An Exploration of Worker Participation-Ownership as a Social Process: The Impact of Worker Participation on Occupational Injury Rates

Daryl Kelley

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AN EXPLORATION OF WORKER PARTICIPATION-OWNERSHIP AS A SOCIAL PROCESS: THE IMPACT OF WORKER PARTICIPATION ON OCCUPATIONAL INJURY RATES

by

Daryl Kelley

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AN EXPLORATION OF WORKER PARTICIPATION-OWNERSHIP AS A SOCIAL PROCESS: THE IMPACT OF WORKER PARTICIPATION ON OCCUPATIONAL INJURY RATES

Daryl Kelley, Ph.D.
Western Michigan University, 1986

Work is an everyday activity which is a normal part of life. A sociological analysis combined with a historical orientation allows for an examination which goes beyond surface appearances in order to examine the social relationships embedded in the organization of the labor process. One adverse manifestation of the social relationships contained in the labor process is occupational injury.

In recent years social scientists and business consultants have proclaimed worker participation as a new way of organizing work. Adherents of worker participation claim that the decision making process can be reorganized where management and labor can engage in joint efforts. This cooperative approach to organizing the labor activity is perceived as having the potential to ameliorate many of the negative outcomes caused by traditional management practice. The negative outcome of particular interest in this study is occupational injury.

In this study the social relationship between workers and their labor activity is through a historical approach. The review of historical research explicates the social construction of the labor process which is an outcome of the struggle between capital and labor. An examination of this struggle and the economic structure which shaped it will provide a better understanding of the present
social context where worker participation is enacted.

In order to examine the relationship between participation and occupational injuries, a questionnaire was sent to companies which have been identified as having either a worker participation program or a form of employee ownership. Employee owned firms were included since research has indicated that this form of ownership is strongly associated with worker participation. The questionnaire was designed to gather information regarding the extent and type of participation and the rate of occupational injuries within the companies sampled.

Bivariate tables were constructed to assess the relationship between worker participation and occupational injuries. In general, the data indicated that the more workers were involved in the decision making process, the lower the injury rate would be. Limitations were placed on the interpretation due to the small size and purposive nature of the sample.
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ACKNOWLEDGMENTS

A dissertation is usually a research project which is enacted by a student at the end of his or her formal career. In addition to the many everyday problems encountered in doing research, students are apt to lack the financial resources which help organize the research process. Also, the transition of role relationships from student to colleague can be a source of frustration as well as growth. I was very fortunate to receive an abundance of emotional and intellectual support and the basic financial support which minimized the problems faced during the dissertation process.

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Daryl Kelley
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CHAPTER I

INTRODUCTION

During the last decade there has been a revival of interest in the participation of workers in the workplace decision making process which has spanned disciplines and academic boundaries to also include: management, union officials, business consultants, journalists, and social activists. The adherents of worker participation contend that it provides a solution to many contemporary workplace ills; such as, low productivity, high absenteeism, high turnover, poor quality control, and hazardous working conditions. This research will theoretically explicate and empirically test the relationship between worker participation and occupational injury rates.

In order to interpret the potential impact of worker participation on occupational injury rates, the broader social context of the workplace must be examined through an historical perspective. The organization of the workplace is the product of human action, that is humans organize the activity of work. A sociological perspective is concerned with how this human action is shaped by the structure of society and particularly the economic system. A sociological-historical review of the organization of work demonstrates that the material conditions which presently exist in American workplaces are the result of a historical struggle between
capitalists and labor which has been shaped by and in turn has created the economic structure of society.

The organization of work which emerged from this struggle is an outcome of a social process. A sociological method and perspective is necessary in understanding this process and how the outcome of this process can be modified to ameliorate the workplace ills created. Worker participation has been hailed as a solution to multitude of workplace problems often with little evidence to support the claim. The primary research question for this project is: Does the participation of workers in the decision making process decrease occupational injury rates? In order to test this relationship a questionnaire was mailed to workplaces which possess alternative organizational characteristics to the workplace organization created through the historic struggle between labor and capital.

Two important organizational forms which will be examined are participatory programs which allow workers a greater input into the decision making process than traditional capitalist workplaces and worker ownership where workers own at least half of the company's stock. Worker participation has been perceived as a new corporate management strategy for coping with such management problems as productivity, quality control, and turnover (Blumberg, 1973; U. S. Department of Health, Education, & Welfare (HEW), 1973; and Carnoy & Shearer, 1980). An historical review of the workplace will provide the reader a basis for interpreting the current problems faced by corporate managers. From this framework the findings of this research concerning worker participation and injury rates will be
Cooperatives and Employee Stock Ownership Plans (ESOPs) are two major forms of worker ownership. Cooperative ownership has a long history in the American economy (Jones, 1984). Jackall and Levin (1984) present an array of case studies of worker cooperatives which possess different histories and characteristics, but all of the cooperatives are examples of an alternative to capitalist ownership. Strongly associated with cooperative ownership is a democratic form of management where workers have an equal say in the decision making process (Bernstein, 1976b).

In comparison to cooperatives, the history of ESOPs is much shorter. Corporate tax and trade legislation of 1974 and 1975 provided the incentive and the legal structure for ESOPs (Berman, K. V., 1976). In many cases the ESOP has become a viable mechanism for worker buy-outs of their workplace. A change from private or public stock ownership to employee ownership does not necessitate a change in the decision making process. Whyte, Hammer, Meek, Nelson, and Stern (1983) have noted from their collective experience as consultants that employees expect a change in how everyday decisions are made. The relationship between worker ownership and decision making will be explicated in this research.

A shortcoming of previous research was a failure to fully develop a theoretical explanation for the present interest in worker participation. A second purpose of this project is to collect information regarding the social characteristics of workplaces which possess participatory programs which will be utilized in framing
issues to be pursued in future research. Structural changes of the economy and organizational changes of the activity of work since the emergence of large corporations in America will be documented. This will allow for the findings to be interpreted from an historical perspective which should help crystallize questions for future research.

As stated above worker participation is perceived to be connected to host of issues. A single variable perceived to be associated with worker participation was selected instead of multiple dependent variables in order to more fully develop worker participation within a social historical framework. Worker injuries was specifically selected as the dependent variable because recent works have exposed the serious consequences of the unsafe conditions experienced by workers.

Works pertaining to the safety of workers usually focus on the hazardous health conditions of work. This study is restricted to injuries because an injury is an immediate consequence which can be attributed to the immediate environment. Whereas occupational disease requires time for its manifestation, and the causal linkage must be traced to past conditions of the workplace which may be different. This study will also refer to the harmful events experienced by workers as injuries rather than as worker accidents. Sass and Crook (1981) contend that the very word accident connotes a meaning of personal responsibility. When informed that a person has been involved in an accident, we often associate an error in judgement has occurred which either precipitated or caused the event. For
this reason, the term injury will be used consistently throughout the
text when referring to physical harm experienced by workers.

The nature of the relationship predicted between worker partici-
pation and injury rates is an ameliorative one. In the next section
works which report or examine the harmful conditions of the workplace
will be reviewed. If worker participation does indeed reduce injur-
ies, a better understanding of the dynamics of participation must be
obtained in order to pursue appropriate action for creating safer
workplaces. With a better understanding of how to reduce injury
rates, workers, union officials, management, government officials may
enact changes which may reduce the suffering of workers and their
families.

Harmful Conditions of the Workplace

In the last few years several books have been written explicat-
ing the present harmful conditions inflicted upon workers. These
works consist of both journalistic and academic accounts. Though
there is a considerable overlap, the journalistic books tend to
describe the conditions—often in the words of the affected employ-
ees, and investigate why harmful conditions exist in the workplace.
Academic accounts tend to provide less descriptive accounts and
present observations or data within a theoretical framework. Though
the interest of this project is worker injuries, the recent exposes
have concentrated more on case studies of occupational disease which
will be briefly reviewed because injuries and disease are conceived
as part of the same problem.
Ashford's (1976) *Crisis in the Workplace: Occupational disease and injury* is a monumental work which provides a masterful evaluation of the Occupational Safety and Health Act and its administrative agencies. Furthermore, Ashford provides the most complete discussion of official statistics regarding the nature and extent of workers injuries and health problems which existed in the early 1970's.

Pieces of the information reviewed by Ashford (1976) are commonly reported in introductory sociology and social problem textbooks which cover workplace injuries as a measure of corporate crime. The case presented by Ashford is a grim one. Ashford (1976) states:

National Safety Council estimates indicate that 14,200 deaths and 2,300,000 disabling injuries (100,000 of which cause permanent disability) resulted from accidents at nonagricultural workplaces during 1971. Since the working population of this country numbers roughly 80 million, this would mean that in 1971 more than 1 in 40 workers suffered a temporarily or permanently disabling injury at work. (p. 84)

Revised National Safety Council figures indicate that there were 13,700 deaths in 1971 (National Safety Council, 1984).

Updated statistics indicate that since the early seventies the death rate of workers has decreased steadily, but remains high. The National Safety Council (1984) estimated that 11,300 worker fatalities and 1,900,000 disabling injuries (70,000 were permanent disabilities) occurred in 1983. The decrease in deaths from injuries is determined by comparing the rate of death per 100,000 workers where the rate for 1971 and 1983 were respectively 18 and 11 or a decrease of seven deaths per 100,000 workers (National Safety Council, 1984).
U.S. Department of Labor's (1983) *The President's Report on Occupational Safety and Health Administration* is the most recent and authoritative report on the harm experienced by workers. The injury rates and the average number of lost workdays per lost workday injury between the years 1975 and 1981 have been rather stable with a slight decrease. The U.S. Department of Labor (1983) recorded 4,370 worker fatalities in the private sector in 1981. In addition to the exclusion of public employees this fatality figure does not include establishments and farms with fewer than 11 employees. The difference in counts between the U.S. Department of Labor and the National Safety Council which estimated 12,400 worker fatalities is due to the methods employed and the population examined (National Safety Council, 1984).

Recent statistics reporting the injuries inflicted upon workers support the contention that occupational injury is a serious social problem. The seriousness of the problem is far greater when the impact of occupational disease is included. The U.S. Department of Labor (1983) estimated 126,000 new occupational illness cases in 1981.

The seriousness of harm experienced by workers as a social problem becomes even more apparent when the harm is conceptualized as one of many manifestations of harm created by the capitalist system. Kramer (1984) convincingly demonstrates the seriousness of harm created by corporate actions by comparing the figures measuring the costs of corporate crime to consumers, workers, citizens, and third world nations with the costs of conventional street crime. Kramer
(1984) concludes that the economic, physical, and social costs of corporate actions with harmful consequences far outweigh the harmful consequences of conventional crime.

The death and injury toll provided by the official statistics indicate that occupational injury is a serious problem faced by workers. In fact, Page and O'Brien (1973) report: "Industrial mishaps have produced annual fatalities that have exceeded war deaths in Vietnam and Korea during comparable periods"(p.2). The quantitative measures provide indicators of how many workers suffer and the extent of their sufferings, but fails to reflect the qualitative experiences of workers in regards to worker injuries and fatalities.

The journalistic accounts of worker injuries and academic works with a journalistic style provide a better report of the harm experienced by workers. Exemplars of the journalistic accounts would include: Scott's (1974) Muscle and Blood, Brodeur's (1974) Expendable Americans, and Randall and Solomon's (1977) Building 6: The Tragedy at Bridesburg. Scott (1974) examines an array of cases which focus on the health of workers exposed to toxic chemicals. She also provides one of the most extensive case studies of a recent major disaster at a silver mine. Scott (1974) contended that the ninety-one men who lost their lives had died because management had not provided the necessary precautionary measures. She found that workers were not immediately evacuated when a fire was detected for fear of losing work time. Also the mine did not contain updated self-rescuers (special oxygen masks) and workers were left to wait for the choking carbon monoxide gas.
Brodeur's (1974) investigation focuses on the harmful effects of asbestos and documents the medical-scientific-political organization which supports the manufacturing of asbestos. The study begins with informal in depth interviews with former workers from an asbestos plant in Tyler, Texas which had been closed by Pittsburgh Corning Corporation. He describes in detail the physical complaints and health concerns of the former workers. Through union contacts, company management, and an informant at the National Institute for Occupational Safety and Health (the governmental research counterpart of the Occupational Safety and Health Administration), Brodeur (1974) assembles a case which indicts the medical field for serving the interests of business at the expense of workers.

Brodeur (1974) documented how the results of medical examinations paid for by the company were not provided to workers even in cases where health problems were discovered. Also the company suppressed from the public and workers information which supported the claim that asbestos is a harmful substance. When the plant closed the local newspaper printed stories which finally provided workers with information which they had only suspected previously. The release of information combined with the manifestation of asbestosis among fellow workers made many former employees of the Tyler plant wary of their future. In a conversation with a small group of former employees, workers wondered if they too had been permanently afflicted.

Berman (1978) relates the story of Marcos Vela, a former employee of Johns-Manville (another important manufacturer of
asbestos products) and a victim of asbestosis. For ten years information was contained in Vela's company medical file which indicated he was developing asbestosis, but he was never told. Over the course of those ten years he had seen company employed physicians on numerous occasions who ran tests which proved his disease, but never informed the patient. He found out about his disease after he entered the hospital due to a shortage of breath. On the advice of a lawyer, Vela sued one of the company physicians involved with his case and was awarded $350,000 in damages. When interviewed by Berman, Vela's lung capacity was down to one-fourth of normal and a minor illness could require a major hospital stay. The compensation awarded by the court, of course, could not return his health.

Randall and Solomon (1977) take a very similar approach to Brodeur in their exposé of bis-chloromethyl ether (BCME). Like Brodeur, Randall and Solomon (1977) conducted in depth interviews with workers who were exposed to BCME at a chemical plant owned by Rohm and Hass Company. They also investigated the medical controversy where the harmful effects of BCME were disputed. Though tougher standards for the use of BCME were enacted, the enactment of a safer standard had been delayed by industry.

Like Berman (1978) and Brodeur (1974), Randall and Solomon (1977) found that the company examined attempted to hide the adverse health effects caused by the production process. Representatives of Rohm and Hass continued to deny that BCME was a human cancer agent which needed strict control, even after Dr. William Figueroa, a chest specialist at John Hopkins published a paper based on medical the
histories of Rohm and Hass workers. Figueroa's interest began when he met Bob Pontious, an employee from Rohm and Hass who was dying from oat cell carcinoma. Figueroa began an investigation because Pontious's non-smoking lifestyle and youthful age did not meet the usually characteristics associated with the disease. Due to a lack of cooperation from Rohm and Hass, Figueroa was not able to examine the whole population and was forced to extrapolate from a small number of cases. His findings, however, were later corroborated by a controlled study by the National Institute for Occupational Safety and Health.

Randall and Solomon (1977) also found Rohm and Haas implemented procedures which reduced the reporting of injuries. Randall and Solomon (1977) report that Bob Mason, a mechanic at Rohm and Haas during the mid-sixties, stated:

If you cut your hand, you were told, "Don't report it. Your department won't win the safety award this year." And if you went to the plant doctor, he'd say right off, "You didn't get it here." There was a joke around the plant that there was nothing at Rohm and Haas that would hurt you. It might kill you, but it wouldn't hurt you. (p. 88)

In a study of a tannery, Rowland (1980) reports another means whereby management was able to reduce the number of reported injuries. When a department reported fewer than the average number of injuries for a month, each worker was awarded a five dollar coupon for groceries from Safeway supermarket. Workers were apt to put pressure on fellow employees to not report a minor injury if the report would lose the monthly coupon. Rowland (1980) contends that this mechanism merely reduced the number of reports and not the number of injuries.
Rowland (1980) also documents how management may attempt to attribute responsibility for a mishap to an individual instead of the production process. A tragic mishap occurred in the tannery where a worker added acid to a vat which created a poisonous gas. Two workers were killed and three hospitalized. The tannery management provided the following press release: "The accident was not an error in formulation. It was the result of a 'human being' dumping the wrong material in the huge drum used for removing hair from the hides." (Rowland, 1980, p. 25).

In a conversation with a mechanic who was 20 yards away from the tragic event, Rowland (1980) received this account:

It never should have happened! The company didn't tag the operation as experimental and didn't post the new recipe. Furthermore, the worker who always adds the chemicals simply threw in the chemicals that were lined up for him to throw in--someone had lined up the chemicals wrong and included acid among the chemicals to be added. The worker who died simply added a chemical that was lined up for him. He died when he opened the trap door on the vat in order to add the next round of chemicals like he was supposed to.

I saw him open the door and saw him instantly collapse face down. Me and a guy I was working with began to run toward him. We smelled the rotten egg smell and recognized it as Hydrogen Sulfide gas. As maintenance men we had gotten a memo that explained the properties of Hydrogen Sulfide gas and sulfahydrate liquid. The memo was only written in five or six copies. Workers who weren't in maintenance didn't get it. We ran to the oxygen equipment. Meanwhile two other workers ran to help the guy who fell. One of them was heavy-set and panting hard when he got there--he collapsed instantly. We dragged two men away and gave them mouth-to-mouth but their skin was turning purple and they both had died. (p. 25)

The qualitative accounts briefly described above, provide an introduction to the harmful and dangerous conditions encountered by workers in the industrial workplace and their experience of those conditions. Through qualitative methods the journalistic accounts
have captured part of the pain and anguish experienced by workers and their families. Also the interviews and documentation provided by these accounts form a starting point for understanding the organizational characteristics existing in the industrial world which facilitates harmful working conditions. Also the following of political policy and public testimony and the tracing of medical research interests, illustrates the political process which disfavors workers due to their lack of resources (e.g., Brodeur, 1974).

Though quantitative measures fail to capture the human experience attached to occupational injuries, they provide information regarding the extent of the problem. Because a mail questionnaire is being utilized in the collection of data, only the quantitative aspect of occupational injury will be examined. The qualitative link between worker participation and occupational accidents is beyond the scope of this project.

Organizational Plan

Since the structure of capitalism is perceived as shaping the organization of labor, an examination of this process and the created products will serve as a starting point of the investigation. Chapters II and III will document the changing material conditions faced by American capitalists and document how the collective response of capitalists changed the structure of the economy. Included in the response of capitalists is the continuous struggle they were engaged in with labor and the impact this struggle had on the organization of work. Through an historical analysis a better
understanding of what exists in the workplace can be obtained which can serve as a guide in constructing alternatives to the organization of work.

The failure to examine the organization of work within an historical context limits the arguments generated for explaining the phenomenon and leads to a legitimation of the status quo. Quinney (1979) perceives this legitimation process as a "mystification of objective reality" which supports a bourgeois ideology. A critical historical analysis threatens this mystification of what is and what must be, by delineating how reality is created and recreated by human beings. As Brecher (1978) illustrates in his analysis of the workplace, an historical perspective is the uncovering of the hidden history of the workplace. Alternatives to what exists are found through an historical approach.

