathy specifies a "...general way of thinking about the competitive significance of technological change as it affects the evolution of production systems," the key to which is, "...what management does in terms of human relations." The role of management in tapping the human resources of the firm is further specified:

...what passed for an American labor force policy in previous years is not merely out of date; it is poison. It is not merely a curious relic of another era; it can be lethal to those who rely on it...Building good quality products is impossible without the active cooperation of a dedicated and talented labor force.¹⁶

In a more recent treatment of the same subject another set of Harvard Business School professors developed the thesis of improving competitiveness through management's strategic implementation of employee involvement. The theme for rejuvenating manufacturing firms is "...quality improvement and error reduction programs, employee involvement, closer interfunctional linkages, flatter organizational hierarchies, and more rapid adoption of new

¹⁵ William Abernathy, Kim Clark, and Alan Kantrow, Industrial Renaissance, (Harvard University Press: Cambridge, 1980) p.xi.

¹⁶ Abernathy, et al, ibid., p.90-92.

manufacturing technologies."¹⁷ Management strategy should focus on these variables to become more competitive while understanding that "the purpose of an organization is to weld people together in a common purpose, while allowing various individuals and groups to focus their attention and expertise on specific tasks."¹⁸

There is close agreement between the MIT group and the HBS groups on the causes and consequences of increased global competition and for the need to change workplace governance systems. It also seems clear that both sets of explanations are moving towards the conclusion that worker participation in areas traditionally reserved exclusively for management can add to the competitiveness of an organization. While the two strands of theorists appear to be converging, there remain difficulties in reconciling the distinct interests of management and labor in most American business organizations. How can management, for example, argue for increased employee involvement or union-management cooperation, if they are also pursuing an anti-worker, anti-union strategy?

These questions become particularly pointed when the firm seeking non-adversarial relations with its workforce has multiple plants, at some of which management is pursuing

¹⁷ Robert Hayes, Steven Wheelwright, and Kim Clark, Dynamic Manufacturing, (The Free Press: New York, 1988) p.viii.

¹⁸ Hays, et al, ibid., p.128.

an anti-union strategy. This sort of arrangement is not uncommon. General Electric, for example, is a well known "double breasted" corporation that maintains good relations with its unionized operations while working hard to remain union free in others (various unions represent about 30% of GE's hourly workforce).¹⁹ Many corporate leaders insist that this attitude is not new, that the difference lies not in a changed strategy but in more effectively carrying out the old strategy of "running the business as management sees fit."

Empirical evidence suggests that this is a questionable assertion. Close examination of the decline of union density in the private sector in the United States over the last fifteen years indicates one variable as outstanding among all others: the increase in the number of employer unfair labor practices.²⁰ Particularly alarming is the rise in illegal dismissals of employees exercising their right to form a collective organization. The slowness of the National Labor Relations Board in rectifying these unlawful dismissals, and the fact that there are no punitive damages associated with such dismissals, has led to an all-out assault on one of the fundamental pillars of American labor

¹⁹ Conversation with Frank Doyle, Senior Vice-President for Industrial Relations, the General Electric Company, February 1990.

²⁰ Richard Freeman, Labor Markets in Action, (Harvard University Press: Cambridge, 1989) p.221-248.

relations law. Noting these developments legal scholar Paul Weiler has written: "Contemporary American labor law more and more resembles an elegant tombstone for a dying institution."²¹

The decline of unionization in the United States does pose significant problems for policy makers, business executives, labor leaders, and scholars of workplace governance. Can employees be adequately represented without an organization or institution independent of managerial control? This is not merely a question of academic interest or of importance to unions or those concerned about the labor movement. As important as these two concerns are, the relation between representation at the workplace and the ability to remain competitive through continuous improvements in production processes is a common concern for both employees and employers. In other words, an active organization independent of managerial control that represents employees interests is of benefit to the competitiveness of a business.

Why might this be so? Given the confluence of interests that management and labor relations scholars have noted over the years, and the new realities of increased competition, the need to have a fully committed and skilled workforce will only increase. While management can provide

²¹ Paul Weiler, "Promises to Keep: Securing Workers' Rights To Self-Organization Under the NLRA," Harvard Law Review, v96,n8, June 1983, p.1769.

for avenues through which employees can express their concerns, and the government can continue to extend basic rights to employees into more areas of the employment contract, unions remain the institutional avenue through which workers can exercise their voice.²² In the next section is an examination of how extensive new forms of employee voice is being heard in workplace relations in the United States, in both union and non-union workplaces.

Workplace Relations in the United States: 1990

Nonunion firms, and many firms with multi-plant operations with union and non-union employees, began to adopt the personnel policies that collective bargaining produced both because these policies fit the firm's business strategic needs for stability and predictability and because they helped reduce the incentive of workers to unionize. Union avoidance, which became a major industry for management consultants and law firms in the late 1970s and 1980s, had not undermined the acceptance by the business community in general of the collective bargaining system in the 1960s and early 1970s.

Changes in employee relations were not, however,

²² See Fred Foulkes, Personnel Policies in Large Nonunion Companies, (Prentice-Hall: Englewood Cliffs, New Jersey, 1980) for an excellent study of human resource management in non-union firms, and Charles Heckscher, The New Unionism, (Basic Books: New York, 1988), for a provocative analysis of employee involvement and union strategies.

restricted to the non-union sector of the economy. In the early 1970s interest developed in a variety of quarters on the subject of the quality of working life. A product of the era of affluence in the 1950s and 1960s, the social aspects of work became an important part of dialogue and negotiations between labor and management. The wildcat strikes at General Motor's Lordstown, Ohio, assembly plant came to symbolize the disenchanting or alienated worker.

Out of this experience, officials from the United Automobile Workers (UAW) and General Motors set out an ambitious program to re-humanize the assembly line through improvements in the quality of working life. Robert Schrank, who directed the Ford Foundations "Quality of Work Life Programs" during the late 1970's, sponsoring research initiatives throughout the United States, recalled the major themes of these efforts: "The main thrust was to answer the question: How can you make [the industrial workplace] a better place to work? These were attempts to de-Taylorize work, to re-humanize mass production jobs."²³

The efforts to change adversarial workplace relations in the 1970s through a social approach to making work itself more bearable gave way in the late 1970s to a more pragmatic and economic approach. The core of this movement was an

²³ Presentation to Economic Policy Council panel on labor-management relation, September, 1989.

import from Japan--the quality circle.²⁴ In a not so subtle fashion the movement that was beginning to re-think the labor process from the workers' point of view was transformed into a management tool for creating productivity increases. Figure IV below summarizes the various types of employee involvement in decision making at the workplace.²⁵

Figure IV

Forms of Involvement	Types of Workplace Involvement			Representative
	Consultative (quality circles)	Structural (work teams)	ESOPs	
Direct/ Indirect	direct	direct	indirect	
Content of Decision	workplace		workplace	firm strategy
Extent of worker influence	intermittent	intermittent	continuous	or variable

In this schematic a formal involvement program is defined as one that has a system of rules, either imposed on or granted by the organization. Informal types of employee involvement such as consensus building or casual, infrequent

²⁴ The quality circle is proof of the old saying, "What goes around, comes around." Deming and associates from AT&T brought the idea of employee involvement through quality circles to war ravaged Japan in the 1950s.

²⁵ Adapted from John Cotton, et al, "Employee Participation: Diverse Forms and Different Outcomes," Academy of Management Review, (v.13,n.1, 1988).

exchanges between employees and supervisors are not depicted. How extensive are these various forms of non-traditional participative management structures in the United States in 1990?

Partly in order to answer this question I conducted a survey of 1,000 personnel administrators and 220 local union officials in the summer of 1989.²⁶ The sample of personnel administrators was drawn from a list provided by the American Society for Personnel Administrators. The sampling method was random with equal weighting by region, industry, and firm size. There is, however, a bias towards larger firms built into the ASPA list since smaller firms are less likely to have a full-time human resource professional on staff. On the labor side the survey sample was drawn from a list provided by the U.S. Department of Labor. This sample is also biased towards larger union locals.

In addition to the bias towards larger organizations an additional source of potential bias is due to problems of self selection associated with voluntary surveys. The likely bias is towards an over-response by people in organizations that have adopted a particular process of employee involvement. The final caveat on potential bias in the surveys is a recognition that answers to opinion

²⁶ The survey was conducted for the Economic Policy Council panel, "Competing in the Global Market: The Challenge to Business and Labor." The results are reported in Sleigh, The Common Interests of Employees and Employers in the 1990s, (UNA-USA Publications: New York, 1990).

questions are influenced by questionnaire design, the mood of the respondent at the moment, and other subjective conditions, and thus is an imperfect guide to actual behavior or performance. Given these limitations of survey mechanisms, lessons can still be drawn from a well-designed survey that elicits an adequate response. The response rate was 25% from management and 29% from labor, rates that are in line with similar mail surveys without substantial follow-up.²⁷

A general question asked both the personnel administrators and labor leaders the extent to which employees were involved with new forms of participation in decision making. While a few of the respondents said they had no idea what we were talking about, that they had never even heard of participative arrangements, the vast majority (99% of management, 96% of labor) answered the question as the figure below indicates.

²⁷ See Floyd Fowler, Jr., Survey Research Methods, (Sage Publications: Beverly Hills, 1988). Copies of the survey mechanisms and SAS data file are available from the author.

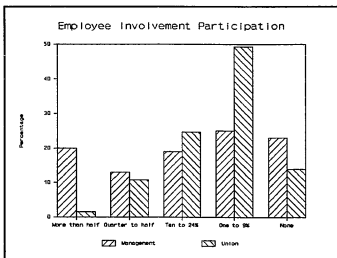


Figure V

As can be seen in this figure nearly 90% of the union representatives say that less than a quarter of their members participate in any form of employee involvement process. The difference in managerial response to this question is explained by an increased number of non-union workers who participate in an employee involvement process. The graph above lumps both the union and non-union companies together, but an analysis of the data shows that a third of the non-union personnel administrators say that more than a quarter of their employees participate in some form of non-traditional decision making. This is an important finding that requires additional research. Have these companies adopted more progressive human resource policies in order to avoid unionization or have they recognized the need for and

employee involvement? A more detailed analysis of the data and personnel policies of these firms would be needed to answer these questions, an analysis that we will return to in the case studies of workplace relations in the American newspaper industry.

Another set of questions arises from the above discussion: What type of decisions are these employees involved in? The survey asked the personnel administrators two specific questions that sought answers to this question. The first question is related to the perceived need for increased skill and flexibility of the American workforce as a consequence of increased global competition. The statement posed asked the personnel administrators to rank the importance of, "When hiring new employees, their willingness to learn new skills is ..." A related question asked whether or not current employees were involved in the screening process as part of the regular company hiring practice. If current employees know their jobs better than anyone, a fundamental precept of employee involvement, then we would expect that these two answers would closely correspond. The two graphs below, Figure VI, indicate that there is a wide difference in response.

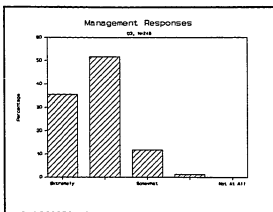
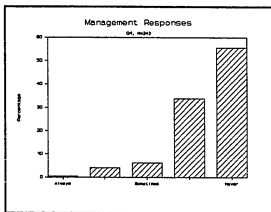


Figure VI



The personnel administrators indicate that current employees are consulted less than 10% of the time on decisions regarding new hires. More likely, this is one management function that has remained resistant to employee involvement in both union and non-union organizations.

Similarly, the survey asked both union and management respondents a question about union or employee involvement in another area of management decision making that forms the central piece of this dissertation. The question was, "Are

employees [or the union] consulted on major investment decisions, such as the purchase of new technology?" Figure VII below shows the response.

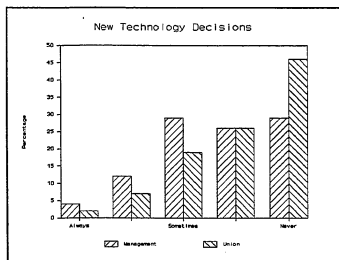


Figure VII

The overwhelming majority of both union and management respondents indicated that decisions on new technology remain the sole prerogative of management.

Correlations were found between several questions and the extent of unionization. Using a dichotomous variable for union or non-union (where any presence of unionization was taken as a "yes" otherwise "no", or "1" and "0") the table below summarizes the correlations. Only two variables were found to be significant: Q7, which asked "What percent, if any, of the overall workforce participate in some form of employee involvement program?", with a negative relationship

with unionization; and, Q9, which asked the personnel administrators to indicate the form of employee complaint mechanism that best represents the last step in such a complaint procedure. The finding of the highest form available to the respondents, binding arbitration, was found to be highly correlated to unionization.

Table 1

Correlation Coefficient (ORG)
 Where 1=Union; 0=Non-union

Variable		
Q1	-.0275	
Q2	-.0308	
Q3	-.1083	
Q4	-.1181	
Q5	.0450	
Q6	-.0303	
Q7	-.1513*	1-tailed Signif at .01
Q8	.0515	
Q9	.6276**	1-tailed Signif at .001
Q10	-.0677	
Q11	-.0922	
Q12	.0290	
Q13	-.0015	

Results from the survey indicate that both union leaders and personnel administrators would like to move to a more participative, less adversarial labor-management relationship. While the desire to change was clearly indicated (nearly two-thirds of the union leaders said that moving to a more participative relationship was either "extremely desirable" or "very desirable" while only 2%

responded "not at all") the survey shows that traditional areas of management decision making have changed very little.

In concluding this review of labor relations past and present in the United States the important issues that we will revisit are these:

1. Management theory and industrial relations theory have moved in cycles through out the years, at times in harmony and others in discord. The dominant management theories of the past--scientific management in the first half of this century, human resource management in the second half--have given way to a new synthesis that brings together economic and social aspects of work. The new synthesis in management theory, best articulated as in the past in writings coming out of the Harvard Business School, places competitiveness as the outcome of managing human and financial resources in new innovative ways.
2. The dominant theories of industrial relations, as exemplified by the continuity from Commons to Dunlop, that workplace governance is a miniature replication of pluralistic democracy has lost much of its appeal and following. The new synthesis in industrial relations theory is groping for an explanation of the decline of American unions and for justifications for a continuing commitment to the system of collective bargaining.

3. The historical development of workplace governance in the United States is marked by two distinct phenomena: consistent opposition of business to encroachment by labor into areas of traditional managerial decision making, and the division of representation of American workers in the private sector into three groups--skilled craft workers, semi- or unskilled industrial workers, and those outside of the system of collective bargaining in small businesses.²⁸

4. The increased competition brought about by changes in the global economy has forced American businesses to restructure managerial systems--prominently workplace governance systems and financing arrangements. The results of this restructuring, in a wide variety of organizations, are flatter hierarchies of management and leaner budgets.²⁹ These changes in the structure of organizations are forcing employees to take greater responsibility in their work, often without commensurate increases in compensation. Opportunities

²⁸ See Jack Barbash, The Practice of Unionism, (Harper and Row: New York, 1956) for an analysis of those workers "inside" and those "outside" the collective bargaining system. The point is simple: there is a large sector of the American workforce that practically speaking has little opportunity or incentive to unionize.

²⁹ See for example, Peter F. Drucker, The New Realities, (Harper and Row: New York, 1989) for a description of these trends.

exist to synthesize the restructuring of organizations and a redefinition or rethinking of the importance of work to the individual.

The next chapter will focus the analysis of how organizations respond to technological change by reviewing theories of technical change and then looking at how business and unions have dealt with these changes historically. With this macro-analysis in mind we can then proceed to the more micro-analysis of the particular transformation that occurred in production technology and workplace governance in the American newspaper industry in the 1980s.

CHAPTER III: EXPLAINING TECHNOLOGICAL CHANGE

If every tool, when summoned, or even by intelligent anticipation, could do the work that befits it, then there would be need neither of apprentices for the master craftsmen, or slaves for the lords. Aristotle

The earliest recordings of the origins of civilization indicate that humans created and used tools as part of complexly organized societies. New evidence suggest a revision of conceptions of civilizations' development from the emergence of farming 10,000 years ago to the discovery of tools and objects used for production and exchange that date back 32,000 years.¹ The question of tool usage and adaptation, as it relates to the structure of society, is a fundamental one for anthropologists and sociologists. With the coming of capitalism and industrialism the question of tool usage and change became a focal point in understanding the struggles that resulted from transformations in the economy and society.²

Early social theorists were concerned with understanding the transition from feudal society to industrial capitalism. Max Weber wrote that the development of capitalism was closely tied to the more or less

¹ "Findings Point to Complex Stone Age Societies," The New York Times, December 20, 1988.

² See particularly, E.P. Thompson, The Making of the English Working Class, (Vintage Books: New York, 1966), for a detailed history of this process in England from the mid-1600s to the 19th Century.

simultaneous emergence of Protestantism and, more specifically, to the Protestant ethic of saving.³ In similar ways, both George Simmel and Emile Durkheim placed the division of labor, which had become an essential aspect of industrial-capitalism in the late 19th century, in a prominent location of their sociology.

For Simmel the division of labor represented for the individual at once a discontinuity with the past and a gain in freedom in the present. "This specialization," wrote Simmel, "makes one individual incomparable to another, and each of them indispensable to the highest possible extent. However, this specialization makes each man the more directly dependent upon the supplementary activities of all others."⁴ The tension of modern life brought about by increasing differentiation and urbanization is the object of Simmel's sociology--most clearly expressed in his classic essay "The Metropolis and Mental Life."

In the same vein Durkheim placed the division of labor and the conflicts brought on by the transition from feudal-agrarian societies to pluralistic-industrial societies at the core of his analysis. For Durkheim the division of labor was not inevitably associated with disruption in social cohesion. Class conflict occurs, according to

³ Max Weber, The Protestant Work Ethic, (Allen and Ulwin: London, 1930).

⁴ Kurt Wolff, The Sociology of Georg Simmel, (The Free Press: New York, 1950) p.82-86.

Durkheim, because the division of economic functions outstrips the development of appropriate moral or ethical regulation. It is this gap between "what is" and "what ought to be" that is at the heart of what Durkheim called "anomie," or the state of alienation felt by individuals or groups of individuals that results from the collapsing of social structures that govern society.⁵

While these founders of sociology all put the division of labor, and either explicitly or implicitly the role of changing methods of production, in a prominent position in their analysis, no social thinker of importance to the development of modern sociology has put more emphasis on the role of tool usage and change than Karl Marx. At the same time it is important to note that the liberal political economists who preceded and then followed Marx also were concerned with explaining technical change. For these reasons this analysis of attempts to explain technological change will focus first on Marx's theory and those of the liberal political economists; then on alternatives to the Marxian and liberal conceptions, particularly the persuasive alternative provided by Joseph Schumpeter in the 1920s.

⁵ Emile Durkheim, The Division of Labor in Society, (The Free Press: New York, 1933).

Marxian Theories of Technological Change

For Marx the understanding of the way labor is performed and the relationships that constitute the way items are produced and distributed forms the central components of social interaction. "The whole of what is called world history," Marx declares, "is nothing but the creation of man by human labor." Furthermore,

The various stages of development in the division of labor are just so many different forms of ownership; i.e. the existing stage in the division of labor determines also the relations of individuals to one another with reference to the material, instrument, and product of labor...As individuals express their life, so they are. What they are, therefore, coincides with their production, both with what they produce and with how they produce. The nature of individuals thus depends on the material conditions determining their production.⁶

Marx explains technological change in industrial-capitalism as a function of historical developments. The economics of production--the forces and relations of production in Marx's terminology--are the key to Marx's analysis. The unit of analysis is not the individual, but rather the system that is fulfilling a historical mission:

To prevent possible misunderstandings, let me say this: individuals are dealt with here only insofar as they are the personifications of economic categories, the bearers of particular class relations and interests. My standpoint, from which the development of the economic formation of society is viewed as a process of natural history, can less than any other make the individual responsible for relations whose creature he

⁶ Karl Marx, The German Ideology, (International Publishers: New York, 1988)p.41-48.

remains.⁷

In itself this analytic stance is problematic in that it divorces social outcomes from individual wills. This is a problem that will be taken up in Chapter [strategy]. For now let us avoid these problems and concentrate on the general theory Marx puts forward in Capital--Volume I explaining technical changes in the usage of tools.

Marx describes the capitalists' desire to innovate thus:

The objective of the development of the productivity of labor within the context of capitalist production is the shortening of that part of the working day in which the worker must work for himself, and the lengthening thereby of the other part of the day, in which he is working for nothing for the capitalist...[For the workers] the interconnection between their various labor confronts them, in the realm of ideas, as a plan drawn up by the capitalist, and in practice, as his authority, as the powerful will of a being outside them, who subjects their activity to his purpose.⁸

The capitalist, in other words, chooses that type of machinery that will maximize profit through the minimization of labor paid for. In this Marx is recognizing the choices available to the individual capitalist who is locked in to constantly innovating in order to survive in a competitive environment.

Workers experience this introduction of new machinery, in what Marx describes as the transition from manufacture to

⁷ Karl Marx, Capital--Volume I, (Vintage Books: New York, 1976) p.92.

⁸ Marx, Capital--Volume I, *ibid.*, p.438,503.

large-scale industry, as separated from the entire production process. The effect on the worker is alienation from the process of producing:

Along with the tool, the skill of the worker in handling it passes over to the machine. The capabilities of the tool are emancipated from the restraints inseparable from human labor power. This destroys the technical foundation on which the division of labor in manufacture was based. Hence, in place of the hierarchy of specialized workers that characterizes manufacture, there appears in the automatic factory, a tendency to equalize and reduce to an identical level every kind of work that has to be done by the minders of machines.⁹

The capitalists motive of profit maximization leads directly to the deskilling of workers, of the stripping away of traditional craft skills in favor of routinized work processes, according to Marx. He notes, however, that under "...a communistic society there would be very different scope for the employment of machinery than there can be in a bourgeois society."¹⁰ The basis for machinery's usage, for tool usage and change, is thus not fixed but rather confined within the realm of capitalist development.

The introduction of new technologies is thus explained by Marx as a consequence of the constant need by capitalists to remain profitable in a competitive environment. Marx sees this constant source of innovation as the source of worker alienation but also, as above, the decline of the

⁹ Marx, *ibid.*, p.545.

¹⁰ Marx, *ibid.*, p.393.

division of labor which gave rise to alienation in the first instance. It is at the point of this contradiction that Marx precariously positions himself:

Large-scale industry tore aside the veil that concealed from men their own social process of production..Its principle, which is to view each production process in and for itself, and to resolve it into its constituent elements without looking first at the ability of the human hand to perform the new process, brought into existence the whole modern science of technology..Modern industry never views or treats the existing form of a production process as the definitive one. Its technical basis is therefore revolutionary, whereas all earlier modes of production were essentially conservative.¹¹

While the profit motive is certainly a fair enough explanation of why capitalists as a class would seek out new forms of production, whether those forms took the shape of new machinery or new production processes utilizing existing equipment, Marx does not explain each capitalists motives. This is consistent with his overall outlook and falls into the trap of functional explanations: Marx is explaining an outcome as a natural or inevitable occurrence without encountering the individual's choice. For the individual owner investment in new processes is necessary only to the extent that it will improve profitability or ensure long-term survival. If no competition exists, or profit levels are felt to be adequate, then it is not in the interest of the individual capitalist to incur a cost in innovating.

Marx does not directly confront this deficiency in his

¹¹ Marx, *ibid.*, p.617.

theory explaining technological change. Instead he locates another source of innovation: not only is the capitalist in competition with other capitalist, but more fundamentally for Marx, capitalists as a class are in a battle with workers over control of production. "Machinery," Marx writes, "acts not only as a competitor who gets the better of the workman. It is also a power inimical to him, and as such capital proclaims it from the rooftops."¹²

The class struggle becomes, in this conceptualization, a source of worker empowerment and for capital to underutilize the optimal amount of innovation in the production process. Marx is arguing in the dialectical fashion that industrial capitalism is both the source of innovation with revolutionary potential, and the cause of directing innovation away from socially useful automation in favor of capitalist control of the process of innovation.

The Marxian theory is hard to maintain in the face of reality. Contemporary theorists continue the muddle, as with Claus Offe and Helmut Wieselth's claim that "by introducing [labor-saving] technical change, capital can release itself partially from the dependence upon the supply of labour, thereby depressing the wage rate."¹³ Repeating again the mistake of Marx in failing to specify the

¹² Marx, *ibid.*, p.637.

¹³ Offe and Wieselth, "Two Logics of Collective Action," Political Power and Social Theory, 1:67-115 (1980)p.75-76.

appropriate unit of analysis--whether that is the enterprise or industry--leads these theorists away from a clearer understanding of technical. The theory is static in the sense that it assumes a monotonic response by capital. The argument also fails on economic grounds: the innovating company exposes itself to greater risk by investing in unproven techniques.

