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**THE INTERNATIONAL CONTEXT OF LABOR-MANAGEMENT RELATIONS:
IMPLICATIONS FOR WORKPLACE MONITORING**

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INTRODUCTION AND FINDINGS

Because the American economy is so tied in to the global economic structure, increasing attention has been given to approaches in other industrial nations in their efforts to maintain a competitive edge and best adapt microelectronic technology. This has involved governmental policies and actions and the wide range of labor-management relations. This chapter explores some of the international developments and notes contrasts with the United States, and some potential lessons with regard to managing the new technology and systems of labor relations and issues relevant to workplace monitoring.

A number of findings come from this review:

1. The American labor relations system and labor law model differs importantly from many other industrial nations. The higher rates of unionizations, existence of labor parties, and tradition of governmental involvement in the labor-management arena distinguishes most other industrial democracies from the U.S.
2. A more developed tripartite government-labor-management approach to industrial policy, economic development and growth has been developed in most of our competitor industrial nations. This approach has no real equivalent in this country, but we note increasing calls for some efforts in this direction.
3. A tradition of worker participation, including employee involvement in applying new technology in factories and offices, is more developed in other industrial countries. However, there is well-established international communications system across management and union circles which has shared quality of working life and participative management experiences. There is evidence of a substantial growth of this philosophy in the American labor-management relations community and a new Federal government initiative in the U.S. Department of Labor.
4. Since collective bargaining covers only one-fifth of the American work force, other initiatives have been explored by advocates and policymakers, including the use of occupational safety and health laws and agencies, somewhat parallel to the work environment laws in other nations which have addressed job stress, work organization and technology concerns. Concern over health effects, stress related worker compensation claims, are among the driving forces for reform here. Thus far, only modest changes in federal legislation and standards, such as

the OSHA hazard communication standard, have been seen; more activity seems focused at the state and local level tied to VDT worker protection and the like. European developments have been a significant stimulus for some of this effort.

5. Issues of privacy and rights of employees are treated in some other industrial nations in a broader socio-political context with proactive legislative initiatives promulgated. The pattern in this country is more towards taking a reactive stance, and addressing alleged abuses after the fact through collective bargaining and other remedies focused on the workplace. The American pattern is likely to continue, although there has been a notable increase in the concerns over privacy and employee rights expressed by unions, citizen action groups, and policymakers.

6. The force of law, tradition of labor-management relations, and the current economic and political milieu have shaped the American approach to dealing with the new technology at the workplace, including electronic monitoring. It is a model which is different in important ways from the more centralized, regulatory, legislated model of employer-employee relations in many other industrial nations. While voluntary and recommended styles of participative management and other approaches towards dealing with microelectronic technology developed abroad may have growing influence in the United States, there will continue to be a distinctly different approach taken in this country in the foreseeable future.

REASONS FOR INTERNATIONAL PERSPECTIVES

The past decades have altered the global economy such that it is essential to understand the American economy and the world of work within an international perspective. This is the case for many reasons. First, US based multinational corporations have invested a substantial portion of their capital and production facilities outside the country; they are indeed multinational or global firms albeit American owned. Second, US firms are involved in a large number of joint ventures with foreign firms and governments, both abroad and within the United States. Third, foreign firms have increasingly invested and developed production facilities within this country--from auto to electronics. And, fourth, this international competitive environment has increased the sensitivity of American managers, employees, and unions to varied approaches in such areas as labor relations, organizational structure, managerial style, and technology at the workplace.

This increased awareness has been facilitated by the considerable movement of managers across national boundaries and the communications and visitations involving employee and union delegations as well.

The internationalization of the American economy has resulted in a great deal of information flow between the United States and other industrial and developing nations. In particular, it has led to reciprocal influences between the industrial nations of the world. For example, U.S. managers study workplace experiments in Western Europe; Japanese managers try to apply their approaches in U.S. production facilities; and U.S. unions meet with their counterparts employed by US multinational firms, such as in the case of autoworkers in Ford Motor Company facilities world wide. The technology of production in factory and office settings is transnational and this interchangeability also has furthered interest in international experiences.