In the opening of his treatise on the rise of Louis Bonaparte, Karl Marx (1978) graphically describes the importance of an historical perspective when he stated:

Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly found, given and transmitted from the past. The tradition of all the dead generations weighs like a nightmare on the brain of the living. (p. 595).

In comprehending the historical process whereby these nightmares are integrated into the beliefs and values of the living, the pervasive ideology which reflects the interests of the powerful class is attacked. The utilization of an historical perspective attempts to free the analysis from the dominant ideology of society and this freedom allows for the construction of alternatives. Hence, an
historical perspective is not only an interesting method which provides additional information, but a necessity in comprehending past human action and guiding the creation of a better society.

The information provided in Chapters II and III will create a general orientation toward the theoretical framework provided in Chapter IV. The theory pertains to the relationship between work and human beings. In regards to harmful conditions of the workplace, the assertion will be made that when provided with the opportunity humans will organize work in the safest possible manner. The historical chapters will demonstrate that the organization of work is a result of the struggle between labor and capital. Thus the struggle must be taken into account when constructing a means of changing the workplace.

The review of the literature chapter will explicate the specific forms of alternative management and ownership which presently exist in the United States. This will provide the background for understanding the data reported in Chapter VI. These findings were generated from a questionnaire sent to workplaces identified as having either an alternative form of management or ownership. The respondents were asked to provide information regarding the decisions workers made, injuries which workers had incurred in the past year, and some background information concerning the characteristics of their company and workforce.

The concluding chapter will pull the pieces of the dissertation together. The main thrust will be to amplify the findings of the analysis chapter and pose questions generated from the analysis.
This will be achieved by placing the analysis into an historical context and discuss the implications for future research. The chapter will end with a brief discussion on the implications for political action contained throughout this work.
CHAPTER II
MONOPOLY CAPITALISM

A major concern of this study is the controlling of the labor process. In order to fully comprehend why the work activity is presently designed the way it is, the historical process whereby the present labor process was developed needs to be examined. Such an examination will provide an understanding of why the labor process was shaped in a particular manner, the dynamics which shaped the labor process, and suggest what beliefs legitimizes the present system.

The time period which will be examined will extend from the 1880s to the great depression. This period of time marks a transition in the American economic system. At the beginning of this era, craftsmanship, a system of work where workers largely controlled the labor process, existed in many industries. Before the end of this era the control of the labor process by the craftsmen was largely seized by management. In this chapter a description of craftsman control, the structural changes which influenced a change who controlled the design of work, and the struggle which resulted in the enactment of change will be reviewed.

Craftsmanship

In this section the control of the labor process by skilled craftsmen which existed in some industries around the turn of the
century will be described. First a brief description of what craftsmanship was will be provided and the means whereby craftsmen were able to maintain their control of the labor process will be reviewed.

**Description**

The glass manufacturer, material processing (iron and steel), and the automobile industries as they existed around the turn of the century have provided rich case histories in documenting how the work process was largely controlled by craftsmen (Brody, 1960; Stone, 1974; and Montgomery, 1979). Craftsmen were a class of highly skilled workers who negotiated the price of their labor with owners, and retained control of how the work activity would be performed.

The control of the labor process allowed workers to gain a sense of respect and accomplishment. For example, the quality of a good workman in the coal industry was defined as the ability to select the proper method to obtain coal with only a pick. Retired union official, John Brophy, related the pride he had in his father, a skilled coal miner, when he stated:

> It was a great satisfaction to me that my father was a skilled, clean workman with everything kept in shape. The skill with which you undercut the vein, the judgement in drilling the coal after it had been undercut and placing the exact amount of explosive so that it would do an effective job of breaking the coal from the solid...indicated the quality of his work (Brody, 1980, p. 3).

An essential quality of the labor performed by skilled workers at the end of the nineteenth century was that thought and execution were joined in the same activity. Whether extracting coal, shaping
glass, or rolling iron the worker made countless decisions and adjustments in order to effectively organize the use of labor and create a quality good. Mastery of the labor process, in addition to producing goods, created the skilled worker. The social status of the craftsman was an achieved one which workers held with pride.

In order to become a craftsman a worker had to acquire competency in the performance of work. Workers who desired to become a craftsman had to complete an apprenticeship under the guidance of a skilled craftsman. Craftsmen were workers who had mastered their trade, thus not all workers were craftsmen. In addition to craftsmen the labor force was also comprised of unskilled labor whose labor was directed by the craftsmen or by a foreman in industries where craftsmanship did not exist.

Workers under the system of craftsmanship did not compose a homogeneous group and groups of workers were also excluded from participating in the training which would result in becoming a craftsman. Stark (1980) perceived the skilled workers as middle men who utilized their position to protect their interests and exclude other workers from benefits. In fact, Monds (1976) notes that the skilled steel workers, "had a vigorous contempt for the unskilled men with whom they worked" (p. 90). Secondly, this exclusion from their ranks included elements of racism and sexism (Montgomery, 1979; Brody, 1980).

Though only some industries possessed a craftsmanship system, it provided at least one group of workers the opportunity to devise and control the labor process. In the next section the means whereby
craftsmen were able to control the labor process will be explicated. 

Craftsman Control

Craftsman control of the labor process rested upon three systems: (1) the system of payment, (2) transmission of knowledge, and (3) the worker's normative system. Collectively these components assured the craftsmen autonomy in the performance of work. Each component will be separately examined.

Skilled workers were involved in the system of payment on both a collective and individual level (for a detailed description see, Stone, 1974, and Montgomery, 1979). In many industries skilled workers could be perceived as sub-contractors. Montgomery (1979) described the system of payment recorded in the log books of the local union for iron rollers of the Columbus Iron Works from 1873 to 1877. Skilled workers negotiated the tonnage rate with the company and decided the rate of pay for themselves and helpers.

Craftsmen were also empowered to hire, fire, and assign work for the unskilled workers. Brecher (1978) argues that craftsmen were thus "able to limit the labor market, maintain skill requirements, and keep up the pay scales" (p. 5). Such power also legitimated the skilled workers claim of controllers of the labor process. They had the rights to make employment decisions, because they understood how many workers were needed to fulfill the contract.

The direct negotiation of the payment of wages had an important impact on the social interaction among skilled workers. Grzyb (1981) notes that when contemporary workers socialize off the job they are more apt to discuss sports and leisure activities instead of job
related matters. For what trade secrets can an auto worker who welds four spots on each car exchange with another employee who tightens bolts with an impact wrench. Craftsmen needed to discuss the value they would place on their labor in order to fix the best price for their services. Since the contract usually stated a fee per quantity of output, skilled workers had a further incentive to share information with one another which would enhance their collective productivity and pay.

Since the production process played an important role in the creation of the skilled workman's identity, the social conversation of workers was apt to contain more tidbits of work experience than interactions between contemporary workers. This social interaction was not restricted to the lunchroom or bar, but part of the wider community. Brody (1980) describes a wide range of activities arranged in the community where workers could gather and interact socially.

The information of how the work should best be performed was only shared between workers and not between laborers and owners. The transmission of knowledge concerning the labor process was a second means whereby craftsmen were able to control the labor process, Brecher (1978) contends that skilled workers in most industries controlled the work process because:

Only they possessed the skills and knowledge necessary for production. They controlled the transmission of these skills through their control of the apprenticeship system. That control was perpetuated and made effective by their refusal to let work be sub-divided into smaller components that did not require "all-a-round craftsmen. (p. 5)
The containment of knowledge to the realm of skilled workers enabled them to make decisions regarding the labor process. The craftsmen decided how much work should be done and the method of work. Montgomery (1979) concludes: "All the boss did was to buy the equipment and raw materials and sell the finished product" (p. 12).

The control of the labor process was further supported by a normative system constructed by workers. At the heart of the normative system was a moral code which encapsulated the values which legitimated the norms of the skilled workers. Workers also had sanctions at their disposal to ensure conformity to their code.

A major thrust of the craftsmen code demanded that workers present a "manly" bearing toward bosses. Carter Goodrich, a sociologist who studied miners in the early 1900s, captured this manly bearing in the following anecdote:

A Hungarian-born miner told Goodrich that on his first day in the pits in America, he was toiling with his shovel as laborer for a miner when the foreman entered the room. To the Hungarian's astonishment the miner told him: "Sit down Frank." Fearfully glancing from the miner to the foreman, Frank sat down. The miner chattered with the foreman casually about various problems on the job, until the foreman left. Then the miner said to the Hungarian, "Don't you ever let me catch you working when a boss is around." (quoted in Monds, 1976, pp.82-83)

Montgomery (1979) cites other examples where skilled workers discontinued work when approached by a boss. To be a man, a worker needed to face any perceived indignity with open defiance.

In 1867 a machinist found posted regulations requiring workers to be dressed and at their posts by the first bell where they would remain behind locked doors until the end of the shift. The machinist

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later reported: "Not having been brought up under such a system of slavery, I took my things and went out, followed in a few hours by the rest of the men" (quoted in Montgomery, 1979, p. 13). This example provides further evidence that skilled workers respected themselves and demanded others including owners to recognize their achieved status of craftsmen.

In addition to mandating a manly bearing toward management, the ethical code provided a framework for appropriate behavior between workers. A worker was not to enact any behavior which would threaten another worker's job. A worker who made special deals with supervisors such as dirty work were seen as negatively affecting the relationship between all workers and management (Montgomery, 1979).

The relationship between workers was not only embedded in a moral code but often backed by union sanctions (Montgomery, 1979; Brody, 1980). Workers who broke the code could be ostracized by other workers, face expulsion from the union, and a possible strike by workers demanding the dismissal of a recalcitrant worker. Thus there was a mutual support between the moral code enacted on the shopfloor and the union organization.

Even in workplaces without a form of sub-contracting, skilled workers attempted to control the labor process. Montgomery (1979) reviews documents which indicate that "stints" or output quotas created by workers were pervasive in the nineteenth century. He states:

As the laments of scientific management's apostles about workers "soldiering" and the remarkable 1904 survey by the commissioner of labor, Regulation and Restriction of Output,
made clear, stints flourished as widely without unions as with
them. Abram Hewitt testified in 1867 that puddlers in New
Jersey, who were not unionized, worked eleven turns per week
(five and a half days), made three heats per turn, and put 150
pounds of iron in each charge, all by arrangement among them-
selves. Thirty-five years later a stint still governed the
trade. (p. 12)

Thus, workers established rules governing the performance of
work. These rules did not establish total control of the workplace,
but made the struggle for control on an everyday basis possible.
Montgomery (1979) contends that this daily struggle was feasible
because the activity of resistance was embedded in an ethical
code. This moral code shaped interaction between workers and owners
and between workers themselves.

In the late 1800s, workers had a considerable amount of collec-
tive decision making power regarding the performance of work.
Skilled workers attempted to preserve power through the codification
of behavior which would ensure their dignity. Under this system
workers produced not only goods but themselves. A manly worker
was one who commanded respect and honor for the position he had
earned by mastering the labor process.

What is important to comprehend for this study is that there has
been alternative ways for organizing work where workers had an
important role in the decision making process. During the era of the
craftsmen, the planning as well as execution was in the hands and
minds of the workers. The next section outlines how the economic
structure changed and then how this structural change transformed the
labor process.
Structural Change

Craftsmanship existed in an economic system where the vast majority of workplaces housed less than 100 workers. Hymer (1978) described the business firms of the 1870s as: "typically controlled by a single entrepreneur or small family group who, as it were, saw everything, and decided everything" (p. 122). Of course, as noted above, this decision making power in some cases resided in the hands of the skilled workers. In a few short decades the size of many companies would grow beyond the watchful eye of a single entrepreneur.

Within the next two decades the form of American capitalism would be greatly transformed. Between 1897 and 1905 there was a massive merger movement among corporations which resulted in the formation of firms with a monopoly structure. This period is thus perceived as the beginning of monopoly capitalism. The most graphic operationalization of monopoly capitalism is the merger wave.

Mergers

Before the merger movement the number of workers employed by businesses was relatively small, but an astounding period of growth of the workforce employed by a single company began even before the combination movement.

According to Edwards (1979), "Only the railroads and the New England textile mills, pioneers of large-scale industry, employed more than a thousand workers before the 1880s" (p. 23). Immediately
before the great wave of mergers, Edwards (1979) lists a number of companies that were greatly increasing the size of their labor force. Companies exemplifying this trend included: Pabst Brewing Company whose workforce grew from less than a hundred workers in 1870 to over 700 workers by the mid-1890s; Edison increased its workforce from approximately 1,000 in the 1880s to 2,400 by 1890; and Pullman increased its work population from 200 in 1870 to over 14,500 by 1893.

The phenomenal growth represented by the increase of the workforce provided the expansive companies with a greater percentage of their markets. A larger market share should have increased their share of the market and provided stability for the company. In spite of this rapid growth, however, the American economy was experiencing trouble.

Dowd (1974) reports that from 1873 until the mid-1890s America, as well as the industrialized world, faced the most serious depression ever experienced to that time. At the heart of the crisis was falling prices which made profits problematic. The end result was the first serious attempt by American capitalists to control prices.

At first companies attempted to control prices through collusion where they could maintain their independence but reap the benefits of market control (Lebergott, 1984; Dowd, 1974). Gentlemen’s agreements, profit pools, and trusts were means where control was attempted but failed. Companies could cheat on the agreements and the Sherman Antitrust Act outlawed such practices (Lebergott, 1984). Dowd (1974) stated that:
By the late 1890's, mergers or combinations (in which many firms were combined under one ownership and identity) became the rule; the years between 1897 and 1905 witnessed their first spectacular rush. During these years, over 5399 firms came under the control, finally, of 318 corporations, the most advanced and powerful firms in the economy. (p. 65)

The acquisition period was swift and intense. Since a primary motivating factor for combining companies was to halt unrestrained price wars and control their individual product market, the organization of mergers were largely horizontal in form. Companies within the same industry merged into a single large corporation. For example, the five largest harvest manufacturers (Deering Company; Warder, Bushnell, and Glessner; Plano Company; Milwaukee Company; and McCormick Harvesting Machine Company) became International Harvester; and General Electric was a consolidation of Edison; Thomson-Houston, and other firms. The largest and most spectacular combination was United States Steel Corporation which merged 165 companies and was then able to control 65 percent of the steel industry (cases cited in Edwards, 1979, pp. 43-44).

The combination of the productive forces into gigantic enterprises changed the basic organization of business. The new structure which emerged is often referred to as monopoly capitalism. Even without the mergers companies were already experiencing a period of growth, but the combination movement multiplied this growth. This tremendous growth resulted in a concentration of corporate assets. Hunt and Sherman (1978) report that the best estimates of the post Civil War period indicate that the largest 200 nonfinancial corporations held an inconsequential percentage of assets, but by the 1920s this group possessed 33 percent of all assets.
Of course, not all companies in all industries were swallowed by large corporations. What resulted in monopoly capitalism was a dual economy which consists of a peripheral (competitive sector) and a center (monopoly sector) (Averitt, 1968). The center was composed of the large corporations created by the merging of companies while the periphery consisted of the small and medium size companies in the industry.

The concentration of corporate assets in the core sector had a great impact on how the companies organized the production of goods. The organizational structure which existed prior to monopoly capitalism was not compatible with goals of corporations in the core sector. An explication of the reorganization required by monopoly capitalism provides the basic organizational structure of the labor process in the contemporary corporate firm.

Organizational Change

As noted a major characteristic of the horizontal merger movement was the increased size of enterprises. The increased firm size, created both problems and opportunities for management. Both events provided an impetus for a change in the organization and conditions of work.

The increased share of the market of monopoly firms gave management greater control of prices through their control of the supply of products. Thus management had an opportunity to maximize profit through price control. Also capitalists were better able to maximize profits through a reduction in costs. With a greater
control of the supply of jobs, management was better able to achieve cost reduction through wage cuts (Brody, 1960).

The increased size of the workforce also provided an incentive for changing who controlled the labor process. Stone (1974) documents how the control of craftsmen in the steel industry was replaced by management control. An increased division of labor was initiated whereby skilled craftsmen were replaced with semi-skilled workers.

Best and Connolly (1982) describe the outcome of management control when they state:

the owners were able to mechanize the production of steel. Output was soon increased, the number of working hours was expanded to ten or twelve hours per day (often seven days a week), and work skills were defined so that no group of workers became indispensable to the enterprise. The system was structured so that managers did almost all of the thinking, organizing, and commanding while the workers monitored specific pieces of machinery or did other physical work. Craftsmanship was thus replaced by labor in the steel industry. (Emphasis in the original). (p. 67)

The increased size of the workplace also changed the interpersonal relations between management and labor. In many companies which were previously family owned, employee relations were often organized around personal relations (Skaggs & Ehrlich, 1980). In the larger workplaces authority became decentralized and vested in the foremen where authority had rested solely with the family. This change is noted by Brecher (1978) who states:

In industry as a whole in 1900 there was one foreman to every 45 workers; by 1920 there was one to every 24. Not only did the proportion of foremen increase, their role likewise changed. From merely supervising the pools of unskilled labor, foremen became the directors of production on the shopfloor. (p. 10)
The emergence of monopoly capitalism or more appropriately a dual economy where a core sector of large companies existed along with small competitive enterprises, created a new economic structure. The organization of work as it existed before 1880 was not compatible with the core sector of monopoly capitalism. The structural changes resulted in organizational changes in this sector to meet the goals of management. These managerial goals, however, resulted in changes which were undesirable for workers, especially skilled craftsmen. In order to understand the final organizational outcomes the conflict which raged during this era between management and labor must be examined.

Labor-Management Struggle

Unions experienced an explosive growth simultaneously with the merger movement. The union growth is perceived as a consequence of changes in the economic system rather than as an independent event. The organizational changes in the workplaces in the core sector brought forth a response from labor. In this section a description of the union movement will be provided, followed by a description of the conditions created by monopoly capitalism which negatively affected the lives of workers. The final part will describe organizational changes enacted by monopoly capitalists after the turn of the century due to the complacent position they forced upon labor.

Union and Strikes

Due to the emphasis on the union movement, labor history may be
more aptly called union history. Though most unions opened their doors to all white male workers, the union activity immediately preceding the turn of the century was divided into trade and reform unionism. Trade unions were organized around skilled workers and the main objective was to negotiate better conditions for workers. Included in these better conditions was gaining rights which upheld the respect and dignity of skilled labor. Also trade unions were more likely to have radical politically oriented leaders who desired an end to the capitalist system. The reform unionists represented by the Knights of Labor held different beliefs and were represented by a leadership with a reform orientation.

At the beginning of the 1880s the Knights of Labor was the largest labor organization. An important reason for its membership outstripping other unions was the Knights did not restrict their ranks to skilled workers as some trade unions did. In fact, a central belief of the order was equality among workers (Grob, 1974). The primary goal of the Knights of Labor was enacting reform measures and the ultimate goal was the abolishment of the wage system itself. To reach their goals the organization pursued a course of education and cooperation. They believed through education workers would learn their true interests and be able to cooperate with management in a manner that would be beneficial for both groups. Terrance Powderly, president of the Knights of Labor, strongly opposed the use of strikes and even more vehemently opposed revolutionary activity (Brecher, 1972).