Similarly, on more sociological grounds, the Marxist explanation of technical change is lacking solid grounding. Harry Braverman, who to his credit refocused analysis on the labor process, writes in the Marxian vein:

The mass of workers gain nothing from the fact that the decline in their command over the labor process is more than compensated for by the increasing command on the part of managers and engineers. On the contrary, not only does their skill fall in an absolute sense (in that they lose craft and traditional abilities without gaining new abilities adequate to compensate the loss)...The more science is incorporated into the labor process the less the worker understands of the process; the more sophisticated and intellectual product the machine becomes, the less control and comprehension of the machine the worker has.¹⁴

Braverman's clear statement of the de-skilling thesis has had a profound impact on the study of work, creating a virtual cottage industry of de-skilling studies.¹⁵ The de-skilling thesis seems to be tilting at wind mills.

¹⁴ Harry Braverman, Labor and Monopoly Capital--The Degradation of Work in the 20th Century, (Monthly Review Press: New York, 1974) p.425.

¹⁵ See for example, Andrew Zimbalist, Case Studies on the Labor Process, (Monthly Review Press: New York, 1979) for the first of many such books.

Technology and the production process no doubt does become increasingly complex with the passage of time. Certainly the printing presses of today are more complex than the Guttenberg press of the 16th century. The leap in assuming that the worker is incapable of understanding these changes is difficult to swallow--it is in fact a degraded view of the worker. The studies by David Noble and Harley Shaiken, while rich in detail and description, are extensions of the technological determinist view that workers are pawns in the process of capitalist development.¹⁶

Perhaps another view is that capital invests as little as possible in training workers and thus individual workers are unable to understand the complexities of the production process. The current hue and cry from the business community in the United States over the lack of preparedness of today's workforce and the need for an increasingly sophisticated worker would seem to put to rest the idea that capital desires an unskilled workforce.¹⁷

¹⁶ See David Noble, America By Design, (Oxford University Press: Oxford, 1977) and Forces of Production, (Oxford University Press: Oxford, 1986); and Harley Shaiken, Work Transformed, (Holt, Rhinehart and Winston: New York, 1984).

¹⁷ This is not to say that the business community is willing to invest heavily in worker training. Indeed the clamor is really a critique of a public good, education, that business wants provided. The point is that the debate is not over skilled jobs versus unskilled jobs but rather over who will pay for the training of the workforce--the public or private business. For a clear analysis and statement along these lines see, David Mowery, Technology and Employment, (National Academy of Science: Washington,

Classical and Neo-Classical Economic Explanations

The Marxian view of technological change shares many common points of reference with the classical and neo-classical liberal economic explanation. In itself this is not surprising given that Marx wrote much of his work in dialogue with or in opposition to the classical liberal economists like Adam Smith. Here I will briefly review the work of Smith and the neo-classical model.

Adam Smith's most famous work, The Wealth of Nations, is subtitled "Of the causes of improvement in the productive powers of labor and of the order according to which its produce is naturally distributed among the different ranks of the people."¹⁸ Not exactly the kind of catchy title that is required today but certainly descriptive. The book is about the sources and consequences of technical advance. Often overlooked in discussions of Smith's work is the concern for the impact technical advance has, in his words, on the "common people." Perhaps this is so because of the enormous impact Smith had on theorizing about the economic consequences of technical change.

At the center of the classical liberal explanation of the development of capitalist is the capitalist or

D.C., 1988).

¹⁸ Adam Smith, The Wealth of Nations--Books I-III, (Penguin Books: New York, 1987--first published 1776).

entrepreneur. The self-interest of the capitalist propels him to innovate, Smith argued. It is important to note, however, that Smith was not arguing this from a moral point of view--that is that self-interest ought to be the preferred method of organizing economic activity--but rather from a descriptive view of what is. A re-reading of Smith may well be in order from a more sociological or philosophical point of reference.

What economists took from Smith, however, continues to influence policy making the world over--particularly today with the rush towards "free markets" by the Eastern Bloc countries. For classical and neo-classical economists in the Smithian vein technological change is best described in terms of the choices that capitalists make in allocating scarce resources to a given task. The structure of the production process, in this model, involves transformation of raw materials, energy, labor and capital into a produced product. Given that raw materials and energy are in many ways naturally found in the world neo-classical economists simplify the model to concentrate on two inputs: labor and capital.¹⁹

The model, obviously greatly simplified from the complex mathematical equations derived over the years by

¹⁹ See F.E. Ferguson, The Neoclassical Theory of Production and Distribution, (Cambridge University Press: Cambridge, 1969), for a definitive explanation of the static neoclassical view.

economists, posits that at any given time there exists a set of combinations of labor and capital inputs that an enterprise can choose from. At any single point on the line or curve that is formed by choosing labor and capital inputs is the marginal product or each extra amount of product created by the addition of one extra unit of either factor. There are general assumptions that guide the choice that the capitalist makes in deciding the best combination of inputs: (1) a behavioral postulate of profit maximization; (2) that all points on the curve are equally accessible to all enterprises--that is there are no barriers, either natural or imposed, to entering or exiting from the market; and (3) an institutional postulate that there exists perfect competition or, put another way, that there are an abundance of enterprise competing to produce and sell similar products.

The rate or the extent of technical change in this model is thus described as "the relative change in total unit costs when the techniques in each period are those which would minimize unit costs when factor prices are constant."²⁰ Cutting through the obtuse language what is being described is the change, or shifting, of the curve representing combinations of labor and capital. The model is static, all external forces are held constant for the

²⁰ W.E.G. Salter, Productivity and Technical Change, (Cambridge University Press: Cambridge, 1960) p.30.

purpose of determining an equilibrium point at any given time. The static nature of the model is clearly at odds with the dynamic nature of the activity being described-- perfectly competitive markets with no barriers to entry or exit with everyone trying to maximize profits sounds more anarchic than static.

Given the uncertainties that the individual capitalist faces in such a state of anarchic markets, how can the neo-classical model account for the choices that enterprises make? The rational capitalist choice is simple, the orthodox view says:

The real reason for the predominance of labour-saving inventions is surely that which was hinted at in our discussion of substitution. A change in relative prices of the factors of production is itself a spur to invention, and to invention of a particular kind-- directed to economizing the use of a factor that has become relatively more expensive.²¹

The static neo-classical model is quite similar to Marx's account of technical change. But this model, as Marx's, suffers from the flaw of viewing the world as changing in episodic ways. If the individual capitalist is concerned with profit maximization, under the constraints of the neo-classical model, what difference should the choice of input minimization make? Why labor? As Salter says of Hicks: "There is no reason to assume that attention should be concentrated on labour-saving techniques, unless, because

²¹ John Hicks, Theory of Wages, (Macmillan:London, 1932) p.125.

of some inherent characteristic of technology, labour-saving knowledge is easier to acquire than capital-saving technology."²²

Both the Marxian and neo-classical models rest on faulty assumptions of the rationality and functionality of choices made by individual capitalists or enterprises. The static bias of both models leads to an incomplete picture of the process of innovation. What alternative view of innovation is better equipped to describing these processes? The next section reviews the evolutionary theories of technical change put forward by Schumpeter in the 1920s and Nelson and Winter currently which, I believe, offer a richer, more accurate way of explaining innovation and technological change.

Evolutionary Theories of Technical Change

If Marx is the most influential social scientist to put technical change at the center of analysis then a close second is the Austrian economist Joseph Schumpeter. Schumpeter saw innovation--of which technological innovation holds a prominent but not exclusive position--as the engine of economic development. In a famous passage, which I quote at some length below, Schumpeter's evolutionary theory of innovation and development is put forth:

²² W.E.G. Salter, *op cit.*, p.43-44.

Capitalism..is by nature a form or method of economic change and not only never is but never can be stationary. And this evolutionary character of the capitalist process is not merely due to the fact that economic life goes on in a social and natural environment which changes and by its changes alters the data of economic action; this fact is important and these changes (wars, revolutions, and so on) often condition; industrial change, but they are not its prime movers. Nor is this evolutionary character due to a quasi-automatic increase in population and capital or to the vagaries of monetary systems of which exactly the same holds true. The fundamental impulse that sets the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates...

The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism.²³

The key explanatory figure in Schumpeter's scheme is the individual capitalist or entrepreneur--a historical figure who emerged in the 18th century. Rather than discount the irrational basis of innovation as Marxian and neo-classical explanations do, particularly the willingness to take extreme risks, Schumpeter placed the creative and unpredictable aspects of innovation at the core of his analysis. Admittedly this is an elusive task: trying to explain the irrational is rather like trying to catch snow flakes. Schumpeter's detailed, some would say self-

²³ Joseph Schumpeter, Capitalism, Socialism, and Democracy, (Harper and Row: New York, 1976--original 1942) p.82-83.

indulgent, descriptions of the evolution of capitalist systems is not limited to historical exegesis. Rather, he posits a theory for explaining innovation in light of the seemingly irrational aspects of risk-taking thus making history relevant.

What makes the entrepreneur tick? Marx said, "Control over the means of production"; the neo-classical economists said, "Profit maximization." Schumpeter puts forward three interrelated ideas: (1) the dream and will to found a private kingdom; (2) the will to conquer, to succeed for the sake not of the fruits of success, but of success itself; and, (3) the joy of creating, of getting things done.²⁴ As Jon Elster has noted, these motives "appear remarkably elusive."²⁵ The conflict between the incessant innovation of capitalism and the desire for stability is a tension, Schumpeter believed, that would inevitably lead to the destruction of capitalist systems: "Capitalism," he wrote, "is a self-eradicating system."

The Schumpeterian view is characterized by disequilibrium, dynamism, and evolution in the process of technological development. Innovation is carried out fundamentally by entrepreneurs who break from the existing

²⁴ Joseph Schumpeter, The Theory of Economic Development, (Harvard University Press: Cambridge, 1934) p.93-94.

²⁵ Jon Elster, Explaining Technical Change, (Cambridge University Press: New York, 1985) p.117.

order to experiment with new forms of organizing economic activities. Often major breaks with the past occur from the accumulation of many smaller innovations and in a random--or at least far from a deterministic--manner. Schumpeter's view of economic development proved difficult to model in precise ways, which explains why the neo-classical model with its precise production function continues to dominate the field of economics. Recent attempts to explain technological change through a Schumpeterian lens have proved more successful--particularly influential has been the work of Richard Nelson and Sidney Winter.

Nelson and Winter's description of economics and technological change departs from the orthodox view of organizational behavior as optimal choice from a defined set of capabilities (the production function in neo-classical explanations). Using a metaphor adopted from the biological sciences they place organizational change in a broader evolutionary framework. This, they say, "accounts in particular for the attention we devote to the nature and sources of continuity in the behavioral patterns of an individual organization."²⁶

A key to Nelson and Winter's theory is the notion that profit-maximizing behavior is inconsistent with the optimal interest of the individual entrepreneur. They argue:

²⁶ Richard Nelson and Sidney Winter, An Evolutionary Theory of Economic Change, (Harvard University Press: Cambridge, 1982) p.96.

It does not pay, in terms of viability or of realized profits, to pay a price for information on unchanging aspects of the [operating] environment. It does not pay to review constantly decisions which require no review. These precepts do not imply merely that information costs must be considered in the definition of profits. For without observing the environment, or reviewing the decision, there is no way of knowing whether the environment is changing or the decision requires review.²⁷

In place of profit maximization Nelson and Winter put forward an idea borrowed from Herbert Simon--that of satisficing. Firms, as well as individuals, do not necessarily maximize but do enough to remain satisfied. In terms of explaining technological change an enterprise will, the theory goes, spend enough time and resources to keep abreast of developments in the field. Just enough to keep shareholders, managers, and workers contented. It follows that firms will not have detailed knowledge of techniques other than those which they are currently using. The enterprise instead is faced with a situation where, "surveying available knowledge is like surveying a landscape on a hazy day. Some things are close enough to be seen clearly, others remote enough to be totally invisible. But the intermediate conditions cover a broad range and are complex to describe."²⁸

²⁷ Sidney Winter, "Economic 'natural selection' and the theory of the firm," Yale Economic Essays, #4--1964, p.262-264.

²⁸ Sidney Winter, "An essay on the theory of production," Centennial Symposium of the University of Michigan (1980)p.16.

Nelson and Winter put forward a six step process that large complex organizations involved in producing substantially similar products go through before changing techniques: (1) Satisficing on current production methods if current returns are satisfactory; (2) Induced search if returns on investment fall below an acceptable level. This search might, for example, copy what other firms are doing or initiate an internal analysis of possible changes in production method; (3) Profitability testing if a new technique is found out of the search. Typically the firm will perform an analysis of the net present value of various alternatives; (4) Investment if the net present value is positive; (5) Entry into the technique--the firm will purchase and install the new technology; (6) Labor markets are considered endogenous or outside of the model, that is wage rates are taken as given by individual firms according to industry standards.²⁹

As description of both the vagaries of innovation and the process of undertaking a change of organizational routine Nelson and Winter's model is very attractive. Many organizations that were once industry leaders through innovation become stagnant later on. Organizational knowledge, in other words, does not necessarily work to

²⁹ These six steps are taken from Elster, Explaining Technical Change, (Cambridge University Press: New York, 1985) p.142-143; the components are also found in Nelson and Winter, op. cit., p.195-274.

continuously improve innovativeness--risk-taking may occur for only a time and then the costs of additional risks may appear too high. A good example of this is the American steel industry.³⁰ The model above occurs through time and changing circumstances. It differs from the Marxian and neo-classical models in its understanding of the dynamic nature of innovation.

While I believe that the evolutionary explanation of Nelson and Winter is more powerful in explaining technological change, empirical data is difficult to come to substantiate this claim. All I can say is that it more accurately depicts the complex process of technological change while not necessarily predicting the direction or pace of innovation. In the next chapter, the history of changes in newspaper printing technologies, these complexities can to life.

One aspect that deserves more attention than either the neo-classical economists or the evolutionists have given is the relationship between industrial relations and technical change. This relationship, with reference to the American system of workplace governance, is reviewed below.

Industrial Relations and Technical Change

³⁰ See especially Mark Reuter, Sparrow's Point, [?]. The story here is that the owners were so enamored of their [type] technology that they couldn't see that newer [type] technology had replaced theirs.

The connection between industrial relations, or more broadly conceived as the relations between various groups of employees and supervisors at the point of production, and technical changes in the production process is not transparent. Recalling the earlier discussion of industrial relation theorists in Chapter I, a recurring theme from Dunlop to Kochan is that technology is part of the external environment that labor and management must adapt to. To the extent that changes in technology requires changes in work organization, in both Dunlop's³¹ and Kochan's³² models, it may bring pressures to bear on rule-making bodies to negotiate, impose or accept adjustments. With some distinction between the old and the new theorists in industrial relations, the basic premise remains that management decides on issues of new technology and, as a consequence, industrial relations is relegated to dealing with the effects of these decisions.

The static theories of technological change--the Marxian and neo-classical accounts described above--support this view. Larger forces are at work in both of these

³¹ John T. Dunlop, Industrial Relations Systems, (Southern Illinois Press: Carbondale, 1958). Technology is one of three principal environments within which industrial relations operate, the other two being the product market and the distribution of power in the larger society.

³² Thomas Kochan, et al, The Transformation of American Industrial Relations, (Basic Books: New York, 1986). To Dunlop's three environments Kochan adds public policy and workforce characteristics and values.

theories to which the workplace must adapt. The evolutionary theories, however, provide the basis for re-thinking the relationship between industrial relations and technical change. While none of the theories described above--the Schumpeterian view and the contemporary work of Nelson and Winter--explicitly takes account of the process of introducing innovation from the view of the workplace it is a short jump to take. My view is that there are a multiplicity of possible combinations of new technology and work organization from which to choose and that the relations at the point of production influence both the selection of new technology and how it is used. In other words, the choices management makes are not taken from a set of givens by the external environment but rather from the inter-relationship between available technical choices and workplace relations.

In the case of newspaper printing we will look at how one technology (offset printing) became the industry standard and the differences on how this same technology was adopted in similar operations with differing labor-management relations. In each newspaper plant there are many common modes of organization and relations between labor and management. More interesting, though, is the extent to which the same technology is adapted to the particular circumstances of that paper. There is an "asset specificity" unique to each plant that defies the

explanations of static industrial relations or technological change theorists.³³ The framework of game theory, discussed in Chapters IX, sheds light on how the bargaining and negotiating that continuously occurs in the process of production can help explain organizational responses to technological change.

In reconceptualizing the relationship between industrial relations and technological change we can move beyond the stereotypical categorization of worker or union attitudes towards these changes. The standard view is that workers or unions are either "resistant to change" or "accepting of change." The Luddites of early 19th century England have come to stand for worker resistance to change in production processes.

In contrast to these generally accepted view of worker or union policy towards technological change are various statements by American labor leaders such as the AFofL's first president, Sam Gompers, who declared at the 1923 convention of his union: "It is absolutely futile for workmen to protest against or go on strike against the introduction of a new machine, a new device, or a new tool."³⁴ This from a union leader whose members, of the

³³ See Oliver Williamson, The Economic Institutions of Capitalism, (Free Press: New York, 1985).

³⁴ Quoted in Sumner Slichter, Union Policies and Labor Management, (Brookings Institute: Washington, D.C., 1941) p.205.

cigar makers union, were facing high displacement from new automated rolling machines.

While there are numerous examples of resistance to change by workers and unions in the U.S., resistance or concern that can be seen in the "automation scare" of the 1960's,³⁵ on balance the record of American unions indicates a willingness to accept new technology. With expanding markets and high levels of employment through the 1950s and 1960s this policy had few negative effects. The combined effects of increased global competition and the rapidity of changes in technology, particularly related to the spread of micro-electronic devices in traditionally mechanized production processes, has increased the pressure on workers, unions, and managers to move beyond the limiting categorization of being either accepting of or resistant to change.

Morton Bahr, President of the Communications Workers of America, summarized his views of the challenges that workers, unions and managers face:

We believe that new technology is absolutely required to move this country forward and to make it competitive. We believe that workers in the union should be involved and will be involved in this process..I hope that the thrust that all of the local

³⁵ Innumerable studies and books were produced in the early 1960's as the result of the concern over the employment displacement effects of new technology. One such influential report was, National Commission on Technology, Automation and Economic Progress, Technology and the American Economy, (Government Printing Office: Washington, D.C., 1966).

unions and members will be looking to adopt would be, "We welcome new technology. We want to be part of its design and implementation, and we want to be trained to perform work on it and continue working." This has to be the future.³⁶

With the background analysis of industrial relations and theories of technological change and these words in mind we turn to an examination of the newspaper printing industry in the United States.

³⁶ Interview with Morton Bahr, Presstime, (February 1990, p.14).

PART II: ORGANIZATIONAL RESPONSES TO TECHNOLOGICAL CHANGE

In Part I we reviewed the development of workplace relations in the United States up to the 1980s and theories of technological change. My argument places technological change within the context of workplace relations. Most industrial relations, organizational, or management theorists have thought of choices about changes in the production process as an external variable outside of the scope of workplace relations.

By thinking of technological change as part of the unique workplace relations of a given enterprise we can derive a clearer understanding of the problems and potential for making these transitions more, for lack of a better word at this point, effective. The problematic definition of "effectiveness" is that it rests with the definer--profitability and competitiveness from managements point of view; income, employment, and work content from labor's point of view; provision of better and cheaper products from the consumers point of view. There are some common and some conflicting interests between these views which will be explored in Part III.

Part II begins with an analysis of the historical development of newspaper production methods and an overview of the current competitive realities of American newspapers. This industry analysis is followed by four case studies of American newspapers that have struggled with changes in production processes during the 1980s.

CHAPTER IV: THE STRUCTURE OF THE AMERICAN NEWSPAPER INDUSTRY

Historical Development of the Newspaper Production Process

The origins of printing go back as early as 225 B.C. when the Han dynasty in China used seals to "sign" official documents. With the introduction of manufactured paper, around 105 A.D., the transition from seals that were impressed in clay to using ink made from various naturally occurring liquids was relatively easy. Examples of various forms of printing--of transferring an image from one material to another--abound in early Chinese history.¹

While examples of printed material exist in ancient times, it is generally accepted that printing for a large distribution beyond an immediate set of royalty or lords was first done by Johann Gutenberg. The Gutenberg Bible is the first known mass-produced printed product--a forty-two line Bible that took nearly three years, from 1452 to 1455, to produce. The process that Gutenberg used was to cast individual letters by hand in reverse on a piece of hard metal, then punching the letter shape into a soft copper mold to form a die, called a matrix. Experimenting with various combinations of metals to cast the mold for these matrices. Gutenberg's experience in lead mirror manufacturing gave him the idea to use this malleable yet

¹ J. Michael Adams, et al, Printing Technology, (Delmar Publishing: Utica, NY, 1988).

durable material as the basis of type-plates. Hitting on a combination of lead, tin, and antimony, Gutenberg's plates of the 15th century remain nearly unchanged to the present in direct, or letterpress, printing.²

In fact, much of the language of modern printing is a holdover from Gutenberg's original terminology. Terms such "form," "leading," "uppercase," "lowercase," "type size," "impression," and "makeready" all originated with Gutenberg. The process that Gutenberg and his fellow foundrymen in Germany used was to set type by hand on a mirror-image lead plate which then was pressed on to a piece of paper thus transferring the image in right-reading form. Later, in the 17th Century, a process was developed to curve the type-set plates so that a continuous rotary motion could transfer the image to a sheet of paper fed into a press.

With the decline and overthrow of various forms of feudal society in the 18th and 19th century and the rise of more open, inclusive, democratic societies the demand for printed products grew geometrically. The pamphleteers of the American revolution, for example, used a printing process that was similar to Gutenberg's letter-type press. The critical difference for the explosion of printed material in the later parts of the 18th century was the advancement in paper making abilities. In the first decade

² J. Adams, *ibid.*, p.20.

of the 19th century the paper-making machine was perfected in England. This innovation meant that paper making could move from a hand process to a machine process. The effect of this change was to make paper a standardized material that was available in large quantities at relatively low prices. The combination of available supply of this crucial material, increased demand by new markets of newly empowered citizens, and the application of water and steam power to the printing process led to the creation of mass markets for printed materials.³ As noted by Morse Peckham, these developments had far reaching effects:

By 1830, publishing had been revolutionized. Printed matter was now cheap--for the first time in human history literacy could be massively extended through all levels of the population. In England the population grew by a ratio of one to four; but the literate population grew by a ratio of one to thirty-two..The nineteenth century experienced a communications revolution which, though a part of the industrial revolution, may very well have been the most important of its results.⁴

The components of mass production were in place in the early part of the 19th century for the printing industry. The newspaper publishing industry, however, posed a few hurdles that took some time to overcome. While paper production was increasing rapidly the technology to set type

³ See Alvin Gouldner, The Dialectic of Ideology and Technology, (Oxford University Press: New York, 1976), for a discussion of the development of mass markets for "news."

⁴ Morse Peckham, Beyond the Tragic Vision, (George Braziller: New York, 1962) p.27.

by machine lagged. For newspapers, with there rapidly changing product, this imposed a limit on the amount of type that could reasonably be set in a given period of time. As George Barnett, one of the great historians of the printing process, notes:

In 1887, typesetting was essentially the same art as in the late 16th century. While other branches of the printing trade had been revolutionized, the compositor had not advanced in his process beyond the point he had reached four hundred years before.⁵

On July 3, 1886, however, the newspaper industry would begin to undergo a radical transformation that would take several years before its full effects were felt. On that date Ottmar Mergenthaler demonstrated the first truly automatic typesetting machine in the composing room of the New York Tribune. The story of Mergenthaler's invention is worth some detail in that it reveals the motivation and intrigue surrounding a new production process, and the reactions by groups affected by the introduction of a new technology.

The general idea of Mergenthaler's machine came from an inventor from West Virginia, Charles Moore, who had the idea of making a "writing machine." Mergenthaler had a machine shop where he manufactured prototype machines for a variety of inventors. After an inspection of the machine that Moore

⁵ George Barnett, Chapters on Machinery and Labor, (Harvard University Press: Cambridge, 1926) p.3.

had brought to Mergenthaler's Baltimore shop. As described in Mergenthaler's biography, "[T]he general idea of Mr. Moore's machine was to produce by type-writing a print just like that produced from printer's type, the idea being to avoid the cost of type-setting, and to multiply the work so made by the lithographic process."⁶ Unfortunately for Moore and his financial backers, the process involving separate matrix production integrated with the casting of the plate turned out to have many complications which prevented it from widespread introduction, particularly the need for consistent output and time requirements. In the summer of 1879, after two years of trying various combinations, Mergenthaler gave up on Moore's design.