There are considerable variations among the industrial nations in terms of their labor-management systems, approaches to dealing with technological change, the role of government in the economy, as well as the strength and economic and political role of unions. In the 1950s and 1960s, many European nations experienced labor shortages and relied upon "guest workers" from other less developed nations; in the U.S., that has never been the case. Many of the social dynamics of the 1960s, however, were common across national boundaries and cultural differences. The wave of interest in participatory democracy affected all industrial nations, and the factors which gave rise of work reform concerns in the U.S., were common in most nations in the West.

Electronic monitoring is but one facet of the microelectronic technology capability. The potential is transnational and the issues raised are also international. Equally important, the application and policy outcomes are variable. This chapter is designed to explore some of these international

influences and experiences as they apply in the American work setting.

AMERICAN LABOR-MANAGEMENT RELATIONS UP TO THE MODERN ERA

A longer treatment of the history of work and labor-management relations has been given in this report (Chapter 3). What might be most directly pointed out is that several threads have unfolded in this century, some of which have continued and some have been partially replaced. The Scientific Management approach developed by F.W. Taylor was built upon some basic assumptions about industrial production and efficiency tied to the division of labor, scientifically measured job tasks, and economic incentives for workers. Some tendencies in this vein continue into the present time. However, beginning in the 1930s and developed in the 1940s and beyond, there emerged the Human Relations approach fostered by E. Mayo and colleagues at Harvard Business School. This philosophy emphasized the social aspects of work and the importance of social support from fellow workers in helping to determine worker productivity. Variations on this theme continue to the present. The Human Relations approach did not replace Scientific Management, and by the 1950s, the issue of power and real differences between managerial and employee interests were more accepted in many managerial theories. The challenge was to attempt to integrate work organization goals--harmony, productivity, profits--with those of the employees.

The evolution of dominant managerial philosophies did not occur in a vacuum. Rather, they reflect the shifts in the work force, the growth of unions, and the significance of the collective bargaining mechanism which protected workers and established contractual conditions of employment. The fields of industrial psychology and sociology saw considerable growth during the Second World War with studies of group morale, productivity, and worker

relationships. Such studies made it clear that real differences or conflicts exist and that efforts to alter morale, job satisfaction, and productivity would need to acknowledge these. "Cow sociology" was the phrase derisively used to denote those managerial approaches which sought to gloss over employee concerns and attempt to make workers contented without addressing their real interests.

The social climate of the nation began to change in the late 1950s with the beginnings of protest by Black Americans against the institution of racial segregation. From the Hollywood image and popular books such as *The Man in the Grey Flannel Suit*, the nation was challenged by scenes of federal troops enforcing school desegregation in Little Rock and Dr. Martin Luther King, Jr. organizing a boycott of Jim Crow buses in Montgomery. By the 1960s, a wide range of social movements had organized on the issues of empowering people to make decisions affecting their lives and cries for "Black Power," "Student Power," "Community Power" were heard.

Not surprisingly, the issue of involvement in the workplace, where we spend one-half of our waking hours, was articulated as well. While there were some differences between the United States and European countries in terms of social issues of the times, the 1960s saw very similar movements for change by students, environmentalists, women, and community activists. The European milieu fostered more experiments related to work and the economy and the results of these became publicized in the United States in the late 1960s and early 1970s.

The changes which have been outlined earlier in this report [Chpt. 3] influenced the shifts in managerial philosophy and labor relations. The occupational structure in the post-World War era revealed a marked growth in the services with a decline in manufacturing, and a substantial growth in

public sector employment. The proportion of women workers increased and the sectors of the labor force which were organized shifted to include more government workers, white collar and professional workers, as well as more women and racial minorities. New approaches to union organizing were developed which stressed issues of work environment and employee influence.

Federal and state legislation increased with amendments to the National Labor Relations Act, relevant sections of the Civil Rights Act, and other laws. The American labor relations framework is based upon a system of voluntary unionization and free collective bargaining which stands in contrast to nations with legislated approaches to decision-making at the job.¹ This approach distinguishes the US industrial relations system from some other industrial nations. Yet, there is a role played by government in terms of wage, health, nondiscrimination and other forms of protection. The government has a system of arbitrating cases, hearing cases in courts of law, and well-utilized mediation and conciliation services. Thus the labor relations system which evolved from World War Two through the 1960s was to a considerable extent tri-partite, yet distinguishable from systems developed in other nations.