The desire of the leaders to avoid confrontation was not widely
shared by the rank and file of the Knights of Labor. Often workers would join the Knights immediately after walking off the job in a wildcat strike action. The period was marked by spontaneous grass root action which sometimes led to workers forcing union leaders to call for strikes against their conservative judgment.

The greatest rival organization to the Knights of Labor was the American Federation of Labor (A.F.L.) which was established in 1886. For nearly four decades the A.F.L. was under the leadership of Samuel Gompers, a trade unionist who rose to power in the cigar makers union. Gompers contended that:

The trade union is nothing more or less than the organization of wage earners engaged in a given employment, whether skilled or unskilled, for the purpose of attaining the best possible reward, (and) the best attainable conditions for the workers in that trade or calling (quoted in Grob, 1974, p. 68).

Though Gompers' statement clearly indicated his desire to create better working conditions, he also hesitated in calling workers out. In 1919 he followed the workers dragging his feet and pleading for workers to stay on the job (Montgomery, 1979). His reluctance did not stem from ideological concerns like the Knights of Labor, but were shaped by the problems and limitations he faced. The union lacked the funds and leadership which comes with maturity. Also Montgomery (1979) documents that union leadership needed to demonstrate to management that they were able to provide stability by controlling wildcat strikes.

At the offset, the trade unionist and the Knights of Labor attempted to engage in cooperative activities, but the personal views of Powderly and Gompers often differed because they represented
contrary organizational goals. Grob (1974) documents the emergence of conflict between the Knights of Labor and the A.F.L. which resulted in irreconcilable differences and finally all out war. Though weakened by struggles with management, the A.F.L. emerged as the dominant labor organization by 1895 (Grob, 1974).

The Industrial Workers of the World (I.W.W.) also emerged during this era but was unable to survive as a viable force. The Wobblies, members of the I.W.W., established their organization in 1905 and rose to a position of influence in 1912 after winning a textile strike. Within ten years their numbers dwindled due to the internal inability of leadership to deliver the demands of the workers and the external harassment from the press and government. The Wobblies were willing to engage in workers' struggles for improved conditions, but their ultimate goal was the building of a cooperative community both political and economic.\(^9\)

Though union leaders attempted to pull in the reigns on the rebellious activities of laborers, there were situations during this era where no constraint existed which was strong enough to avert the frustrations and anger of workers from being transformed into action. In 1877 the spontaneous work stoppage of railroad workers in West Virginia quickly crossed state lines becoming America's first general strike (Brecher, 1972). This was the beginning of several outbursts during the next two decades where workers collectively and spontaneously expressed their dissatisfaction with working conditions.

When labor collectively presented demands to management they often met an iron-will determination to preserve the status quo no
matter what the costs. In some cases companies relied on federal troops and paid detectives to safeguard their property, protect workers willing to work, including scab labor imported at company expense from outside the community, and to disrupt the organizing activities of workers. When a large strike was called workers knew what to expect. They armed themselves with shotguns or pistols, piled stones where they could be easily be retrieved, patrolled the streets to prevent the infiltration of strikebreakers or detectives and, in general, prepared for the defense of their community.

Thousands of strikes occurred during this era but only a small number resulted in violence. The majority of strikes were isolated actions against a small company and did not develop into a widespread rebellion. In spite of the recognition by workers of the violent response from companies, workers demonstrated determination in pursuing demands. This determination in face of impossible odds is a measure of the desperate state experienced by workers.

Brecher (1972) describes five different bloody confrontations between workers and agents of the government or company during the last three decades of the nineteenth century which resulted in the deaths of 40 workers and an unknown number of serious injuries. At different times local deputies, National Guardsmen, state militia, federal troops, and Pinkerton detectives have been deployed against American workers. Miners, railroad and steel workers were groups of laborers who were most often confronted by armed forces during this violent era.

Labor history embodies a reality of despair and misery lived by
American citizens who did not have the power, even collectively, to win demands from management whose personal wealth and power was supported by military force and social morality. In spite of these odds and consequences workers engaged in a struggle. An explanation of the material conditions faced by workers shortly before the turn of the century provides at least a partial understanding of why workers were willing to risk even their lives for better conditions.

Material Conditions

Workers in the closing decades of the nineteenth century and the opening decades of the twentieth century faced changes which demeaned their working lives and threatened their means of securing a livelihood. Four specific conditions experienced by many workers during this time period included: (1) wage cuts, (2) abusive foremen, (3) a degrading of skill, and (4) lockouts. These conditions are conceived as emanating from monopoly capitalism. The structural changes during this period not only permitted management new strategies in dealing with labor, but also provided the appropriate conditions and incentives to embark on a hostile relationship with the unions and skilled workers.

As mentioned in the section on organizational change, management pursued cost reduction through wage cuts. In 1912 Mr. Lipson, a skilled weaver from Lawrence Massachusetts, described the personal conditions which led him to engage in a strike. Lipson's testimony serves as a documentation of the devastating effect of wage cuts on the daily existence of a worker's family:
Mr. Berger. Why did you go on a strike?
Mr. Lipson. I went out on strike because I was unable to make a
living for my family...
Mr. Berger. You have been a skilled workman for years and your
wages average from $9 to $10 per week?
Mr. Lipson. Yes; that was the average.
Mr. Berger. How many children do you have?
Mr. Lipson. I have four children and a wife.
Mr. Berger. You support a wife and four children from a weekly
wage averaging from $9 to $10 per week and you are a skilled
workman. Did you have steady work?
Mr. Lipson. Usually the work was steady, but there was times
when I used to make from $3 to $4 and $5 per week. We have had
to live on $3 per week. We lived on bread and water...
Mr. Berger. How much rent do you pay?
Mr. Lipson. I pay $2.50.
Mr. Berger. Per week?
Mr. Lipson. Yes sir.
Mr. Berger. You pay $2.50 per week for rent out of $10 weekly
wages?
Mr. Lipson. Yes, sir. You asked me whether I supported my
family out of $10 per week. Of course we do not use butter at
the present time; we use a kind of molasses; we are trying to
fool our stomachs with it.
Mr. Berger. It is a bad thing to fool your stomach.
Mr. Lipson. We know that, but we can not help it. When we go
to the store without any money, the storekeeper tells us that he
can not sell us anything without the money.
Mr. Berger. How much were you reduced by reason of the recent
cut in the wages?
Mr. Lipson. From 50 to 65 to 75 cents per week.
Mr. Berger. How much does a loaf of bread cost in Lawrence?
Mr. Lipson. Twelve cents; that is what I pay.
Mr. Berger. The reduction in your wages, according to this,
took away five loaves of bread from you every week?
Mr. Lipson. Yes, sir. When we go into the store now with a
dollar and get a peck of potatoes and a few other things, we
have no change left out of that dollar. Of course we are living
according to what we get (U. S. House Hearing, 1969, pp. 30-32).

During the 1890s a wage cut was a common experience among
workers. Brody (1960) reported that a demand for a wage cut for 325
skilled workers led to the famous steel strike at Homestead in 1892.
During this time coal miners and Pullman workers were forced to
accept lower pay (Brecher, 1972). Wage cuts had devastating conse-
quences for workers which forced them into desperate struggles.
Brody (1960) contends that wage cuts were a reflection of management's obsession with cost reduction. The concentration of jobs in the hands of fewer companies made wage cuts easier to obtain.

The changing role of the foreman as a director of work activity also created problems for workers. Unfortunately for labor, they did not rule their new domain in a just, fair manner. In addition to directing workers, foremen had the power previously held by the entrepreneur. The foreman dispensed instructions, assigned work, had the right to hire and fire, and establish pay (Edwards, 1979).

Edwards (1979) recognized that the Homestead and Pullman strikes were primarily caused by wage cuts, but in reviewing the testimony of workers who engaged in the strikes he found an underlying dissatisfaction regarding treatment from foremen. Workers charged that favoritism was a factor in the assignment of jobs, differential payment was received for the same work, and abusive and harsh punishment was meted out. For example, at U.S. Steel workers were regularly docked an hour's pay for being less than a minute late, and often hassled into quitting.

Thomas Heathcoat, a Pullman car builder, described an episode where abuse was expressed in a physical manner:

One of the foremen—he has a very violent temper—had a piece of work done which he had to wait for some little time on account of the workman not being able to do it in a certain length of time, and he struck him in the face, making his nose bleed. The matter was reported to the management, but they took no action whatever in regard to it. The man was going to sue the foreman, but he was told by the foreman of the department to which he belonged that if he did he would be discharged. (Edwards, 1979, p. 59).
Stone (1974) describes how many foremen were previous workers who were promoted up the ranks which added to the bitterness of workers. One female worker complained of a supervisor, who had at one time worked beside them, flaunted her authority and declared workers were feigning illness when asked for permission to leave the premises (Edwards, 1979). The treatment received from foremen resulted in resentment and struggle.

The pervasive authority of foremen was granted by management because personal relationships could not govern the large workplace. Brody (1960) further documents that the foreman's position in the steel industry became a ladder to the fruits of upper management. A stiff structure of competition was created where advancement was based on the meeting of organizational goals. In pursuing their career interests resulted in foremen abusing workers.

A third negative condition faced by workers was the deskilling of labor. Montgomery's (1979) work provides a powerful documentation of the struggle between 1901 and 1904, regarding whether or not the craftsmen would control the labor process. He concludes that labor's efforts for direct control were largely unsuccessful; however, the work culture which supported the struggle went underground rather than being eradicated (Grzyb, 1981).

Montgomery (1979) documents several examples of direct action in an attempt to control the work process. For example, "Time-study men at Pittsburgh's American Locomotive Company were attacked and beaten by workers in 1911" (Montgomery, 1979, p. 115). In another plant workers burned or threw pay envelopes containing incentive pay into
trash bins, because such pay was perceived as a means of management to control the pace of work. The means whereby management attempted to gain control of the labor process will be further discussed in the next section.

The lockout was a means utilized by management to reorganize work and change the relationship with employees. The lockout, the closing of the doors to the present employees, suspended the means of workers to earn a livelihood. This mechanism was an effective device for monopoly capitalists since they controlled a significant proportion of jobs in their locale. This control limited the number of alternative employment activities available to workers. A brief description of the lockout of Carnegie steelworkers at the Homestead plant will demonstrate how the lockout was used to obtain the new goals of monopoly capitalists.

In 1892, Henry Clay Frick, the chairman of the Carnegie Steel Company decided it was time to rid his company of labor trouble by eradicating the union. The workers of the Amalgamated Association of Iron and Steel Workers were perceived as holding back the production of non-union workers. The union was seen as opposing the company's drive to reduce costs.

The Homestead plant was encaged by a twelve foot fence topped with three strands of barbed wire. Frick sent for 300 Pinkerton guards to protect strikebreakers and defend the company from trouble makers (or workers who would fight against having their livelihood taken from them). On July 2, 1892 the entire workforce was locked out (Brecher, 1972).
Workers, many among them armed, met the Pinkerton detectives at the landing dock. Gunfire was exchanged and the Pinkerton men were not able to land. Finally Federal troops took control of the town and protected the property of Carnegie.

Frick offered to consider rehiring workers on a man by man basis where he could weed out the troublesome union men. The workers were able to solidly resist for four months. At that point the workers conceded and the union was broken. Stone (1974) states that by 1910 the entire steel industry was non-union, but more importantly the production process had been changed.

Stone (1974) describes how new semi-skilled workers replaced the skilled craftsmen. An increased division of labor was instituted whereby workers were no longer able to control the labor process. The destruction of the union enabled management to organize work in a manner which diminished the dependence upon skilled workers and devised jobs where workers could be easily replaced. The lockout was utilized in some instances as a means for management to change the organization of the workplace.

The hardships experienced by workers due to unfair treatment and wage cuts resulted from the human actions of management whose behavior was largely shaped by structural factors. The bitter competition created by the accumulation of capital created a drive to reduce costs. Mergers was a means to control the market but the expansion on a large scale resulted in power vested in foremen regarding the labor process and vast amounts of political power acquired by capitalists. Labor discord was fueled by the arbitrary
use of power by foremen whose authority was greatly enhanced with the concentration of capital. Each battle, such as wage cuts or control of the labor process, may appear to be independent of one another, but the struggles emanated from the same structural process of monopoly capital.

In order to preserve the prerogatives of ownership and to ensure a free America, businessmen firmly resolved to forestall and hopefully destroy the union movement. In the pursuance of securing command of a passive and peaceful labor force, technology was introduced which lessened the dependence of management on the knowledge of skilled workers. This strategy elicited more resistance from workers and increased the labor-management struggle in the short run.

Monopoly capitalists with the aid of the government and force were successful in diminishing the power of workers and their unions. By the end of the nineteenth century the union had been greatly weakened (Fitch, 1910; Brecher, 1972). Shortly before the 1920s union power was greatly revived but was crushed in 1919 (Brecher, 1972; Hunt & Sherman, 1978).

The ability of monopoly capitalists to decrease the power of the unions allowed management to easily initiate change in the workplace. The result of the changes made by management was a rationalized workplace where work was divided into its smallest component. In the next section the importance of Taylorism and Fordism in transforming the workplace will be explicated.
Reorganization of the Workplace

Recent historical accounts of the development of technology within the workplace interprets this development in some cases as a means of controlling workers, rather than as a technological necessity mandated by large scale production (Braverman, 1974; Stone, 1974; Edwards, 1979; and Best & Connolly, 1982). This interpretation perceives monopoly capitalists as organizing the work in a manner where the need for skilled labor would be eliminated which would give management more control of the work activity. This would be obtained by deskilling the work activity.

A seminal work which analyzes the deskilling and degrading of work is Braverman's (1974) Labor and Monopoly Capital. Fredrick Taylor, the founder of Scientific Management, is held to be the principal culprit in the deskilling of labor by Braverman. Around the turn of the century Taylor had expressed his theory of management and engaged in experimental implementations which ended with mixed results.

In 1911, Taylor (1984) wrote that managers had four essential tasks which he identified as:

First. They develop a science for each element of a man's work, which replaces the old rule-of-thumb method.

Second. They scientifically select and then train, teach, and develop the workman, whereas in the past he chose his own work and trained himself as best he could.

Third. They heartily cooperate with the men so as to insure all of the work being done in accordance with the principles of the science which has been developed.

Fourth. There is an almost equal division of the work and the
responsibility between management and the workmen. The management take over all work for which they are better fitted than the workman, while in the past almost all of the work and the greater part of the responsibility were thrown upon the men. (p. 87)

Braverman (1974) greatly expands on the fourth principle which he interprets as the separation of thought and execution. Managements' domain of activity was expanded to include the total planning of work to be performed while the role of the worker was limited to physical activity. He perceives the routinized work activity of the contemporary workplace as the final outcome of Taylorism. Critics of Braverman contend that he overstates the success of Taylorism (Stark, 1980; Burawoy, 1978; and Edwards, 1979). As a total package, Taylorism was never instituted in practice and modifications existed mainly in non-union shops (Burawoy, 1978).

Though the direct influence of Taylorism may have been overemphasized, even the critics recognize that Taylorism had at least an important indirect impact on the labor process. Stark (1980) asserts that Taylorism was a part of a greater movement which decades later resulted in the entrenchment of engineers as a solid profession.

Even if Taylorism in itself was not a success, it represented a larger movement which was changing operations in the workplace. Best and Connolly (1982) indicate the importance of Taylorism and the concomitant practices when they state:

Its basic principles are accepted even by many who criticize this or that detail. The separation between management and workers, the assignment of mind work like planning and managing to the former and mindless work to the latter, the division of work assignments into simple and repetitive tasks, the dependence on monetary incentives and the threat of unemployment as primary instruments of worker discipline and motivation, the use of time-and-motion studies and programmed budgets to organize
work efficiently—these are still the central ingredients of modern management theory and practice. (pp. 124-125)

In the second decade of the twentieth century, workers' ability to control the work process was greatly diminished by the continuous flow production method. This method is often referred to as Fordism since the continuous production line at the Highland Park plant received so much attention when it opened in 1913 (Edwards, 1979). In differentiating between Taylorism and Fordism, Herman (1982) conceptualizes Fordism as the concrete realization of Taylorism. Fordism is the fulfillment of the dream Taylor was unable to achieve and the nightmare workers were unable to avert.

Ford was not actually the first to utilize continuous flow production. Edwards (1979) notes that by 1905 the meat packing industry had fully developed the method; however Ford refined the use to its fullest potential as a means of control. Workers were limited to a small space which created a situation where only one task was performed and needless actions avoided.

Edwards (1979) contends that the continuous line was the beginning of technical control. Since the movement of workers was extensively prevented and the same task or motion was repetitiously enacted, there was little need for a supervisor to oversee and schedule the sequence of tasks. Control had passed from the worker to shared by the foreman and was finally embedded in the technology itself.

Taylorism and Fordism respectively provided the theoretical and the technical means for deskillling the labor force. The history of
the union struggle demonstrates that in the core sector management was able to enact changes in the labor process because of their success in squashing labors' resistance. Management had the power to enforce their will contrary to the interest of workers. Power is fragile, however, when it rests solely on repression. Management needed something that would create loyalty toward the company and ensure labor peace. Welfare capitalism filled that need.

Welfare capitalism included a wide array of programs and services. Any voluntary contribution to the welfare of employees was included under the rubric of welfare capitalism. Such practices ranged from providing a lunch room or curtains in the existing eating area to profit sharing and pensions. U. S. Steel spent an unprecedented amount ($750,000 per year) in pioneering safety devices and practices which resulted in a sharp decline of accidents (Brandes, 1976).

Brandes (1976) records the first welfare project as being headed by Samuel Slater who in the 18th century educated the boys in his spinning mill on their days off. Though some companies in the mid-nineteenth century invested in housing, welfare capitalism did not reach its peak until the 1920s. These programs, however, were short lived and did not survive the depression.

Judge Gary, chairman of U.S. Steel, was one of the heartiest supporters of welfare capitalism. Brody (1960) reviews speeches and action of Judge Gary which provides a clear understanding of his motives. Judge Gary was a deeply religious man and believed that caring for the needs of workers was the moral course of action.
Along with his concern for doing the right thing was a strain of paternalism. \textsuperscript{10} When his steelworkers struck in 1919 he was deeply hurt by their ingratitude and stood firmly against organized labor.

Morality was not the sole motivation in enacting a welfare program. Edwards (1979) notes that welfare benefits were distributed at the discretion of the employer and benefits were often withheld from disloyal or union employees. As President Harold McCormick of International Harvester stated: "Our Pension Plan is purely voluntary expression of the company's desire to stand by the men who have stood by it" (quoted in Edwards, 1979, p. 93).