As Mergenthaler's biography has it, the idea to incorporate the matrix and plate production in one step occurred to him a train ride from Baltimore to Washington. On returning to his shop he began, in 1883, to produce the first integrated linotype machine. Mergenthaler addressed a group of interested people, including his investment partners on the completion of the linotype in 1884:

The history of our enterprise, gentlemen, is one of evolution. We started by printing one letter at a time, and justifying the sentences afterwards; then we impressed into paper mache one word at a time, justified it, and a type from it by after process. Next we impressed a whole line and justified it, still leaving the production of the type as a second

⁶ Carl Schlesinger, The Biography of Ottmar Mergenthaler, (Oak Knoll Books: New Castle, Delaware, 1989)p.4.

operation; but now we can compose a line, justify and cast it all in one machine and by one operator.⁷

No sooner had the prototype linotype come into operational form than problems developed in financing the new enterprise. The first orders for linotypes were placed in 1885 and, with the installation at the New York Tribune, the machines were finally tested in production. The board of the newly created Mergenthaler Printing Company ordered one hundred of the machines based on the sale to the Tribune over Mergenthaler's objections. As with most new machines, the linotypes were experiencing technical difficulties "partly due to weak or defective points in the machine, but more generally caused by the inexperience of both the operators and the machinist in charge."⁸ At the yearly meeting of stockholders in January, 1888, Whitelaw Reid, President and General Manager of the company broke bad news: "the linotype machine had not proven itself to be the labor-saving machine it was supposed to be, and that, far from being a money maker [to the newspapers] it had so far brought nothing but trouble, loss and disappointment to those using it."⁹

The dispute between Mergenthaler and Reid grew to the point where the inventor felt compelled to resign in April

⁷ Schlesinger, *ibid.*, p.20.

⁸ Schlesinger, *ibid.*, p.26.

⁹ Schlesinger, *ibid.*, p.33.

1888 because the quality of the linotypes being shipped could not be guaranteed. After a bitter dispute with the Reid and the board of directors, Mergenthaler was terminated from the company, and the company was reorganized to achieve more professional management of the production facility. Mergenthaler left a bitter and not much richer person for his efforts. The new Linotype Company, however, was poised to expand into new markets as the bugs in the prototype were worked out and the manufacture of the machines perfected. Figure VIII shows the rapid growth of linotype sales following the reorganization.

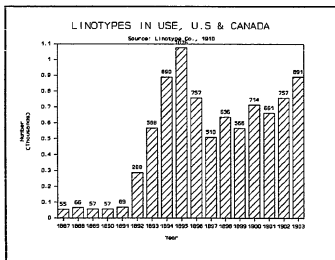


Figure VIII

Overcoming resistance from typesetter's and their powerful union, the International Typographical Union (ITU),

was another factor mitigating the growth of the introduction of the linotype until 1890. Two critical factors led the ITU to accept the new machinery beginning in 1890. The first factor were efforts by the new management at the Linotype Company to assuage union concerns about the new machines. Mr. L.G. Hine, the new President at Linotype, "afforded them [union officials] to investigate the capabilities of the machine before they were asked to accept it and establish a scale of wages under which it would be tolerated in their offices."¹⁰ In a similar vein, the newspapers themselves took pains to soften the difficulties in making the transition to the new technology, according to Merghenthaler's account in 1893:

...from our observation in this respect we think we are safe to say that there is not a single newspaper within the United States which would at time have been willing to discharge its old employees and employ in their place a set of even the most experienced linotype operators even if they could have been furnished for the asking.¹¹

A second important factor that may well explain the willingness of employers to accommodate their skilled workers was the fact that cheapening the cost of composition acted as an immediate and significant source to stimulate demand. As Barnett has noted, consumers benefitted as well: "The larger profits of newspaper publishers [brought about

¹⁰ Schlesinger, *ibid.*, p.58.

¹¹ Schlesinger, *ibid.*, p.58.

by increases in labor productivity] led to strong competition between papers which partly took the form of an increase in the size of the paper."¹²

The union, largely a decentralized network of urban-based organizations that dated back some fifty years to the 1830s and formerly organized in 1852, recognized the importance of the new composing technology early on. For example they adopted a resolution at their convention in 1888 which read, "The ITU favors the recognition of such [typesetting] machines."¹³ In addition to this recognition the ITU adopted two national strategies to influence the introduction of the new machines. The first policy that the national organization adopted was to change the method of payment for typesetting from piece rate to a time-scale that would even out disparities between shops that had the new technology and those that did not. The second policy was to steadily reduce hours without reducing pay. In both instances the union was largely successful. Barnett summarizes the union response to the introduction of the linotype machine:

Experience has convinced the greater part of well-informed trade union leaders that the introduction of important labor-saving machinery cannot be permanently halted by trade-union action..[However] every member of the union is potentially a displaced workman...Where

¹² Barnett, op. cit., p.8.

¹³ A Study of the History of the International Typographical Union, (Volume II, published by the ITU, 1967)p.86.

the control of the national union is greater, the likelihood of dealing with the question on a better informed basis is also greater.¹⁴

The growth of typesetting capability required further changes in the printing process which, in turn, required labor and management to adjust the organization of work. Particularly noteworthy was the development of the web press. The web press uses a continuous sheet of paper from a roll which is printed, folded, and delivered in sections in one operation. These presses became commercially available in the late 1890s, some thirty years after the installation of the first such press at the London Times in 1866.¹⁵ The production components of the modern newspaper industry were thus in place by the turn of the century and remained largely unchanged until the appearance of fully automated typesetting in the 1960s and the advance of photo-offset newspaper printing in the 1970s.

Throughout the 1970s and 1980s American newspapers changed over from letterpress to offset printing technology. The key difference in the two processes is the use of chemical interaction between oil and water in the offset method compared to the direct impression made by typeset plates in the letterpress process. With offset printing an image is created on a plate by a photographic process.

¹⁴ Barnett, op. cit., p.141-143.

¹⁵ Werner Merkli, "Landmarks in Printing," The Courier, July, 1988.

Compared to the lead plates which were created by the linotype machine, weighing up to forty pounds, an offset plate might weigh several ounces. The offset plate is mounted onto a printing cylinder which is in contact with another cylinder which is wrapped by a rubberized blanket. Both the blanket and the plate are chemically treated so that the oil-based ink only adheres to specified areas on the plate. As the press rolls the image is transferred, or offset from its correct-reading image to a mirror image. The paper travels between the blanket cylinders and receives the printed image.

Significant changes accompanied the transition from letterpress to offset printing. Most important for the organization of work is the increased sophistication of color-separation that is possible with photo-offset methods. With the growth of micro-electronic devices applied to the printing process the work of producing a daily newspaper has become increasingly complex. Along with this complexity is an increase in quality and quantity--the newer offset presses can be run faster with the lighter plates. The offset presses that were installed by Rockwell-Goss in the 1980s could run 70,000 copies of a 80 page paper per hour with color compared to the best letterpresses installed only a few years previous that ran 50,000 tops without color.

The Structure of Newspaper Production

The changes in production methods that occurred at the turn of the century radically altered the scale and scope of newspaper production throughout the industrializing world and established patterns of production that remain essentially intact today. The second generation of change, the increasing use of automated typesetting in place of mechanized processes in the 1960s, and the recent application of micro-electronics to the editing, lay-out, and printing of the newspaper in the 1970s and 1980s, has brought about a transformation in the form and content of work. While the basic structure of newspaper publishing remains as it was in the early part of this century, the actual organization and management of work has changed considerably with these developments in technology. This section describes the typical pattern of newspaper publishing in the United States with emphasis on the final stages of the process--the actual printing and delivery of the paper.

The process of producing a newspaper starts with reporting and editorial direction of the paper. The work setting of reporters, the newsroom, is typically jammed with telephones and computer screens. A frenzied, chaotic seeming environment is the rule rather than exception. The newsroom is a rather informal place where ties are loosened, shoes kicked off, and editors and journalists call each

other by first name. The power of the editor, to change or even can a story, is muted by the pressures of producing on deadline and the fact that more often than not they have moved up the ranks from everyday reporters to managing the editorial process.

Journalists began to organize collectively through the American Newspaper Guild (TNG) in the 1930s. The Guild, with its ties to the CIO, organized across job categories to represent clerical and administrative staff in the newsroom in addition to reporters. The Guild remains one of very few examples of successful union organizing among white-collar workers. This success is explained partly by the reform-mindedness and social progressiveness of many reporters and the weak economic position of reporters in a production regime that has historically had high rates of unionization of skilled blue-collar workers and high fixed costs of production. As a result, reporters were more vulnerable to layoffs than most other white-collar professionals. The combination of social and economic factors propelled the relative organizing successes of The Newspaper Guild in the 1930s. By the early 1970s the Guild had 135 of the nations 1,748 daily newspapers under contract, a percentage that remains more or less the same today.¹⁶

¹⁶ See Peter Drier, "Newsroom Democracy and Media Monopoly: The Dilemmas of Workplace Reform Among Professional Journalist," The Insurgent Sociologist, Vol. VIII, N. II & III, Fall 1978, for a detailing of work in American newsrooms.

Once the "copy" is written and edited, the final version is ready for the next step in the process: the setting into type. In this stage of the production process radical transformations have occurred over the last twenty years. The shift from "hot metal" plates, described in the last section, to electronic composition completely changed the technical aspects of what typesetters and compositors do on the job. The replacement of the linotype machine beginning in the early 1960s with computerized typesetting methods which include high-speed electronic photo-typesetters and electronic scanners. Highly skilled typesetters could set five lines of type per minute with the Linotype machine. With introduction of punched paper tape controls in the 1960s productivity jumped to 6 lines per minute; computer-driven linotypes, which came on line in the late 1960s increased productivity to 14 lines per minute.¹⁷ In one comparison of the next generation of typesetting devices, it was found that the most sophisticated mechanical linotype machine took 35 minutes to set a 2,500 word story, with some errors, whereas an electronic photocomposition device set the same article in one minute with no errors.¹⁸ In addition to the increased speed of these photocomposition

¹⁷ Benjamin Compaine, The Newspaper Industry in the 1980s: An Assessment of Economics and Technology, (Knowledge Industry Publications, Inc: White Plains, NY, 1980) p.113-114.

¹⁸ Compaine, op.cit., p.148.

devices is the fact that they can be operated from the same keyboard as the one used to enter the copy.

The result is that the typesetting and composition components of newspaper production are more or less obsolete. New developments in technology, electronic pagination and facsimile transmission, have all but eliminated the need for mechanical typesetting and paste-up of photos. While the work of the typesetter and compositor has traditional appeal as a highly skilled trade that required long apprenticeships which were controlled by the printers union, the International Typographical Union, it is important to note the negative aspects of these jobs. Blauner's characterization of printing occupations as a classic case of skilled labor where a combination of specialized knowledge and coordination between mental and manual activities is required, was accurate.¹⁹

The negative aspects of mechanical typesetting and composing is usually overlooked: the old hot-type composing room was "a combination of a dungeon and a blacksmith shop, with added discomforts of ink mists and loud noises."²⁰ In contrast, the modern set-up room is typically air-conditioned (perhaps out of concern for the computers more

¹⁹ Robert Blauner, Alienation and Freedom, (University of Chicago Press, Chicago, 1964).

²⁰ John Udell, "Special: The American Newspaper," Monthly Bulletin of the International Press Institute, September 1978, p.10.

so than the people operating them but still a significant improvement), clean, quiet and well-lit. The job of composing a daily newspaper requires little of the brute force formerly needed to lift forty-pound lead plates all day. These changes, in large measure, explain the increase in the number of women who have entered the hitherto exclusive male domain of newspaper production.²¹

In contrast to the change in technology brought about by the introduction of the linotype machine in the 1890s, the ITU was not able to control either the pace or direction of the new electronic typesetting technology in the 1960s and 1970s. As a result, the union finds itself today fighting rearguard actions to try to preserve jobs wherever they can, and for the most part failing. A more detailed analysis of the decline of the typesetter's trade is certainly needed than that presented here: was it caused by the union's unwillingness to change or by the unusually high level of democracy within the union which mitigated aggressive responses? Or is the cause more likely explained by management's desire to take control of a part of the production process that had grown in cost and unionization? Either explanation has merits, but I think both miss the mark. The more fundamental explanation is to be found in

²¹ See Pat Roos, "Hot-Metal to Electronic Composition: Gender, Technology, and Social Change," in Barbara Reskin and Roos, Job Queues, Gender Queues: Explaining Women's Inroads Into Male Occupations, (Temple University Press, Philadelphia, 1990).

the small accumulation of applications of automated machines and subsequent applications of micro-electronic devices that provided the ability to vastly expand productivity.²²

Whatever the cause of the decline of the typesetting function, the effects are evident throughout the production process. Given the pressure of nightly deadlines and the mechanical nature of typesetting, there was a need to have the editorial and typesetting functions in close proximity to one another, and in turn to the printing process. Transporting several hundred forty-pound plates around clearly is too time consuming. The rise of photo-offset or lithographic printing in the newspaper industry that followed the development of electronic composing devices in the early 1970s allowed papers to send the electronically set type over facsimile to a remote location in a matter of seconds. Thus the spatial relationship between departments--from editorial to typesetting and composing, to the pressroom--was broken apart. Many papers still have integrated production facilities in one building. More often, however, particularly with new installations of offset presses, the production facility is located some distance from the editorial and administrative side of the

²² See Harry Kelber and Carl Schlesinger, Union Printers and Controlled Automation, (The Free Press: New York, 1967) and Seymour Martin Lipset, et al, Union democracy: The Inside Politics of the International Typographical Union, (The Free Press: New York, 1956) for two studies on the ITU.

newspaper publishing operation.

The newspaper printing process proper, the laying of ink on paper, remains similar in form to previous web-press operations, but radically changed in content. The education director of the Graphic Arts International Union²³ wrote in 1975:

There does not appear to be any totally new technology that would have a severe, immediate impact upon either employment or the adjustment of the skills of our members. What seems to be the order of the day might be summed up in two words--faster and better. Most of what we have been able to identify as either process or equipment that might change the industry are refinements of technology that has been with us.²⁴

The new offset presses differ from letterpress operation in several critical respects but are not "totally new technology." Among the differences in offset printing that require a new set of skills of press operators is the balancing of ink and water levels to attain the correct printed output. In letterpress the impression is made directly onto the paper, thus the setting of ink levels and impression force are the critical aspects of maintaining quality. These settings, on the older letterpresses, are

²³ The GAIU subsequently merged with the International Printing and Graphic Communications Union in 1983 to form the Graphic Communications International Union (GCIU--AFL-CIO).

²⁴ John Stagg, "Response to: Changing Technology, Corporate Structure and Geographical Concentration in the Printing Industry," in Labor and Technology: Union Responses to Changing Environments, edited by Donald Kennedy, et al, (Pennsylvania State University, 1982) p.161.

done by manually adjusting ink-level for a specified column of printed material. As the newspaper is printed, folded, and delivered a pressman will pick out a finished newspaper from the delivery belt and check the printed material and adjust accordingly. A press layout like this can print a 64 page newspaper in four sections in straight run or 128 page eight section paper in a collect run. The average full speed for a letterpress newspaper is 50,000 copies per hour and 70,000 for an offset newspaper press.²⁵

The layout of an offset press is essentially the same as for letterpress. In the offset printing process the key to quality production is the maintaining of the proper balance between ink and water. The chemically treated water solution is used to separate the image area from the non-image area. The offset, or lithographic, plate is a thin aluminum sheet with its image and non-image areas on the same printing plane. The image area is made grease-receptive so that it will accept the grease-based ink and repel water. The non-image area is made water-receptive so it will repel the ink when wet. Maintaining the proper balance is complicated by the fact that the web of paper is being pulled through the printing cylinders at high speeds and under high tension. Too much water, even if the printed

²⁵ In a collect run the printed material is held by the folding mechanism for one revolution thus doubling the output of a single delivered paper while, of course, cutting the speed of the press run in half.

output looks good, can result in web breakage. The breaking of the web of paper is one of the most significant causes of loss productivity during a press run.²⁶

While many of the controls for maintaining the proper balance between water, ink, web tension, and press speed are automatically controlled by micro-electronic devices on modern offset presses, for the press operator the task of printing a daily newspaper in offset involves a good deal more in the way of decision-making than in letterpress. Any definition of skill or notion of the content of work must take this aspect of decision making into account. The long apprenticeships that pressmen traditionally served--up to eighteen years in some instances²⁷--are more a function of social and economic forces than a measure of the skill involved in a job.

The increasing use of micro-electronics in the newspaper industry--from the computerization of the editorial process, through the facsimile production of type, to the automatic pre-set ink and water levels on the press--has had a peculiar effect on employment. Many trades and job function have effectively been eliminated and yet overall employment has steadily increased over the years, as

²⁶ For more on web offset press operation see Web Offset Press Operating, (Graphic Arts Technical Foundation, Inc.: Pittsburgh, 1984).

²⁷ Interview with Austin McCan, New York Daily News, August, 1990.

seen in Figure IX below.

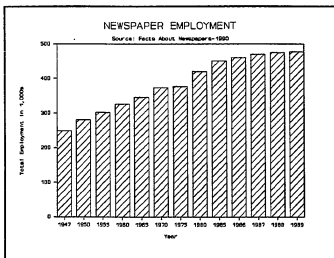


Figure IX

There is something of a redefinition of skill occurring in the newspaper publishing industry, especially at the point of production in the pressroom. In the case studies that follow we see different processes and strategies that labor and management followed in determining the layout of the new technology and the usage of the new presses. These cases do not establish a new paradigm of work organization has occurred. Perhaps it is too soon to tell if the new micro-electronics in newspaper publishing will bring about fundamental changes in the organization of work and in labor-management relations. The potential, as Shoshanna Zuboff notes, is there:

Information technology..does have the potential to redirect the historical trajectory of automation. The intrinsic power of informing capacity can change the basis upon which knowledge is developed and applied in

the industrial production process by lifting knowledge entirely out of the body's domain. The new technology signals the transposition of work activities to the abstract domain of information. "Work" becomes the manipulation of symbols, and when this occurs, the nature of skill is redefined.²⁸

More hyperbole than fact in newspaper production which remains physically demanding despite the many changes noted above, Zuboff's theory is worth investigating as an alternative to the stale debate between "de-skilling" and "up-skilling." The key word in the above passage is "potential." My argument is that workplace governance systems are an important aspect of how and why this "potential" is carried into practice, something Zuboff hardly stresses. There are, however, other important influences shaping the structure of the newspaper industry which are briefly outlined below before turning to our case studies.

The Competitive Structure of the Newspaper Industry

In the United States there are 1,626 daily newspapers with a total circulation of 62,649,218 papers per day.²⁹ The nature of the product, advertisements wrapped around news, makes it unique. The timely delivery and consumption

²⁸ Shoshanna Zuboff, In the Age of the Smart Machine, (Basic Books: New York, 1987) p.23.

²⁹ ANPA, "Facts About Newspapers: 1990," p.2-3.

of the news component of the product gives the daily newspaper a useful life of a matter of hours. Advertising remains the largest source of revenue for a newspaper and the ratio of advertising to the total content of U.S. daily and Sunday newspapers has stayed more or less constant over the years, ranging from a low of 57.7% in 1947 to a high 64% in 1975. The latest figure was 62.7% in 1988.³⁰

The most salient competitive points about the newspaper publishing industry are the increased competition with other sources of news and advertising, such as radio and television, weekly newspapers, magazines, and especially in terms of advertising, direct mail fliers. Within the newspaper industry itself, the long-term consolidation of papers seems inexorable. While the number of papers has remained more or less constant, declining from 1,763 dailies in 1946 to 1,626 in 1989, the growth of newspapers affiliated with chains has been marked. In 1910 there were only 13 newspaper chains or groups, controlling 62 newspapers; by 1984 149 chains controlled 1,115 papers.³¹ Disturbingly, for those who think that competition between papers is important to the political process of democracy, there are fewer and fewer cities with more than one newspaper. Figure X below shows the decline in the number

³⁰ ANPA, "Facts About Newspapers: 1990," p.11.

³¹ Editor and Publisher International Yearbook, various editions.

of firms in multi-paper cities.

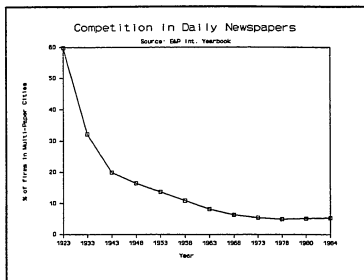


Figure X

The table below lists the ten largest American newspaper companies. Together these ten firms account for 44% of the total daily circulation and 22% of the ownership of all daily newspapers.

The increasing concentration brought on by the growth of the large newspaper chains has another consequence besides the development of monopolistic product markets. With size has come the move away from the relatively small, privately held family newspaper. The Tribune Company is one of the more recent examples, and a large one at that, of a

	Daily Circulation	Number of Dailies
Gannett Co. Inc.	6,022,929	82
Knight-Ridder Inc	3,794,809	28
Newhouse Newspapers	2,997,699	26
Times Mirror Co.	2,626,259	8
Tribune Co.	2,608,222	9
Dow Jones & Co.	2,409,955	23
Thomson Newspapers	2,127,123	122
New York Times Co.	1,919,094	27
Scripps Howard	1,570,957	21
Cox Enterprises Inc.	1,280,040	18

Table II

newspaper that has "gone public" with their ownership.³² The changes in ownership structure has put increased pressure on managers to deliver on the bottom line for shareholders concerned about the quarterly performance of their investment.

Another worry for newspaper executives is how to capture an adult audience that increasingly is moving away from reading a daily newspaper. Figure XI below shows the steady decline of the average number of persons over the age of 18 who are regular weekday readers of a newspaper. This decline is partly explained by the availability of other sources of news, but also to the increase of illiteracy and the growth of the non-English speaking population in the

³² In Chapter V's case study of the Chicago Tribune and Chapter VIII's study of the New York Daily News the extent to which stock ownership is available is important. Despite having gone public the majority (nearly 75%) of the stock is owned by a few senior executives at the Tribune and the McCormick family trust.

United States.

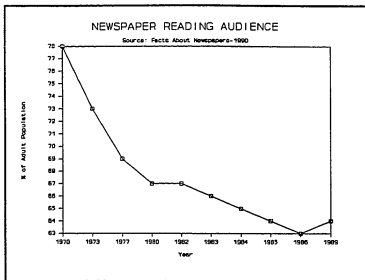


Figure XI

The competitive picture of the newspaper publishing industry is one of change and challenge. The profitability of the industry is under intense pressure, as a group newspapers have under-performed the stock market over the 1980s, and technological innovations continue to present themselves.

On the near horizon are technologies such as electronic photography and picture storage which will allow editors to quickly look pictures on a PC terminal, crop and size the photo instantly, and input the photo into a news column. Another technology in development is erasable optical laser discs which will have profound effects on page make-up and

plate making departments.³³ Finally, there is the development of flexo-graphic printing, a sort of hybrid of offset and letterpress that has the advantages of offset (high-speed, high quality) with the advantages of letterpress (direct printing which eliminates the need for mixing ink and water). A few newspapers have installed the first generation of flexo-presses with mixed results. The industry remains active, innovative, turbulent, and very much in the public eye.

³³ Both of these technologies were demonstrated for the first time at the ANPA-Tec conference in Las Vegas, June, 1990.

CHAPTER V: THE CHICAGO TRIBUNE--THE COLLAPSE OF COLLECTIVE BARGAINING

The Tribune Tower, located on Michigan Avenue in Chicago's downtown loop, is one of the great symbols of the city's rise to prominence. As Chicago's "Cathedral of Commerce"¹ built in the early 1920s, the Tribune Tower remains today a place where public opinion is molded in the shape of the Republican, urban-prairie tradition of the company's founding owner and editor Joseph Medill. The Tower is also an icon to the era of integrated newspaper production--the entire production process, from executive offices to newspaper production, is contained within the 30 story building. For the next 60 years production was done in the bowels of the Tribune Tower.

In the late 1970s, the Tribune management decided to update the existing letterpress printing facility with another grand gesture--the building of the largest single offset printing plant in the United States. The location for the new plant was only a mile away, on the corner of Halsted and Grand, but located in a different world. Far from the glitzy "miracle mile" that begins with the Tribune Tower, the Freedom Center, as the new facility is named, is in the middle of an industrial area bordered by the shipping center for Montgomery Wards and a public housing project.

¹ Katherine Solomonson, "Chicago's Cathedral of Commerce," Chicago History, Spring 1989, p.5-25.

Metroliner Offset presses and state-of-the-art paper handling and mailroom equipment, came on-line in late 1982 all seemed well with the company and the eleven unions that represented nearly 1,200 production employees.

After the start-up of the Freedom Center in late 1982, relations between the unions and management began to deteriorate. By 1985, the three main production unions went on strike--Local 16 of the Chicago Typographical Union representing the typesetters and composing room employees, Local 2 of the CTU representing the mailroom employees, and Local 7 of the Web Pressmens Union of the Graphic Communications International Union. To this day, the strikes remain unresolved, with the exception of the printers who entered into a consent decree with Tribune in January, 1989 ending the strike of Local 16 in exchange for job buyouts.

The case of the Chicago Tribune exemplifies the breakdown of collective bargaining in the wake of new technological innovation. In this chapter we address first a brief history of the Chicago Tribune and its past labor relations, then with a description of the events leading up to the strike which commenced on July 18, 1985, and concludes with an analysis of the attempts to resolve the dispute between the unions and the Tribune over the next four years.

"The World's Greatest Newspaper": Chicago's Corporate Voice

On July 6, 1925, the Chicago Tribune invited the public to view the newly completed Tribune Tower. On June 10, 1922, the eve of the paper's seventy-fifth anniversary, the Tribune had challenged architects throughout the world to come up with a design for the Tower which would befit a city, and a paper, that saw itself as an emerging giant. Joseph Medill had passed along control of the paper to his two nephews--Robert R. McCormick and Joseph Patterson--in 1911 after a run of nearly sixty years.