By the end of the 1960s, the changing occupational structure, new technology, and global economic shifts posed new challenges for the American economy and management. There was growing interest in international developments and experiments in employee involvement that were being undertaken in Europe. This period marked the entry into a new phase of labor relations with a markedly changing global economic climate.

1. The distinction is examined in Steven Deutsch, "Voluntaristic vs. Constitutional Approaches to Worker Participation," Comparative Labor Law, Vol. 2 (Summer, 1977).

INTERNATIONAL DEVELOPMENTS IN LABOR-MANAGEMENT RELATIONS FROM THE 1960s

The broad efforts around the world to push for various forms of participatory democracy in the 1960s took many forms. In some contexts the discussions were joined with older movements for change, such as the Fabian socialist tradition in the British trade union movement. Regardless of the particular form, by the 1970s the issue of participation at the workplace, or industrial democracy, was a major feature of discussion and implementation in the industrial relations systems throughout the West.

There were a number of sources for this phenomenon. First, there was the influence of self-management theory and practice, notably in the model of Yugoslavian self-managing socialism. Second, there were the models of co-determination, such as in West Germany, which had their genesis in the 1930s and were altered in the 1950s designed to have functioning delegate works councils to facilitate workers influence in decision-making. In the 1970s and 1980s, a major "humanization of work" program was developed in the FRG, administered by the occupational health and safety ministry. Third, there emerged a new tradition of applied research in the 1960s based particularly at the Tavistock Institute in England and the Work Research Institute in Norway, emphasizing employee participation and democratization at work. There were a series of management initiated interventions and planned changes to give employees influence at the workplace which were systematically studied. Attention was given to the psycho-social factors of work, e.g., job satisfaction, morale of workers, and the quality of social relations; other research focused on such performance factors as productivity and efficiency. The Industrial Democracy Programme in Norway was a pioneer in this field and influenced industrial practitioners and researchers in many countries,

including the United States.

By the early 1970s, the interest in job redesign, human engineering, work reform, or whatever term was in vogue, was world-wide. The first international conferences on participative management and quality of working life were held in 1971 and 1972. The experiments undertaken in Europe were of considerable interest to American industrial managers, employee representatives, practitioners, and industrial researchers. The key issue seemed to be that increasing employee involvement spoke both to the restlessness and militancy manifest by workers in the 1960s and to managerial desires to have improved quality of working life and effective work organizations.²

In some countries there was a clear philosophy of extending more power to workers as part of the overall program of democracy envisioned by the government. This is clearly the case in Sweden where the Social Democratic Party has a long-term program to establish political democracy, social democracy, and finally economic democracy through incremental legislative reforms. When, in the late 1960s, the Swedish labor movement turned to issues of greater worker participation both at the workplace and in the economy, the Social Democratic Party translated these demands into legislature goals. In sequence during the 1970s, the following laws have been passed:

Act on Employee Representation on Boards;
 Security of Employment Act;
 Promotion of Employment Act;
 Act on the Status of Shop Stewards;
 Worker Protection or Safety Act;
 Act on Employee Participation in Decision-Making (MBL);
 Work Environment Act;

2. The mood of the period and developments in Europe are reviewed in Solomon Barkin (ed.), Worker Militancy and Its Consequences, 1965-1975: New Directions in Western Industrial Relations (NY: Praeger, 1975).

and in the early 1980s,
Wage-earner funds.³

A similar series of reforms were implemented in Norway allowing worker representation on corporate boards and other means of participation.⁴ The issue of "management prerogatives" and what constitutes appropriate employee involvement has naturally been raised in Europe as in the United States. The 1970s saw a substantial expansion of the agenda for European unions and they have bargained over the introduction of new technology, work and job design, production systems, organizational planning, and company investments. The legislative arena continues to be significant in those countries with such traditions, including Scandinavia with its history of relatively cooperative labor relations, Germany, and Holland. In England, Australia, and Canada, the adversarial labor relations model is closer to the United States, and therefore, they continue to rely upon collectively negotiated agreements between employers and the workforce rather than legislative solutions. It is important to note the considerable variations across national boundaries in the size and strength of the labor movement: from 90 percent of the workforce in Sweden, to 50 percent in England, and 20 percent in the U.S.