A welfare plan was a means whereby management attempted to secure the loyalty of workers through generosity. Once the power of trade unions was broken (never eradicated), management needed to rebuild the labor force in a manner which would ensure harmony and peace. Welfare capitalism was an attempt to secure the cooperation and loyalty of workers toward management ends.

Summary

The conflict between labor-management during the period between 1880 until the 1930s was a result of structural changes which can be described as the creation of monopoly capitalism. The accumulation of capital resulted in the expansion of enterprises and a fierce competitive market which resulted in low prices. The combination movement emerged as the best solution for controlling the market.

Before the great merger movement, entrepreneurs managed workplaces housing less than 100 workers. Thus everyday problems could
be resolved through personal interaction. Skilled workers in many industries were contracted to perform the work and they were able to maintain a great amount of autonomy in the performance of work.

With the rise of large centralized industries, the personal relations approach became ineffective and resolving this problem by placing power in the hands of foremen increased the conflict. The lives of workers became unbearable as labor costs were reduced by large companies, often through wage cuts. Throughout this period labor and management were involved in conflict.

The resistance of labor was met with oppressive and violent means mixed with paternalistic welfare. By the mid-twenties, it appeared that monopoly capitalists had achieved their objectives. After a long and sometimes bitter struggle management had defeated the trade unionists.

In seeking a permanent solution to labor resistance, management embarked on a course of rationalizing the workplace. Technical control of workers had been established the pace of work. The power of workers was greatly diminished by a process of deskilling labor. These processes, however, did not resolve the conflict between management and labor, but gave capital a short term victory. A new organization of work created a set of debilitating conditions for workers which simultaneously created the need for a struggle by workers and shaped the structure of the struggle. This struggle will be explicated in the next chapter on late capitalism.
CHAPTER III

LATE CAPITALISM

The term late capitalism refers to a mode of production and an historical time period. The chronological data is not as relevant as the notion of a mature capitalist mode of production which has been shaped by economic crises and struggles between capital and labor. Late capitalism is the economic system which produces the goods, services, and social relationships presently faced by Americans in their everyday lives.

Late capitalism is a totality which includes a complex interactive relationship between the state and the business community, a market which is internally segmented by industry, and an external set of economic-military relationships which encompass the globe. Most consumers and workers are not aware of this complex totality in their everyday lives, but they encounter the outcomes of the structure of late capitalism. For example, consumers experience inflation, desires for products heavily advertised as needs, unsafe products, and disposable goods while workers face high unemployment, inequality, discrimination, and less security.

As in the previous chapter, the historical analysis will be restricted to the features which are considered salient in understanding the meaning of work within this socio-economic system. This chapter will focus on two eras: (a) 1930 to post-second world war and (b) recent decades. An explication of the former will provide a

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basis for understanding the economic conditions which have shaped the present labor process. The present form of the workplace should be understood as an outcome of the processes outlined from the 1880s to the present.

Late Capitalism I: 1930 to Post-World War II

Kirkendall (1974) analyzes the profound crises which occurred during this era, and concludes that no generic transformations emerged. He perceives that the intensive changes which took place were an extension of the structures established in the previous era. The interpretation presented here opposes the continuation thesis and conceives of late capitalism as a new emergent economic structure. Late capitalism was marked by more than a mere continuation of the concentration of capital. The relationship between the government and economic structures, the role of the American economy in the global economy, and management-labor relations changed in a drastic manner.

Economic Changes

At the beginning of the twenties the reign of monopoly capitalists appeared to be ensured on their own terms for the unions had been smashed and the government was sympathetic to the needs of big business. By the end of the decade, however, the great depression had shaken, the new kingdom to its foundation. Three important restorative structural changes which occurred during this era were: (1) greater intervention of the government into the economic sector,
(2) a second merger movement in the core sector of the economy, and
(3) a massive industrial conversion for World War II.

The great depression stimulated governmental intervention into
the economic system. Realizing the precarious position of capital-
ism, Roosevelt embarked on a series of experiments which simulta-
neously preserved the system and modified the structural relation-
ships within society. For example, the Securities Exchange Commissi-
on established rules for the buying and selling of stock which were
designed to preserve and build confidence in the trading of stock
while outlawing past abuses.

Carmoy, Shearer, and Rumberger (1983) interpret the New Deal as
government responding to the demands of its citizens in a display of
democracy in action. While reinvigorating the economy, the New
Deal attempted on a limited scale to compensate the victims of
capitalism. The New Dealers legislated for a coalition of victim
groups including: the homeless, the jobless, and the aged. A major
provision for labor was the National Labor Relations Act of 1935.

Section 7 of the National Labor Relations Act (NLRA), often
referred to as the Wagner Act, guaranteed workers the right to
organize and choose their representatives in collective bargaining.
Hence, what had been denied workers in their previous struggle was
now mandated by law. The realization of the law in practice was to
be a result, in many instances, of another bitter and violent battle
in the workplace.

The intervention of the government extended beyond the executive
branch and the passage of one act. In addition to the National Labor
Relations Board, the government became involved in other ways. The La Follette Civil Liberties Committee collected testimony from workers and management across the country which brought awareness to the public of the violent abuses perpetuated on workers. The Supreme Court backed labor by rescinding their definition of strike activities as a restriction of commerce (Kirkendall, 1974).

A second structural change of business during the twenties was the second merger movement. This movement was characterized as being vertical in nature where large corporations bought up suppliers or customers. For example, Ford purchased its own steel company and U.S. Steel purchased companies which produced metal barrels and drums (Dowd, 1974; and Edwards, 1979). The onset of the depression drastically reduced the number of mergers.

The vertical combinations, which were restricted to the core segment of the economy, allowed the large corporations even greater control of their markets. Control is ensured since supply problems are minimized when a producer owns its suppliers. Also the owning of customers allowed a vigorous campaign for creating a demand for their product. The importance of the vertical movement beyond the securing of the market position of large corporations has not been examined. Any impact on workers or the organization of the workplace remains an open question.

The third important structural change during this era was economic conversion for the war effort. Though economic recovery started before World War II, entry into the war provided the impetus
for expansion and growth. Due to the loss of confidence by capitalists brought on by the depression, Kirkendall (1974) argues that serious conversion of the production forces did not begin until 1942. As the federal dollars poured into armaments, the economy was revitalized and profits soared. Companies in the core sector were the major beneficiaries of this quick expansion. As Charles Wilson, president of General Motors, stated: "This defense business is big business... Small plants can't make tanks, airplanes, or other complex armaments" (Kirkendall, 1974, p. 208).

The massive conversion of industry for the war effort resulted in a permanent military industrial sector. In past wars, military conversion of industrial plants provided capital and expansion opportunities for business, but many businessmen perceived military expenditure as "boondoggles" and reconverted to a peace economy at the end of the war (Barnet, 1969). The conversion process and the mammoth amounts of capital invested provided the material conditions for the emergence of the military-industrial complex. The abuses of this complex and the internal dynamics which perpetuate this complex are well documented (see, Reich, 1978; Simon & Eitzen, 1982).14

Kirkendall (1974) reports that "the war converted the nation into a global power interested in and capable of promoting major changes in many parts of the world and in the relations among nations" (p. 284). Within the United States the large corporations, established during the era of early monopoly capitalism, continued to expand and played an important role in the global economy.
In sum, capitalism during the twenties was generally considered a system to contain unlimited potential to bring prosperity to all. The market crash of 1929 and the ensuing depression shattered this dream. Roosevelt's New Deal was an attempt to reinvigorate the economic system, but revival did not set in until vast amounts of capital was pumped into the system for the war effort. America emerged from the war as a global power. Workers, however, even during the boom times of the early twenties had not received their fair share of profits, and during bad times they experienced despair and misery. The changes in the economic system, especially the core sector, shaped the material conditions of great hardships for workers.

Material Conditions

At the beginning of the twenties, the labor movement had been squashed, and many large corporations had implemented welfare programs in the hopes of ensuring a peaceful future. The depression, however, placed a strain on the resources of management and many of the corporate welfare programs fell by the wayside (Brandes, 1976). Also management placed greater demands on labor to maintain profits while many previous poor working conditions had not been rectified.

During the depression consumers cut back on their spending which further decreased the demand for goods being produced. Workers, in greater numbers than ever before, experienced unemployment or the threat of joblessness. Furthermore, the hours of workers who remained on the job were often drastically reduced (Lebergott, 1984).
In the pursuit of profit under depression conditions, companies in the core sector attempted to extract the same amount of labor from workers during shortened hours and for less pay than previously. Workers found these conditions to be unbearable which resulted in a renewal of their struggle against management (Brecher, 1972). But the conditions experienced by workers worsened before a viable resistance on the part of labor emerged.

As production began to increase, the hours of labor increased and working conditions became even more unbearable. Below are three accounts which illustrate the harm encountered in the early 1930s by labor. The descriptions concern steel, mining, and auto industries which were located in the core sector of the economy.

A steel worker documents the physical and emotional exhaustion which resulted from eleven hours of grueling hard work in a dirty inferno. The physical exertion of pushing a mud-stick, swinging a sledge, or hoeing cement brings on constant fatigue which must be ignored until he can reach home and collapse into a bed fully clothed. A worker’s spirit drains from as well as strength. As the steel worker who reported these conditions tragically wrote in 1933:

> Even bitterness burns out. You can't live forever with a white hot hate. Day after day and night after night the mill crushes down on you. You fight and curse and sweat. Then you gorge down your meat and crawl into bed and forget about it. Drabness smothers you up like an infinite blanket. You are mangled into something without spark, something less than a man, something between a packhorse and a machine (Allen, 1969, p. 277).

In the early years, auto workers whose work was organized under the continuous flow production method faced arduous working conditions, but the speed-up they experienced to preserve profits
resulted in a breaking of human endurance. The extreme demands placed on their labor power, had a physical affect on the everyday lives of workers. A wife of a worker for General Motors complained:

You should see him come home at night, him and the rest of the men in busses. So tired like they was dead, and irritable. My John's not like that. He's a good, kind man. But the children don't dare go near him, he's so nervous and his temper's bad. And then at night in bed he shakes, his whole body, he shakes (quoted in Brecher, 1972, p. 187).

A miner in the mid-thirties describes the impact of the general conditions on a miners well being and specific dreaded consequence of a horseback, slate flakes which drop without warning and crush whatever is beneath forming the shape of a horse's back. The miner reflects on what the day may bring while he is walking to work with his six brothers when he states:

We are sleepy. Getting up at three o'clock every morning, tramping over Lame Shoat to the mines is tough. Even for muscles seasoned like hickory, warped in the sun. We've done this since we were big enough to lift a chunk of black coal.

We are a solemn group. Never know what to expect next. Maybe a gas explosion. Maybe a horse-back. One brother is minus an arm. A horse-back got him. Knocked his carbide light out. He was working an isolated room. For half a day he lay there in the dark with half a ton of slate rock crushing his arm. We missed him at night and went a-looking. His arm was ground up in a bloody mess. We managed to drag him out to the drift mouth. The doctor was gone. The arm stayed that way till next day. But he loads ten tons of black coal now. He loads ten tons with one long arm (Adams, 1969, pp. 336-337).

The speed up of production, long hours of strenuous labor, and hazardous work comprised the working conditions experienced by workers on a daily basis. These material conditions provide the background for the emerging union struggle.
The Second Labor War

In the early thirties, heavy industry was largely unorganized. The American Federation of Labor (AFL) was the major union organization which was mainly an association for skilled workers. The efforts of the AFL were sometimes internally hindered due to the protective jealousy of union leaders scrapping over which union new workers should join. In 1935 the Committee for Industrial Organization (later to become the Congress of Industrial Organization) was formed within the AFL by John L. Lewis, president of the United Mine Workers (Brody, 1980).

The earlier call for industrial unionism was often associated with political radicalism. In the mid-thirties, however, the term represented a tactical dispute rather than an ideological battle. John Lewis perceived the potential of the Wagner Act as a means for obtaining an aggressive organizational drive where workers would be formed into unions along industrial lines. The AFL leadership desired to build on the base provided by existing unions where new members would be channelled into the affiliate which best represented their trade.

Though structural forces were emerging which formed the possible conditions for organizing, John Lewis was a person who would use those conditions to his utmost advantage. At the annual AFL conferences Lewis engaged in heated arguments, one which ended in a facial blow to an opponent, to obtain the policy of industrial unionism. In lieu of general support from the AFL, Lewis formed an
aggressive group of dedicated organizers within the Committee for Industrial Organization (Bernstein, 1970; Brody, 1980).

The success of the Committee was phenomenal. The Committee had an optimal structure in organizing mass production workers. Under the leadership of Lewis the industries of steel, auto, rubber, lumber, and electrical workers were either organized from scratch or greatly expanded (Bernstein, 1970).

In 1936 the Committee was expelled from the AFL, a move which Lewis did not attempt to block and had hoped would happen. The Committee was renamed the Congress of Industrial Organizations (CIO) with Lewis as president. By 1941 Lewis claims to have recruited four million member, but Brody (1980) reports the figure to be closer to 2.5 million. Though given less attention by historians the AFL did not stagnate, but also grew during this period. In fact, the AFL and the CIO were approximately the same size (Kirkendall, 1974).

During the organizing drive of the late thirties, management took active steps to prevent the growth of unions. Welfare capitalism, the benevolent cement of the worker owner bond had dissipated with the great depression (Brandes, 1976). Instead of searching for a new form of philanthropy, management in the core sector returned to the underhanded and violent tactics of the bloody era of monopoly capitalism. The La Follette Committee heard testimony regarding the employment of labor spies by management. The reports gathered through this system of espionage allowed management to fire organizers and crush organizational drives before momentum could be established (testimony excerpted in Auerbach, 1969).
The La Follette Committee also documented the extent of munitions stockpiled for protection against rebellious workers. The committee’s findings reported a strong association between munition purchases and impending labor strife. For example, during June of 1934, Republic Steel Corporation purchased:

in addition to its gas ($9,273.43 worth of equipment), 149 revolvers, 10,000 rounds of .38 caliber revolver ammunition, 1,000 shotgun shells, 450 rifle cartridges and 100 riot sticks, coming to a total of $11,900.71 (U. S. Senate Committee on Education and Labor, 1969, p. 258).

Some companies also employed toughs who had no reservations in using physical force. Henry Ford was notorious for hiring thugs who served under the command of Harry Bennett, Ford’s faithful lieutenant and confidant. Bennett was an ex-boxer who enjoyed the company of gangsters and a perverse macho lifestyle. By 1937 Bennett had built a force of 3,000 men who were willing to bust heads on command (Bernstein, 1969).

Goodyear Company devised a less violent approach through their "Flying Squadron". Squad members were selectively chosen for their education and strong physiques. They rapidly learned all of the jobs in the plant so that they could keep production going, even if workers would walk off the job. Squad members were granted super seniority which placed them in the fast track of advancement (Bernstein, 1969).

Due to the weathering of some tough times, union provided a mature leadership with a well formulated plan of action. Leaders, including Lewis, preferred negotiation to mass action; but when a strike was unavoidable they strategically attempted to pick the time
and place. Field organizers were ordered to placate the demands of workers until a stronger resistance could be built, and vital production plants were targeted if a strike became necessary.

As in the earlier strike era, workers did not always wait for union leadership to implement their grand strategies. Workers discovered a new tactic for gaining their demands with the sitdown strike. Rather than walking out and picketing at the front gate, a designated worker inside the plant would pull the main switch to shut the line which signalled the other workers to sit down at their station.

Brecher (1972) claimed that "the idea spread so rapidly because it dramatized a simple powerful fact: that no social institution can run without the cooperation of those whose activity makes it up" (p. 211). Brecher also documents the power experienced by workers through the collective withdrawal of their cooperation and the establishment of a democratic government within the plant. With the successful takeover of a plant a command committee would be elected and rules of self-governance would be enacted.

The case which received the most notoriety was General Motors' Flint operation. One reason the Flint takeover was so successful was due to Governor Murphy's active involvement in the negotiation process and his refusal to deploy the National Guard (Bernstein, 1969). Brecher (1972) points out that many lesser known sitdowns were squashed by the police.

Bernstein (1969) describes the pervasiveness of the sitdowns when he stated:
In America the first modern sit-down occurred at the Hormel Packing Company in Austin Minnesota, in 1933. In the next two years there were a number of "quickies" in Cleveland and Detroit auto plants, mainly over the speed of the assembly line...In 1936 unionists were relying upon it in many industries-maritime, shipbuilding, glass, steel, hosiery, textiles, oil,aircraft, shoes, urban transit, publishing, retail trade, hospitals, and numerous others, including, of course, automobiles. According to the Bureau of Labor Statistics, there were 48 sit-downs involving 87,817 workers in 1936, 477 such strikes in which 398,117 participated in 1937, and 52 sitdowns involving 28,749 in 1938. (p. 500)

The sitdown tactic combined with the organizing drive of the reinvigorated union, changes in the law which were more favorable to workers' interests, and the harmful conditions created favorable circumstances for the unionization of workers. As noted above the AFL and the CIO greatly increased their membership during the thirties. The organizational form of the new unions was shaped by the struggle which took place in a wider social-historical context.

Outcomes of the Struggle

Workers, union officials, and management in the core sector had a stake in the outcome of the union struggle and each had different concerns and resources available. Workers faced injurious conditions and perceived collective action as a solution. By the end of the craftsmen era, management of the large oligopolies had defused the union movement. Thus, the essential task faced by the remaining union leaders was to gain recognition as representatives of workers in order to increase their collective bargaining strength. Except for the informal work culture, management had gained control of the labor process and desired to maintain the prerogatives gained from the last struggle.
Management initially resisted the intrusion of bargaining agents into areas which had become defined as management domain. For example, Charles Wilson, president of General Motors, flatly refused to open the books to bargaining agents (Brody, 1980). Management, however, quickly realized the potential for stability through negotiation; and were willing to bargain as long as strict parameters were placed on the discussion.

The restricted area of negotiation was what management perceived as control of business. As one General Motors executive emphatically stated: "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" (quoted in Brody, 1980, pp. 187-188). Thus, certain issues became defined as being in the domain of collective bargaining while others were excluded.

The successful sitdowns ended with management agreeing to union elections which would determine who would represent the workers in collective bargaining. Organizers promised if the union was voted in, the grievances of the workers would be resolved. Once recognized the union leaders did negotiate contracts which improved the quality of life of workers through wage concessions, but they did not resolve the issues workers perceived to be most pressing. The speed-ups of the production line and the gruelling conditions faced in the performance of work were not as easy to negotiate as the wage of workers.

Nissen (1981) refers to issues defined as collective bargaining as "economism." In the ensuing decades, unions became very adept
at gaining increased wages and fringe benefits, but a price was paid. In accepting economism as the goal of union bargaining, workers basically lost the right to determine how their labor was to be used, and had no right to interfere in corporate actions defined as business decisions.