Medill had characterized the Tribune as the "business man's newspaper" and aimed its contents primarily at Chicago's well-educated, prosperous elite, and those aspiring to join the growing middle-class. McCormick and Patterson wanted to expand the readership and influence of the Tribune to a broader group that could identify with the future of Chicago and its place in the world. While both were educated in elite Eastern schools--Groton and Yale--they both held onto the midwestern values that had shaped Chicago and other growing midwestern cities. The "hog-butcher for the World...City of the Big Shoulders," in Carl Sandberg's words, Chicago's elite wanted the legitimacy that comes from being a metropolitan powerhouse.²

² There are many examples in literature that attest to Chicago's unique place in American society. The city's moniker, "The Second City," speaks to this ambivalent view. See for example, Theodore Dreiser, Sister Carrie; Upton Sinclair, The Jungle; the city's greatest chronicler and

The two cousins, McCormick and Patterson, shared common upbringing and views about Chicago, but disagreed on important aspects of editorial content. McCormick was described in aristocratic terms: "Born to wealth, and to power," young Robert R. McCormick dutifully entered upon the obligations of an esquire of the new nobility."³ Joseph Medill Patterson, in contrast, publicly embraced socialism in 1906 and did his best to downplay his elite upbringing and education. He once instructed an architect who was designing a home for him: "Make it look as if I didn't have any money."⁴ Inevitably McCormick and Patterson split paths with Patterson leaving Chicago in 1925 to take over the New York Daily News.

The Tribune's circulation grew by leaps after the completion of the Tower. In 1923 daily circulation stood at 517,184; by 1928 the Tribune was the largest of six daily papers in Chicago with a circulation of 761,548. Despite its leadership position, competition was fierce: three papers (the American, the Herald-Examiner, and the News) all

critic, Nelson Algren, Chicago : City on the Make; and for a more recent, though in need of updating to reflect changes in the 1980s, and sociological analysis, William Kornblum, Blue Collar Community.

³ Solomonson, op.cit., p.8.

⁴ Solomonson, op.cit., p.7.

had daily circulation over 400,000.⁵ Consolidation and decline was the fate of the other newspapers in the 1930s to 1970s, leaving the Tribune and Chicago Sun-Times the only two daily papers in Chicago in the late 1970s.

Labor relations at the Chicago Tribune with unionized printers dates back to the formation of the ITU in 1852 with the recognition of Chicago Typographical Union Local 16. The printers, typesetters, and composing room employees represented the aristocracy of Chicago's growing working class population and took part in many early labor struggles. Printers were, for example, part of the Haymarket eight-hour day protests in 1886 and supported the striking Pullman workers in 1894. Relations between CTU Local 16 and the Tribune were generally congenial, despite a bitter strike in 1912 that involved the pressmen's union and unskilled workers. The 1912 strike, at the instigation of the International Workers of the World (IWW), resulted in the breaking of many union contracts which were not restored until 1921.

From 1921, with the move into the new Tribune Tower, until 1947 relations between the company and unions, representing, in addition to CTU Local 16, the pressmen, paperhandlers, machinists, electricians, and other trades, remained on good terms with the unions providing skilled

⁵ All figures are from "Ayer's Newspaper Directory--1930," found in the Chicago Historical Society's collection labeled, CTU #16, Box 14.

labor through their hiring halls and the papers enjoying modest profitability in a time of economic depression. The one union that was bitterly resisted at the Tribune, however, was the Newspaper Guild. The Guild was never able to get a solid base of support at the Tribune.⁶ In 1947, however, the Tribune, along with other Chicago newspapers, faced its most severe labor problems.

With the passage of the Taft-Hartley Act in 1947 the closed-shop arrangement with the unions providing all labor was outlawed. In place of the closed shop was put the union shop wherein the employer does the hiring. After a specified period, usually thirty days, the new employee must join the union as a condition of further employment. This provision of the Taft-Hartley Act was bitterly fought by the printing unions who could see the end of their control of job training and placement. On November 24, 1947, the printers in Local 6 walked off the job at the Tribune. Colonel McCormick, still the publisher at the Tribune, upon hearing the news on a business trip to Japan said, "Good. I hope it lasts a long time."⁷ The publishers in Chicago stood together with McCormick--John S. Knight of the Chicago Daily News, Marshall Field III who had recently acquired the Times and would soon merge it with his Sun newspaper.

⁶ Peter Drier, "News Room Democracy," The Insurgent Sociologist, Fall 1978, v. VIII, N. II, p.75.

⁷ Lloyd Wendt, Chicago Tribune: The Rise of a Great American Newspaper, (Rand McNally: Chicago, 1979) p.680.

The publishers used the opportunity provided by the strike to introduce new technology into the printing process. On November 26, 1947, the Tribune ran a front-page article on the new look. The headline read, "SIX PAPERS APPEAR IN NEW DRESS". The accompanying piece told the story:

Members of Local 16 of the Chicago Typographical Union placed picket lines in front of all five plants in which the city's six daily papers are published. The printers went on strike on Monday. During the strike all Chicago papers will be published by the photo-engraving process.

Management of the Chicago newspapers had taken full advantage of the strike which lasted 22 months by installing the new photo-engraving processes which eliminated the hot-type setting process. With the strike effectively broken, the unions returned having dropped their insistence on the closed-shop and accepting a compromise worked out between Col. McCormick and union leaders. The compromise involved the creation of a preferential hiring list from which the publishers could choose workers according to seniority. The system meant that management was co-equal to the unions in the hiring process.⁸

Production in the Tribune Tower and labor relations remained more or less unchanged from the time of the settlement of the strike in 1949. With the gradual improvement of the offset printing process and with the

⁸ Wendt, op.cit., p.681.

decaying state of the Tower's production facility, Tribune management decided to make a major investment in a new facility.

The Freedom Center: Transforming Corporate Structure, Work Process and Labor Relations

The changes in production process that were to occur in the late 1970s with the installation of the new facility coincided with radical changes in corporate structure and labor relations. In 1968 the Chicago Tribune Company of Illinois was restructured as a holding company incorporated in Delaware and consisting of 26 subsidiary companies. These included an array of newspapers, television stations, and syndicated entertainment programs. At the head of the Chicago Tribune, by far the largest holding of the new company, was Stanton Cook. The new management team pronounced a new era, while assuring continuity with the old:

We start 1969 with a new publisher, a new editor and a new masthead leading this page. Readers who come to regard the Tribune as an old friend can expect to see some changes.

We expect to remain basically conservative. This does not mean that we are opposed to change, but rather that we believe that change must be made in the light of tradition and the lessons of history.⁹

The ownership of the company remained closely held until 1982 when the stock went public. When the original

⁹ Wendt, op.cit., p.756.

Tribune Company was incorporated in 1861, it had a capitalization of \$200,000, representing 2,000 shares of stock. Of the 2,000 shares Joseph Medill held 1,060 at the time of his death. This block of stock had remained essentially intact through a trust fund set up by McCormick's and Patterson's. By 1974 the net worth of the Tribune was assessed at \$347,000 million.¹⁰ Two investment bankers from Solomon Brothers who helped structure the company's finances, Robert Hunt and John Madigan, became vice-president and chief financial officers respectively of the new Tribune. By the end of the 1970s the transformation from a family owned and operated newspaper to a publicly owned corporation was complete. No longer were the McCormicks or the Pattersons involved in the operation of the Tribune Company, though the trust continues to hold a large number of preferred shares in the company.

With a restructured management and investor suits against the company's going public disposed of, and new technology available, the Tribune bought nine 10 unit Rockwell-Goss Metroliner Offset printing presses. The Metroliner was a newer version of Goss' proven offset technology with a brand new 160-page folder and automatic reel loaders.¹¹ The installation of the new presses began

¹⁰ Wendt, op.cit., p.785.

¹¹ Both the 160-page folder and the automatic reel loaders proved problematic during the start-up phase at the Freedom Center, according to the erector in charge of the

as soon as the Freedom Center was built in early 1980. The total cost of the presses ordered from Rockwell was \$235 million, with an additional investment in paper handling equipment, mailroom facilities, and the building itself adding an additional \$150 million. By the time the full process was complete, the Tribune had spent over \$400 million by 1982 on the Freedom Center.¹²

During the latter part of 1982 and early 1983 the Tribune simultaneously ran production at the Tribune Tower and the Freedom Center. With such an enormous undertaking-- to move the entire production process from one location to another required a major coordinating effort between production management, editorial directors (who remain in the Tribune Tower), upper management, and the production workforce. Robert Hagstrom, President of Web Pressman's Local 7, said: "We were instrumental in a hundred and

installation. The 160-page folder is an example of how time pressures add to the difficulties in making transitions in technology. I was part of the Rockwell-Goss team (three engineers, four machinists) that built the prototype 160-page folder in Goss' Cicero plant in 1980. After months of planning, design and fabrication we built the folder only to find numerous flaws. Three weeks of 12-hour day shifts were needed to meet the deadline required by the Tribune installation. As one deadline passed after another, and the folder still not operational, it was necessary to ship the folder as is in order to keep the installation process on schedule. As a flat-bed truck was backing into place to receive the folder (all 40,000 pounds of it) we were still making modifications. Additional modifications in the field cost Goss and the Tribune a substantial amount of money.

¹² Robert Wiley, "The Chicago Tribune", an investment report on the Tribune done by Furman Selz, February 16, 1990.

forty-four different mechanical changes on the Metroliners."¹³

In the 1979 contract between the Pressmen and the Chicago Newspaper Publishers Association (CNPA) the installation of new technology was foreseen, particularly at the Tribune. The Sun-Times, by then the only other daily newspaper in Chicago was already beginning to feel strapped for cash and slipping in the circulation battle with the Tribune. The 1979 contract sections on new technology read:

It is recognized that both Publishers may during the life of this agreement add new presses to its operation, either at an existing facility or in a new facility...In such event, the and Publisher making the change will immediately establish a Start-Up Committee consisting of chapel members from the Publisher and management representatives in equal numbers to consult regularly and frequently during the transition period of any new operation.¹⁴

As related by Pressmen's President Hagstrom and members of Local 7, these Start-Up committees worked with management to smooth the transition from the Tribune Tower to the Freedom Center. The pressmen had an incentive clause in the 1979 contract that provided for time off in the event new technology became fully operational. Section 26B of the contract was an innovative response to technological change--a "New Technology Sabbatical Bonus" which provided five weeks off for full-time pressmen once the new presses were

¹³ Interview with Robert Hagstrom, July 26, 1989.

¹⁴ Chicago Web Printing Pressmen's Union #7 agreement with CNPA, April 3, 1979, Section 26(a).

in operation.

The 1979 contract also provided for three other departures from past practice. In the past contracts were typically three years in duration; the 1979 contract doubled that to six years. A second provision was an acknowledgement of changes in manning requirements. The manning requirements on the Goss Headliner presses at the Tribune Tower specified sixteen journeymen for a 9-unit run and an additional journeyman for each color spot. This was gradually reduced by contract to 13 journeymen for a 9-unit run effective at the beginning of the third year of the contract. Further reductions in manning were foreseen in a new plant starting at 11 journeymen per 9-units. The final important change in the contract was the guaranteeing of jobs for all "journeymen situation holders" at the time of the contract for the rest of their lives. Situation holders are those pressmen who regularly work out of the union's hiring hall from which the papers could choose. For the most part situation holders were regular employees of one paper, but there was a fair amount of moving back and forth between the Sun-Times and the Tribune if times were busy or slow at one or the other.

The 1979 Pressmen's contract expired April 3, 1985. The Mailers contract had expired in July of 1984 and the Printers contract expired in January of 1983. Other unions at the Tribune were also in negotiations in the spring of

1985 including the I.A.M. and I.B.E.W. The tone of the negotiations between the Mailers and Printers (Local 2 and 16 respectively of the C.T.U.) was ominous starting back in late 1982. With the new pressroom coming on line at the Tribune in late 1982 with highly automated typesetting and composing functions, and a sophisticated new mailroom, the Tribune management was concerned with job guarantees for work that was essentially obsolete.

With the elevation of Stanton Cook to Chairman and CEO of the Tribune Company in 1979 the company began to look for a new person to run the Chicago Tribune. That person was Charles Brumback who came to Chicago from the Tribune's Orlando Sentinel paper in the summer of 1981. The Sentinel is a non-union paper that has state-of-the-art production facilities and modern "human resource management" labor relations. Brumback described both the Sentinel and his transition to Chicago:

[The Sentinel] was making more money than the Chicago Tribune was making, and they had about ten times the revenues we had [in Orlando]. We had no unions there; we had what I consider good employee relations. We never laid people off but we had all the labor-saving devices in the world. I had no experience with unions and that was one reason I didn't know if I should take the Chicago job. I tried to understand the unions here and I couldn't. ¹⁵

Brumback and the new leadership at the Tribune were determined to regain control of the production process on

¹⁵ Interview with Charles Brumback, July 27, 1989.

three fronts: (1) To put an end to the union hiring hall and some of the perceived abuses that resulted from the joint process of union-publisher hiring. The workforce at the Chicago Tribune consisted almost entirely of white men, most of whom were related to each other. The goal set by Brumback was to achieve a workforce composition closer to Chicago's racial makeup; (2) To separate management and union functions. In all of the unions at the Chicago Tribune foremen belonged to the union, which is typical of the printing and building trades in the United States; and, (3) To utilize the employees with job guarantees as management saw fit. Brumback's interpretation of the job guarantee provisions in the Mailers, Printers, and Pressmens contracts implied lifetime employment with the company, not necessarily employment at a certain job.

To conduct the negotiations with the unions with this agenda Brumback brought in George Veon as vice-president for employee relations. Before coming to the Tribune, Veon was vice president in charge of labor relations at the Wisconsin State Journal in Madison. Veon was in that position in 1978 when printing unions struck the Journal and the Capital Times. After a four year long strike, during which both papers continued to publish, the pressmen's union and the mailer's union were dissolved, and the printer's were left with two employees. Veon, who took much of the credit for successfully breaking the unions, had at his side a

Tennessee law firm that was beginning to earn the distinction as the newspaper industry "union busters". With Veon's appointment at the Tribune he brought along his Tennessee friends, the law firm of King and Ballow.¹⁶

Brumback described the changes that were occurring at the Tribune in the winter of 1985:

There are two types of management lawyers: one is the repair and maintenance type, who are kind of manipulated by these smart labor lawyers, and then there are the change guys. We had a repair and maintenance firm representing us but I brought in the change guys...We were determined to make a change and we did.¹⁷

With the new presses completely installed and running smoothly and the corporate restructuring complete, the Tribune management was in control of the situation. In the winter of 1984 the Tribune decided to disband the Chicago Newspaper Publishers Association because, as Brumback put it, "We had totally different needs than the Sun-Times. We were determined to regain control of basic management functions; Murdoch [Rupert Murdoch, owner of the Sun-Times] didn't want the hassle with the unions, so we parted ways."

On January 15, 1985 the Tribune made what it termed a "final offer" to the printers and mailers. The final offer

¹⁶ Holy Garland and Paul McGinn, "The Tribune's Union Busters," Chicago Lawyer, September 1985, document 13 situations where King and Ballow represented newspapers that broke union contracts between 1978 and 1985. Ballow figures in the New York Daily News case study in Chapter VIII.

¹⁷ Interview with Charles Brumback, July 27, 1989.

included all the management points listed above mandating transfers, changes in jurisdiction, and optional hiring of substitutes through the union. The contract was rejected by 332 to 13 by the printers and a similar margin by the mailers. On January 15 both the Sun-Times and the Tribune posted new work rules for printers and mailers that unilaterally changed the terms and conditions of work at the two newspapers.¹⁸

As the contract expiration in early April with the Pressmen approached, the unions joined together to form the Chicago Newspaper Union Employees Unity Council. The Unity Council had taken nearly four years of meetings to pull together. Finally, the unions were pushed into action by the Tribune's moves. The April 3 deadline passed and negotiations with the pressmen, printers, and mailers dragged on, the Unity Council began to take shape. On June 1, 1985, a strike vote was taken by the three unions who were working without contract. The printers voted 301 to 5; the mailers 305 to 2; and the pressmen 278 to 2: all in favor of striking. Three other important unions representing the electricians (IBEW), the machinists (IAM), and the drivers (Teamsters Local 706), all endorsed the strike at the Unity Council meeting June 15. However, all three had contracts in effect which forbid strikes or

¹⁸ C.T.U. #16 newsletter, Reporter, v.79 n.8, February, 1985, p.1.

lockouts during the life of the contract.

The strike deadline was set for July 7. Against the deadline of the strike another development was occurring that would have ramifications for the outcome of the impending struggle. The printers union, with its obsolete skill base and aging membership, was trying desperately to merge with another union. The Teamsters union, which was expelled from the AFL-CIO in 1957 because of leadership corruption, was actively courting the declining printing unions. The AFL-CIO leadership was opposed to any such mergers, and instead was actively involved in trying to find a match within the federation for the ITU.

Talks had gone on between the ITU and various unions since 1973, including tentative agreements to merge with the Newspaper Guild in 1982 (which was rejected by a 3-2 margin by the membership); talks with the Graphic Communications International Union, who in 1984 rejected the ITU merger proposition saying that the ITU was trying to engage the GCIU in a bidding war with the Teamsters; and continuing talks with the Teamsters. One faction of the ITU, led by former president, Robert McMichen, was opposed to merging with the Teamsters; another faction, led by then president Joe Bingel in 1984 endorsed the merger. In a series of internecine battles the matter finally came to a vote of the membership in August of 1985. The merger with the Teamsters

was rejected 34,234 to 17,547.¹⁹

The two-party factionalism which has historically characterized the ITU had come back to haunt them in the merger negotiations. The Chicago local had split fairly evenly--883 for, 1,385 against--but the Teamsters were angry with the outcome and the public denunciations of their union by certain ITU leaders, particularly McMichen, and the AFL-CIO leadership. After the defeat of the merger, Tom McGrath of the ITU's mailers division left the ITU and actively sought mailers locals throughout the U.S. that joined with the Teamsters. The two biggest mailers locals, in Chicago and New York, stayed with the ITU. Four years later, in 1986, the ITU merged with the Communications Workers of America and the next year the Teamsters rejoined the AFL-CIO.

The effect of the behind the scenes merger battle and defeat of the Teamsters was significant. As the July 7 strike deadline approached the Tribune brought in King and Ballow to conduct the negotiations, dismissing their long-time law firm of Seyfarth and Shaw. Ballow was able to "stop the clock" on the strike deadline at 11:55 p.m. of July 7, ostensibly to give him time to prepare a new offer. A new offer was not, however, forthcoming, and the unions went ahead with the strike on July 18.

¹⁹ Gary Chaison, When Unions Merge, (Lexington Books: Lexington, Mass., 1986) p.80-81.

The extra time had given Brumback, Veon, and Ballow sufficient time to organize a team of replacement workers from the Orlando Sentinel and Southern Production Program Inc. SPPI conducts seminars on labor relations for newspapers and runs a program in Oklahoma City to train newspaper management to run equipment during a strike.²⁰ The strike was successfully for the first day--the morning edition was missed. After that, according to Brumback and other informed sources, the Tribune did not miss a single edition. "Within six months," Brumback said, "we had all the production back."

The key to the Tribunes' ability to continue publishing was the fact that the Teamsters Local 706 lived up to its contractual obligations and continued delivering the struck paper. Had the merger vote gone the other way the Teamsters would have almost surely honored the picket lines, which would be after all their own members. With the breakdown in collective bargaining the nine hundred workers from the printers, mailers, and pressmens union were without jobs and without much hope of regaining work at the Tribune.

From the Picket Line to the Court Room: The Shifting Venue of Workplace Relations

Emissaries to came and went to and from the Tribune Tower trying to convince Stanton Cook to intercede in the

²⁰ Garland and McGinn, op.cit., p.3.

bitter dispute--Tom Donohue, Secretary-Treasurer of the AFL-CIO and John Dunlop, former U.S. Secretary of Labor, were but two of the crowd that met either with Cook or Brumback seeking a resolution to the strike. Despite pleas from Chicago-area Cardinal Joseph Bernardine, Chicago's Mayor Washington, and Illinois Governor Thompson, the Tribune held fast: accept our terms or stay out.

The Unity Council had failed to get together in time to act effectively. Dennis Doyle, chairman of the strikers public relations committee, said: "We were utterly unprepared when the strike started. The Tribune has a 104-page strike manual and it's a cold book. We didn't have anything."²¹ A mass demonstration was called for in early January. An earlier date, for the Thursday evening of Thanksgiving, the traditional beginning of the heavy Christmas advertising season, was held up by the Chicago Federation of Labor, according to sources in the CTU. Ed Brabec, the CFL's head and leader of the Chicago Plumbers union, didn't want to disrupt work going on with his members at the Tribune.²²

While the rally attracted over 17,000 supporters in a typically bitter January day in Chicago, the impact of the

²¹ Dan La Botz, "Chicago Unionist try to stop concession," The Guardian, January 8, 1986.

²² Interview with August Sallas, CTU Local 16 President, July 25, 1989. Sallas defeated incumbent CTU president Dave Donovan in May 1988, a defeat that further split an already divided local.

rally was negligible on the Tribune. The only venue that remained for the unions was to pursue unfair labor practice suits against the Tribune in court. The cases consistently found in favor of the striking workers--the Tribune, the NLRB ruled, had not negotiated in good faith. Part of the King and Ballow strategy apparently is to delay court cases as long as possible with appeals to the highest level. Despite the NLRB rulings the Tribune pursued the cases into Federal Court.

The Tribune, at the request of Judge Aspin of U.S. Federal Court, agreed to have a mediator try to settle the dispute with the printers. On March 30, 1987, former Secretary of Labor William Usury became the mediator in this dispute. After nearly two and half years of "the most difficult mediation I have ever been involved in"²³ the two sides agreed on a package which included \$8.5 million in back and severance pay. The membership voted 180 to 43 to accept the settlement which provided monetary compensation to the typesetters for ending their employment relationship with the Tribune.

For the striking mailers and pressmen litigation continues to this day. For Tribune management, their goals of gaining control of the production process were achieved. Brumback cited figures that in 1989 25% of the production workforce were minorities, as opposed to 3% before July,

²³ Interview with William Usury, June, 1989.

1985, and 20% of the pressroom employees are women, compared to none prior to July, 1985. Waste paper is done from 7% per run, to 3%, representing a significant cost saving and exceeding, by a small margin, the industry average. One financial analyst estimated that in the two year period starting in January of 1986 through the end of 1987 the cost savings due to increased efficiency and lower pay scales nearly equaled the total amount invested in the plant.²⁴ These claims appear accurate--at least in the analysis of the investment community.²⁵

It is less clear whether or not these gains will last. Despite the fact that Mr. Brumback was willing to be interviewed for this project, I was denied access to current pressroom employees. An assessment of the attitudes of the replacement employees towards their work, the Tribune, and the striking workers who still have a legal claim to those jobs, is important to any such analysis. It is also well to note that many union workers remain at the Tribune--nearly 70 machinists, 100 electricians, and over 500 newspaper deliverers. In an informal interview with a machinist at the Tribune I was told, "They [the replacement workers] stay

²⁴ Robert Wiley, "Tribune Company," investment report of Furman Selz, February 16, 1990, p.19.

²⁵ A New York investment analyst at Furman Selz continues to recommend Tribune Company stock despite the current losses at the New York Daily News by citing the "successful" Freedom Center strategy. In financial terms, the transition was a success.

in their world, and we stay in ours. We have as little to do with them as possible, but we have to be careful because they [Tribune management] looks for any excuse possible to discipline or get rid of any of the union people."²⁶

The collapse of collective bargaining at the Chicago Tribune was felt beyond the shop-floor at the Freedom Center or the union headquarters in Chicago. One big-city publisher remarked, "If the Tribune can win this one in a hard-rock blue-collar town like Chicago, there's hope for all of us."²⁷ Would other publishers follow the lead of the Tribune and use the installation of new technology as an opportune time to change the terms and conditions of workplace governance? Would the Tribune use the breaking of the Chicago unions as a weapon against the unions at the New York Daily News?

²⁶ Conversation with a member of I.A.M. Local 126 working at Tribune, October, 1990.

²⁷Kevin Klose, "Tribune Strike Continues," Washington Post, May 11, 1986.

CHAPTER VI: THE MINNEAPOLIS CONCEPT

One paper that did not follow the pattern set by the Chicago Tribune of aggressively taking on the unions with the installation of new technology is the Minneapolis Star-Tribune. The flagship paper for Cowles Media Communication, the Star-Tribune installed fifty units of Rockwell-Goss Metroliner offset printing presses in 1986-1987. The case of the Star-Tribune highlights the problems and benefits for both labor and management in exploring new ways of involving employees in decision making.

The first section of the Star-Tribune case study provides a historical perspective on the paper up to the time of the installation of electronic typesetting capability in 1975. The contract of 1975 with ITU Local #42 laid the foundation for an orderly, if difficult, transition to the new composing room technologies, which is analyzed in the second section. Recognizing the need to update the printing process to match the new composing technology, the company decided to build an all-new production facility. The last section details the process of moving into the new production facility and the challenges that still face labor and management at the Star-Tribune as they respond to technological change.