In addition to legislating co-determination, which was done in Sweden and expanded in Germany in the late 1970s, some countries have passed work environment laws which mandate employee involvement in planning and designing

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3. Sandra Albrecht and Steven Deutsch, "The Challenge of Economic Democracy: The Case of Sweden," Economic and Industrial Democracy Vol. 4 (August, 1983) pp. 287-316.
 4. Bjorn Gustavsen and Gerry Hunnius, New Patterns of Work Reform: The Case of Sweden (Oslo University Press, 1981).

work and technological changes in the workplace. There is an explicit section on technology in the Norwegian Work Environment Act of 1977; to wit, Section 12:

General requirements. Technology, organization of the work, working hours and wage systems shall be set up so that the employees are not exposed to undesirable physical or mental strain and so that their possibilities of displaying caution and observing safety measures are not impaired.

Conditions shall be arranged so that employees are afforded reasonable opportunity for professional and personal development through their work.

Arrangement of work. The individual employee's opportunity for self-determination and professional responsibility shall be taken into consideration when planning and arranging the work.

Efforts shall be made to avoid undiversified, repetitive work and work that is governed by machine or conveyor belt in such a manner that the employees themselves are prevented from varying the speed of the work. Otherwise efforts shall be made to arrange the work so as to provide possibilities for variation and for contact with others, for connection between individual job assignments, and for employees to keep themselves informed about production requirements and results.

Control and planning systems. The employees and their elected union representatives shall be kept informed about the systems employed for planning and effecting the work, and about planned changes in such systems. They shall be given the training necessary to enable them to learn these systems, and they shall take part in planning them.

The Norwegian and Swedish Work Environment Acts of 1977 and 1978, respectively, build upon demonstrable evidence that machine-paced, monotonous work, done in social isolation and involving shift work, leads to unhealthy outcomes in both emotional and physical terms.⁵

There is a clear relationship shown in research and revealed in some

5. Bjorn Gustavsen and Gerry Hunnius, New Patterns of Work Reform: The Case of Norway (Oslo: Oslo University Press, 1981); Bertil Gardell and Bjorn Gustavsen, "Work Environment Research and Social Change: Current Developments in Scandinavia," Journal of Occupational Behavior, Vol. 1 (January, 1980).

national legislation which connects technological change, job stress, and efforts to improve the work environment.⁶ For example, the head of the World Health Organization Stress Lab includes democratization at the workplace among his list of proposed measures to combat job stress.⁷ A considerable body of research has suggested that electronic office work is stressful and that ergonomic and administrative or organizational factors are critical to accomplish stress reduction.⁸ The German Humanization of Work Program, federally funded and implemented, is within the occupational safety and health ministry. In short, research revealed the benefits of employee involvement including reduced accidents and injuries, reduced stress and other ill effects from work, and thus the expansion of worker participation was encouraged and mandated by governmental job safety and health laws. Over the past decade, there has been some interest in this approach by other nations as well.

The 1970s saw a rash of industrial experiments to reform the workplace and involve workers. The Swedish Employers' Federation claimed that 500 such innovations had been evaluated during the 1970s and supported such industrial democracy efforts.⁹ Similar arguments emerged throughout the 1970s in both

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6. This perspective is offered in Steven Deutsch, "Extending Workplace Democracy: Struggles to Come in Job Safety and Health", Labor Studies Journal Vol. 6 (Spring, 1981) pp. 124-132.
 7. Lennart Levi, Preventing Work Stress (Reading, MA: Addison-Wesley, 1981).
 8. U.S. Congress, Office of Technology Assessment, Automation of America's Offices (Washington, D.C.: U.S. Government Printing Office) OTA-CIT 287, December 1985), Chapter 5
 9. Swedish Employers' Federation, Job Reform in Sweden: Conclusions from 500 Shop Floor Projects (Stockholm: SAF, 1975); see also Stefan Aguren and Jan Edgren, New Factories: Job Design Through Factory Planning in Sweden (Stockholm: Swedish Employers Federation, 1980).

the international management literature and union publications.¹⁰ During the decade of the 1970s, a large number of international conferences were held, and by 1981, there were thousands of participants at the international quality of working life conference in Toronto, indicating the growth of this interest and the magnitude of application.