The point which needs to be stressed is the control of the labor process was no longer a labor issue. The design of the work activity was defined as a management responsibility and not a concern of workers. Workers could not overtly share the labor process through collective bargaining.

Issues regarding working conditions did not totally disappear, rather the predominance of economic issues overshadowed other concerns. Brody (1980) reports that between 1947 and 1960, one-quarter of strikes were over job security, work load, and shop conditions. Though the union bargained away claims, issues would still emanate from shopfloor conditions.

Even with the prerogatives of management firmly entrenched (including production schedules, expansion, plant location, prices), workers attempted to control their lives and seek justice in the workplace. Brody (1980) states that the union tried to achieve justice through the establishment of rules. Through detailed job descriptions and clearly defined responsibilities union bargaining agents provided workers with a means to attempt to control what work was performed. The nature of work, however, was determined by management.
The changes which occurred during the thirties laid the foundation for what we recognize as unionized companies who employ blue collar workers today. During the thirties the mass production industries were unionized and collective bargaining was established within specified parameters. Management firmly established specific realms of decision-making as their natural and inherent rights.

**Late Capitalism II: Recent Developments**

Though there have been recent structural changes in the economic system, much of the base was established during the early post-war period. The nightly news provides a cursory glance of the outcomes of modern capitalism which includes: megamergers, corporate military suppliers who charge exorbitant prices for replacement parts, trillion dollar defense proposals, frightening budget deficits, covert intervention abroad, etc. A quick glance at the hidden capitalists processes behind these news items will be provided by examining the structural changes in the economy.

**Structural Change**

Dowd (1974) describes a third merger movement from the late sixties to 1972, and Bluestone and Harrison (1982) extend the analysis of this wave through 1979. The number of mergers during this third wave dwarfed the two earlier movements. The third wave is characterized as being mainly conglomerate in form (Dowd, 1974; Hunt & Sherman, 1978; and Bluestone & Harrison, 1982).

Heckscher (1980) contends that the conglomerate should not be
confused with the earlier structure of monopoly corporation. Heckscher (1980) defines the conglomerate as consisting of, "random arrays of subcompanies, united only by their profitability" (p. 87). The purchase of Montgomery Ward by Mobil Oil and Conoco by U.S. Steel exemplifies this trend in corporate ownership.

Bluestone and Harrison (1982) describe how conglomerate behavior has weakened our main industries when they state that:

during the three years following 1976, the U.S. Steel Corporation reduced its capital expenditures in steel making by a fifth. Profits were redirected into the acquisition of chemical firms, shopping malls, and other activities; so much that, by 1979, forty-six cents of every new non-steel plant and equipment was being replaced by $2.90 of new capital investment, in the steel operations the replacement rate was only $1.40. (pp. 40-41)

Bluestone and Harrison (1982) present the above as one piece of evidence from their nationwide study which indicates a deindustrialization of America. Bluestone and Harrison (1982) define deindustrialization as "a widespread systematic disinvestment in the nation's basic productive capacity" (p. 6). The conglomerate is an organization of capital which in some instances has had a disastrous consequences for members of society. One negative outcome associated with conglomerates, but not restricted to them, is corporate flight.

A company with a diversified structure which cannot produce a high enough profit rate may be closed to raise capital through tax write-offs; rather being sold to another company. Tax write-off closures can destroy a community. For example, Anaconda Copper and Mining, a copper smelting company with a 75 year history was purchased by Atlantic Richfield Company and abandoned two years later. The closure eliminated 80 percent of the community's entire payroll which
devastated the lives of workers and the town (Bluestone & Harrison, 1982). The study by Bluestone and Harrison is trace the increased flow of the nation's capital from the frostbelt to the sunbelt or foreign countries.

Another practice possible under the conglomerate is "milking" where profits are siphoned from one enterprise and used for other purposes, such as buying other profitable companies. When short run profit becomes more important than long range planning, managers are apt to follow reinvestment strategies which are detrimental to the long term secure growth of a company that is milked. Without reinvestment into acquired companies within a short time a once profitable company may be forced to close its doors, and add more workers to the unemployment rolls. Furthermore, the milking of profits to purchase other companies reduces the amount of reinvestment capital which can stagnate the whole economy.

The increase of diversification among large corporations has a tremendous impact on management's decision making process which may lead to negative ramifications for workers and whole communities. As management increasingly engages in the buying and selling of firms, companies become commodities which are bought and sold in the pursuance of profit. Growth through investment requires capital flow, thus when an acquired company can no longer produce an acceptable profit it is replaced by a company which can. This is made easier since corporate headquarters is usually located outside the community and do not have ties to the welfare of local workers and
citizens.

A second major structural change after World War II was the central role American business played in the global economy. America emerged from as a major economic policy maker and power of the industrialized world. The dominant position of effected American foreign policy with both industrial and Third World nations.

At an international monetary conference at Bretton Woods, New Hampshire in 1944 the world bank was established where the American currency was established as a monetary standard (Bowles, Gordon, & Weisskopf, 1983; and Institute for Labor Education and Research, 1982). The dollar was placed in a dominant position over other currencies, since the dollar could be used as a reserve currency in place of gold. This created a desire for American dollars by many countries.

The position of the American corporations in the global market was further strengthened through the use of foreign aid. The financial assistance offered to other countries often contained political conditions which enhanced the ability of American corporations to make profit in the recipient countries (Institute for Labor Education and Research, 1982). Bowles, Gordon, and Weisskopf (1983) document that the intrusion into foreign governments in pursuit of American interests was aided by covert CIA operations and the threat of or the use of military intervention.

The destruction of much of the productive forces of the remainder of the industrialized world and the growth of the American economy placed America in a dominant position in the global market.
For two decades following World War II, American corporations reaped benefits from their position. High productivity created a large amount of investment capital and as demonstrated at the beginning of this section, this resulted in a concentration of corporate assets through conglomerate merger activity.

Labor Today

A structural movement followed in reviewing the history of American capitalism has been the concentration of corporate assets. The concentration of assets was restricted to certain types of industries rather than being evenly spread across all industries. This resulted in a mixed economy where sectors of the economy possessed a different set of characteristics and hence conducted business in a different manner. Differentiation in the economic structure resulted in a labor market segmentation where workers in each segment have qualitatively distinct life and work experiences (Edwards, 1979).

In analyzing contemporary American capitalism, Edwards (1979) discerns three labor markets which are: (1) the secondary, (2) subordinate primary, and (3) independent primary. Respectively these labor markets are roughly equivalent to the working poor, the traditional unionized, and what has been recently referred to as the professional-managerial-technical class. An important assumption behind the concept of labor market is that labor is fragmented. Instead of making global statements about all workers, an observer should locate the workers being observed in the appropriate labor market.
segment and describe the concomitant conditions of that market which workers experience in their daily lives.

Edwards (1979) describes jobs in the secondary labor market as being dead-end low paying jobs with little opportunity for advancement. In the typical secondary job there is little security, few pays offs tied to seniority and few entry level educational requirements. The different types of jobs which typify the secondary market includes: janitors, waiter and waitresses, guards, sales clerks, and low level clerical positions. These jobs can be considered as held by the working poor due to the low pay and lack of security.

Subordinate primary jobs offer workers more security with benefits tied to seniority and better pay. All jobs in the primary market are well defined and have clearly defined paths for advancements (Edwards, 1979). Many of these jobs are located in the industries which were unionized during the thirties. Jobs included in the subordinate primary market are: production jobs (in auto assembly, steel, rubber, home appliances, etc.), transportation in the core sector, retailing and warehousing in the core sector (Edwards, 1979).

Jobs in the independent primary market possess all of the positive characteristics of subordinate primary jobs and more. Edwards (1979) differentiates the independent from the subordinate primary market when he states that independent jobs:

- typically involve general, rather than firm-specific, skills;
- they may have career ladders that imply movements between firms;
- they are not centered on operating machinery; they typically
require skills obtained in advanced or specialized schooling; they often demand educational credentials; they are likely to have occupational or professional standards for performance; and they are likely to require independent initiative or self-pacing. (p. 174)

Jobs which exemplify these characteristics are: foremen, craftsmen, bookkeepers, specialized secretaries, research assistants, engineers, registered nurses, doctors and other professionals.

The great differential in compensation and benefits received by each of these groups creates a diverse life experiences for members of each group. The life experiences shapes a workers' concerns, values and political attitudes. For example, a worker in the secondary market who is not able to provide the basic needs of his or her family will be less concerned than a worker from the independent primary segment in regards to the building of a nuclear power plant. This exemplifies that workers are not only segmented by occupation but are separated socially and politically. They possess different agendas for social change due to the different conditions faced in their everyday work lives.

Social groups are not equally represented in the labor market segments. Women and other minority groups have a high proportion of jobs for their population in the secondary market segment (Camoy, Shearer, & Rumberger, 1983). Only in the public sector have minorities been able to make gains in the proportion who obtain professional jobs and these gains are apt to be eliminated by the budget cuts of the Reagan administration (Camoy, Shearer, & Rumberger, 1983).

In examining changes in the workplace, labor segmentation
promises to be a fruitful concept in understanding change. The material conditions of workers vary by segment which shapes the issues and concerns of management and labor. The changes which occur in one sector may not occur in the other segments.

A second concern of labor today is the growing threat to the existence of union. Gross (1980) contends that there is a general meltdown of labor unions which includes the following processes: the containment of labor organization and a union free south, the dissolution of existing unions through decertification, labor legislation including the right to work, and general economic policies which weaken the strength of unions. The best documented evidence of the drive to crush unions is the emergence of firms specializing in attacking unions. Bluestone and Harrison (1982) state that a:

thousand firms, with estimated aggregate annual revenues of as much as $500 million, now advise both private and public employers how to keep unionizers and sympathizers out of the workplace if possible; how to defeat the union when representation elections cannot be avoided; and, where unions have succeeded in winning elections, how to manage new elections to decertify them. (p. 179)

Lagerfeld (1981) further documents that these firms are not shy about using illegal means to obtain their goals. For example, a union busting specialist described to a group of managers how to provide misinformation to workers and illegally obstruct the voting process in deciding if a union is desired by workers, since delay tactics would allow union fervor to die down and the chance of the union winning a majority will decrease with the passage of time.

The union busters at the present may not pose a serious threat
to the union movement for most companies continue to engage in good faith collective bargaining with union representatives. The emergence of the attack against the unions, however, represents the waning influence of union power in recent years. Carnoy and Shearer (1980) state the percent of the labor force unionized has declined during the last three decades. In 1978 only 24 percent of the labor force belong to a union (Bluestone & Harrison, 1982).

**Labor Process**

In reviewing the development of late capitalism in America a central focus has been on how structural economic changes have shaped the struggle between labor and management. An important element of this struggle concerned the control of the labor process, that is how work is performed and who designs the activity of work. In this section examinations of how the work activity is currently performed and problems created by the organization of work will be reviewed.

Braverman (1974) has been credited by critics and friends alike for rekindling the interest in the workplace as an area of study. Braverman (1974) declares the purpose of his seminal work, *Labor and Monopoly Capital*, is: "the study of the labor processes of capitalist society, and the specific manner in which these are formed by capitalist property relations" (p. 24).

At the heart of Braverman's analysis is a progressive degradation of work in capitalist America. According to Braverman (1974) the accumulation of capital shapes the labor process; that is, the means by which management structures and organizes how work is
Capitalist production requires that workers be separated from the means of production so that labor can be treated as a commodity. Once this is achieved, the main problem facing management is the extraction of labor from the purchased labor power.

Braverman (1974) contends that management largely solved the labor extraction problem through the enactment of Taylorist principles of organization. Taylorism or scientific management divides labor into simple routine tasks which the worker performs again and again. This allows for a separation of mental work from manual labor where thought is firmly established as the domain of management and physical effort is what is purchased from workers.

The separation of thought and action has had a detrimental impact on the everyday lives of workers. Boring, monotonous, repetitive labor is the outcome of capitalist control. Work which has been divided into its simplest components is organized by management in order to meet their needs and goals. This detailed division of labor is the final step in making labor a commodity. Workers have neither the knowledge nor more importantly the right to organize their own work activity. Thus, workers are expected to endure the shop floor conditions resulting from the organization of work by managers who posses the expert knowledge for constructing the best possible organization. That is, management will create the best possible organization from their perspective which is often contrary to the interests of workers.

In the pursuance of efficiency, profit, and iron control, work is apt be organized in a manner which is detrimental to workers.
Repetitive tasks combined with a system which ensures the highest possible output endangers the health and safety of workers and ensures the alienation of workers. With the labor process legitimately defined as the domain of management, work has been designed by management where work is a negative experience for workers.

The organization of work has drastically changed from the craftsmen days where the process of work shaped the identity of workers to today where workers are alienated from work. Ritzer (1977) succinctly describes the characteristics of contemporary work as:

1. Work is external, not part of a person's nature.
2. People do not fulfill themselves in their work. In fact, in working they deny themselves.
3. Work is so horrid that people feel at ease only in leisure.
4. Work is not voluntary. It is imposed.
5. Work does not satisfy and end, but is rather little more than a means to an end.
6. In their work, people function like animals.
7. People sell their life activity in order to acquire the means of subsistence.
8. Labor is a commodity to be bought and sold like any other.
9. People do not produce for themselves, but for wages. (p. 260)

The negative reaction of workers to labor constructed in such a manner have been recorded by journalists and social scientists who have interviewed workers (e.g., Terkel, 1974; and Rubin, 1976). The feelings of many workers were summed by a young mechanic who told Rubin (1976):
God, I hated that assembly line. I hated it. I used to fall asleep on the job standing up and still keep doing my work. There's nothing more boring and more repetitious in the world. On top of it, you don't feel human. The machine's running you, you're not running it. (p. 155)

A paint sprayer at the infamous General Motors Lordstown plant sarcastically described the variety of his work to Garson (1977) when he stated:

There's a lot variety in the paint shop. You clip on the color hose, bleed out the old color, and squirt. Clip, bleed, squirt, think; clip, bleed, squirt, yawn; clip, bleed, squirt, scratch your nose. Only now the Gee-Mads have take away the time to scratch your nose. (p. 88)

Gee-Mads was the employee acronym for General Motors Assembly Division (GMAD), a new management group at the Lordstown plant who increased production to 101 per cars per hour where other plants averaged under 60 per hour. The Vega plant at Lordstown received national attention in 1973 when workers spontaneously walked off the job because the working conditions were unbearable.

Another auto worker who spot welds described the tedium of his job to Terkel (1974) when he stated:

I stand in one spot, about two- or three-feet area, all night. The only time a person stops is when the line stops. We do about thirty-two jobs per car, per unit. Forty-eight units an hour, eight hours a day. Thirty-two times forty-eight times eight. Figure it out. That's how many times I push that button.

You got some guys that are uptight, and they're not sociable. It's rough. You pretty much stay to yourself. You get involved with yourself. You dream, you think of things you've done. I drift back continuously to when I was a kid and what me and my brothers did. The things you love most are the things you drift back into. (pp. 221-222)

The control of the labor process by management resulted in the implementation of a job design which is detrimental to workers. They
find their jobs boring to such an extent that their mental health and endurance is threatened. The labor process allowed management to obtain profit but created new problems.

Crisis

In the last decade examinations of the workplace have revealed many problems which exist. Some perceive these problems to have reached a point of crisis. This concluding section will review a hidden and perceived crisis. The hidden crisis is exemplified by Bowles, Gordon, and Weisskopf (1983) who examine the cracking foundation of late capitalism and conclude major structural changes must be enacted to meet the needs of the American people. The perceived crisis recounts the problems commonly associated with the contemporary workplace.

Hidden Crisis

Several political economists have contended in recent works that the American capitalist system is in a state of crisis or at least facing serious structural problems (Bowles, Gordon, & Weisskopf, 1983; Institute for Labor Education and Research, 1982; and Bluestone & Harrison, 1982). The argument is made that the present recession is qualitatively distinct from previous downturns in the economy which are endemic to a capitalist system. Bowles, Gordon, and Weisskopf (1983) contend that the recent recession represents the breakdown of the post-World War II economic foundation.

The breakdown is due to the faulty base upon which the post-war
economy was built. Bowles, Gordon, and Weisskopf (1983) trace economic warning signals back to the mid-sixties which indicated the post-war base was eroding. After the war three sets of institutionalized power relations were created by corporate capitalists which guided action regarding foreign trade, relations with labor, and relations with citizens.

The structure of foreign trade and labor relations identified by Bowles, Gordon, and Weisskopf (1983) were briefly discussed above. The dollar as a reserve currency placed United States corporations in a dominant position in the global market, and the labor accord struck with unions was the restriction of bargaining to economic issues for one segment of labor. Union leaders attempted to restrict wild cat strike actions by the rank and file in order to negotiate with management. Bowles, Gordon, and Weisskopf (1983) contend that the segment of labor who had not received the benefits of union wages, demanded higher wage compensation which eroded the labor accord.

The accord between citizens and corporate capitalists was established through the federal government. The central belief was that in enacting policy in the interests of large corporations was in the interests of the American people. The emergence of the welfare state where the government began to enact policies, such as social security and unemployment insurance, which compensated the victims of the capitalist system changed the relationship between citizens and the state. The logic of establishing policy solely in the name of profit became challenged by the poor, environmentalists, minorities,
and consumers whose interests were hurt by such a policy.

The corporate power structure was built on the global conditions existing immediately after the second World War. The growth experienced during the war years was sustained with the destruction of the productive forces of most of the industrialized world which allowed American capitalists to establish global corporate policies in their own interests. This uncontested superiority of American capitalists lulled them into following the policies which had given them dominance. The failure to adopt innovative management strategies and more importantly, aggressive reinvestment strategies allowed foreign competitors to capture a larger share of foreign markets and even make headway into the American market.

Bowles, Gordon, and Weisskopf (1983) contend that the corporate structure led to the wasteful deployment of our resources which characterizes our system as a "slack economy". The current recession is a result of wasted resources. Instead of engaging in long term planning geared toward meeting the interests of the American profit, capitalists have pursued short term profit through defense contracts and buying companies. The resolution of the current crisis requires a restructuring of the American economy.

Perceived Crisis

The HEW Report (1974), *Work in America*, documented the problems currently faced in the workplace. Corporations are faced with high absenteeism and turnover, lower productivity and quality, and unsatisfied alienated workers. These outcomes are attributed to the
repetitive nature of work and the changing social characteristics of workers.

Workers are better educated and not satisfied in performing mindless tasks in return for a wage. Workers are not as willing to become a mere appendage of the machine. Thus management needs to find a better way of organizing work which is more amenable to workers; so that, management can continue to pursue profit.

Worker participation has been justified on grounds of the perceived crisis. Consultants have been hired by management to redesign the labor process where management goals can be met. This solution calls for a reorganization of the work activity without a significant change in the power relation between capital and labor.