Historical Development of the Minneapolis Star-Tribune

From the beginning of the European settlement of the Minnesota frontier in the early 1800s the area had a strong Scandinavian influence. Along with a strong work ethic, the area was noted for a fiercely competitive newspaper industry. The roots of the Star-Tribune date back to the formations of the State-Atlas, a Minneapolis weekly that was one of twenty-four newspapers in the Minneapolis-St. Paul area in 1859.¹

The publisher of the State-Atlas, Col. William S. King, merged his paper with another weekly, the Chronicle, to create the Tribune in 1865. Two years later, in 1867, the Tribune became the Minneapolis Daily Tribune which published on every day except Monday "to spare many employees the necessity of laboring on Sunday."² During the next 24 years, there were six changes of ownership. Then, in 1891, the Tribune was sold to Gilbert Pierce and W.J. Murphy. Murphy eventually took over Pierce's half-interest in the paper and members of the Murphy family continued to have a controlling interest in the Tribune for the next fifty years. Murphy was described as "distinguished in appearance, aloof in most of his employee relationships,

¹ George Hage, Newspapers on the Minnesota Frontier, (Minnesota Historical Society, 1967) p.148-149.

² Bradley Morison, Sunshine on Your Doorstep: The Minneapolis Tribune's First Hundred Years, (Ross & Haines Publishers: Minneapolis, 1966).

shrewd in business dealings and relentless in his determination to keep the Tribune abreast of modern publishing techniques." During the first decade of his control, the Tribune installed Minneapolis' first Mergenthaler typesetting machines, experimented with color, and published its first cartoon and its first halftone engraving. Upon Murphy's death in 1918, he willed \$350,000 to establish a program in Journalism and Mass Communication at the University of Minnesota--a bequest second only to that left by Joseph Pulitzer to Columbia University.³

By 1920, there were four dailies in Minneapolis: The Tribune, with both morning and afternoon editions; and the Minneapolis Times, the Minneapolis Journal, and the Minneapolis Star, all afternoon papers. Across the Mississippi River in St. Paul, another four dailies competed for readership in the Twin-Cities. The Tribune had the largest circulation of the eight dailies in the area. In 1935 the Cowles family, owners of the Des Moines Register & Tribune, bought the Minneapolis Star, and in 1939, they bought the Minneapolis Journal.

The Cowles completed their consolidation of Minneapolis newspapers with the purchase of the Tribune in 1941. The paper that continues to survive to this date is the

³ Hage, op.cit., p.130-131.

Minneapolis Star-Tribune.⁴ Two generations of Cowles, John Sr. and Jr., led the paper from the 1940s through to the 1980s both in terms of business and editorial decisions. Both generations of Cowles were "hands-on" owners who regularly visited the press and composing rooms. As John Carmichael, business agent for the Minneapolis chapter of the Newspaper Guild noted: "John Jr. was the kind of person who felt an allegiance to the employees."⁵

As in other cities, the Twin Cities ended up with fewer newspapers as a result of relentless consolidation. By 1975, the principle competition for the Star-Tribune was the cross-river rival, the St. Paul Pioneer Press-Dispatch. On the labor side, ITU Local 42 represented the printers and typesetters in the Twin Cities newspapers since the reorganization of the local after the Civil War. While relations were generally cordial, there were two major conflicts with the Star-Tribune in the 1960s. In 1962, all twelve of the craft unions struck the Star and Tribune forcing the paper to suspend publication for 116 days. The strike issues were wages and benefits, particularly a more generous company sponsored pension plan.⁶ The strike was settled with both sides claiming victory.

⁴ The paper changed its name to the Star Tribune Newspapers of the Twin Cities in 1987.

⁵ Mary Sands, "A Case of Trust," University of Minnesota Business School, 1988, p.3.

⁶ Morison, op.cit., p.131.

In 1969 a second job action occurred with the printers staging a "working strike." Again the issues were over wages and benefits, rather than technology. The creativity of the working strike of the printers was seen in the changing of type that escaped the keen eye of editors. For example, in one ad for free puppies the correct phone number was substituted with the publishers home telephone number. The mischievousness of the printers during the working strike of 1969 is still remembered by management and workers alike at the Star-Tribune.⁷

In retrospect, however, the ability of the printers and typesetters to disrupt production in 1969 serves as a poignant reminder of the extent of changes that were about to occur with the introduction of new typesetting technology in 1975. John Dennison, a key player on the company side in negotiations stretching from 1975 to the present, described the local printers union as "the most powerful group in the building" until automation began stripping them of their craft.⁸ With the steady introduction of new typesetting technology the company and ITU Local 42 approached the 1975 negotiations with trepidation.

⁷ This example, and many others, were related to me during my interviews in Minneapolis, June, 1989.

⁸ Sands, *op.cit.*, p.6.

The Negotiations of 1975: The Minneapolis Concept

Consistent with past practice at the Star-Tribune and with industry standards, most of the contracts between the company and its unions were of two to three years in duration. With radical changes in the production process in the planning stages, primarily in the composing and typesetting areas, the company and ITU Local 42 prepared for difficult negotiations over contracts that were due to expire in September, 1975.

Two key elements in the 1975 negotiation would play a role twelve years later as the Star-Tribune completed the process of modernizing its production facility. The first was management interest in having a "fair" solution to the automation question while asserting the need for total flexibility to buy and use equipment it desired without having to consult with the printers or any other union in the building. The second key element was a recognition on the part of ITU Local 42's leadership that the times, they were changing. A turning point in the union attitude occurred in late 1973 when members of the Star-Tribune's bargaining committee traveled to the ITU's headquarters in Colorado Springs in search of information and advice on automation. Research done for Local 42 indicated that nearly 60% of the Star-Tribune's 243 printers could be made redundant with new technology and that another 156 composing

room employees jobs were threatened as well.⁹

The company and Local 42 began meeting in May, 1974. Thirteen months and 25 meetings later, an agreement was reached on June 13, 1975, three months before the contract expired, that detailed the process of changing composing and typesetting functions at the paper. The key components of the contract were as follows:

* Lifetime job guarantees for all 389 members of ITU Local 42 over a ten-year period.

* Guarantees that 130 printers would remain in the composing room doing composing room work. Management had to use attrition or other inducements to reduce the workforce.

* Management acquired complete control over all present or future computerized equipment or other changes in newspaper production.

* Established a "plant pattern" concept for determining wages during the ten year period of the contract. The concept provided the printers with the second highest weekly pay among the unions. The printers became the tail wagged by the other unions.

One innovative solution to moving the redundant printers out of the Star-Tribune was to start a publishing company, Tri-Star Graphics, which performed commercial typesetting work. While the idea was innovative, logistical and bureaucratic problems kept the new company from profitability. The effort was terminated in 1984 after the company had lost nearly \$1 million. By 1986, the composing

⁹ Material for this section draws heavily on two case studies prepared by Mary Sands, "A Case of Trust" and "Printing Automation", cases #8001 and 8002, for the University of Minnesota School of Business.

room had reached the floor of 130, with an additional 17 printers in other departments because of transfers.

In addition to the printers and typesetters in ITU Local 42, most of the other unions had also followed the lead of labor relations director John Dennison and signed long-term contracts: a five-year contract with the pressmens' union in 1980-1985 which was followed by an eight year contract until 1993; a five year contract with the electricians union; and ten year contracts with the platemakers union. With so many union signing long-term agreements, all with the same "plant pattern" feature, the burden to negotiate a pattern fell to the mailers union who had affiliated with the Teamsters delivery union in 1985.

Along with the stability that the ten-year contracts had brought was a dedication to completing the upgrading of the Star-Tribune's production facility. Much like the Chicago Tribune, though on a smaller scale, the Star-Tribune produced its daily newspapers in an intergrated, but aging, production facility. The decision was made in 1984 to move to a new building with state-of-the-art offset printing technology to go along with the innovations in composing and plate making that were achieved in the period following the signing of the ten-year contracts. There were, however, other changes taking place in the Star-Tribunes' management just prior to the installation of the new pressroom that bear on the transition to the new facility.

In 1979 John Cowles, Jr., decided that he would rather be the President of Cowles Media Company rather than its chairman. In his place Cowles put Otto Silha. In late 1982, feeling that he had drifted too far from the paper, Cowles had made himself publisher of the Star-Tribune. As Cowles Media Company prepared to meet in its annual meeting, on January 25, 1983, in Chicago, Cowles was concerned with getting back into the swing of publishing a daily newspaper. The board had other ideas:

As [Cowles] walked into the board meeting that day, he had plans..While Cowles had been hatching ideas for the paper, his board of directors--his family--had been thinking the unthinkable. In Chicago, they acted. They stripped Cowles Media from John Jr. and gave it to his cousin. Cowles was removed as president and publisher at the Star & Tribune.¹⁰

Cowles Media replace John Jr. as publisher of the Minneapolis Star-Tribune with Roger Parkinson in February, 1983. Parkinson, a professional publisher, had operated the Cowles-owned papers in Buffalo, represented a major shift in company management style. A Harvard M.B.A., Parkinson had a reputation for toughness and inflexibility. The change in executive management heightened union concerns that the ten-year deals that were due to expire in two years would be not be renewed or honored. Management at the paper feared that the family tradition of the Cowles, with its emphasis on harmonious relations and high-quality journalism, would be

¹⁰ Michael Crowley, "Cowles KO's Self," The Minnesota Corporate Report, (April, 1983) p.48.

compromised under the new regime that was determined to increase the profitability of the paper.¹¹

The key to the future of the paper, according to Parkinson, was to merge the two papers and to "re-educate the unions to the new economic realities."¹² With the merger of the afternoon Star and morning Tribune into the Star-Tribune Newspaper of the Twin-Cities in 1987, Parkinson had completed the first stage of the process. The second stage, making the transition to the new printing facility, awaited completion.

"A short move but a long distance": The MST Experience

With the new executive management team in place under the direction of Roger Parkinson cost and quality became the central concerns of the combined Star-Tribune paper. Gone were the days when the John Cowles Sr. or Jr. would walk down to the composing room for a chat. Bruce Gensmer, Business Manager and Senior Vice President at the paper, realized that to achieve these twin goals a new production facility was required. Gensmer's twin challenge was to convince Parkinson that the new plant would be cost

¹¹ Cowles Media Company is privately held so there are no reliable sources of public information on the financial condition of the Star-Tribune. One article stated that Cowles, Jr., had "done the impossible: lose money despite owning a monopoly daily newspaper in the country's 15th largest market." (Crowley, *ibid.*, p.48).

¹² Crowley, *ibid.*, p.50.

effective and that labor strife would be avoided in making the transition.

The production facility in use in 1986, located at 425 Portland Street, just blocks away from Minneapolis' commercial center, is an aging integrated newspaper publishing facility. On the first level, alongside production offices and the offices of the labor relations department, is a long window through which visitors and office workers can see the printing presses. On the same level, at the other end of the press room some one hundred yards away, is another bank of windows that look out on the street where the papers are delivered.¹³ Built in the 1940s, but scrupulously maintained through the years, the production facility at the Minneapolis Star-Tribune both looks new and shows sign of wear. The presses in particular, all 1950s vintage Goss letterpresses, were clearly outdated.

In Gensmer's view a completely new facility was needed to "give us a better production environment and to get away from some of the bad habits that had accumulated here [in

¹³ A number of pressrooms in the United States built between 1940 and 1960 had the feature of being able to watch the presses run from an area removed from the pressroom itself. One of the biggest complaints pressroom workers have with newer designs, which don't have this feature, is that they cannot see outside. The architecture of pressroom design seems to reflect the increasing attention to the bottom-line: family owners liked to see their equipment in use, the shareholders are more interested in seeing the cash.

the old pressroom]."¹⁴ The choice to build a new, or greenfield site, was made in late 1984. The first new press in the Heritage Center, located two miles away from the downtown headquarters of the Star-Tribune, was up and running in the spring of 1987. All five lines of the new presses (50 units of Rockwell-Goss Metroliners) were operational by October 1987.

While the "window on the pressroom" at the old-plant provided a view onto the printing of the paper, the pressroom remained, in Gensmer's words, "a world unto itself. We [in management] had no contact with the rank and file worker; it was a secret society where disciplining was done by the union." This view was corroborated by Jesse March, secretary-treasurer for the paper handlers union, and George O'Keefe, business manager for the pressmen's union.¹⁵ Labor-management relations were a matter of "co-existence," according to Gensmer.

With the decision to go ahead and build the new plant, an investment of nearly \$110 million in new press and mail room equipment, Gensmer devised a four part strategy to achieve the twin goals of a timely installation and long-term quality production. The first part was to sign long-term contracts with the critical production unions, a

¹⁴ Interview with Bruce Gensmer, Star-Tribune Company, June 26, 1989.

¹⁵ Interviews with Gensmer, March, and O'Keefe, June 26-28, 1989.

continuation of the Minneapolis Concept that had been successful in the 1975 contract with the printers and composing room employees. The second part was to involve employees in "as much of the decision-making process as made sense."¹⁶ The third part of the strategy was to use the move to the new building as an opportunity to change past practices including especially the lack of managerial control over the production process. This was to be achieved both through collective bargaining, in exchange for job security, and through less formal employee involvement teams. The final part of Gensmer's plan was to purchase the most recently available technology--even technology that was not fully proved in other papers. The idea was to have as advanced a plant as possible so that the most significant changes and adaptations would have to be made immediately. The strategy, said Gensmer, "involved a short move, but a long distance."¹⁷

Long-Term Agreements. To take away any uncertainty about the role of the unions in representing the production workers in the Heritage Center, labor relations director John Dennison set out to sign long-term contracts. The basis of the contracts was a recognition that the union workers, particularly the pressmen, paperhandlers, mailers, and remaining composing room workers, would all have some

¹⁶ Gensmer, interview June 26, 1989.

¹⁷ Gensmer interview, June 28, 1989.

degree of job security in the new plant, even if some of the jobs were made redundant by the new technologies.

The platemakers (GCIU Local 20C) signed the first of the long-term contracts. With an expiration date of November 30, 1986 the company and union wanted to have a contract that would cover the full term of the transition to the Heritage Center. A letter of agreement spells out the goal: "The parties discussed the desire for a longer term contract which would eliminate the need for negotiations well into the time period during which the Company and its employees will be moving into the Publisher's new facility at Heritage Center."¹⁸ The contract agreed upon became effective on December 1, 1986 and runs until November 30, 1996.

In addition to the length, two provisions of the contract are worth particular attention. The contract specifically eliminated "past practice" as a means of determining hiring and work control issues. In place of the complex web of rules which specified manning levels for the operation of the presses, the new contract language called for "publishers manning." In effect the union agreed to cede control of the managing of press production. In return all 160 pressmen were guaranteed lifetime jobs. The second key provision was the "realigning of wage rates," according

¹⁸ Letter of understanding from John Dennison to Kevin O'Keefe, GCIU Local 229, May, 1987.

to Dennison. A wage freeze for the first three years was agreed upon at the top rate of \$19.93 per hour. In subsequent years, starting in 1992, wage increases will follow the lead of the drivers or mailers. If, for example, the mailers get a \$.60 per hour increase, then so will the pressmen.

The uncertainties facing the pressmen in the new plant largely explain why they were so willing to except the tradeoff of wages and control of the pressroom for job security. One pressman at the Star-Tribune said about the contract: "I think they [the union] could have been more hard nose. I think the men would have been behind them, we were in a good bargaining position. The company got new equipment, nobody knew what it was--not just us but management as well. Why sign things away when you don't know what's going to happen?"¹⁹

One by one the other unions signed similar long-term contracts: the drivers (IBT Local 638 extended from March 1, 1987 to June 30, 1992), and the pressmen (GCIU #1M from June, 1988 to November 30, 1997) followed the lead of the platemakers. The one group that would not follow the lead of long-term contracts was the mailers union. The contract for IBT Local 4 granted the publishers manning clause similar to the pressmen's contract but limited the contract

¹⁹ Interview with pressman, name withheld by request, at Star-Tribune, June 28, 1989.

to a more traditional length of three years.

In a letter to Mailers Union President Robert McKee, the company recognized some of the uncertainties that the new production facility was faced with after a year of operation:

Because of the difficulties in predicting future manpower needs in the Mailroom (because of the uncertainties about the operation of new equipment as well as the unknown nature of future manning changes and, most importantly, because of uncertainties as to what the volume requirements will be at the new facility) the parties agreed to develop a buyout program to be made available to eligible employees.²⁰

The buyout program, however, only lasted for one year. Near the conclusion of the buyout process, according to McKee, three of the 200 mailers had taken advantage of the cash bonuses for leaving.

The mailers remain the one group in the production process that has resisted managements efforts to sign long-term contracts. Local union president McKee believes that the next contract, in the summer of 1991, will take hard negotiations to resolve without a dispute. The mailers are boxed in by the company in terms of isolation--they will be the only bargaining unit negotiating before 1992--and by the other unions since the mailers set the wage increase for everyone else. With the exception of the Mailers contract management had achieved two of its goals--signing of long-

²⁰ Letter dated June 10, 1988 from John Dennison to Robert McKee.

term contracts and gaining control over work practices.

Involving employees. With the long-term contracts signed the Star-Tribune management sought to alleviate the fears of the press room workers by involving them in decision making and in providing as much advance training on the new equipment as possible.

Senior Vice-President and Business Manager Bruce Gensmer pulled together a team of plant managers who would oversee the installation and start-up of the Heritage Center. At the center of the start-up team was Tom Hardie, a former pressman who describes himself as "a mechanical gnome to the labor relations department." He, in other words, understands the mechanics and intricacies of the production process, and can relate that understanding to the collective bargaining process.

Hardie had operated the presses in the old plant but had no experience with offset printing production. He organized teams of pressmen, paper handlers, and mail room workers to go on "working tours" of various newspapers that had installed similar Goss Metroliner presses. Hardie said of the teams:

We didn't just take the union scale committee, we didn't want the people to think we were buying off these guys. Neither did we exclude the union reps--we didn't want it said or thought that we were out to break the union. Rather we took volunteers, and made sure that at least one union rep was along on each

visit.²¹

Thirty of the press room workers participated in these trips during the winter of 1986-87 while the new presses were being installed. The visits included working shifts at the Orlando Sentinel (a non-union newspaper owned by the Chicago Tribune) and the Rocky Mountain News in Denver. It was an opportunity, said Hardie, for the press room workers to see the new presses in operation and to exchange concerns with the press personnel running the new presses. "I hadn't run these presses, so it was a chance for me to learn as well," continued Hardie, "it was a way for all of us to learn together. In my mind, it was the best money we ever spent." The teams, in turn, taught classes to other press personnel back in the Heritage Center as the new presses were readied for production.

A notable example of the kind of advance preparation that was taken were efforts by the electricians union. The new presses and mail room equipment relied on micro-processors rather than the switches and relays used on the older equipment. The union sponsored special courses on micro-processor controls and computer programming and trouble shooting. When the presses were installed the electricians were "the best prepared group of all," according to Hardie. As a consequence of the changes in

²¹ Interview with Tom Hardie, Star-Tribune, June 27, 1989.

technology the electrical shop expanded by nearly 40% over the two-year period from 1987 to 1989.²²

Some of the pressmen expressed skepticism that the tours really provided adequate training, "a dog and pony show" as one pressman described it. For the most part, however, the press room employees and union leaders interviewed expressed the view that they were well prepared for the start-up of the Goss Metroliners in March, 1987. What Gensmer and his team hadn't planned on were the difficulties in getting the new equipment to work.

As Hardie, Gensmer, and press room workers all concurred, "The start-up was a nightmare." The problems revolved around the final part of management's four-part strategy--the purchase of the most advanced technology. The paper handling system in particular created massive problems for the start-up. By design, the system required a sharply reduced workforce eliminating most of the work previously performed by members of the paperhandlers union. The new system, CT-50 RTP's,²³ clearly did not have all the bugs worked out. Hardie and other members of the start-up team "just about lived in the plant for the first two months."

²² Interview with Chuck Erickson, Foreman--Electrical Shop, Star-Tribune, June 27, 1989.

²³ "RTP" stands for reel-tension and pasters. The RTP holds three rolls of paper at a time and allows for the automatic splicing of two rolls as the press is running so that a continuous process is achieved. The CT-50's were the first generation of completely automated pasters.

The fact that so many of press room workers had traveled to different sites together lent a sense of togetherness during the start up, one pressman said. "We could have just let them hang. After all, they bought the press, we didn't. But seeing Hardie and some of the others done here trying to help figure out the problems, that made a real difference. It showed that they cared."²⁴

In the end the five new presses were up and running in a very short period of time, compared to other installations. The help and cooperation of the press room workers was, in the words of Gensmer, "indispensable. We couldn't have done it without a real team effort."

The new presses, with a high degree of computerization, have not posed significant difficulties for the press room workers. One pressman, a twenty-seven year veteran at the Star-Tribune said,

..you sort of become a backup to the computer, a quality control person. And yes, the computer fails, you need to be there doing your job. You need to know what to do..In some ways it has made work easier, like in presetting the ink and water levels, in other ways though the computer makes you work smarter because you have to be able to keep right up with it.

The new pressroom is clean and quiet compared to the old plant, "a marked improvement" according to one pressman. The one thing that is missing in the new building, three different pressmen all told me independently was a window on

²⁴ Interview with Star-Tribune pressman, name withheld by request, June 26, 1989.

the outside world.

With the new pressroom fully operational by the end of 1987 the expected cuts in employment had not materialized. In fact, overall employment had expanded slightly, according to Gensmer, with significant gains in the maintenance shops--electrical and machine. One other area had expanded--the mailroom. Union president McKee explained:

With all this new equipment, now they are able to print their own comics and do more color pre-prints during the day than in the past. They are also doing a lot more targeted editions--zoned edition--and they require more mailroom work. They also haven't been able to really automate the inserting of paper into paper: the material is too flexible. You still need a person there to make sure the process flows smoothly.

With the immediate challenge of the installation of new technology and transition into the Heritage Center complete management and unions are searching for ways to build on the positive changes and relationships that were built during that process. Quarterly meetings with plant management and an employees newsletter have become the main focus of involvement efforts. Gensmer posed the question for the future of the Heritage Center: "We responded to a challenge and came up winning--both labor and management. How do you maintain that kind of momentum once the immediate challenge is over and most of your employees have the security of guaranteed jobs for the next five to seven years?"

Similarly, the union officials ask themselves how do

they keep their members involved in the union when there are no contract negotiations for five to seven years. The Minneapolis Concept may not have won universal support from other newspaper executives or newspaper unions but it does serve as a distinct alternative to the Chicago Tribune model.

CHAPTER VII: THE NEW YORK DAILY NEWS

Situated on a border between two parts of America--the gentrifying neighborhood of Park Slope and the ghetto that is Bedford-Stuyvesant--sits another icon of America: an aging factory. Hard by the Long Island Rail Road, around the corner from the 78th Police Precinct, just off of Flatbush Avenue with its home fix-up stores and Caribbean fruit markets, sits the main production facility for New York's "Hometown" newspaper--the New York Daily News. A stroll around the block-long plant that was built in 1927 and last saw a new printing press installed in 1955 is to experience preparations for a war. As private security guards warily watch, a group of union workers from the Daily News are gathering in a store around the corner from the plant to report in at headquarters. At this juncture, in late July of 1990, no strike or lockout has been called, no impasse in bargaining has been officially reached, but the principals in this dance are expecting the worst.

The battle at the Daily News between ten unions and the 1,400 employees they represent and the management of New York paper which is owned and controlled by the Chicago-based Tribune Company. The story is not just about labor-management relations or the failure of one set of negotiators to reach an agreement in New York. The story is about changes in the structure of American labor organizations, American management, the way we work and live

individuals that are the acknowledged leaders for various interests and factions that comprise the situation.

There is Theodore Kheel, the octogenarian and crafty "unpaid advisor" to the unions--a position that he has held since the 1960s. There is James Hoge, the suave New York socialite and publisher of the Daily News, caught in a situation in which he must bear the heat of ongoing negotiations but can't reach for the one button that might turn around a declining paper. That button, access to capital needed to build a production facility, is controlled by the money men of the Tribune Company back in Chicago-- Charles Brumback and Stanton Cook. There is George McDonald, leader of the Allied Printing Trades Council, a 63 year old "bread and butter" trade unionist who learned his job in the bowels of the New York Times mailroom. And there is Robert "Cat" Ballow, the hired gun out of Tennessee with a reputation for breaking newspaper unions brought in by the Tribune Company to conduct the negotiations.

Beyond the headlines there are other stories that are perhaps just as compelling. Two thousand people work at the New York Daily News, jobs that they fear with good reason will disappear if there is protracted war between labor and management. The consumers of New York would also suffer with the demise of yet another newspaper--the fourth to go under since 1960. With the New York Post in shaky financial condition, and the New York Times as more of a national and

international paper, the City would be left with one major daily paper, Newsday, that focusses most of its coverage on and is printed in Long Island, some forty miles from the City. The stage has been set but the outcome is uncertain: Will there be war or peace at the New York Daily News?