Although some European political traditions endorsed worker self-management as part of a larger program for the social transformation of society, the interest in industrial democracy came mostly as a nonideological, highly pragmatic development. The argument was that heightened employee interest and involvement in work increased efficiency and productivity, and hence, produced effective healthy work organizations. Furthermore, it was argued that such employee involvement would contribute to improved quality of production and decreased accidents and ill effects at work. Thus, worker participation was championed by both sides of the bargaining table and supported by government; it was seen as a forward-looking movement to create better work organizations, more competitive enterprises, and a more fulfilling work life and labor relations climate for all.

Needless to say, this perspective is the ideal and the position of committed advocates. But they were prominent in the management and labor community and influenced American managers working within Europe, traveling abroad and meeting their colleagues at conferences and reading the vastly expanding reports in the literature. The impact on the US was significant, particularly given the developments within this country at the same time. The dramatic application of microtechnology across economic sectors took place

10. C. Asplund, Redesigning Jobs: Western European Experiences (Brussels: European Trade Union Institute, 1981).

in all industrial nations. Whether in North America, Australia, Japan, or Western Europe, factories and offices were being automated on a new scale and the late 1970s saw a major push to adopt the new technology. The worldwide economic crisis in the subsequent years affected all industrial nations, and in many countries, commissions were appointed to explore the implications of microelectronics for labor relations, education, and the economy. Some, such as the Canadian Task Force on Microelectronics and Employment, recommended joint labor-management committees to address such issues as training, productivity improvements, and layoffs.

The patterns of labor relations vary considerably among the industrial nations of the West. In general, however, the interest in technological change at work has been greater in recent years in Europe than in the United States. Many European unions have been more aggressive than those in the U.S. over issues of advance notifications of technological change in the workplace, joint participation in workplace design and the introduction of new technology, protection of jobs and programs for relocation, retraining, and other means of cushioning the effects of job loss. This greater support for participative approaches has fostered more joint efforts to address technology questions. There is agreement in some quarters about the benefits of technology to remove monotonous jobs and nurture semi-autonomous work groups with greater worker influence.

For example: in 1982, "Agreement of Efficiency and Participation" was signed by the Swedish employers' federation (SAF) and the blue-collar (LO) and white-collar (PTK) union federations. It recognized the need for efficiency and productivity if Swedish enterprise was to be more competitive in the international markets; it also detailed some of the means of implementing technological change to achieve these goals. The paragraph dealing with

technical development states:

Item 1. General direction. The parties are agreed that day-to-day as well as more far-reaching technical modernization offers many opportunities that must be taken to enable the company to survive, achieve success and therefore also safeguard jobs and employment. Capital expenditure makes it possible to improve productivity as well as creating opportunities to introduce new production systems, utilize modern technology, develop the expertise and skills of employees, and thereby increase the competitiveness of the company.

Item 2. Stimulating work. In the event of technical change, a sound job content shall be the goal, together with opportunities for the employees to increase their skills and accept responsibility for their work. The knowledge of the employees should be stimulated together with their ability to cooperate with and have contact with their colleagues.

Item 3. Major changes. When technical change that involves major changes for the employees is being planned, the trade union organizations shall participate. Such participation shall take place in accordance with the provisions in (sections 7 and 8).

The employer shall describe the considerations underlying the new technology, and the technical, financial/economic, work environmental, and employment consequences that can be foreseen and possibly make proposals for appointing project groups.

Item 4. Training information. It is important that the employees are given opportunities for further development of their vocational expertise and skills. The company shall make available as early as possible training for the new jobs that technical change will involve. Such training shall be provided at the expense of the company and on unchanged pay and employment conditions.