The perception of the crisis mandates different types of solutions. The hidden crisis demands that structural change be enacted while the perceived crisis is limited to a reform strategy. In the next chapter a theory of work will be offered which utilizes the historical insights in constructing a means to ameliorating occupational injuries. The theory incorporates how both reform and structural change of the labor process can impact injuries.
CHAPTER IV

TOWARD A SOCIAL THEORY OF THE RELATIONSHIP BETWEEN WORKER PARTICIPATION AND INJURIES

Occupational injuries have been historically conceived as a psychogenic phenomenon. The psychogenic explanation of accidents is a victim blame approach (Page & O'Brien, 1973; Ashford, 1976; Berman, 1978; Rowland, 1980; and Hagglund, 1981). The standard textbook of industrial safety throughout the years has been Industrial Accident Prevention: A Scientific Approach by Heinrich which was first published in 1931. Heinrich's basic concern was how to prevent human error which was the cause of the majority of accidents. A central concept of Heinrich's theory was that workers are accident prone (Rowland, 1980).

Eric Farmer first coined the term "accident proneness" after the release of the Greenwood Report in 1919 (a governmental report on occupational injury) which lead to research where the internal qualities of workers were considered to be the main reason why accidents occurred (Ashford, 1976, pp. 108-109). This focus on the psychological defects of workers gave rise to the myth that "90% of accidents are caused by workers" which has been debunked by recent research. Recent studies on the cause of accidents reveals workers may be responsible for 25 or 30% of accidents and these studies are considered to have inflated the responsibility of workers (Page & O'Brien, 1973; Ashford, 1976).
Sass and Crook (1981) provide an excellent methodological critique of the myth of "accident proneness". Their review demonstrates that there has existed many rebuttals during the last half-century, but contend that many occupational health and safety authorities still erroneously believe that a substantial factor in injury causation resides in the psychological make-up of the worker. The goal of this project is to present a conception of occupational injuries which explicates the social nature of the phenomenon.

Worker participation is proposed as having an ameliorative impact on occupational injuries. This relationship can best be comprehended by recognizing the relationship between worker participation and the organization of work. Upon explicating the structural and organizational characteristics of work, the relationship between worker participation and occupational injuries will be explored.

Structural/Organizational Relationship

The historical examination of the unfolding of American capitalism presented in the preceding two chapters illustrates how the organization of work and the workplace are shaped by the structure of the economy. The market conditions faced by capitalists influences their actions which in turn shapes the organization of work. For example, the fierce price wars of the 1870s lead to the horizontal merger movement in an attempt to control market prices. The combination of companies resulted in a change in the productive forces; e.g., there was tremendous increase in the number of workers under the roof of a single workplace. Under these conditions the
control of the labor process was removed from labor by management. Thus, the structure of the economy has an impact on how the work activity is organized.

The level of analysis of primary interest in this study is the organizational level. The organization of work embodies the conditions faced by workers, defines the relationship between the worker and the work activity, and establishes the social relationship between workers and management and among workers themselves. These organizational characteristics will be linked to worker injuries. If occupational injuries are a social variable instead of a psychological one, then injury rates should vary by the organization of work.

Though the organization of work is the primary focus the interrelationship between the structural, organizational, and interactional levels is recognized. As stated above, the structure of the economy influences how work is organized. The organization of work in turn establishes the possible interaction patterns between workers. For example, the continuous flow of production physically separates workers from one another which greatly limits social interaction between workers. The craftsmanship system, however, mandated communication between workers regarding the planning and performance of work.

In contemporary American society the mode of production is best described as late capitalism. This economy is a dualistic one where segments of the economy have different dynamics and characteristics. Businesses in the core sector have large amounts of power.
and assets which are utilized in making decisions. The competitive sector is composed of smaller businesses where capital is more limited and they do not have as many options available as corporate capitalists.

A central problem faced by capitalists regardless of the location of their company in the economy is the extraction of labor power from workers. Utilizing a Marxist perspective, Edwards (1979) contends that capitalists purchase labor power, that is, the potential of labor. Once the labor power has been purchased there remains the problem of extracting the maximum amount of labor (actual work performed) from the labor power. Edwards (1979) argues that the solution to this problem varies between the market segments. Authoritarian control is the most common means used by capitalists in the secondary or competitive sector. Corporate capitalists involved in mass production industries control or extract labor through the labor process itself. Edwards refers to this as technical control since the motions which comprise the work activity are controlled by the technology embedded in the labor process. For example, the speed of the production line dictates how fast a worker must perform in order to complete the work activity.

The historical process whereby work has been designed in the core sector was described by Braverman (1974) as the degradation of labor. As outlined in the previous chapter, Braverman conceives Taylorism as resulting in the splitting of the labor activity into its smallest components. Work is then redesigned where a worker repetitiously performs the same task. This leads to the boring
monotonous experience of work and the negative outcomes of higher absenteeism and turnover and lower productivity and quality. Another negative outcome postulated in this research is that the construction of this labor process also increases occupational injuries. In resolving the extraction of labor problem management may have created a labor process which increases the potential for occupational injuries.

Derber and Schwartz (1983) contend that worker participation is a modification of managerial practice in an attempt to modify the negative outcomes of Taylorist management. Before explicating the relationship between worker participation and occupational injuries, a review of theories of worker participation will be provided.

Worker Participation

Glyde (1984) defines worker participation as: "a relative concept, referring to the degree of worker input into both major and minor decisions that affect the workplace and conditions of employment" (p. 275). This global definition covers all of the various forms of participatory programs which have been implemented in American workplaces. The specific forms of worker participation are reviewed in the next chapter. There has been no prior research which has attempted to draw a connection between worker participation and injuries. At this point the general theoretical relationship will be postulated, how this relationship is modified by each type of participation must wait until more complete information on these programs are gathered.
By the late sixties numerous worker participation experiments had been enacted in the United States and foreign participatory programs had received attention (see Blumberg, 1973). In the mid-seventies, there was an explosion of participatory programs of different types. This surge of activity created theoretical confusion and a jargon characterized by imprecise and meaningless terms (Nadler & Lawler III, 1983; and Mills, 1975). The theoretical confusion was largely due to the different sets of domain assumptions held by the social scientists who studied worker participation. These theories will be presented and then the social contextual factors which can place limitations on worker participation will be explicated.

Theories of Participation

Greenberg (1975) created an excellent typology which categorized the different domain assumptions regarding worker participation into four theoretical orientations. His schools of thought include: Management, Humanistic Psychology, Participatory Democracy, and Participatory Left. There are domain assumptions in each theory regarding: the limit of worker participation, the consequences of participation for workers, and the ultimate social and political consequences of participation. The schools are arranged by Greenberg to denote the degree of social change ranging from low to high.

Greenberg (1975) states that "the goal of management remains one of instituting reforms that will lead to better worker morale, lower absenteeism, a greater commitment to company goals, higher-quality
work, and an end to wildcat strikes. The goal remains productivity, efficiency, and profitability, and the limited reforms in participation must be seen in that light" (p. 194). Thus, management strives to solve the problems created by scientific management without changing the existing power relations which they have been able to balance in their favor. Management needs to retain their dominance in power in order to pursue their primary goal which is the maximizing of profit.

The humanistic psychologist recognizes that the existing conditions in the workplace are not conducive to developing the potential of human beings. A state of affairs that is wrong and should be corrected. This moral position and their concern for the mental health of workers differentiates the humanistic psychology school from the management orientation. Humanistic psychologists utilize their professional skills in designing appropriate reforms and thus workers do not need to play an active role in the formation of programs. The ultimate goal of these social scientists is to reform the existing economic structure which is perceived as being the best possible.

The democratic school of thought is less concerned with workplace problems and more concerned with the role of democracy in society. These theorists believe that the best form of government is a democracy, and democracy is defined as participation which should be extended to every area of life including the workplace (see Pateman, 1970; Mason, 1982). Thus, workers should have the right to participate in the decision-making process of the workplace.
Greenberg (1975) uses the term, participatory left, to delineate members of the political left who have demonstrated an interest in worker participation. The motivation of the participatory left is different from the other schools of thought in that their intention is to change the existing economic and political systems. They would conceive of any alternative reforms as merely cosmetic surgery intended to hide the oppression of capitalism, rather than addressing the structural conditions of capitalism which caused the suffering. The left has failed to provide a well developed plan for how participation can change the conditions of capitalism (Greenberg, 1983).

Adherents to the management and humanistic psychology theories perceive worker participation as a means of resolving problems in the workplace while leaving the economic structure intact. The participatory democracy and participatory left perceive participation as a means of changing the individual and creating a demand for further participation which will ultimately lead to social change. The focus of the democratic school has been the transformation of the individual with little attention paid to organizational and structural hindrances to change. The participatory left, by contrast, is more attentive to barriers provided by the socio-economic context.

Participatory democracy has a well established theoretical base and insights from this theory will be synthesized into a social theory of occupational injuries. Thus a more detailed account of this theory will be provided. Participatory democracy was not constructed by implementors of worker participation programs, but constructed from previous political theory. Pateman (1970) criticized
the present state of political science theory as becoming restricted
to voting behavior and representative democracy. Resurrecting the
political thought of Rousseau, John Stuart Mill, and Cole; Pateman
(1970) extends political activity to all institutions of society.
When individuals are allowed to participate in the decision making
process in all spheres of their lives, better citizens are created.
Mason (1982) building on the work of Pateman describes participa-

tory democracy as:
The form of community rule that seeks to maximize the develop-
ment of individuals. Through participation, participatory
democrats contend, individuals will develop their special
capacities. And it is through political action (including
workplace) that the benefits will be greatest, for the quality
of a man's life is determined by the nature of his activity.
(p. 185)
At the core of democratic theory is the educative role of
participation. As a person engages in decision making activity,
competence is gained, and a better citizen as well as person is
created. The more a person participates, the greater the amount of
future input is desired. As competency and hunger for greater
participation increases, the inadequacy of representative democra-
cy becomes apparent. This leads to a modification of existing social
institutions with centralized decision making giving way to collec-
tive democratic decision making.
In sum, Pateman and her followers believe that humans possess an
almost limitless amount of potential which has not been tapped.
Social structure as it presently exists is designed to keep this
collective power shackled. The only way members of society can
unleash this power is through practice. As citizens gain competency
through, practice society will change into a more democratic form. The workplace is an important arena for this transformation process to begin.

Mason (1982) conceptualizes worker participation as a multi-dimensional concept. He lists five dimensions of participation: extensity, scope, mode, intensity, and quality. These dimensions are theoretically independent, but in practice particular dimensions are strongly associated. Mason (1982) defines these concepts as follows. Extensity refers to the proportion of members in the community who take part in the decision making process. Scope is the number and type of issues addressed by members. Mode is the form of participation (e.g., Do members elect representatives or is there face to face discussion?). Intensity refers to the degree of psychological involvement of members, while quality pertains to the actual impact of the act on decisions.

The work of Mason (1982) does not address how participation is facilitated or hindered by the present structure of society. There appears to be a profound belief that all participation is good and all participation will lead to greater participation. In the next section an example of how participation may possibly serve the existing power relations instead of automatically leading to democracy will be reviewed.

Organizational Limitations

The social context where a worker participation project is enacted may limit the extent to participation granted workers. An
implicit assumption made when discussing worker participation as a solution to Taylorist management is enacting programs in the core sector of the economy. The enactment of programs in this segment of the economy may have restrictions placed upon the extent of participation. This is exemplified by Grzyb (1981) who provides a very interesting and insightful examination of worker participation and the control of the labor process by management.

Grzyb (1981) places the work culture as the central concept in his analysis of the workplace. Grzyb (1981) defines work culture as:

the ways of living on the job (and often off the job as well) that workers devise in their informal groups. It includes all of the various components—norms, beliefs, traditions, rituals, etc.—that are normally encompassed by that powerful concept of culture. (p. 466)

He contends further that "all work culture is oppositional" to capitalist relations of production.

Grzyb (1981) pieces many sociological insights together to form a coherent historical framework for assessing new participatory programs. Grzyb (1981) begins by defining working with skill as:

controlling the work process by solving the continuing problems it presents through those variable elements. The objective involvement of workers in their work is the critical result of any work process requiring skill, simply because such a process demands an integration of mental and manual labour in a continuous and creative interaction with the variable features. (p. 466)

Such skill gives workers a task-based reason to engage in conversation and mutual problem solving exchanges. This interaction binds workers to one another as well as to the task they share. Through technology, management has to an extent deskilled labor. This has produced a negative impact on the work culture insofar as the
collective problem solving which binds workers together is no longer needed.

Grzyb (1981) terms the process whereby the work culture of skilled workers is undermined as "decollectivization". This process destroyed the social needs which bound skilled workers together and allowed them to control the labor process. In fact, workers were separated into small assigned stations in the shop where interaction was difficult even when necessary. Hence, workers became estranged from one another and shared only the basic social amenities.

Once decollectivization has taken place, the conditions exist where management can substitute their cultural products for what had been formerly created by workers. With the annihilation of resistance stemming from the work culture, management can attempt to restructure the organization of work where workers will enact the goals of management on their own initiative. Grzyb (1981) holds that some worker participation programs serve as the organizational means whereby workers are constituted into groups to meet management goals.

The norms and sanctions which are posited in the recollectivized work group ensures the goals and values of management. Grzyb (1981) graphically states, "their members are supposed to pat their own backs, slap their own wrists, and kick their own behinds, rather like children being expected to internalize values" (pp. 472-473). Managerial control is thus ironically established in the one historical vestige of workers' control, namely the informal work culture. The capture of this last bastion of worker resistance can result in
capitalists finally establishing their dominion over the workplace.

Upon completing this picture of despair for workers, Grzyb (1981) presents a caveat which not only modifies this control, but reverses the outcome. He notes that the decollectivization process is never total and the work culture goes underground. Thus, the collective action of workers is not as obvious or strong as was the case when workers engaged in overt control of the labor process. Nevertheless, it still exists.

Though Grzyb (1981) does not explicitly draw a link between worker participation and resistance, he cites literature which supports this view. Greenbaum (1979) recorded a case where conflict occurred between an uncontrollable recollectivized work group and management. The newly formed work group collectively left the company when threatened with dismantlement. The bringing of workers back into a sharing relationship resulted in collective action. Furthermore Grzyb (1981) contends that work culture remains the central locale for the formation of worker consciousness. Bringing workers together to solve management problems can lead to collective resistance in their own interests.

Like Grzyb, Derber and Schwartz (1983) also provide an analysis of the integrative and disintegrative aspects of worker participation. They perceive relative worker autonomy (RWA) to be the emergence of a new stage of capitalist management. RWA is composed of two basic forms, job enrichment and semi-autonomous teams. The new form of management evolved due to the problems created by earlier management strategies, especially Taylorism. RWA is thus a solution,
albeit a solution which carries its own contradictions and problems for management.

Derber and Schwartz (1983) conclude:

The new RWA system is therefore characterized by a structural contradiction because the participative labor process changes used to integrate workers (by increasing their job satisfaction) also tend through other mechanisms to dis-integrate workers (by generating unrealizable and ultimately thwarted desires for control associated with the development of psychological empowerment). The creation of relative autonomy thus by its very nature sets into motion both integrative (corporatist) and dis-integrative (noncorporatist) dynamics. (p. 70)

From the discussion it appears that worker participation potentially has many outcomes on the organization of work. An important influence on the outcome of worker participation is the location of the business in the economic sector. Heckscher (1980) states that worker participation programs are concentrated in the monopoly sector of the economy and the historical dynamics of this sector can explain the emergence of worker participation. This happens to be the sector where the decollectivization process was most complete. An understanding of the economic milieu where a participation program is enacted is necessary in comprehending the limitations of participation and the potential outcomes of the program.

In sum, workers are not able to achieve their full potential as human beings within the existing organization of work. The barriers to human growth were constructed by capitalists through a historical struggle for control of the workplace. In order to make sense out of worker participation, researchers must come to grips with this struggle and the corresponding ramifications for what
occurs in the workplace. Furthermore, the structure of the existing capitalist system needs to be scrutinized in order to assess the impact of the economic structure and how the motives of the implementors affects the outcomes of worker participation. The structure of the economy and the motives of management will limit the potential of participation.

A Note on Employee Ownership

The examples and literature reviewed thus far refer to worker participation programs which are controlled by capitalists in the core sector. In recent years, an increasing number of companies have been purchased by employees or created as worker cooperatives. There is a connection between employee owned companies and worker participation which needs to be noted. For the situational dynamics in employee owned firms for worker participation are different from plans enacted in the core sector.

During the recent recession, there has been a trend for workers to purchase their company when informed that the doors would be permanently closed. Various forms of employee stock ownership plans were utilized to raise the necessary capital to become owners. Though employees own stock which gives them legal ownership, they have not always been able to establish control of the company.

Whyte et al. (1983) examined several cases of employee acquisition of firms and discovered a pattern in which workers moved from euphoria to alienation when there was no change in the everyday relations. Workers and management experienced extremely positive
relation when they were able to save the company. Within a year, however, workers become disillusioned if management does not make changes in how decisions are made. Whyte et al. (1983) found that workers did not have a precise meaning of ownership, but there was a feeling that something should change.

Similarly, in reviewing cases of employee acquisition, Zwerdling (1980) found that firms such as Rath Packing Company did initiate worker participation programs after employee ownership was implemented. There is pressure on management to enact change, but change is not mandatory with ownership. There are cases where no change in management practice occurred.

Another form of worker ownership with a different history is the cooperative. The Northwest Plywood Companies represent the most extensively studied worker cooperatives (Berman, 1967; Bernstein, 1976). These well established companies have been very successful in providing good working conditions and a better wage for workers. Furthermore, their organization of work represents the highest form of democracy in the workplace. Major economic and managerial decisions are made by a majority vote where each worker has one vote. Workers also enjoy a great deal of control over daily work decisions.

Characteristics of recently formed cooperatives are not as well documented. Ellerman (1982) claims that the legal structure of cooperatives secures democracy in the workplace. The relationship between worker participation and ownership will be examined in this research.
Theory

Worker participation is conceptualized as having multiple outcomes. Specifically four outcomes are postulated to have an ameliorative impact on occupational injury rates. These include changes in the work organization, interpersonal relations, the meaning of work, and attitudes toward work. The four possible changes are conceptualized independently but in practice can occur simultaneously. Moreover, the following discussion assumes a state of affairs where worker participation is obtained to its fullest extent. Consequently, it does not correspond to reality. Accordingly, after creating this ideal relationship, some practical limitations which modify the potential of decreasing occupational injuries will be provided.

Grunberg (1983) presents one way in which workers can change the organization of work through participation. Grunberg (1983) contends that the relations of production enacted on the shop floor can effect injury rates. He compared the injury rates of two auto plants where the production process is identical but the relations existing on the shop floor varied. Two Chrysler plants, Poissy in France and Ryton in England, were analyzed. Grunberg (1983) found the injury rate to be about sixty times higher at Poissy than Ryton. He attributes this robust difference to the contrasting nature of the social relations of production which existed in the two plants. At Poissy workers had a weak union and workers were unable to make collective demands on management on the shop floor. While at Ryton workers had a stronger worker consciousness which enabled them to collectively
have a greater input in the creation of working conditions including a lesser intensity of work.