The Re-emergence of Collective Bargaining

Labor negotiations have once again taken on a degree of prominence in the public eye. The long decline of organized labor, reflected in the precipitous drop from representing a third of the workforce twenty years ago to one in six employees currently, gave the appearance of a movement in full retreat. Labor stories, once a full time beat for most metropolitan newspapers, were either sad stories of industries restructuring or bright tales of a new world of work where the principal problem is labor shortages and creative management approaches to keeping employees happy. Trade unions were definitely not a sexy story in the 1980's.

The last year of the 1980's, however, was a watershed in terms of labor's re-emergence on the national scene. Emblematic of this trend was the battle against Frank Lorenzo at Eastern Air Lines by striking machinists, pilots, and flight attendants; the protracted struggle in coal country between Pittston and the United Mine Workers; and, the fifteen week strike at NYNEX over the cost of health care. Together with these labor disputes which captured national attention, scores of local disputes and actions by

trade unions give the impression that the announcement of the death of organized labor was indeed premature.

The resurgence of labor is evident from recent actions in New York City. The victory by health care workers in Local 1199 in achieving a significant pay increase from New York City's private hospital association and the election of David Dinkins as Mayor with strong union backing signal the strength of labor in upcoming negotiations in the 1990s.

As Americans from boardrooms to academia, and Capitol Hill to Main Street continue to worry about the declining position of the country's economic position in the increasingly competitive world economy, inevitably the focus will come to rest on the one place where our products are made and services rendered: at the workplace itself. While industries like steel and auto manufacturing were perhaps the first to feel the impact of the changed economic environment in the late 1970s, and have received a great deal of attention because of the transformations that rocked the stability that led to ever increasing wages and profits, virtually every organization has had to readjust its sights in an era characterized by tighter budgets and leaner staffs. How American businesses, workers and their unions, and consumers deal with these constraints and changes will influence the future ability of the country to compete, provide decent jobs at fair wages, and increase living standards.

The Confrontation at the New York Daily News

On March 31, 1990, the contracts between 10 unions and the New York Daily News expired. While saber rattling is very much a part of labor negotiations, what is unusual about this situation is the all out public attack on the unions by New's publisher James Hoge well in advance of negotiations. What are the set of options facing the News, and its parent the Tribune Company, and the ten unions, which bargain as a group through the Allied Printing Council? As this is written, in the spring of 1990 and updated through the fall of 1990, the path pursued is war rather than peace.

The Past is Prologue: Twenty-five of Contention in the Newspaper Industry

The New York Daily News was founded in 1919 by Colonel Robert McCormick's liberal cousin, Joseph M. Patterson¹. Both McCormick and Patterson were grandsons of Joseph R. Medill, the founder and first editor of the Chicago Tribune. The cousins shared much in common except politics. While McCormick continued the conservative, pro-business approach of his grandfather at the Chicago Tribune, Patterson was committed to a more liberal, socially oriented form of a

¹ Lloyd Wendt, The Chicago Tribune: The Rise of a Great Newspaper, (Rand McNally: Chicago, 1979).

newspaper.²

The Daily News, under Patterson's leadership, became the largest circulation daily newspaper in the United States during the depression as a voice for the struggling working people of New York. The tabloid format, sensational news coverage, and regular news stories of local importance, have continued to keep the Daily News among the largest circulation newspapers in the country.³

Labor relations at the New York Daily News during the Patterson years were characterized by a grudging acceptance of the printing trades unions that came to represent the various groups of skilled workers at the newspaper. During the 1940's and 1950's relations between the unions, through the Allied Printing Trades Council, and the newspapers through the Publishers Association of New York City, were characterized by hard bargaining on both sides with an acceptance of the procedure of collective bargaining as a means to negotiate differences and to settle disputes.

The relative peace that characterized the post-war years in the newspaper industry in general as well as at the Daily News vanished in the 1960's with the introduction of

² Oswald Garrison Villard, Some Newspapers and Newspaper-Men, (Chicago: 1926).

³ The Daily News had regular daily circulation of 1,286,000 in 1988 according to the American Newspaper Publishers Association. Only the national newspaper, The Wall Street Journal and USA Today, had larger daily circulation.

new technology. The technology of printing a large circulation daily newspaper had remained remarkably unchanged since the introduction of Mergenthaler's linotype machine in the late 1890's. Over the years complex sets of work rules and standards evolved that covered virtually every aspect of setting type, mounting plates on the presses, setting ink levels, inserting pre-prints, and delivering the paper. The replacing of hot-type, a process that involved the pouring of molten lead into pre-cast plates, with cold-type that could be set from a typewriter-like keyboard was the cause of a bitter dispute in 1963.

The 1962-1963 strike was initiated by Bertram Powers, head of the International Typographical Union (ITU), Local 6 in New York City. As the oldest union in the United States, dating back to the early 1800's with formal ties and continuity since 1837, Powers' union commanded a position of leadership of the Allied Printing Trades. The 114 day strike paralyzed all the newspapers in New York until the Post deserted the Publishers Association in giving Powers the assurance that the new technology would not replace any current typesetters. The issue would arise again in negotiations in 1974 and 1978 as the new technology was refined and installed in newspapers throughout the United States. Besides the issue of new technology, the key outcome of the 1963 negotiation was agreement by the Publisher's to a common expiration date for all the

contracts of Allied workers.

The 1974 strike was short-lived with the Allied Printing Trades Council's inability to control defections of the Pressman's union at the Daily News. With the News publishing, workers at the other papers were eager to get back to work. The 1978 strike would be different, particularly with the ascension of Rupert Murdoch, owner of the New York Post, to the head of the Publisher's Association.

On August 9, 1978, the Allied Printing Trades Council called a strike of all the metropolitan newspapers in New York City. The key issues were over the control of the printing process which the Publisher's Association claimed the unions ran. The issues fell under five broad categories: manning requirements, work practices, job guarantees, wages and hours, and a variety of other lesser issues such as benefits and vacation time.⁴

The negotiations were complex, involving Federal mediators eager to make their mark, questions of labor solidarity, and disagreements within the ranks of the publishers about the reliability of Murdoch. An important figure emerged in the negotiation--Mr. Theodore Kheel. An arbitrator, mediator and advisor to the unions, Kheel had "been involved in all the metropolitan industrial disputes

⁴ A.H. Raskin, "The Negotiation--Part II," in The New Yorker, January 29, 1979.

of any importance" since after the Second World War.⁵

Kheel played the role of "fact finder" for the unions. With the help of several key management production executives from the New York Times and the Daily News, Kheel was able to fashion an agreement that involved sacrifices from the unions, particularly the pressman and typesetters who agreed to buyouts of their jobs in exchange for increased management flexibility in manning the pressroom and page make-up process. After 89 days of back and forth negotiations, during which the New York area was effectively shut off from newspaper coverage of the campaign leading to the election of Hugh Carey as Governor of the State, the unions and publishers came to agreement.

One key to the 1978 settlement for the Publisher's was the inclusion of a "me-too" clause entitling each paper any concessions granted another. Given the declining competitive position of the Daily News and Post relative to the Times, particularly as the cost of updating equipment became increasingly high, the "me-too" clause was to play an important role in negotiations throughout the 1980's and in the eventual demise of the Publisher's Association unified bargaining position.

The 1980's was a grim decade for the American labor movement: the percentage of the private sector workforce represented by a union declined from 25% to 13% and

⁵ Raskin, *ibid.*, p.56.

virtually all union workers were affected by at least one concessionary contract in which wages, benefits or work rules were eroded.⁶ The New York newspaper industry was no exception.

By 1981 the Daily News had encountered serious financial difficulties. The Tribune Company, which was preparing an initial public offering of its stock, reported in the 1983 prospectus that,

Due to rising costs and operating inefficiencies, the New York Daily News incurred operating losses of \$12.6 million and \$14.3 million in 1981 and 1982 respectively. After exploring the possibility of selling the newspaper, the Company in April 1982 commenced a recovery program to return the Daily News to profitability. The first phase of the program was to negotiate with the eleven unions representing the News' employees in an effort to reduce operating costs. These negotiations were satisfactorily concluded in October 1982 and resulted in reductions in staff through voluntary employment termination incentives or job buyouts, and work rule changes. The union contracts, which had been scheduled to expire in March 1984 were extended through March 1987.⁷

Throughout the 1980's the question of the survivability of the Daily News and the Post were subjects of bargaining for the Allied Printing Trades Council. The unions found themselves in the new position of having to stand in judgement over the fate of the papers. Without prior

⁶ Linda Bell, "Union Concessions in the 1980s," Federal Reserve Bank of New York Quarterly, Spring, 1989.

⁷ The Tribune Company, Proposed Prospectus, August 25, 1983, p.17.

experience or technical expertise to evaluate the papers' claims of financial hardship, the Council sought out advice. Again turning to their advisor, Ted Kheel, the Council proposed to the Daily News that they be allowed, at the company's expense, to appoint an accounting firm to review the newspaper's financial records.⁸

After a thorough review by the accounting firm of Peat, Marwick & Mitchell, the Allied's head, George McDonald, reviewed the options available at the Daily News with Kheel. In addition to acknowledging the financial problems at the Daily News which would require union concessions, Kheel and McDonald came to the conclusion that the paper needed better management. As part of the quid pro quo for granting concessions, the Allied insisted on the company appointing a management consultant approved of by the unions.⁹

The negotiating sessions in 1981, 1984, and 1987, all concerned the survival of the Daily News and the Post, while the Times, the only healthy New York paper, received the benefits of concessions granted at the other two papers through the "me-too" clause. With the Post approaching bankruptcy in 1988 and the Times beginning construction of a \$700 million printing facility in Edison, New Jersey, the

⁸ George McDonald, "Report to the Unions," Allied Printing Trades Council Bulletin Volume 1, Numer 1, (February 9, 1982).

⁹ Theodore Kheel, "Bargaining in the 1980's," New York Law School Review, (Volume 28, 1983) p.369.

structure of parallel negotiations through the Publisher's Association broke down.

The twenty-five years of conflict in the New York newspaper industry beginning in 1963 has delivered the unions and the papers to a crucial juncture. The Times signed long-term contracts with the Allied unions in the summer of 1989 signaling a willingness to work together during the transition to the new printing facility. The Daily News also sent a signal to the Allied unions at about the same time. The September issue of Vanity Fair profiled News publisher James Hoge who was, the magazine reported, "ready, even eager, for combat."¹⁰

The New York Times reported that, "Hoge..hoped to persuade union leaders that it [the News] was seriously preparing for a strike should negotiations fail to win "radical" changes in key areas like work rules, manning, hiring and overtime...For both The News and the unions, talk of revolutionary concessions and a possible strike has created an atmosphere of extreme anxiety."¹¹

With contracts expiring March 30, 1990, the Daily News and the unions were girding themselves for a major struggle. Despite the concessions granted by the unions during the

¹⁰ Edward Klein, "Front Page Drama," Vanity Fair, October, 1989.

¹¹ Alex Jones, "New York's Daily News Prepares for a War With its Unions," New York Times, September 25, 1989, B1.

1980's the Tribune Corporation has been unwilling to invest heavily in new plant and equipment without having full control of the printing process. Tribune Corporation president Charles Brumback said, "The Daily News is a major revenue contributor to Tribune, but we don't own that franchise--the unions do. Our task is to get control of that plant the same way we had to in Chicago."¹²

The specter of the "Chicago solution" loomed over the. In 1985 the Chicago Tribune completed the installation and start-up of the largest single plant conversion from letterpress to offset printing. The Freedom Center, as the new plant is called, represented the state-of-the-art in newspaper printing.

Unlike in New York, where all the unions continue to have common contract expiration dates, the Chicago unions had differing expiration dates. Particularly important to the start-up of new presses are two bargaining units that are often overlooked in discussions of the newspaper industry: the electricians and machinists. In Chicago, as in New York, these workers are represented by the International Brotherhood of Electrical Workers (IBEW) and the International Association of Machinists (IAM) respectively.

The Pressmen's Union and the Mailers Union were stunned in June of 1985 to learn that the notoriously tough labor

¹² Interview with Charles Brumback, July 27, 1989.

negotiating law firm, King and Ballow, would replace Tribune's present law firm, Seyfarth and Shaw, with whom the union had bargained for many years. The firm of King and Ballow has a well established reputation in the industry for utilizing every tactic available to management, including pursuing the decertification of the union as a bargaining representative and engaging in "offensive strikes" with replacement workers at the ready.¹³

A strike did occur at the Chicago Tribune in the summer of 1985. At first all the unions honored the picket lines set out by the Pressmen and Mailers, but one by one the electricians, machinists, and critically, the paper deliverers who belonged to the Teamsters union, went back to work. While not maintaining full production, the Tribune was able to effectively break the strike without missing a single edition, as was detailed in Chapter V.

The Negotiations of 1990

The negotiations of 1990 provide a vivid example of conflicting interests colliding full force. The unions in the Allied Printing Trades Council have signalled an unwillingness to significantly change the current collective bargaining agreements which expire on March 31. The Tribune and Daily News management have clearly indicated a desire to

¹³ "An Interview With a Tough Negotiator," Presstime, October, 1989.

radically change the terms and conditions of the union employees contracts. On the eve of April Fools Day, the unions and Tribune management faced each other in a tense situation that directly affect the lives of 3,000 workers at the Daily News and the future of the newspaper.

Management Demands

In seeking to recapture the fundamental tools required to manage production of the Daily News, management say they specifically want:

1) The right to control the hiring process throughout the entire operation.

2) The right to the undivided loyalty to management of all supervisory personnel.

Currently, all first line supervisors belong to one of the unions.

3) The right to assign work and to more flexible work rules which would insure that, once a task is finished, a worker can be reassigned to other work for the balance of the day and not simply collect eight hours pay for fifteen minutes work which can occur under the current regime.

4) The right to determine the appropriate manning levels.

5) The right to determine when overtime is needed.

If the Daily News negotiators are able to gain these concessions from the Allied unions, the Tribune has

indicated a willingness to invest in a new printing facility that would upgrade the antiquated conditions workers now produce in. The cost of such an investment is estimated at \$500 million.

Management at the Daily News clearly has the model of the 1985 confrontation at the Chicago Tribune in mind with these demands. The 1985 strike and successful startup of the Freedom Center in Chicago serves a dual model for the management team headed by James Hoge at the Daily News. Economically, the transition from the old Tribune Tower plant to the Freedom Center was a huge success for the company: margins at the Chicago Tribune tripled between 1982, when both plants were running, and 1987, and have continued improving since. This improvement in margins means the paper today is running an incremental \$110 million in annual contribution, which pays back the entire Freedom Center capital cost every two years. Figure XII compares margins at the Daily News and the Chicago Tribune.¹⁴

¹⁴ Estimates by Robert Wiley, Furman Selz, Inc.

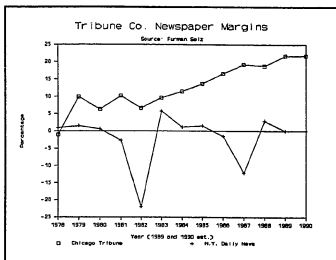


Figure XII

In terms of personal goals, the success of the start-up and the breaking of the unions in Chicago under the direction of Charles Brumback, certainly contributed to Brumback's rising to be President of the Tribune Company. Brumback is now 61 years old. The Tribune Company requires that its senior officers retire by age 65. James Hoge at the Daily News is 54 years old. The path for Hoge seems clear: gaining control of the Daily News positions him for taking over the Tribune Company after Brumback's retirement.

Preparations at the Daily News

Hoge's career has included supervising shutdown of the Chicago Daily News. While management says this is not the preferred course of action in New York, the option is

available. For the unions, which have seen a steady erosion of membership over the last twenty years, losing the Daily News would be a serious blow.

One thing is clear from the publicity campaign management has mounted: they are prepared to do whatever is necessary to make the Daily News a contributor to the Tribune's revenues. While the margins in Figure XII testify to the poor performance of the Daily News, the revenue figures show the potential the paper has, as shown in Figure XIII.

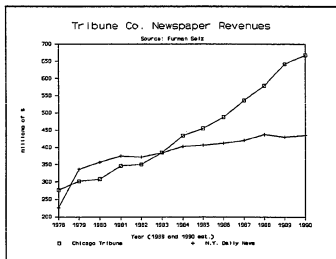


Figure XIII

Steps taken to prepare for the March 30 deadline include training management personnel at Tribune's Fort Lauderdale News and Sun Sentinel plant on letterpress equipment virtually identical to that at the News' printing plant. Management claims that a version of the current daily paper could be produced with one-third the current number of pressmen.

Still unknown, however, is how the paper would be delivered in the event of an impasse. The News' deliverymen's union is unaffiliated with the Teamsters or any other national union. The extent to which solidarity remains between the deliverymen and the Allied unions appears as the crucial point in management's plans to continue publishing through an impasse. Management has offered the delivery routes to the driver's in the form of independently run contractors. So far the union and drivers have rejected that approach and remain committed to staying with the rest of the Allied unions. The potential for violence is particularly high should the Daily News try to deliver papers without the newspaper deliverer's union.

With the aid King and Ballou, a law firm with much experience in preparing management for labor confrontations, the preparations are likely to be extensive and well planned in advance. One possibility is to out source the printing of the paper with delivery by unionized teamsters. While a visit by Hoge to Rupert Murdoch's "fortress Wapping" in

London impressed the Daily News management, a full scale parallel operation is unlikely to occur in New York due to the size of the printing facility needed to print over one million newspapers a day. Whatever the scenario, the Daily News has made it clear that the stakes are very high for the unions should they gamble on management's willingness to pursue their objectives on April 1, 1990.

The Union Response

George McDonald, head of the Allied Printing Trades Council and President of Mailers Union Local 6, comes from the old school of labor relations. A straight forward bread and butter unionist, McDonald ties his concern for his members with the necessity to keep the Daily News going. The last ten years have been difficult for the Allied Printing Trades as technological change has displaced many printers and the competitive position of two large employers, the Daily News and New York Post, has deteriorated.

The willingness to negotiate changes in the collective bargaining agreements is evident. In the last set of negotiations, in 1987, the unions agreed to givebacks amounting to \$30 million at the Daily News. Stanton Cook, then President of the Tribune Company, said in letter to McDonald in 1988:

"...I am enthusiastic about the labor-management

progress and cooperation that has taken place at the Daily News. And the sacrifices that have been made, too, by both the company and employees."¹⁵

The promises made in the 1987 negotiations to go ahead with a planned \$300 million investment in the Daily News did not materialize. For McDonald and the other leaders of the Allied Printing Trades unions, the credibility of promises made by Daily News negotiators is strained both by these recent experiences and by the perception that the parent Tribune Company calls the shots, not Hoge or anyone else at the Daily News.

The bargaining position of the unions is more defensive than aggressive. Accepting the status quo and working without a contract past the March 30 expiration date appears to be acceptable to McDonald and the unions. Whatever settlement one union is able to make must also satisfy the other unions. The solidarity of the ten unions is the key to the overall strategy of the Allied Council. "We will not sign or ratify any contracts until everybody reports that they are satisfied," said McDonald on January 21. ¹⁶

Despite the assurances of McDonald, the fact remains that the incentive to defect from the Allied's ranks is

¹⁵ Allied Printing Trades Council press release, September 28, 1989.

¹⁶ Quoted in, "Fate of Daily News Seen at Stake as Labor Talks Start," New York Times, January 22, 1990, B1.

strong for any one of the ten unions. For a successful divide and conquer strategy on the part of the Daily News, the key groups to watch are the deliverer's, and the maintenance unions, particularly the machinists (IAM) and electricians (IBEW). These last two groups have historically followed the lead of the larger unions but could play a more important role in these negotiations if the promise to install more technologically complex printing presses materializes.

While McDonald and the other union leaders in the Allied Printing Trades Council issue statements about the need for solidarity, the Daily News prepares for an all-out attack on regaining control of the pressroom. If some of the unions defect from the united front, the task of producing a daily newspaper will be made easier. Even without defection, however, management is in the commanding position with the recent experience at the Chicago Tribune in mind. More importantly, management has the advantage of having not invested heavily in a new printing facility. If ever there was the opportunity to walk away from a money losing enterprise, this is it. The incentive for the Tribune to sell off the Daily News and its prime assets, particularly the acreage the plant occupies in mid-Manhattan, is constrained by unfunded pension liabilities and buyout clauses that the pressmen and mailroom employees have. Ted Kheel estimates that these obligations amount to

nearly \$100 million. The Tribune declined to confirm or deny Kheel's estimate.¹⁷

Prospects for a settlement

The prospect for a settlement that satisfies the many interests at stake in these negotiations is not promising. To simplify the negotiations at the Daily News it is useful to look at labor as a cohesive block, represented by the Allied Printing Trades Council, and management, as represented by James Hoge, the publisher of the New York Daily News.

In fact, of course, these negotiations are much more complicated than this stylized version. There are negotiations between and within the unions, and negotiations between the Daily News and Tribune Company as well as within different parts of management at the Daily News. These many points of reference increase the difficulty in coming to a settlement that satisfies these stakeholders, not to mention other important stakeholders such as the readership of the Daily News, equipment manufacturers who would like to build a new printing facility, and suppliers of paper and ink, to name only the most obvious.

If the Daily News is able to capture the kinds of efficiency gains achieved at the Chicago Tribune it is estimated that the Daily News could boost the Tribune

¹⁷ Conversation with Ted Kheel, March 2, 1990.

Company's earnings per share by as much as \$0.75, or 25% above the \$3.00 earned in 1989. If this can be accomplished over five years, the Tribune's EPS would accelerate by 5% compounded per year.¹⁸ This would be very beneficial to Tribune's share price. Success of the current negotiations would add significantly to the value of the Tribune. From management's view this could mean anything from shutting down the Daily News and selling the property it sits on, to replacing union workers in the short term with management and contract employees, to gaining concessions from the unions that will allow maximum flexibility and management control over production in a new, modernized printing facility. The willingness of management to take a strike or to lock out the unionized workers after March 30 strengthens their hand in negotiations.

For the unions the choices are more circumscribed. The first choice of any single union is to defect from the Allied Printing Trades Council when the going gets tough. Initially, however, the willingness of management to take a strike or lock out workers will likely increase the militancy and solidarity of the unionized workforce. The escalation of the war of words being conducted through the press is an indication that the unions are preparing their members for a long battle. The resolution of such a

¹⁸ Robert Wiley, Furman Selz investment report dated February 16, 1990, p.2.

situation does not favor the Allied's members. Unlike the strike at NYNEX, the Daily News does not depend on governmental regulation to price its product. The more appropriate analogy is to Eastern Air Lines where striking machinists have essentially lost a protracted struggle against a management that was determined to have its way. In such a scenario, the confrontation at the Daily News is likely to be ugly and will quickly involve local politicians.

The response of local politicians, especially newly elected mayor David Dinkins, would have an important impact in the negotiations. The poor record of the printing trades progress in integrating minorities into the workforce could prove a mitigating factor in support from Dinkins, New York City's first black mayor.

Conclusion

It appears that management is playing from a position of strength from the Chicago headquarters of the Tribune Company. The strength of their position may, however, also work to their disadvantage. The story is close to that of David and Goliath, with the Tribune Company playing the role of the bully on the block. While McDonald's bread and butter unionism background has helped his members achieve incremental improvements in contract benefits over the years, his task now is to find the common interests of the Daily News management and employees.

Those common interests center on one crucial fact that both sides agree on: the need for a new, technologically sophisticated printing facility. Agreeing on the terms and conditions of work in this new plant, which exists only as an idea at present, is the challenge to Hoge and McDonald. Can they find a common point of interest in such an abstract place?

CHAPTER VIII: THE MIAMI HERALD

The Miami Herald is the flagship newspaper and home base of the Knight-Ridder chain. The chain bears both the name and mark of its founder, John S. Knight. Described as an American original, Knight led the Herald through turbulent times from the 1920s until his death in 1981.¹ Labor relations and technology decisions reflect the strong influence of Knight at the Miami Herald. As the one case study of organizational responses to technological change in the newspaper industry with a non-union workforce, this chapter differs somewhat from the previous cases. In particular, given the fact that there is no formal contractual relationship between press room workers and management there is less documentation of labor-management relations and responses to changing technology. Because of this lack of documentation this case study of the Miami Herald depends more on interviews and my own experience working at the Herald installing their first offset press in 1983.

The Paper on the Bay

On a typically hot and steamy day in southern Florida in August of 1960 John S. Knight sunk a shovel into the sandy soil of the Biscayne bayfront, breaking ground for the

¹ Charles Whited, Knight: A Publisher in Turbulent Times, (Dutton: New York, 1988).

new plant of the Miami Herald. The \$20 million investment, it was thought, would provide "a state of the art printing facility to the 1980s."² The plant, with 60 units of Goss letterpress units, went into production in April, 1963, and remains the central production facility for the paper.

With the passage of the Taft-Hartley act in 1947, newspaper unions went on the offensive to get around the provisions outlawing the closed-shop. The issue was particularly critical to the printers and composing room employees who had enjoyed the benefits of the union hiring hall for so many years. In a series of bitter strikes, from 1947 to 1950, in Chicago, Miami, and Detroit, the Knight chain of papers were confronted with the issue of control over the hiring process.