The point is that all have a stake in the development and application of new technology and that labor supports such investment as long as human considerations are well considered and employees involved.¹¹

This approach to applying technology at work is built into the broader Swedish moral/legal system. Just as Sweden has the highest per capita robots in production, that nation may lead the world in the number of computer data based personal registries. With a population of only 8.4 million, it is

11. For an analysis of this issue see Steven Deutsch, "International Experiences With Technological Change," Monthly Labor Review, Vol. 109 (March 1986) 35-40.

estimated that there are perhaps 70,000 registries and that each Swede is included in between 50 and 300 registers of personal computerized information. Within Sweden, there is an assumption of good intent and that the computerized data fields will not be abused or violate privacy. However, this belief has also been backed by law in the early 1970s' legislation which created a Data Inspection Board to control access and use of such files. Nevertheless, Swedish public opinion reveals that while the citizenry is better served as a result of these data registries, the Swedish people have some concern about protection of privacy.¹²

The key finding here is that in some other industrial nations the issues of privacy of the citizenry and rights of employees at work are treated within the broad social-political framework of the country rather than in the labor-management sphere. In Sweden, there was a move to legislate control of data registries as the proliferation of computerized personnel data bases became apparent. It was typical within that social-political system to address the issue in terms of potential abuses and not wait for problem cases to accrue before acting. This anticipatory problem-solving (or pro-active vs. reactive stance) varies across national boundaries. The concerns over citizen privacy and the spectre of "big brotherism" is international and legislative protection has been sought in most countries. The concerns over workplace monitoring are also widespread and have been nurtured by international labor federations; and, laws and labor negotiations which have addressed remedies to the problem have been given considerable publicity and international

12. Gert Persson, "Computerized Personal Registers and the Protection of Privacy," Human Environment in Sweden, No. 26, June 1986 (Swedish Information Service, NY). For a broader overview see Information Technology in Sweden (The Swedish Board for Technical Development, Stockholm 1985).

dissemination.

We might expect that just as there has been an extensive interchange of experiences and perspectives on labor-management relations and employee participation or industrial democratic programs across the Atlantic so, too, we might anticipate more sharing of viewpoints and practices on electronic monitoring of citizens and workers and workplaces in the immediate future.

RECENT DEVELOPMENTS IN THE UNITED STATES AND LESSONS FROM ABROAD

The upheavals and changes of the 1960s in the United States formed a broader societal context for the climate of labor-management relations. Evidence in the early 1970s demonstrated a high level of concern over worker dissatisfaction, absenteeism, low morale, or what journalists called "blue-collar blues." Wildcat strikes and other signs of work disputes were manifest and a rash of studies and media accounts attempted to understand the problems of worker discontent in this country. Finally, the then-secretary of Health and Human Services appointed a Work in America Commission to explore the problem and offer recommendations. The resulting publication was a major watershed in this country and helped to put work reform on the agenda in the labor and industrial relations community.¹³ This study outlined many experiments in the U.S. and abroad in democratizing work organizations, increasing employee participation, and redesigning work.

Some of the movements for change in the 1960s, including civil rights and environmental organizations, had made coalitions with labor organizations. Legislation was passed as a result of the political climate -- the Civil Rights Act of 1964, the Occupational Safety and Health Act of 1970 as well as

13. HEW, Work in America (Cambridge, MA: MIT Press, 1973).

others. The mood of the country was sympathetic to government regulation to protect the environment, to protect people from discrimination, and to protect workers on the job. Still, the labor relations system remained a voluntary one based upon free collective bargaining. Thus, the impetus for work reform came primarily from the practitioners -- managers and unions, not from government. A wide range of experiments and programs for reform were developed in the 1970s and it was clear that increased employee involvement on the job was a demand or expectation by more workers and a growing component of good managerial philosophy.¹⁴

The 1970s also witnessed a great many changes in the country and the development of microelectronics and the application of new technology at work was among the more dramatic. White males now comprise a minority of the American labor force and this trend will continue. A shrinking minority work in manufacturing jobs.¹⁵ The world-wide economic upheavals, perhaps marked by the 1973 energy crisis, has had profound immediate and long-range consequences for the American economy. Technology has helped to shape some these shifts, and will continue to play a critical role in our changing economy.¹⁶

Just as the American labor-management community has been quite aware of

14. This is reviewed in Steven Deutsch and Sandra Albrecht, "Worker Participation in the United States: Efforts to Democratize Industry and the Economy," Labour and Society, Vol. 8 (July-September 1983) pp. 243-269.