Grunberg's (1983) main thesis can be summarized as follows: "Attempts to increase output through the intensification of labor will decrease workers' safety and increase the rate of accidents" (p. 622). By intensity of labor, Grunberg (1983) means the effort expended by workers on the shop floor. The intensity of labor is modified by the social relations of production. As well as by the balance of power between management and labor, which is embedded in that relationship. Grunberg (1983) concludes that workers are the best protectors of their safety, and when they have the power they will create a work environment which is safe.

Through their everyday relations with management which is supported by their work culture, workers enacted behavior which shaped the intensity of the labor process which in turn resulted in fewer injuries. Thus, under conditions where workers are given an opportunity to control the labor process, it is postulated that workers would design work which can be performed at a comfortable pace. This would reduce the probability of injuries.

Workers might also construct tasks differently and create an alternative system of job assignment. Rather than dividing work into the most routine type, workers would organize work in a more interesting manner. Also workers would be assigned to the work which they find most enjoyable or a system of rotation may be created where boring work is shared. The restructuring of work in the best possible manner for workers would result in their being more attuned
to tasks. This could decrease injuries resulting from workers not paying attention to their work.

What is assumed is that workers will enact their self-interests. Furthermore, it is the interest of workers to create as safe and healthy workplace as possible. The creation of such an environment is also in the interest of the group which is predicted by the educative role of participation. As workers participate they become better citizens and care more about creating the best possible world.

The second factor, a change in interpersonal relations, refers both to the social interaction among workers as well as that between workers and management. In job settings where workers are restricted to a small space where they repetitively perform the same task during the whole shift, there is neither the opportunity or the need to communicate with fellow employees. When the job is created to maximize workers' interests in tasks and when they are provided with the opportunity to participate in the decision making process, a greater bond of solidarity is created among workers. Workers have the opportunity to share information and act cooperatively. The mutual concern arising out of such social interactions will lead to actions which may decrease the probability of injuries. Better informed workers and a greater concern for co-workers will lead to action where workers watch out for one another and share information which will decrease the possibility of injuries.

The role of the immediate supervisor will change with worker participation so that stress might be alleviated. Presently, foremen still act as overseers of production, and punishment is utilized in
obtaining conformity in the rationalized workplace. Through participation, the status differential between supervisor and employee is lessened and they engage in mutual problem solving. Through this problem solving interaction supervisors must first listen to employees and ask for their advice. When production goals are not met, the supervisor and worker have a problem to be solved together, rather than punishment to be meted out by one toward the other. This change in interpersonal relationships can significantly reduce the stress workers experience on the job and decrease the probability of injuries.

The third factor, a change in the meaning of work, is exemplified in multiple ways. As alluded to above, the creation of meaningful work changes the relationship between the worker and the task performed. One reason monotonous tasks contain no meaning is that the worker is not involved in transforming raw materials into a useful product. When workers transform nature into useful products, more is created than a salable product—workers have, in a sense, created themselves. A sense of worth and accomplishment is acquired by workers engaged in the labor process. With this added meaning, workers become more attuned to the labor process, are alleviated from the stress of boring work, and become more knowledgeable of work. This could decrease the potential for injuries.

Though less of an appealing alternative, workers may gain greater meaning from their tasks without any change in the organization of work. The activity of participating in decision making in realms other than work performance (e.g., welfare benefits) may
spillover into the job. Workers may attach more meaning to the job which in turn could lead to the same positive benefits as real change in work organization.

The final relationship is a change in attitudes toward work. Worker participation can enhance job satisfaction which may decrease the probability of an injury. As will be further discussed in the review of the literature, great increases in job satisfaction can be achieved (at least in the short run) with a minor increase in real participation. To sustain positive feelings toward work, attitudes must be reaffirmed for making decisions which matter. This in turn changes the material conditions in a positive direction.

In setting out to establish the connection between worker participation and occupational injuries, the assumption was made that workers can enact decisions that give them control of the labor process. There are, however, constraints placed on the form and extent of participation. The obvious constraint is that worker participation is being enacted in an ongoing economic structure of capitalism.

Any economic system is composed of a complex set of values, goals, and social relationships. The primary goal of capitalism is the pursuit of profit. Therefore, the goals of profit and worker participation can easily conflict, and management might attempt to limit or shape participation in a manner which does not threaten profit. In fact, the underlying promise of increased productivity is contained within many participation programs.

The construction industry serves as a good illustration of the
conflict between goals. Workers in the construction industry have a great amount of autonomy in their work and yet the industry has one of the highest injury rates among industries (Ashford, 1976). One reason for this high rate is the inherent danger of the work itself. Riemer (1979) who conducted a participant observation study of construction, offers an additional organizational reasons for the high injury rate. While it is true that workers are able to decide how to perform their work, they are under a tremendous amount of pressure to maintain high levels of productivity. If workers cannot meet time schedules, then the company will lose contracts and workers face layoffs. Workers find short-cuts to their work which often leads to unsafe practices.

Also, there exists a set of naturalized power and social relationships embedded in the workplace which are hard to transform. Worker participation requires that cooperation and communication replace distrust and punishment. First level supervisors have traditionally been trained to make decisions, give orders, and sanction workers. Worker participation is a threat to the power domain of first line supervisors who may resist changes. If supervisors are successful in blocking changes in the relations on the shop floor, then the potential benefits of participation will not be realized.

Many of the participation programs to be discussed in the review of the literature chapter have limits to the dimension and extent of participation. Even under such limitations, however,
workers may be able to create a safer environment. Even if participants are not be able to enhance safety through a restructuring of the labor process, they may be able to modify some of the dangers which exist. For example, a labor-management safety committee could be established thus allowing the demands of workers for safety equipment purchases to become a higher priority.

The success of workers in creating safer conditions returns us to the issue of control versus resistance. If management is able to use participation to recollectivize the work culture to meet capitalist goals, then the creation of a safer environment is doubtful. The history of capitalism demonstrates no major concern for safety. On the other hand, if participation fosters worker demands which are enacted, then a safer environment may result. Also as long as safety does not become too expensive or attack managerial control.

Even in the worker cooperatives where democracy is developed to its greatest extent, limits are placed on action. Cooperatives still must operate within the market structure of capitalism and face competition from traditionally organized companies. Democracy within the workplace should create better conditions within the workplace.
CHAPTER V

WORKER PARTICIPATION RESEARCH

In this chapter the different types of participatory organizations will be reviewed and either a case analysis or an ideal type will be provided to exemplify the different characteristics of each program. This approach will familiarize the reader with what has been implemented and the results which have been obtained. With this knowledge provided, the participatory programs will be located within the economic system and the social context of these programs will be explicated.

Types of Worker Participation

Various approaches have been adopted in classifying and conceptualizing the characteristics of participation. For example, Derber and Schwartz (1983) first coin the global term, relative worker autonomy (RWA), to denote the emergence of a new system of capitalist management, and then discuss two forms of shop floor programs under the rubric of RWA which they label as job enrichment projects (JEPs) and semiautonomous teams (SATs). Job enrichment programs are conceived of as increasing the individual control of the worker over the job while semiautonomous teams enhance the collective control of workers over their tasks. Other researchers utilize one current concept in the literature but often review other integrate other types of programs with similar organizational structures which
results in combining programs into the same category. Klien (1981) sets out to analyze Quality Circles but notes the similarities with Scanlon Plans and ends by placing Quality Circles under the rubric of Scanlon Plans. Quality Circles and Scanlon Plans as noted below are two separate types of worker participation programs. Finally many discussions place an array of organizational programs under a single generalized term; worker participation as it has been used herein is such a global term. Other global terms found in the literature includes Quality of Work Life, Work Humanization, Organizational Development, Industrial Democracy, Workplace Democracy, Human Resource Development, and Participative Management. Many of these terms contain a double meaning where one usage refers to a specific form of participation while another usage refers to the activity of participation in general or even to an activity outside of the workplace. This later problem is exemplified by the term workplace democracy which in some cases refers to worker participation in the decision making process in the workplace, and sometimes denotes a wider grass roots political movement outside the workplace.

The variety of conceptual approaches and the intermixing of terms has resulted in confusion. In order to clarify the meaning of worker participation, examples of programs cited in the literature will be provided. The examples reviewed will include: Job Enrichment/Job Enlargement, Quality Circles (QCs), Scanlon Plans, Management by Objectives (MBO), Quality of Work Life (QWL), Labor-Management Cooperative Committees, Autonomous Work Groups (AWG), and Majority Rule.
Job enrichment and job enlargement are often discussed in the literature together which gives them the appearance of being synonymous. Job enrichment, however, is a vertical movement where more responsibility and discretion in entailed in the task; while job enlargement consists of expanding workers' activities in a horizontal direction where new tasks are added to the job assignment (Herman & Schervish, 1982). The two procedures, of course, are strongly associated since a major way of enriching a job is the inclusion of new and varied tasks, i.e., job enlargement.

Some social scientists claim that job enlargement does not necessarily require any great change in the job. Nichols and Beynon (1977) report the feelings of a packer in a British chemical company who stated:

> You move from one boring, dirty, monotonous job to another boring, dirty, monotonous job. And then to another boring, monotonous job. And somehow you're supposed to come out of it all "enriched." But I never feel enriched—I just feel knackered. (p. 16)

Such experiences as the British worker are not inherent in job enrichment, the experience largely depends on the specific implementation of the program (Zimbalist, 1980).

Hackman (1975), an academician and well established business consultant, reviewed problems with the implementation of job enrichment programs. Hackman (1975) identified six problems of implementation which are summarized as:

1. Rarely are the problems in the work system diagnosed before jobs are redesigned.
2. Sometimes the work itself is not actually changed.

3. Even when the work itself is substantially changed, anticipated gains are sometimes diminished or reversed because of unexpected effects on the surrounding work system.

4. Rarely are the work redesign projects systematically evaluated.

5. Line managers, consulting staff members, and union officers do not obtain appropriate education in the theory, strategy, and tactics of work redesign.

6. Traditional bureaucratic practice creeps into work design activities. (pp. 130-133)

Thus, the implementation of a job enrichment project is fraught with problems where the guidelines of theory are ignored.

In theory, job enrichment has two essential parts which are: (1) internal motivation of workers to perform well which is accomplished by providing satisfying jobs, and (2) in order to obtain long lasting job satisfaction, jobs must be structured to satisfy the needs of workers. There is no preconceived model which ensures the meeting of these goals. The consultant, however, must follow a rigorous process in determining the effective means for goal attainment. A basic model would include the following steps: (1) a diagnosis of the existing jobs and the perceived needs of workers, (2) discussion of changes with management and workers, (3) education and preparation of the implementors who will be responsible for the enactment of change, (4) preparation of contingencies to meet emergent problems, and (5) an evaluation of the implementation (Hackman, 1975; Janson, 1975).

Davis and Cherns (1975) provide a collection of case studies which exemplify the theory of job enrichment in practice. An
anonymous article from the Davis and Chems (1975) anthology written by an executive for a company where a job enrichment project was enacted was selected to exemplify job enrichment. This case is of special interest since the writer, an executive, reports the interests of executives in job enrichment. Also the case demonstrates the connection between job enlargement and job enrichment.

Management at the plastics firm decided to implement change in the bag-making department in a new facility. In the initial phase, there were eleven employees and two supervisors where the tasks of employees had been divided into small task assignments. Job classifications included two workers at a bag-making machine where one employee loaded, started, and monitored the machine and another inspected the bags for quality and packaged them. Also there were two utility workers who furnished the two machine operators with raw materials and hauled the finished product to a storage area. Maintenance personnel formally assigned to another department serviced and repaired the machines.

The anonymous executive (1975) reported that:

The central idea of job enrichment applied at the plant was to give employees as much responsibility and opportunity to make decisions as their competence and talents enabled them to use, given the constraints of plant layout and technology. The most meaningful and potentially most productive kinds of responsibilities that can be turned over to employees are those which help them to recognize and control major source of "variance" in their working situation. If variance in product specification can be controlled, higher product quality can be expected. (p. 278)

After a careful study of the jobs, management organized the work where the operator not only ran the machine but also inspects the
finished product for quality. In addition to enlarging the task requirement workers were given more responsibility including the authority to reject defective raw materials and inferior products and maintenance of equipment.

Management gained significant results from the program. Labor efficiency increased, maintenance and spoilage costs decreased and six employees were added to the department where each ran a machine while the services of a maintenance mechanic and a supervisor were terminated in that department which saved labor costs. No definitive report of worker attitudes was provided but the executive’s report indicated that there was evidence which supported the conclusion that workers were more satisfied with their jobs.

The additional responsibility provided baggers in the above experiment was very minor, and the decision making domain of workers was not qualitatively increased. In fact, the workers did not even provide input regarding how their jobs would be transformed. Upon analyzing data collected from observing workers, management with the aid of outside consultants reorganized the work in an attempt to primarily meet the needs of management. Because happy or satisfied workers are productive workers, management redesigned the work in a manner conceived as making the work more satisfactory. The theory behind job enrichment is work can be made more satisfying by combining job tasks and offering more variety to the work routine. This happens to be the reversal of Taylorism and the historical degradation of work.

The plastics example is not atypical of many job enrichment
programs. The redesign of the work activity may be very minor. In many cases workers are not even aware that they are participating in a job enrichment program. The major result for workers involved in line production is that they perform more tasks and may be given added responsibility in regards to quality control. In some cases, however, employees are given additional rights such as selecting their own hours and organizing their schedules (Jacobs, 1975).

Critics of job enrichment, such as Barbash (1977), contend that job enrichment is a disguise for lay-offs and speed-ups. To date there appears to be justification for such fears. Higher productivity is a major measure for the success of a program and an enticement for management to enact job enrichment programs. In obtaining higher productivity the time of workers is utilized in a more efficient manner and workers have lost their jobs. This charge of a speed-up has also been directed toward other worker participation programs.

Quality Circles

Quality Circles (QCs) are commonly associated with the perceived success of Japanese management in their core sector in obtaining phenomenal growth and the production of high quality products. Whyte (1983) favorably notes the QCs have not been uprooted in Japan and transplanted in the United States without a careful examination of cultural differences and appropriate modifications. In the United States, QCs still remain largely confined to the core sector of the economy. Well-known American companies which have adopted QCs includes: Bendix Corporation, Conrail, Firestone Tire and Rubber
Klien (1981) defines QCs as:

teams of workers that include managers and nonmanagers who meet regularly to solve production and quality problems and to brainstorm ways to improve productivity—that is, to increase the number of units produced per unit of time and to find other ways of reducing the per unit cost of a product or service. (p. 11)

In order to obtain the objectives of higher productivity and better quality, the existing authoritarian relationship between management and labor must be replaced with a cooperative relationship. QC necessitates a greater sharing of information than traditional management practice and a greater enactment of worker suggestions.

Several social scientists claim that during the seventies that there was a boom in the implementation of QCs in America. Simmons and Mares (1983) estimate that by 1981 over 750 companies had implemented Quality Circles. Unfortunately no detailed case study of the implementation of a QC was located in the literature. One reason for the absence of a pure exemplar in the Quality of Work Life has become the dominant term in American management and many programs are subsumed and combined under this title. This connection will be further explicated in the Quality of Work Life section.

Simmons and Mares (1983) do present some basic sentiments which were extracted from interviews conducted by the authors with managers who have attempted to enact modified QCs. The interviews were conducted with American plant managers who headed companies in the United States which are owned by Japanese firms. The Japanese owners
did not impose their management style on the American managers, but probably did select managers whose style meshed with their own.

The information reported by Simmons and Mares (1983) suggests that these managers have enacted their personal style of communication in the workplace; rather than implementing a new organizational structure which can be labelled as a Quality Circle. The orientation of managers includes a greater sharing of traditional management information with workers, a greater concern for workers as human beings, and open two way communication. One manager reported that he spends one or two hours a day listening and talking to workers on the shop floor. Another has concentrated his efforts on breaking down walls between departments and thus opening up inter-departmental communication between workers. The information provided by Simmons and Mares (1983) indicates that the managers were leery of creating a true Japanese Quality Circle and are searching for an integration of American and Japanese strategies.

Cole (1984), the leading recognized authority on Japanese Quality Circles, reports a sophisticated multi-dimensional program is entailed in the Japanese QCs. Japanese companies invest a considerable amount of expense and time in the training and education of both workers and supervisors. Through this education both groups learn a set of participative guidelines which are enacted on the job. There is also a component which emphasizes collective efforts of workers and supervisors in producing the best possible product. Finally the efforts of workers are rewarded by the company through such plans as life time employment and bonus pay.
Klien (1981) and Simmons and Mares (1983) both note the tremendous difficulty of transposing the rich complex program developed by the Japanese. The general reports on QCs in America indicate that many of the American QCs are the mere enactment of periodic meetings where the executive from upstairs comes to the shop floor to discuss problems over coffee and doughnuts, or personal interaction between supervisors and workers. The aspect of QCs which is new for workers is the additional information about problems faced by the company. In the past production information has been considered none of labor's business. Also workers have more of an opportunity to share information about problems they face on the job.

**Scanlon Plans**

Klien (1981) contends that the Scanlon Plan is an existing American structure where QCs can be fitted. The Scanlon Plan was designed by Joseph Scanlon, an accountant and union official. In 1937 he induced the president of a marginal steel company who was Scanlon's employer to meet with members of the steelworkers union. During this meeting ideas of cooperation, bonus pay, and an organizational structure for employee participation were discussed which formed the basis of the Scanlon Plan (Lesieur, 1958; Batt Jr. & Weinberg, 1978; and Lawler, 1981).

Lesieur and Puckett (1969) recorded the spirit of the plan and its connection with Joseph Scanlon when they wrote:

Scanlon deeply believed that the typical company organization did not elicit the full potential from employees, either as individuals or as a group. He did not feel that the commonly
held concept that "the boss is the boss and a worker works" was a proper basis for stimulating the interest of employees in company problems; rather, he felt such a concept reinforced employees' beliefs that there was an "enemy" somewhere above them in the hierarchy and that a cautious suspicion should be maintained at all times. He felt that employee interest and contribution could best be stimulated by providing the employee with a maximum amount of information and data concerning company problems and successes, and by soliciting his contribution as to how he felt the problem might best be solved and the job best done. Thus, the Scanlon Plan is a common sharing between management and employees of problems, goals, and ideas. (p. 112)

A key organizational feature of the Scanlon Plan is the screening committee which is composed of management and employees. The committee's function is to consider innovative ideas and capital expenditures. The committee, thus, serves as a forum where management and employee representatives try to select actions which will benefit both the company and workers.