In a conversation at the time with Charles Kettering of General Motors John Knight was told, "Newspapers are always telling other people how to run their businesses but don't seem to know how to run their own...You're using cams and gears [in your production methods] that can turn only so fast and then fall apart. You should be using electricity."³ In all three cities Knight followed Kettering's admonition, using the opportunity provided by the strikes at the Chicago Daily News, the Detroit Free Press, and the Miami Herald, to install new typesetting and

² Whited, *ibid.*, p.198.

³ Whited, *ibid.*, p.172.

composing room equipment.

At the Herald, Knight took an even harder stand than in Detroit or Chicago: he replaced the striking members of the International Typographical Union. A second round of labor strife, this time in 1964, resulted in the replacement of the remaining bargaining units, the pressmen, paper handlers, and mailers. Knight wrote in one of his "Notebook" columns in 1964 on the state of labor relations in the newspaper industry:

The problem of every newspaper is to make enough money to put out a first-rate product and still stay in business. Modern equipment, efficiently utilized, could cut costs, improve earnings and stabilize the newspapers' economic condition. And so it would were it not for the unprogressive attitude of printing trades union. They still cling to 1890s ideas in an age of space. The net effect of this backward thinking has been to wipe out the cost-saving efficiency of new methods and put more newspapers out of business.⁴

Knight's broadside against organized labor earned him continuous abuse from AFL-CIO president George Meany and Teamsters president Jimmy Hoffa. Knight's hard stance, against a balance sheet showing over \$1 million per year profit from each of his three main papers, was grist for the leaders of America's trade unions. The fact remains, however, that despite the best efforts of labor in trying to pressure the Miami Herald to re-hiring striking press room employees fell on deaf ears. The plant has remained non-union since the strikes of 1947 and 1964.

⁴ Whited, *ibid.*, p.236.

While the Miami Herald is non-union it is certainly not unorganized. My experience in erecting and repairing a new Goss Metroliner offset press in 1983 was one of constant negotiations between various parts of the paper. Each group in the plant had a strong sense of control over their operations. These groupings, along job lines in the pressroom, reel room, maintenance shops, and mail room, were further solidified by ethnic and racial divisions.

In the reel room, the paper roll tenders were African Americans who had strong ties in southern Florida dating back several generations. Their language was a peculiar mix of English, French, and an African dialect, that blended together to form a unique means of communication that virtually excluded anyone outside of the group.

Upstairs, in the maintenance departments, the machinists were mostly Cuban emigres. The language of the shop was Spanish, though the shop foreman, also a Cuban, made a point of speaking English outside of the shop. He was what the others in the area derisively called a YUCA, or Young Upwardly-Mobile Cuban American. The electrical shop was a haven for English speaking whites who had adopted an almost siege type mentality.

The press room was somewhat more integrated, with even the occasional women, and an aggressive affirmative action program that brought in minorities from outside the Herald and displaced workers from within the Herald.

While the Herald management openly proclaimed in favor of their non-union status, front-line supervisors were fully aware of how constrained they were by the existence of these informal but nonetheless strong groups. One pressroom supervisor who had come from a union shop in the midwest said to me, "I'd rather have the rules written down like we had back in Chicago, instead of this business with each group running their own show."

This distinction, between the pressroom employees, first-line supervision, and upper management, is an important one in both union and non-union operations. The pressures to perform, however, seem greater on first-line supervisors in the non-union situation because of the lack of a detailed system of governance. These pressures and the attendant frustrations they gave rise to were highlighted in interviews I did at the Herald in the winter of 1990.

Managing Technological Change in a Non-Union Workplace

Since the construction of the Herald newspaper facility on Biscayne Bay in the early 1960s, the technology of the production process has grown bit by bit in the same building. First came new, electronic typesetting and composing room equipment in the late 1960s, then came an addition in the mail room in the mid-1970s. The transformation of the printing process itself, from letterpress to offset, took its first step with the

installation of 18 Goss Metroliner offset units in 1982-83. In recent years, from 1988 to late 1989, five units of a new printing technology, flexographic printing, have also been added. With the three different types of printing technology running in the same room, the Herald's response to technological change forms a muddled mosaic.

In an interview with the assistant production manager in charge of support services (maintenance) the difficulties in dealing with the mixture of printing technologies was described:

..[F]or the most part people normally have a tendency to reject changes no matter what the changes are: whether they are good, bad or indifferent. If it's a change they will object to it mainly because of the unknown..We've had rejection on just about every printing process that we have started. Overcoming the resistance down on the press room floor is our biggest problem as managers.⁵

The maintenance shops bear a particular burden because of the various types of presses in use at the Herald: inventories of spare parts are larger than most papers, and the maintenance workers must have a broader range of skills and knowledge of the different printing presses. One consequence of the breaking of the unions at the Herald is a managerial commitment to having a flexible workforce that is

⁵ All interviews in this section were conducted at the Miami Herald in February, 1990. Although the interviewees did not specifically request that their names not appear in this write-up, I have decided against using names in this instance to protect their privacy. Transcripts of the interviews are available upon request.

not bound by the same type of work rules found in unionized pressrooms. Flexibility, according to the superintendent of support services is critical:

We don't have much specialization at the Herald, because it reduces the flexibility. The end result of that [specialization] would be that you would probably have at least twice as many people to service the same equipment. So what we try to do is to train them and to provide training as much as possible so that they become efficient in all areas. We also rotate them on a regular basis.

This supervisor is at the second line of management, the first line being the foreman in respective areas. As with other first and second line supervisors at the Herald he has worked his way up from the shop to his current position. The barrier to going any higher in the organization is clear in the attitudes of the supervisors and the realities of getting production completed. Even given the flexibility built into the workforce through training and a lack of work rules, the supervisors were squeezed to get more in the middle 1980s:

We did have to make certain concessions to upper management in the '80s as far as reductions of personnel. We had gone through some not-so-good times at the Herald, and revenue dropped considerably. Each department had to make cuts in its budget.

The cuts in personnel, for example from 30 machinists to 24 over a four year period, were achieved largely through attrition and early retirement. Given the expansion of duties, however, with the addition of two new press technologies and fewer people, has caused a heightened sense

of anxiety in the press room and support services, according to this supervisor.

In order to deal with these tensions that have arisen from budget cuts and increased job responsibilities, the Herald has a regular system of communicating directly with the workforce. These communications systems rely on monthly meetings with the workforce, foremen, and superintendents, and an irregular bulletin updating the shops on suggested improvements from press manufacturers. The Herald also keeps a regular book on changes to press operation or maintenance, open to anyone in the particular shop that is effected. The support services superintendent noted:

The Herald has always been known for making changes on equipment that has been purchased, and improved it to the point that a lot of manufacturers have incorporated those changes into their newer equipment.

This relationship between the users of technology and the manufacturers of the technology is an important one that is often overlooked. The interaction is on many levels. Certainly the driving concerns are economic and product related, but secondary considerations such as those noted above are important to getting the equipment accepted by its operators.

While the emphasis on flexibility and cross-training were constantly mentioned in my interviews with the Herald's superintendents and shop floor workers, the budget constraints imposed on training expenditures acts as a

constant irritant to these same people. The Herald's special project manager, in charge of new installations, and formerly a press room superintendent and press operator, spoke to this point:

..[I]n today's environment I don't think enough emphasis is being put on training. There's too much of a feeling [by upper-management] that [you can] hire someone off the street and show them a few buttons to push and they're on their way.

Adding to this point was another superintendent:

What [upper management] has done, in essence, is they've taken a craft, and just let it go by the wayside. Printing today is not a craft the way I grew up in it. What they're looking for are machine operators, but these machines are more complicated than just pushing a button.

The foremen and superintendents keenly felt this squeeze between budget constraints and the realities of operating a press room with a wide variety of technologies. "The fact of the matter is that people want training," said the special projects manager. "But the first thing to go are the training programs--two weeks should be enough, according to the guys up front."

The distance between the shop-floor and upper management is growing, according to these two special projects managers:

Management's philosophy today is what I call a professional manager. A man with a college degree, who comes in not knowing a hill of beans about what the hell we do here and they say, okay, Mr. College Degree, you're the press room manager. And he wants someone he can talk to, not some old pressman. So he hires another college graduate who has never seen a pressroom. In the end they create what they know--a

bureaucratic maze that we [in production] have to live with...I don't think you'll ever see another press room manager down there coming out of the ranks at the Herald.

Workers on the shop-floor understand this split between production management and upper management, and have devised ways of exploiting these divisions. Manning levels, for example, remain the same on all of the presses. Reductions in the workforce have come uneasily and with a corresponding loss of morale, according to the current press room supervisor.

For their part, upper-management is trying to respond to these challenges, and the additional challenge of trying to harmonize a racially and ethnically diverse workforce. Since 1968 Knight-Ridder has had an aggressive management development program--the Knight-Ridder Institute of Training (KRIT). Since its founding the Institute more than 6,200 Knight-Ridder executives and employees have participated in its curriculum.⁶ The seminars sponsored by the company are "an integral part of the company's goal to create a more pluralistic work force."

As the Miami Herald confronts the future a number of questions remain unanswered: Will they invest in a new production facility that consolidates new printing technology? Will they find ways to bridge this gap between

⁶ Knight-Ridder, Inc., Annual Report--1989, p.70.

supervisory management and upper management? Will the production employees be able to overcome the divisions between them and organize some kind of association or union to further their interests? As incomplete as this case study is, these questions are of great importance to our understanding of the process of organizational responses to technological change. The Herald is an example of the complexities involved in making strategic decisions about new technology and the relationship between these decisions and labor-management relations.

PART III: BARGAINING STRATEGY, PROCEDURES AND OUTCOMES

In the concluding two chapters that follow I examine

the lessons from the four case studies. Given the context of workplace relations in the United States and theories of technological change, the four case studies provide distinct examples of how newspapers with differing patterns of labor-management relations responded to the introduction of the offset printing process in the United States during the 1980s.

Given the common and competing interests of employees and employers that emerge from these case studies, what theoretical lessons help us explain the differing patterns of workplace relations? Using the framework of game theory, the method in the social sciences for analyzing interdependent decisions, Chapter IX attempts to answer, or at least provide a framework for answering, this question.

In the final chapter I turn to a more pragmatic analysis of the implications of these lessons on the governance of the workplace. The decline of the labor movement in the United States poses real problems for American workers and for society as a whole. Building on the analysis of workplace relations in Part I, the case studies in Part II, and the conclusions from Chapter IX, I make the case for changes in the system of collective bargaining that would provide for increased worker participation in decision making and greater flexibility in union-employer relations.

CHAPTER IX: ANALYZING STRATEGIC CHOICES--A GAME THEORETIC PERSPECTIVE

In reviewing the scholarly field of industrial relations in Chapter II, the influential work of John T. Dunlop was quoted at some length. One passage in particular, from Industrial Relations Systems, is worth noting again: "The present volume," Dunlop wrote, "presents a general theory of industrial relations; it seeks to provide tools of analysis to interpret and to gain understanding of the widest possible range of industrial relations facts and practices."¹

The intellectual debt owed Dunlop in the study of industrial relations is enormous. At once a practitioner and theoretician, Dunlop clearly deserves a prominent place in the annals of workplace governance research. Nevertheless, without diminishing my respect for and debt to Dunlop, the ambitiousness of his project, carried out with a number of other leading scholars in the period from 1950 to 1980, clearly failed to anticipate the rapid decline of the American model of industrial relations in general and in the power of organized labor in particular. The elaborate system building and functionalism of American sociology during this time, particularly the work of Dunlop's senior

¹ John T. Dunlop, Industrial Relations Systems, (Southern Illinois University Press: Carbondale, Illinois, 1958) p.vii.

colleague at Harvard, Talcott Parsons, was an important influence in this trend.

Against the trend for broad theories that explained the stability of the American system of collective bargaining was the cross current of detailed workplace studies from which general conclusions were drawn. The work of Harry Braverman is of importance in this regard, not because he systematically drew out theoretical conclusions from his observations but because he re-centered the analysis on the relations between workers and managers at the point of production rather than at the level of the system. Work by Burowoy, Noble, Shaiken, and recently Fantasia, all add to our understanding of workplace governance from the vantage point of the worker.²

While recognizing the distinctiveness of each of the works in this literature on the labor process, the common problem with these analyses is how to connect the observations with a generalized understanding of the implications of the observations. Particularly in the studies that rely on the participants' observations, which are then generalized to prove in some sense a larger point, the judgments in many cases seem unauthentic. To work in a

² Four recommended books in the study of the labor process: Harry Braverman, Labor and Monopoly Capital, (Monthly Review Press: New York, 1974); Michael Burowoy, Manufacturing Consent, (University of Chicago Press: Chicago, 1979); Rick Fantasia, Cultures of Solidarity, (University of California Press: Berkeley, 1988); and Harley Shaiken, Work Transformed, (Holt: New York, 1984).

machine shop for ten months hardly qualifies one to make sweeping conclusions about "working class consciousness."

Neither the macro or systems approach of Dunlop, nor the micro or labor process approach of Braverman, seem quite right. Neither serves as an adequate guide to action for either workers, union leaders, first line managers or executive management. A blueprint for action is probably not possible, but a schematic may be.

The next section develops the basis for such a schematic using game theoretic constructions. The concluding section applies these constructions to the case studies of American newspapers described in the previous chapters. These constructions are at a preliminary stage and reflect more the mechanisms used in the study of workplace governance rather than a sweeping theory. In my view it is probably better to have a good way of explaining a few things than trying to explain everything poorly. Analyzing the strategic choices available to labor and management, as they both respond to technological change, through the lens of game theory can clarify the bargaining strategy, procedures and outcomes from this process.

An Outline of Game Theory in the Social Sciences

When two or more parties have competing interests, what mechanisms help us understand how they resolve their differences? In the newspaper industry, for example, is

there a way to frame the choices that corporate executives and union leaders made in confronting the process of technological change that helps us understand the diverse outcomes encountered in the previous case studies?

In 1944 John Von Neumann and Oskar Mergenstern published a pathbreaking book, Theory of Games and Economic Behavior, which set out to answer a similar set of questions in the context of neo-classical economics. The formulations of Von Neumann and Mergenstern--"n-person problem" as the model is called--gave rise to a new field within economics, that of game theory. Using the rather limited constructs of neo-classical economics, with its static definition of profit-maximization and self-interest described in Chapter III, game theory proposed solutions to particular aspects of societal rationality, that is "the possible, proposed, or predicted behavior of rational individuals in mutual interaction."³

With subsequent efforts game theory has increasingly become more complex and applied to an ever increasing number of economic and sociological questions. The major conceptual components that form the center of game theory, such as "rationality", "player," and "strategy" are briefly examined below. What the theory attempts to explain are the strategic alternatives available to competing parties with

³ Martin Shubik, Game Theory in the Social Sciences, (MIT Press: Cambridge, 1987) p.2.

uncertain outcomes. The explanation of decision making put forward here does not include the important contributions of psychologists who are interested in how people do make decisions, whether rational or not.⁴ Rather, the focus, again, is to narrow and concentrate rather than to expand. The final chapter takes up a more prescriptive, expansive view of the application of these constructs.

Rationality. The notion of what constitutes rationality is problematic. Beliefs, preferences, choices or decisions, actions, behavioral patterns, persons, collectivities and institutions, are all said to be rational or irrational. Jon Elster offers a useful definition of rationality for our purposes: "Substantively rational beliefs are those which are grounded in the available evidence: they are closely linked to the notion of judgement."⁵ Elster goes on to describe the ways that individuals are free to choose their own constraints,⁶ how the idea that the preferences underlying a choice may be shaped by the constraints, and the indeterminacy of

⁴ See for example the work of Amos Tversky and Daniel Kahneman, "The Framing of decisions and the psychology of choice," *Science*, (1981, v.211, p.453-458), and David Bell, Howard Raiffa, and Amos Tversky, *Decision Making*, (Cambridge University Press: New York, 1989).

⁵ Jon Elster, *Sour Grapes*, (Cambridge University Press: New York, 1983), p.2.

⁶ Jon Elster, *Ulysses and the Sirens*, (Cambridge University Press: New York, 1984).

rationality in many social choices.⁷

Elster's work indicates the limits of rationality, and by extension of game theory, in analyzing social choices. The more fundamental point, however, is a recognition that most human action is informed by choices based on what people believe is likely to have the best overall outcome. Choice is, in this sense, not merely a calculation of individual gain, as in the economists model, but is also shaped by the norms and customs of social groups. With this narrower and yet more complex notion of rational individual choice, game theory is "the natural, indispensable framework for understanding human interaction."⁸

Players. The game begins with a set of decision makers or players. The basic unit of analysis rests with the decisions and choices made by individuals. Whether these individuals are acting on their own, as in economic models of consumer preference, or as representatives for a larger group of individuals, the conception of rationality expressed above resides at the level of individual decision makers. This view, called methodological individualism, is in stark contrast to the Marxian view examined in Chapter III. "To explain social institutions and social change is to show how they arise as the result of the action and

⁷ Jon Elster, Solomonic Judgments, (Cambridge University Press: New York, 1989).

⁸ Jon Elster, Nuts and Bolts for the Social Sciences, (Cambridge University Press: New York, 1989) p.28.

interaction of individuals."⁹

The critical players in the newspaper industry are the executive managers who make the corporate decision to purchase new technology and the union leaders who respond to this choice. Also important to note are the external forces that act upon the central players. On the management side there are the capital and product markets (for example, shareholders and consumers), the suppliers of printing machinery, and supervisory managers. On the labor side there are the members, and non-members who are potential replacements. To simplify the analysis the decisions and actions of the two sets of critical players, labor leaders and management executives, will form the core of the analysis.

Strategy. To have a strategy, in game theory, is to have a reasonably complete description of how a player intends to play a game, from beginning to end. The important aspect of developing a successful strategy within this definition is to acknowledge the interdependent aspects of the game. That is, a good strategy is one that anticipates the moves of the other party. In much of the literature on strategic choice in business settings this point is routinely neglected.¹⁰

⁹ Elster, Nuts and Bolts, op cit., p.13.

¹⁰ An example of this is the definition of strategy in David Nadler and Michael Tushman, Strategic Organization Design, (Scot, Forsman and Co.: Glenview, Il., 1988): "The

The application of this idea of strategic behavior distinguishes games of skill (sports, chess and the like) and chance (cards, horse racing, etc.) from games where the best course of action for each player depends on what the other players do.¹¹ The strategy of each player depends on their resources, ability to make binding commitments and credible threats, expected or desired payoffs, and time frame from which the outcomes of the strategy is judged.

Collective bargaining is a good example of the recognition of conflicting interests within the larger context of interdependency. Social conflict, on the other hand, is often quite different, as noted by Lewis Coser: "Social conflict is a struggle over values and claims to scarce status, power and resources in which the aims of opponents are to neutralize, injure or eliminate their rivals."¹² Kenneth Boulding expresses the difference between the social conflict noted by Coser and industrial conflict:

stream of decisions about how organizational resources will be configured to meet the demands, constraints, and opportunities within the context of the organization's history" (p.23). The assumption is that managers select from a more or less constant set of alternatives irrespective of competition and conflict within the organization.

¹¹ See Thomas Schelling, The Strategy of Conflict, (Harvard University Press: Cambridge, 1960), for further development of these ideas with application to a variety of subjects, particularly international relations.

¹² Lewis A. Coser, The Functions of Social Conflict, (Free Press: Glencoe, Illinois, 1956) p.8.

Industrial conflict is a...curiously ambivalent affair, closer to the battle of the sexes than to the clash of armies. Consequently, it is not difficult to build on the positive-sum or cooperative aspects of the game and to develop institutions that express this aspect. This is perhaps why the union, which may have been originally devised to prosecute conflict in many instances becomes an instrument to resolve it in a way..that an army never does.¹³

Building on the positive-sum aspects of the common interests of labor and management is indeed the desired outcome. Managers, in their role as doing the owners' work of maximizing value, and labor, in protecting jobs and bettering work life, struggle over the distribution of power and resources within the enterprise. How this struggle over the distribution gets played out is critical to understanding the development of strategy for unions and management, and for understanding the evolution of cooperative labor-management relations.

Game theory approaches this problem of bargaining over the distribution of goods in a systematic way. First, let's assume that bargaining process takes place only once and that there are only two parties, labor and management, and that they only have their own interests in mind. The situation described is a form of the Prisoner's Dilemma.¹⁴

¹³ Kenneth Boulding, Conflict and Defense: A General Theory, (Harper and Row: New York, 1963) p.226.

¹⁴ A.W. Tucker, "A Two-Person Dilemma," Stanford University Mimeograph, 1950, is frequently cited as the earliest exposition of the prisoner's dilemma.

Labor and management are analogous to two prisoner's arrested for a crime that has been committed. The matrix below in Figure XIV depicts the options available to the two prisoner's:

Figure XIV

		Prisoner I	
		Don't Confess	Confess
Don't Confess		1,1	10,0
	Prisoner II		
	Confess	0,10	6,6

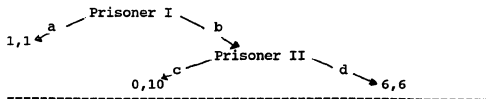
If neither prisoner confesses to the crime they both will receive one year in prisoner. If they both confess to the crime they each will receive six years. The confessing option also implicates the other prisoner. However, what if the authorities offer you a choice: turn the other person in and you can go free? In this case confessor gets zero punishment and the non-confessor gets ten years. An attractive proposition, no doubt, but how do you know that the same option hasn't been placed before the other prisoner? Here Prisoner I has to weight the probability that Prisoner II will hold their ground and not confess. The immediate strategy of self-interest would indicate going for the zero-year option by turning Prisoner II in.

This simple game has some important implications for labor-management relations. First, the most rational path

not always the route of self-interest. In the above example the rational actor would calculate the outcomes that minimizes the downside (ten years in prison) while maximizing the upside (no prison). The "minimax" criteria would lead both to the "don't confess" option despite the fact that it means a year in prison. The second important lesson derived from this game is that the more you know about your partner (or adversary) the better is your ability to predict their response and thereby improve your own probability weighing decision making process.

The Prisoner's Dilemma, while instructive, lacks one crucial element that dramatically changes the payoff matrix. In a one-shot deal, where you don't have to worry about future consequences, both the rational and self-interest solution may well be to take as much as you can and not worry about the other party. Absent from the model is the dynamic of bargaining, the sequence of moves and countermoves. In order to model this, using the same outcomes or payoffs as above, we would need an extensive form of representation as shown below in Figure XV.

Figure XV



The desired outcome 1,1 will never be reached unless Prisoner II can precommit to use strategy "c" in case Prisoner I plays "b". The threat to use "c" is not credible, since it is not in II's interest to execute the threat if the second point is reached. If we assume that precommitment is unfeasible, that there isn't a deal ahead of time, Prisoner I will play "b". The extensive form reveals further the process of bargaining, the influence of time (or at least of sequence), the need for good information, and further the ability to back claims credibly.

In both examples, it is hard to see how cooperation can evolve if the parties are pure egoists, or put another way, purely self-interested. While social norms of fairness and equity certainly mediate the extent to which individuals, or groups, pursue a strategy of pure self-interest game theory has produced some interesting results showing how cooperation can be the optimal choice even of purely self-interested egoists.

Robert Axelrod conducted a tournament in 1979 involving professional game theorists to see who could come up with the best, or dominant, strategy within a prisoner's dilemma type game. Axelrod asked for strategies in the form of a computer program that could respond to the cooperation (C) or defection (D) of the another player, taking into account the history of previous interactions with that same player.

The game, in other words, was repeated several (or many) times. The winner was a program submitted by Anatol Rapoport, a game theorist and philosopher. Not only was Rapoport's solution the winner, it was also the shortest. Called TIT FOR TAT, Rapoport's program uses a very simple tactic: Cooperate on move 1; thereafter, do whatever the other player did the previous move.¹⁵

The risk is all in the first move--the other person may defect immediately and leave you hanging. However, by defecting yourself on the next move neither side gains. Thus, if one party can convince the other party that they will retaliate against any defection, it is in the interests of both to cooperate.

In theory, cooperation can evolve as the dominant strategy of even the purest self-interested parties competing over scarce resources. Under what circumstances will individuals, or groups of individuals, come together to act collectively to provide a public good which the members of a group have a common interest in providing? Mancur Olson, in his well-known study, The Logic of Collective Action, provided this answer: "...The larger a group is the farther it will fall short of providing an optimal supply of any collective good, and the less likely that it will to obtain even a minimal amount of such a good. In short, the

¹⁵ The results of the test are detailed in Robert Axelrod, The Evolution of Cooperation, (Basic Books: New York, 1984).

larger the group, the less likely it will further its common interests."¹⁶ Olson's claim is not that small is beautiful, but that as size increases the costs of communication and administration begin to outweigh the benefits of acting collectively.

The same logic, however, applies to the administrative costs of bargaining among a variety of groups. At what point does the proliferation of various unions, as in the newspaper industry, begin to create costs over and above the benefits provided? Without going into Olson's argument in detail¹⁷ we can use these two ideas--that of the evolution of cooperation as a potentially positive-sum outcome and the limits of collective action--to look at labor-management relations in the newspaper industry.