15. See U.S. Congress, Office of Technology Assessment, Technology and Structural Unemployment: Re-employing Displaced Adults, OTA-ITE 250 (Washington, D.C.: U.S. Government Printing Office, February 1986), Chapter 8; Ronald E. Kutscher and Valerie A. Personick, "Deindustrialization and the Shift to Services," Monthly Labor Review (June 1986) pp. 3-13.

16. See Business Week, "High Tech to the Rescue," (June 16, 1986).

work reform and experiments in employee involvement and job restructuring abroad, so, too has there been considerable awareness of foreign treatment of technology and its application to the workplace. Technology has been a factor in moving investments and closing production facilities, both here and abroad. In many countries, there are legislated mandates which restrict the unilateral rights of employers to close a plant, including requirements for job retraining, and advance notification to employees. The problem of plant closings has been a major issue in the U.S. for the past few years and the labor-management community has explored various remedies both within the collective bargaining framework and outside -- including legislation at the national and state level.¹⁷

The U.S. government has a number of bilateral and multilateral agreements to share information on occupational health data and research, information pertaining to job health standards, and the like. There is a broader work environment framework in Europe which tends to include psycho-social factors, human factors and ergonomics, and other dimensions to a greater degree than is true in the United States. However, the occupational health and safety perspectives in Japan and much of Europe have become more and more common in this country. Many publications have lauded the ergonomic achievements in England, Japan and Scandinavia; other articles and books have emphasized the Norwegian Work Environment Law and the use of data stewards to deal with new technology.¹⁸ Many union and management delegations have visited other

17. U.S. Congress, Office of Technology Assessment, Plant Closing: Advance Notice and Rapid Response - Special Report, OTA-ITE-321 (Washington, D.C.: U.S. Government Printing Office, September 1986).

18. Bjorn Gustavsen and Garry Hunnius, New Patterns of Work Reform: The Case of Norway (Oslo: Oslo University Press, 1981).

industrial nations to study their approaches to work environment, their cooperative and joint approach to work environment and worker training.¹⁹ The community of scientists and health professionals has tended to be transnational, but it is the case that U.S. management, labor, and allied parties have been much influenced by developments abroad.

The challenges posed for the American economy in recent years have not been unique. But as many analysts have observed, our international competitors have developed industrial policies which are genuinely tripartite and involve government, management, and labor in concerted action. Moves in this direction have been significant in the U.S., but representatives of labor and management, as well as public policy makers, have argued that we need to learn lessons from the more successful foreign competitors.²⁰ Countries which have fewer natural resources, such as Japan, or countries which have similar basic industries (steel, auto, wood products), such as Sweden, have exploited new technology in a major way and have articulated cooperative labor-management policies with major governmental coordination. This discussion will surely continue in the near future as the United States attempts to cope with its lost dominance in the world economy, loss of foreign markets, trade deficits and the like.

This report has demonstrated that electronic monitoring at the workplace must be seen in a broader context. It is one component of the total labor-management climate, as well as part of the culture with its values and ideologies. This is true in all nations. The massive amount of data kept on

19. This is reviewed in Steven Deutsch, Work Environment Reform and Industrial Democracy," Work and Occupations, Vol. 8 (May, 1981) 180-194.

20. Business Week, "The Hollow Corporation," (March 3, 1986); Robert Lund and John Hansen, Keeping America At Work: Strategies for Employing the New Technologies (New York: John Wiley & Sons, 1986).

Swedish citizens has not become a major issue because the potential for abuse has not been realized. The adoption of laws restricting data registries and controlling citizen monitoring are reflective of the sentiments in each country. In similar fashion, where the quality of labor-management relations is positive, and where employees are consulted and actively involved in decision-making at work, there are likely to be few abuses of monitoring. In fact, the capability of electronic monitoring might be explored jointly by employees and managers and the results also used jointly to elicit problem-solving around concerns over productivity, quality of production, (workers' attitudes) or even matters of security. In short, the issue is most often perceived as a problem where the level of trust is low and the technology is used unilaterally by management without consultation and participation by the workforce. If there is a clear lesson for American managers here, it is that electronic monitoring should be perceived like any other form of supervisory function. International experiences indicate that participative styles of management are likely to build confidence and trust on the part of the workforce and that the technology can be used in such a way as to increase both worker involvement and quality of work life as well as productivity.