Applying Game Theory to Organizational Responses to Technological Change

Referring back to the cases a few examples indicate the applicability of game theory to analyzing the strategic choices of labor and management. The Chicago Tribune case provides a vivid example of the consequences of changing management philosophy. In the simple two-person game played

¹⁶ Mancur Olson, The Logic of Collective Action, (Harvard University Press: Cambridge, 1965)p.36.

¹⁷ See Michael Taylor, The Possibility of Cooperation, (Cambridge University Press: New York, 1987) for a detailed analysis of Olson and the Hobbesian view of the world as a place where life is "short, nasty and brutish."

out above the optimum strategy was to cooperate until the other person defects, and then retaliate for that defection.

Think of the time prior to the new management team at the Chicago Tribune, led by Charles Brumback, as a more-or-less cooperative period, whether an "armed truce" or "analogous to the war of the sexes" or fully cooperative in the sense of sharing a common set of objectives. The union-management relationship at the Chicago Tribune, as at other newspapers, at the very least recognized the legitimacy of the each party and in the collective bargaining procedure as the best way to deal with differences arising over the terms and conditions of work.

With the installation of the new management team that prevailing attitude changed. With the installation of the new presses at the Freedom Center completed with the cooperation of the unions and workers, the Brumback-led team was in a position to demand concessions from these same unions. The comments of Brumback confirm the new attitude of management: "We were determined to make a change and we did." The bringing in of King and Ballow, a well-known union-busting firm, replacing the Tribune's more conciliatory negotiators, was more proof that the strategy of defection was in the works.

A second set of pressures coincided with these new attitude towards labor: the public sale of Tribune Company stock. Brumback sought allies in the share holders in his

struggle against the unions, a marked change from the era when the principal owner of the firm, the McCormick family, would stroll through the pressroom to chat with employees. With the huge investment in the Freedom Center coming from the investors pockets, they were willing allies on Brumback's side.

While the Tribune management team had their side lined up to carry out a new strategic relationship with the unions, the unions themselves were floundering to counteract these moves. The first move by the unions was to create a Unity Council, an umbrella group under which all twelve unions would negotiate. The problem for the twelve unions was clear: with contracts expiring at different dates, and labor law requiring union leadership to live up to contractual obligations, how could the unions effectively use their traditional source of power--the strike?

The collective action problem that the unions faced was insurmountable for some of the smaller groups, such as the machinists and electricians who were not in a position to incur large fines for honoring picket lines set up by the larger units. The potential benefits of acting collectively derived by any one of the unions were outweighed by the potential costs. With the Unity Council coming together relatively late in the process, the first meetings were held only three months before the strike began in July of 1985, the benefits of fostering cooperation between the unions

could not be fully realized. As a result, the Tribune was able to successfully play the game of divide and conquer.

In contrast to the Chicago Tribune case, where management broke the covenant of cooperation and successfully overcame the unions retaliation, the Minneapolis Star-Tribune made an explicit commitment to the continuation of the collective bargaining process, and by extension, to cooperation. By sending press crews around the country to see other new press installations the management sought to allay the fears of the unions against loss of membership and of the workers against the fears of an unknown technology. The success of these efforts was coupled with long-term contracts which guaranteed acceptable standards of work and levels of employment.

The deviant case at the Minneapolis Star-Tribune, the Mailers union, shows the limits of the management approach to continuing cooperative relations.¹⁸ With the majority of workers covered by long-term contracts, without wage-reopeners except those tied to what the Mailers received, the burden of negotiating fell almost exclusively to the Mailers union. By isolating the Mailers, the one group that senior management felt was "not on board during the entire

¹⁸ As above, "cooperative" relations is used here to indicate a continuation of collective bargaining. Chapter X reviews new efforts at extending collective bargaining and employees involvement in areas of decision making traditionally reserved for management, which often goes under the heading of "cooperative labor relations."

transition", management hoped that the new mailroom technology would force the recalcitrant union into a more pliant bargaining position. Such was not the case.

The Mailers actually find themselves in a strengthened bargaining position due to the new technology. With increased flexibility and higher quality production from the printing presses, the Star-Tribune was able to print material previously contracted out, especially high-quality, four color inserts. The increase in in-house production has led to an increase in mailroom work. That increase was anticipated by management, to a certain extent, but what wasn't anticipated was the difficulty in programming the new mailroom equipment to handle the increased amount of work. Mailroom equipment, in general, has not kept up with the pace of technological change in other parts of the newspaper production process. Inserting remains a mechanical process that has proved very difficult to automate.¹⁹

The wage component of the long-term contracts at the Star-Tribune is a weak link in management's otherwise successful response to transitioning to the new facility. With the militant Mailers union feeling isolated from the rest of the unions, and in an enhanced bargaining position due to the increase in work, they represent something of a

¹⁹ A similar difficulty is the one encountered in the clothing industry. Sewing the arm of men's jackets, for example, has proved a very difficult task to automate. See, John Dunlop, "TC2: A Case Study of Industrial Governance," Harvard Business School Case Study, 1986.

loose cannon to management. In this instance, the weakness of the other unions (in the sense that they are taken out of the bargaining process by the long-term contracts) gives them strength: a high-wage increase by the Mailers goes as well to them! Not surprisingly, the other unions have made the head of the Mailers union, Bob McKee, the leader of the Allied Printing Trades Council in Minneapolis. Management's inability to get all the unions to cooperate, which management thought was to their advantage, may well turn a successful transition strategy into a unsuccessful longer term strategy.

The Miami Herald case is complicated from a game theory perspective. Who does management negotiate with? The two thousand employees individually, or with informal groups, or merely by command to everyone at once? From the brief description given of the Herald's responses to technological change the picture develops of a varied answer to these questions. The company neither negotiates directly with every employee or simply commands to everyone. The mechanisms for expressing the employees voice are complex at the Herald, as at other non-union firms. A much more detailed analysis is required to understand the operation and function of employee's voice in these organization.

A few observations, however, are in order from a reading of the Miami Herald case. As in unionized newspapers, the success of new technology, the ability to

use the new press equipment to its fullest capability, depends to a large extent on the efforts of the workers operating the new technology. As simple, or even simplistic, as this sounds, a whole set of obstacles arises from this observation. The critical observation to make is that employee commitment to the firm is of critical importance to the process of an organizations response to technological change. Recall from the Miami case the pride that employees and first-line supervisors take in making alterations to the new presses to fit the unique circumstances of the paper. Employees are less likely to make such a contribution unless they feel a commitment to the organization. Also recall, however, the frustration that these same employees and first-line supervisors expressed in feeling unappreciated for having made such a commitment. The absence of a formal network of communication drives a wedge between the employees commitment and the firms understanding of that commitment. Without overstating the point, the absence of a mechanism for expressing employee voice at the Miami Herald has lead, inevitably, to the dissatisfaction noted. Whether a union, as presently conceived as a collective bargaining agent, or some other form of employee association, could overcome these feelings of disenchantment is a question that employees, first-line supervisors, and senior management at the Miami Herald frequently ask.

In the last case, that of the New York Daily News, we have an example where a stalemate between labor and management effectively prevents the achieving of a mutually agreed upon goal--the need for state-of-the-art printing technology. Following on the signals from Tribune management, the Vanity Fair article featuring Daily News publisher James Hoge saying "we are ready, even eager, for combat" with the unions, and the presence of Robert "Cat" Ballow at the negotiating table, the unions had advance notice of management's strategy.

The advance time gave the unions both the opportunity and the incentive to prepare for a retaliatory response to management's defection from collective bargaining. The unions, under the direction of the Allied Printing Trades Council, pursued two strategies: (1) to stay at work beyond the March 31, 1990, contract expiration deadline rather than strike, and (2) to develop a counterattack against the Daily News. At the heart of the counterattack is a proposed consumer and advertising boycott of the paper.

The first strategy has, as of this writing in October, 1990, worked well. The Daily News has borne the cost of maintaining a strike breaking crew of pressroom and newsroom employees at the ready over the last six months. Only very recently has the cost of this "insurance policy" come under

attack by the Tribune Company's shareholders.²⁰ A consistent pattern in the Ballou strategy of breaking unions is forcing a strike, replacing the striking workers, and then outlasting the unions and replaced workers in the protracted court battles that ensue. The fact that the eleven unions at the Daily News have hung together, despite attractive offers to various of the individual unions, is testimony to the effectiveness of the Council's strategy and the awareness by individual union leaders of the company's intention.

The second strategy, that of the consumer and advertising boycott, is harder to understand. At this stage in the conflict the boycott is a threat, not actually put into practice. Holding aside the question of whether or not the unions could pull off a successful boycott in the event of a strike or some other escalation in the conflict at the Daily News, is the boycott a credible threat? Here the framework of game theory is useful once again.

What will a successful boycott achieve? The point of a boycott is to bring economic pressure on your adversary. But given the precarious financial standing of the Daily News (see Figures XII and XIII), does increasing the likelihood of bankrupting the paper increase the power of

²⁰ One estimate of the cost of strike preparations by the Daily News is \$1 million per month. The New York Post reported on October 12, 1990, that the "scab newsroom was being dismantled."

the unions? The threat of the boycott seems to lack credibility precisely because of the negative consequences that would follow from a successful boycott. By pursuing the strategy of preparing for a boycott that cannot be won the unions have vitiated a proactive strategy that could convince management that the unions are committed to the ongoing survival of the paper.

A more credible and proactive strategy might go something like this. Given the commitment of the unions to the long-term survival of the Daily News, and the recognition of the need for a substantial investment in a new plant and equipment in order to make the paper competitive, the unions should impose a per-capita tax on its members for the purposes of investing in this new plant. A per-capita tax of \$1 per hour per working member at the Daily News (roughly a 5% tax) imposed as of January 1, 1990, would generate over \$4 million over the course of a year, a significant amount of cash that, combined with labor costs savings and possible investments from the unions pension funds could be leveraged to buy the entire Daily News operation. The creation of such a fund, administered by the Daily News Unity Council, would give the unions a tangible resource with which to back up their claims of commitment to the survival of the paper. In so doing, the unions could turn a reactive strategy into a proactive one. In effect they could say--"If you are not willing to invest in this

enterprise, we are."

Another lesson emerges from the application of game theory to the situation at the Daily News. Following on the suggestion of creating a credible threat through the formation of an "Employees Capital Fund" is the realization that management is not monolithic. The prospects of the company going bankrupt may appeal to certain shareholders who see the liquidation value exceeding the costs of continuing operations, but almost certainly not to those managers who live in New York and rely on newspaper employment for their livelihood. The creation of an Employees Capital Fund could be extended by the unions to managerial employees--even to Hoge himself. The unions, in alliance with Daily New management, in this way could use the divide and conquer strategy against the Tribune Company back in Chicago.

These examples show how the application of game theory to the study of strategic choices can inform our understanding of the mechanisms at work in labor-management bargaining situations. The specific examples of how organizations responded to technological change in the newspaper industry highlight the usefulness of these constructions to both understanding these mechanisms and to the formulation of strategic responses.

Both labor and management in the United States finds

itself in a Prisoner's Dilemma where trust has been broken, the legitimacy of each party is diminished, and new ideas for restoring collective bargaining are scattered. In such a situation, where management has gained the upper hand, restoring a balance to labor-management relations is of great importance to workers, unions, businesses, and the competitiveness of the country as a whole. In the final chapter that follows, I build on the previous analysis to argue for changes in labor-management relations that will improve this state of affairs.

CHAPTER X: THE COMMON AND CONFLICTING INTERESTS OF EMPLOYEES AND EMPLOYERS

As more and more organizations in the United States feel the impact of increasing global or local competition and tightened budgets, the requirement to restructure organizations will continue. Along with the economic forces propelling the demand to restructure organizations, to become "leaner and meaner" in the words of one CEO, there are significant demographic and sociological changes in the American workforce which increasingly make the old structures of hierarchical management obsolete.¹

The emphasis throughout this dissertation highlights the importance of workplace governance in mediating these two trends, the one economic, the other sociological, and the importance of technological change as an opportunity for an organization to restructure the management of human resources in responding to these challenges. The thesis proposition is that having an organization independent of management control, a union or some other form of formal employee representation, can benefit both employees and employers in making the transition to new production technologies and, by extension, in remaining competitive.

There are, to be sure, competing interests between

¹ See for example, Frank Doyle, "People Power: The Global Human Resource Challenge for the Nineties," Paper presented to the World Management Congress, September 23, 1989, for an analysis of American management's restructuring efforts in the 1980s.

employees and employers, but there are also common interests. My contention is that developing those common interests, while recognizing the competing interests, is an increasingly important aspect of an organization's competitive position and that game theory helps explain the mechanisms for fostering these cooperative solutions. In this concluding chapter two sections develop these themes further: a brief analysis of workplace governance issues in the near future, and implications of the new paradigm of industrial relations for the American newspaper industry.

Workplace Governance in the 1990s. Figure XVI below is a typology of current workplace governance systems in the United States.

FIGURE XVI

Workplace Governance Systems in U.S.

Participative	Human Resource Management	Human Resource Joint L-M
Adversarial	Unilateral Management ----- Non-Union	Traditional L-M Relations ----- Union

The newer form of workplace governance stresses the involvement and participation of employees in decision making. Even the title of the personnel manager or industrial relations manager has changed to reflect this new

emphasis on their role as "human resource" managers.² The distinction in the category between those organizations that are participative and those that are adversarial is admittedly somewhat vague. However, there are real differences between those organizations that have significant employee input in decision-making and those that don't. The contemporary "managerialist" firm in this category is typified by a high degree of employee involvement without union representation. Charles Heckscher identifies these basic characteristics of the "managerialist" organization:

- * an enormous expansion of channels by which employees can voice their concerns, especially about job-related matters.
- * considerable protection against arbitrary managerial power.
- * relatively high job security.
- * encouragement of career development and movement within the organization.³

² Not everyone agrees with these changes. An emotional debate was waged, for example, at the 1989 Industrial Relations Research Association meeting in New York over the meaning of "human resources" versus the traditional notions of industrial governance. The IRRA has held the line while the American Society for Personnel Administrators has recently changed its name to the Society for Human Resource Management.

³ See Charles Heckscher, The New Unionism, (Basic Books: New York, 1988), for a detailed analysis of these characteristics.

On the union side of the typology there is significant debate within the labor movement on the merits of joint labor-management problem solving processes or other forms of cooperative relations. Two quotes from influential American labor leaders define the debate:

[Cooperative programs] lead to lasting improvements in job satisfaction among union members. And I believe if we respond to the challenge posed by improving the quality of working life, it offers us in the labor movement the opportunity to deal with many issues which have been beyond the reach of traditional collective bargaining agreements.⁴

[The purpose of cooperative programs]...is to undercut the union; to use up its duties and responsibilities; to make it seem unnecessary and ultimately put it out of business.⁵

The successors of these two union leaders, Morton Bahr of the CWA and George Kourpias of the IAM, continue to hold similar views on the possibilities of joint labor-management problem solving.

Paralleling the change in management's increased attention to workplace governance issues, particularly employee involvement, is the development of a hard-line against traditional union-management relations. The rapid climb of NLRB certified unfair labor practices in the late

⁴ Glenn Watts, President of the Communications Workers of America, quoted in Michael Shuster, Union-Management Cooperation, (Upjohn Institute: Kalamazoo, Michigan, 1984)p.21.

⁵ George Poulin, Vice-President, expressing the views of William Wimpinsinger of the International Association of Machinists, in Shuster, op. cit., p.12.

1970s and throughout the 1980s, particularly evidenced by unlawful dismissal ULPs during organizing campaigns, exemplified a pattern of management hostility towards unions and the laws of collective bargaining.⁶ Another example of fundamental changes in labor relations in the 1980s was the relatively new phenomena of concession bargaining. As Figure XVII below shows, the incidence of concessionary contracts soared during the 1980s, growing even in those industries that were growing or consistently earning profits.⁷

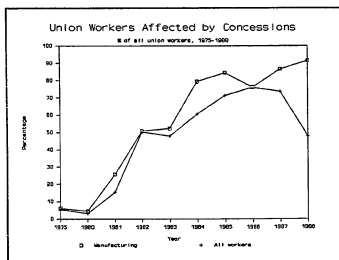


Figure XVII

Combining the concessionary bargaining environment in

⁶ See Paul Weiler, The Law at Work, (Harvard University Press: Cambridge, 1990) for a detailed examination of contemporary labor law.

⁷ Linda Bell, "Union Concessions in the 1980s," Federal Reserve Bank of New York Quarterly, (Summer 1989).

the 1980s and increasing hostility towards union organizing efforts with management's discovery of more progressive treatment of non-union employees have formed the roots of the decline of the American labor movement are clear and likely to continue. The collusion of the government, through its failure to enforce existing labor law and promote the public policy commitment to collective bargaining, certainly added measurably to the decline. What alternatives exist for organized labor, for employees, and for managers, and the system of collective bargaining as the 21st century approaches? The case studies of newspaper's responses to technological change serve as examples of various strategies available to labor and management and indicate some of the institutional innovations that could address the common and competing interests of employees and employers. The cases also show some of the ambiguities facing decision-makers as they try to make their organizations more competitive. Table III below summarizes the salient measures of effectiveness indicated in the three case studies of newspapers that changed technology in the 1980s.

As noted in the Introduction, financial measures, such as return on assets or investment, were difficult to determine, but are clearly of great importance in shaping management's strategy. The "speed of transition" refers to how quickly the paper was able to get full production from

the new printing equipment. "Waste paper" is probably the simplest, and most revealing, single measure of the efficiency of a newspaper's production. A high degree of employee responsibility figures in to the amount of waste paper, and is therefore an excellent measure of employee job satisfaction. Industry averages are 3-5%, with start-up figures as high as 15% waste as part of total paper consumption. Unfortunately the industry does not keep detailed records of productivity measures such as waste paper. My observations of the newspaper industry, including figures put together by press manufacturers, are routinely altered by pressroom employees and supervisors, and between newspaper executives. The fourth measure of organizational effectiveness, "employment", is an indication of whether or not the management used the new technology to displace labor or to expand employment into new markets. Finally, I have included a subjective variable, "workplace relations," which is an estimation by management's perception of labor-management relations.

Table III: Measures of Organizational Effectiveness

<u>Measure</u>	<u>Performance</u>		
	Chi.Tribune	Mpls.Star-Tribune	Miami
Financial	+	?	?
Speed of transition	+	+	-
Waste Paper	+	+	-
Employment	?	+	-
Workplace relations	-	+	-

Key: + improved or increased; - worsened or declined; ? unknown.

Source: Interviews and survey administered by Sleigh, 1989.

An agenda for workplace governance in the 1990s. The four case studies of American newspapers presented here fit to a considerable extent the typology presented in Figure XVI above. The Chicago Tribune moved from the lower right-hand corner (traditional adversarial labor relations) to the upper left-hand corner (participative non-union relations); the Miami Herald is in the lower left-hand box (unilateral management), but would like to move to a more participatory (but non-union) relationship; the New York Daily News is in the lower right-hand corner (with management trying to move to the upper left-hand box--participatory, non-union) ; and the Minneapolis Star-Tribune has moved from the lower right-hand corner to the upper left-hand box (joint labor-management relations). With few exceptions, all of the newspapers that I have studied or worked in fit the pattern of moving towards more participatory labor relations--some with the union's assistance, some in trying to eliminate their union's or to remain non-union.

Newspaper management's strategy is reasonably straight forward. In an increasingly competitive field, and one with rapid and costly changes in technology, the need to replace organizational rigidity with flexibility is of great importance. Workplace relations in this environment play a critical role in getting out a high-quality product in a timely manner. Management's strategy, as seen throughout

the case studies, revolves around the need to gain control of managing the work process, and in breaking down traditional work-rules and practices that were accumulated through years of bargaining with strong unions. Improvements in newspaper printing technology have created the opportunity to expand into new markets and to monitor the work process from a distance.

Labor's strategy, however, is not so clear cut. A significant problem are the historical constraints that weigh down any future-oriented strategies. The historical constraints on the newspaper unions is the legacy of craft-unionism which has survived for the last one hundred years in representing the sectoral, or jurisdictional, interests of specified groups of workers. While the numbers of unions in newspapers has shrunk with consolidations and mergers from as many as fifteen in any given plant to today's norm of ten, the basis of union representation remains based on craft. The relative stability, and growth, of the newspaper industry over the last one hundred years has given rise to labor organizations that have grown use to ever increasing wages, well-defined work practices, and a stable membership despite the installation of labor-saving technologies.

The union organizations which grew through time under these circumstances were unprepared for the new realities of newspaper economics, management and technology that arrived full-force in the 1980s. The model of incrementally

improving the pay and working conditions through multiple bargaining units suited the stable environment, but not the increasing flexibility required in remaining competitive in the 1980s.

Despite having joint organizations, such as the Allied Printing Trades Council in New York and similar organizations in other cities, the fact is that power rested in the individual unions. The unions in the newspaper industry thus faced, and continue to face, a continuing set of collective action problems of the sort described in Chapter IX--defecting from the umbrella organization may well benefit the individual union in the short run. The strategic question for the unions is to overcome this incentive to defect through new institutional arrangements which compel the individual unions to act collectively. This is where the historical constraints have tightly bound the unions in the newspaper industry, restricting their ability to strategically address questions of institutional designs responsive to these problems.

Any agenda for workplace governance in the 1990s needs to recognize these strategic needs and problems of both labor and management. There must be, in other words, a commitment by both employers and employees to a common set of goals that include the provision of secure, fairly-paid jobs, an encouragement of reasonable profits, and a believe in the process of collective bargaining as the means to

democratically negotiating over these issues. Five specific recommendations form the core of this agenda for workplace governance in the 1990s within the confines of such a commitment:

1. Improving the information available to labor and management which would help both understand and develop appropriate bargaining strategies that would seek attainment of common goals. The need for increased information sharing, in such areas as financial status of the organization or concerning investments in new technology, not only is important to developing trust but, more importantly from the perspective of game theory, is critical to forming an accurate assessment of the other party's intentions. As we saw in Chapter IX, the dominant strategy is to cooperate until the other side defects. Increasing the flow, and quality, of information between labor and management increases the proper weighting of the likelihood of continued cooperation.

2. Seeking out new forms of continuous bargaining that would augment, if not replace, the current form of collective bargaining around specified contract expiration dates. The imposition of a more or less arbitrary expiration date has two effects: it does intensify the incentive to come to an agreement but it also may force the parties to adopt a policy that given

more time and information may not have been adopted. An arbitrary date thus may have the perverse effect of forcing the parties to adopt an undesired policy. Continuous bargaining, with expiration dates, would eliminate many of the negative effects while maintaining the incentive to come to a conclusion.

3. Restructuring of labor organizations to meet the demands of the future rather than historical relationships; a re-thinking of organized labor's goals is needed, particularly in the traditional craft unions which dominate the newspaper industry. In addition to moving beyond the historical constraints mentioned above, the unions need to respond to the growth of the non-union workforce which today represents nearly 90% of the private sector workforce and at least 80% of the newspaper employees. Innovative solutions, such as those put forward for associated members who would have the benefits of belonging to a large organization even if not covered by a collective bargaining agreement, must be pursued. The newspaper unions could offer special incentives to non-union employees by establishing training centers where new technology could be learned, or through mutual society type benefits such as insurance or savings plans. In any case, the unions must act aggressively or face the very real possibility of becoming islands with a rising

tide. The disappearance of effective organizations independent of managerial control will not only hurt workers but management as well. The impact of unions, I have argued throughout, is to force managers to manage better by taking wages out of competition and instead requiring efficiencies to come from organization responses and innovations.

4. Renewing a commitment to the system of collective bargaining on the part of management should accompany the business restructuring that is taking place throughout the world. The flattening of organizational hierarchies results in new challenges and opportunities for management; understanding the relationship between workplace relations, collective bargaining and this process of organizational restructuring is a key to the survival of modern organizations. Collective bargaining remains the democratic way of expressing employees voice in a formal, institutional way. An integration of collective bargaining and the newer forms of employee involvement in decision making is one of the fundamental problems that both labor and management will be faced with in the years to come.

5. Understanding that the process of technological change requires optimum cooperation from all parts of an organization, it becomes clear that the current industrial relations system in the United States, as

exemplified, by the newspaper industry is far from perfect. Applying the four recommendations above with the specific circumstances of changing production methods, the possibilities for new forms of workplace relations that improve the efficiency and equity within organizations are possible.

With this agenda in mind the task for social science is to develop sophisticated methods for measuring the effectiveness and contribution of workplace governance to the competitive position of an organization and to the quality of worklife. The framework of game theory provides an entry point for understanding the mechanisms that shape how organizations respond to technological change. Within the context of the history of American industrial relations and theories of technological change, the American newspaper industry provides a good example of the difficulties facing labor and management as they struggle to adapt to new and changing circumstances in both the economic and social relations at work.

As indicated in Table III on page 254, the choices are not clear-cut. Notwithstanding these difficulties, the cases show that there are a multitude of strategies available to both labor and management, and that a convergence on shared or common interests is possible. Without suggesting that the case has been proven, I continue

to believe in the necessity of having an organization independent of managerial control representing employees interests, both for the sake of the employees and for the overall effectiveness of the organization.

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