Sweden and Norway have a history of cooperative labor-management relations, and over the past two decades, have led in programs of employee involvement and active participation. This has included participation in shop floor decision-making, decisions about work environment, organizational structure, implementation of technology, and investments. Along with such democratic tendencies at work, these nations have shown high levels of economic growth, high standards of living, very low levels of unemployment, adoption of advanced microelectronic technology, and sensitivity to issues of privacy and protection of worker rights. While one cannot use any nation as a

blueprint, there are some clear suggestions here which might be applicable for the United States. A labor force and union movement that is consulted over technology issues and sees the use of microelectronics, including workplace monitoring, as something which will benefit workers as well as managers, is likely to be engaged, productive, and committed to quality of production and economic success. Many practitioners in industry believe these are noticeable lessons from abroad and are worthy of application in this country.

The flavor of this approach is nicely captured in a description of the Swedish Work Environment Fund Development Programme:

One of the programmes' objectives is to ensure that new technology is introduced in a manner which will improve the environment, develop and expand work content, and promote the creation of more stimulating occupations and rewarding work assignments, thereby enabling the technology to be used - in the widest sense - in the most positive manner possible. Only by adapting technical innovations designed to meet human requirements can the competitiveness of Swedish industry and the efficiency of public administrative bodies be given a real boost.²¹

Yet, as has already been noted, there are important differences between the United States and Sweden in terms of the strength of unions, the history of labor-management relations, the role of the labor party (Social Democratic Party) and the government, labor law and the like. The American legal system is rather unique, albeit the emphasis has shifted in recent years with the decline of unions, new programs of worker participation, a shifting role of government and philosophy in the courts and NLRB.²² More important, there is a set of traditional attitudes which constitutes a barrier for the adoption of new approaches.

21. Swedish Work Environment Fund, The Development Programme: New Technology, Working Life, Management (Stockholm: ASF, n.d.) p. 4.

22. See Benjamin Aaron, "Labor Law Research in North America," in Sten Edlund (ed.), Labor Law Research in Twelve Countries (Stockholm: Swedish Center for Working Life, 1986).

Our legacy of adversarial union/management relationships, which is rooted in part in the failure of nineteenth and early twentieth century managers to be concerned about the nature of work being created through technological change, thus serves as a substantial barrier to the introduction of new technologies in the current era. This leaves the U.S. at a distinct competitive disadvantage with respect to other countries (notably Japan) whose labor/management relationships at this point are more cooperative than those in the U.S. One can only wonder how the implementation of computer-based technology will fare if we do no better in accounting for human factor in designing and implementing that technology than we have done in the past.²³

It is abundantly clear that American multi-national firms function well in the different cultural and legal environments abroad. American managers have adapted and learned the correct approaches for working in Sweden, Japan and many other industrial nations who are our competitors. While no overnight changes should be expected in the way in which American managers operate at home, there are growing signs that the challenges in international trade and foreign competition are driving forces towards an altered posture of labor-management relations. The American management community has learned from its overseas experiences and has noted the successful approaches in other industrial societies. This suggests a continuing trend in many quarters towards lessened adversarial and more cooperative labor-management relations and some important innovations in employee involvement tied to introducing new technology at the workplace. The number of firms which have adopted such approaches is considerable; more importantly, they represent very large proportions of the workforce in their respective industries; e.g., auto, telecommunications, aerospace.

The federal government is acting in partnership in some of these endeavors, at least in so far as philosophical support and some catalytic activity is concerned. "The Department of Labor has taken a strong position

23. Lund and Hansen, op.cit., pp. 145-146.

in support of labor-management cooperation as an important prerequisite to America's return to preeminence in the world marketplace."²⁴ Furthermore, some of the participative management initiatives have been taken within governmental agencies at both the federal, state and local level. The lessons from abroad are only suggestive and do not constitute a blueprint, but they have already had some significant influence and are likely to be a continuing stimulus for government, management and labor initiatives and cooperative approaches to managing new technology in America's offices and factories.

24. Stephen Schlossberg and Steven Fetter, U.S. Labor and the Future of Labor-Management Cooperation, (Washington, D.C.: U.S. Department of Labor, Bureau of Labor-Management Relations and Cooperative Programs, 1986) p. 2.
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