Lawler (1981) notes that traditionally Scanlon Plans were more aptly to have been found in smaller companies, but recently large scale organizations have begun to enact Scanlon Plans on the plant level. Unfortunately except for outdated studies a current relevant case studies were not found. Lawler (1981) does review studies which indicate that Scanlon Plans enjoy a high success rate (success ratio is 30 to 14) in meeting management goals. The successful outcomes obtained by Scanlon Plans includes: teamwork and sharing of knowledge at lower levels, fulfillment of social needs, cost savings and higher productivity, higher efficiency, positive attitude change in workers (i.e., less demanding), workers produce more ideas and effort, and strengthen the union due to a better work situation and higher pay. In general, Scanlon Plans appear to provide the same
benefits for the company as Job Enrichment/Job Enlargement and Quality Circles, but provides a greater opportunity for worker participation. Decision making, however, remains in the hands of management.

Management by Objectives

Management by Objectives (MBO) is a modified application of operant psychology to the organization of work. On the surface the connection between worker participation and MBO is not readily apparent. For management and consultants are the primary actors in MBO, they collect and analyze data which is utilized in reinforcing behavior which is deemed appropriate by management. Within MBO there is a component of feedback which often allows or requires the participation of workers.

In MBO the desired outcomes are first identified and then traced to the observable behavior which is considered to cause the desired outcome. The task of the manager or consultant is to provide the conditions which will shape the desired behavior. This is done by reinforcing the behavior which will lead to the desired outcome. Reinforcers are stimuli which have an impact on the frequency, strength, or duration of behavior. An important reinforcer utilized in MBO is feedback where a worker is provided with verbal information about past behavior (for detailed description see, Miller, 1978).21

Miller (1978) provides several case studies from his association with Behavioral Systems, Incorporated, a MBO consultant firm. The case selected to represent MBO concerns a yarn mill. The case was
chosen for its simplicity and yet completeness of a MBO project.

The spinning department of the yarn mill experienced a large number of high bobbins which means the bobbin in the spinning process was not pushed completely down, thus resulting in tangles and lost work hours. The department manager collected baseline data by counting the number of high bobbins for eight days without the awareness of employees. Once the baseline was established a goal for future performance was selected and announced to supervisors and workers. Supervisors were instructed in how to reinforce employees and in turn reinforced by the department manager. The baseline recorded an average of 55.9 high bobbins, by the end of the experiment the negative outcome had been reduced to an average of 8.7. The experiment ended when the department manager was promoted.

In this case the reinforcement which was provided included a public chart of employee performance, words of praise, and coffee and doughnuts. These reinforcers are minor rewards, but can be very important when placed in historical context. Embedded in the reinforcer is a different approach to the everyday relations between management and labor.

In traditional form of supervision, punishment often serves as the first and only reaction to undesired behavior. Operant psychologists who deal with human behavior believe punishment to be an ineffective means of shaping behavior and relies solely on reinforcement except under extreme circumstances. In order for MBO to be effective the established supervising tactics of first line managers must be modified to utilize reinforcement. Such a change may be
beneficial for workers and alleviate stress in the workplace. The success of MBO even more than previous programs depends upon a change in management style, but like other forms the ultimate decision making remains the domain of management. Like QCIs and Scanlon Plans, some MBO projects also entail mutual problem solving and greater decision making by employees with the ultimate control residing with management.

Quality of Work Life

Quality of Work Life (QWL) has become a general term for improvement in the workplace. Cohen-Rosenthal (1980) describes QWL committees as "joint union management efforts with basically an open-ended agenda" (p. 4). If a union is involved in the project, certain parameters of the project are often negotiated with management.3

Though QWL includes a variety of participation programs certain characteristics have emerged in practice. There is a committee framework where workers and management representatives are elected or volunteer to serve on the major steering committee. The committee discusses general issues and then constructs, usually with the aid of a consultant, a participatory program. The participatory projects are usually experimental and are restricted to a single department in the plant on a trial basis. Workers who volunteer for projects are given some form of training which focuses on the acquisition of problem solving skills. Data are collected and examined on performance and work related behavior (i.e., absenteeism, attitudes toward
After reviewing various definitions of QWL across time, Nadler and Lawler III (1983) state that the basic elements are: "(1) a concern about the impact of work on people as well as on organizational effectiveness, and (2) the idea of participation in organizational problem solving and decision making" (p. 27). The goals of QWL are twofold: enriching the job experience of workers by providing meaningful work and meeting the organizational goals of the company, such as higher profits and productivity. In general the company benefits are more important to management, and union officials are more concerned with creating meaningful work (for different viewpoints, see Bluestone, 1977; Fuller, 1980; Whyte, 1983).

Tarrytown, a General Motors plant in New York, will serve as an exemplar of a QWL project. Tarrytown was one of the first sites for the implementation of a QWL project which was negotiated and written into the 1973 contract between the United Auto Workers and General Motors. This case not only contains the earmarks of many QWL projects, but has been reviewed from different perspectives. The summary of the case is based on articles by Horner (1982), a union official who was deeply involved in outlining the QWL policy and the selection of the site, and Guest (1979) an academician who has studied work for over thirty years.

Before the QWL project, Tarrytown was recognized as a plant suffering severe problems. Horner (1982) stated that the plant:

ranked number 17 in quality, was one of the highest grievance plants, and had more strikes or strike threats than most others.
In addition, relations between union and management representatives were very poor, as was the relationship between workers and supervisors. Worker absenteeism was very high, approximately 12 percent. Most other plants ran around 8 percent. (p. 38)

Because of these problems which had a long history of festering and poisoning the relations between management and employees, Tarrytown was perceived as a tremendous challenge for the QWL project.

The first action in implementing the project was the establishment of a steering committee which was composed of four workers and four management representatives. In addition to establishing guidelines for their action the committee needed to provide information as to the goals and objectives of QWL to all workers. With this foundation laid the steering committee proceeded to initiate a pilot project.

The initial project was implemented in the back window installation group where 35 workers were given twelve hours of training in problem solving techniques and an array of team building topics at the expense of the company. Sessions were held where workers were encouraged to express their ideas on how to solve production problems. Specifically management was concerned about glass breakage and water leaks.

Many workers reported that they entered the program with skepticism. Many workers found that they received satisfaction in watching their ideas transformed into reality and remarkable results were obtained. The charts which tracked damages indicated that the company's breakage costs were reduced by $68,000. Workers also reported that their work had become more enjoyable and meaningful.
As the QWL was gearing up and diffusion of the project into other areas was taking place, a lay-off crisis occurred. Due to market conditions half of the workers were laid off. The QWL experiment was also a casualty of the economic downturn. With the original group disbanded due to plant transfers or lay-offs the continuity of the program was disrupted.

Plant management remained committed to the effort, and continued to support the program. In 1977, a plant wide program was embarked upon where all workers received problem solving training and would be able to enact projects in their work area. Also orders increased and workers were called back and the whole plant became a QWL project.

Tarrytown has been declared a success. Guest (1979) states:

Although not confirmed by management, the union claims that Tarrytown went from one of the poorest plants in its quality performance (inspection counts or dealer complaints) to one of the best among the 18 plants in the division. It reports that absenteeism went from 7 1/4% to between 2% and 3%. In December 1978, at the end of the training sessions, there were only 32 grievances on the docket. Seven years earlier there had been upward of 2,000 grievances filed. Such substantial changes can hardly be explained by chance. (p. 85)

The experience of Tarrytown appears to represent typical QWL projects except for the diffusion of the project to encompass the whole plant. Walton (1979) demonstrates that diffusing the project remains a problem for most projects. Many QWL projects never get beyond the experimental stage where only a handful of workers participate in the program.

Workers involved in QWL, as reported in the literature, are more satisfied with their work and attach more meaning to their work. Workers usually receive some type of problem solving training which
is utilized on the job. For workers whose jobs have been historically degraded and broken into their smallest components, QWL provides a new and exciting experience. This experience of watching their ideas transformed into action is one of the main rewards for workers. In some cases workers receive some form of bonus pay and security may be increased when a successful QWL project is enacted in a marginal operation.

The bulk of rewards as reported in the literature are reaped by management. These benefits include: lower absenteeism, lower turnover, higher productivity, greater commitment from workers, lower costs, and fewer grievances. Many of these problems have been associated with the application of Taylorism (Braverman, 1974). Through QWL management has been able to solve these problems without a basic change in the power relations in the workplace. Though workers are allowed to participate or provide greater input into the decision making process, the ultimate decision remains a part of management domain (Heckscher, 1980; Grzyb, 1981).

One of the problems encountered in QWL projects is the entrenchment of hierarchal authoritarianism (Alexander, 1984; Kornbluh, 1984). These relations must be replaced with cooperative relations between management and labor; and the relationship between the worker and the job must change. QWL offers the potential for workers to gain greater control over the labor process by making decisions concerning how the task will be performed, but there remains doubt if new open ended management styles will give way to tradition (Kornbluh, 1984).
Labor-Management Cooperative Committees

Cohen-Rosenthal (1980) states that a labor-management committee is very similar to a QWL committee except the former has an open agenda whereas the labor-management committee is formed to solve specific workplace problems. In many cases, the structure and function of the Labor-Management Committee and the QWL cannot be distinguished and the terms are often used interchangeably (Batt Jr. & Weinberg, 1978). Labor-Management Committees are often charged with solving the same workplace problems as QWL.

Batt Jr. and Weinberg (1978) list many companies with Labor-Management Committees and briefly describe some of the projects. Some of the companies as Labor-Management Committees are categorized elsewhere as QWL programs. Batt Jr. and Weinberg (1978) state that companies with committees includes: Chrysler, Bendix, Dana, Rockwell; and many food companies including A & P, Giant, Heinz, Kroger, and Safeway. Included in the tasks which have been dealt with by Labor-Management Committees are: organizing and designing the layout of a new plant, performing work inside the workplace which formally had been subcontracted outside the plant, and the selection of key supervisory personnel. The same constraints which are placed on QWL projects apply to Labor-Management Committees. Thus at all times management has the right to veto decisions of the committee.

In addition to describing a form of worker participation within the workplace the term, Labor-Management Committee, has a second meaning which refers to a community organization. This form is
exemplified by the Jamestown Area Labor-Management Committee (JALMC) which is documented by Whyte, et al. (1983). Like other committees the JALMC was formed to meet a specific need, but unlike predecessors the committee was formed to solve the problems of a community as well as specific companies.

Jamestown, New York was considered a poor choice for corporate investment. Workers of the town were largely unionized and workers were accustomed to what corporate planners considered high wages. The unionized workers of Jamestown had a reputation for fighting for the resolution of grievances through work stoppages. As companies moved to better labor climates and few corporate replacements appeared, the local citizenry were faced with a dying town.20

The economic crisis of the town lead to the formation of the JALMC with the intent of changing the business climate of the community. The committee was able to obtain federal funds from the Economic Development Administration (EDA) in order to plan and enact projects. The numerous projects which were enacted within the workplaces proscribed the objectives described under QWL where cooperation, economic goals, and meaningful work was pursued in a joint effort between labor and management. Whyte et al. (1983) concludes that Jamestown is today facing a bright and exciting future rater than economic ruin.

In addition to providing more meaningful work, Jamestown also provides a political means for the survival of communities. As the previous chapters have indicated many communities face devastating consequences due to the development of highly mobile capital. Towns
are left with no economic infrastructure as plants move to better labor climates which is defined as cheaper labor markets. Labor-Management Committees may be a way where communities can rebuild after disastrous plant closures. This potential of Labor-Management Committees remains largely untapped, as most committees at this point serve the same function as QML projects. Like QML, Labor-Management Committees are largely concentrated in the core sector of the economy.

**Autonomous Work Group (AWG)**

Derber and Schwartz (1983) note that many observers of worker participation programs consider Autonomous Work Groups to offer much more change than the projects discussed thus far. The main purpose of the AWG is to return control of the labor process, the organizing of the performance of work, back to workers. As Lyman Ketchum, an organizational specialist for General Foods, stated; "They (workers) have to have real control, and not just over simple stuff like when they take a coffee break--it's the real guts of the job' (quoted in Zwerdling, 1980).

Workers are formed into groups where the members decide on task assignment and the pace of work. A group leader is either assigned by management or selected by the group. The leader provides leadership through example rather than command, and the role assumed is facilitator of social and work relationships, rather than overseer of labor. Each member of the team learns as many tasks as possible and a form of job rotation is enacted.
Jenkins (1973), Zwerdling (1980), and Simmons and Mares (1983) have examined the Topeka System which will be utilized to exemplify AWG. The Topeka System refers to a General Foods Gravy Train Plant which began operations in Topeka, Kansas in 1971. From the offset the new plant was designed to maximize the freedom and decision power of workers. During the first few years the plant was repeatedly heralded as a success and an exemplar of future management. In recent years problems have emerged in the plant and the future of the AWG remains in doubt.

At the end of the sixties General Foods was reaping large profits from growth in the dog food market. Kankakee, Illinois was the only dog food plant owned by General Foods and the plant was experiencing severe troubles. There were racial tensions within the plant, violence toward supervisors, and frequent grievances. Zwerdling (1980) documents one case of sabotage where "an entire day's production had to be scrapped after an employee threw green dye into the dog food vat" (p. 20).

The home office decided that a better way had to be found for the production of their product. A new plant was to be built and the new operation was to be organized where workers and managers could reach their fullest potential. The goal of the planners of the new plant was to devise a system where workers could satisfy ego needs which would ensure high productivity and efficiency for the company (Zwerdling, 1980).

Before the plant opened management took great care in screening prospective employees. The applicants for team leaders underwent a
particularly rigorous interview process. The company did not want foremen but coaches who possessed, "team spirit, resourcefulness, flexibility, and emotional openness" (Zwerdling, 1980, p. 21). Once the production workers and team leaders were selected by management and their training was complete, then the plant was largely turned over to workers.

At company expense, workers attended participation conferences where they expressed their euphoria with the Topeka System. Workers did not experience differential treatment by status. For example, vested privileges of hierarchy, such as preferential parking and differential quality in carpet did not exist at the plant. Workers played an important role in the hiring and firing of fellow employees. The team formed a committee which met on a regular basis to discuss any problems effecting group performance. Included in their discussion was the confronting of fellow workers or group leaders who were not perceived as contributing their fair share. Workers determined which sanctions should be utilized toward fellow workers.

Workers early in the project also maintained that they actually controlled the production process. In conventional dog food plants, engineers are hired to control the cooking and mixing process. At Topeka workers made decisions concerning how the dog food should be manufactured and served as quality control agents over the production of their product.

For the first several years, workers at Topeka reported that they were very satisfied with their jobs. This satisfaction was manifested in economic benefits for the company. Zwerdling (1980)
reported that:

the factory operated for almost four years without a single lost-time accident; only 70 workers have been producing the levels of output which corporate engineers had expected 110 workers would be needed to produce. Absenteeism has remained below 1.5 percent, and the factory has achieved unit cost about 5 percent less than at General Foods' conventional plants, saving about $1 million per year. (p. 24)

In the past few years, however, there has been a deterioration of the positive work climate and problems have emerged. The satisfaction of workers has declined and the decentralization of decisions has started to revert to conventional management. Workers still report that working conditions remain better than what is provided by alternative conventional employment.

The direct cause of the deterioration of participation at the Topeka plant has not been established, but the explanation is considered to be multi-faceted and interactive. First, the original plant manager who was very committed to worker participation had been replaced by a manager who is perceived as being skeptical and unsupportive of participation. Second, in recent years workers have faced greater pressure to meet higher production goals. This pressure has decreased the time workers previously spent in discussing problems, so that they can get on with the work. Third, the enthusiasm for the program wore off as workers continued to face the realities of the job. As one worker stated: "We were in the clouds for a long time, but 300 tons of dog food a day, every day, can bring you down to earth in a hurry" (quoted in Simmons & Mares, 1983, p. 197). Finally, some began to perceive their control as illusory. These workers felt they were empowered to only make decisions
which would be approved by management. Simmons and Mares (1983) have been informed by management that the original structure of participation has been reinstated and Topeka remains a very profitable plant, but the euphoria has waned and the future is uncertain.

Several conclusions can be drawn from the Topeka system and AWG in general. AWG provides workers with a greater opportunity to organize and direct their performance of work. Workers who are provided with the opportunity to control their work experience have greater job satisfaction than workers in comparable conventional plants. AWG are formed, however, in capitalist enterprises and must be amenable to goals and conditions of this system. Thus, workers are expected to enact behavior which ensures the profitability of the company and remain loyal to management.

As noted by Heckscher (1980) and Wrenn (1982), AWG raises the question of control. Autonomy of workers threatens the authority of first line supervision and rests greater decision responsibility in the hands of workers. As workers participate in decision making, they may desire to increase the boundaries of their domain which would threaten the managerial control of the plant. Wrenn (1982) contends that to date AWG has not imposed any threat to capitalist control. For workers have not asked for anything that management was not willing to give. Furthermore, Heckscher (1980) describes modifications within the AWG which ensures the pursuit of capitalist goals. For example, in one company team leaders were trained to constrain discussion in meetings to relevant issues which were defined as workplace problems of production. In sum, AWG has great potential
for alleviating many of the problems stemming from Taylorism and creating more meaningful work, but presently demonstrates no potential for social change.

**Majority Rule**

Majority rule involves workers voting on decisions which effects the company which is a break from the preceding participation plans. In the United States, majority rule is restricted to the worker cooperative form of ownership. Unlike the other participatory programs, worker cooperatives entails control by workers of the company, and has the highest evolved form of democracy within the workplace (Bernstein, 1976).

The Northwest Plywood Cooperatives have by far received the most attention of social scientists (Berman, 1967; Bernstein, 1976; Greenberg, 1980; Zwerdling, 1980). There are about 16 plywood cooperatives operating in the Pacific Northwest which have been in existence for over 20 years. The participatory structure of these cooperatives vary, but Zwerdling (1980) lists the common characteristics as:

- each worker owns one share of the factory and cast votes on everything from choosing the board of directors—usually around seven or nine workers from inside the mill—to formulating corporate policies such as sick leave, purchasing equipment and making real estate investments.

- Every worker earns equal pay, from shopfloor sweeper to the co-op president, and every worker receives an equal share of the annual profits. (p. 95)

The participatory rights of workers are not a gift from management which can be rescinded at any time but a part of employee
ownership. An indication of this control is illustrated by the fact that workers have the right to hire and fire managers, but managers cannot hire or fire workers. Nor can managers implement important decisions without approval of cooperative members.

Overall the evaluations of worker cooperatives are very positive. Workers enact more cooperative behavior on the job than under conventional management. If a fellow worker needs a quick hand or information, you help out. Greenberg (1980) demonstrated that cooperative workers are more satisfied with their jobs. Berman (1967) found that cooperatives average 30% higher productivity rates than conventional firms and are able to pay higher wages. Workers demonstrate a commitment to their company and to themselves. Workers search every alternative to keep their brethren on the job during slack times and hence workers need not worry as much about lay-offs as conventional workers.

Workers within the cooperative recognize the existence of problems and individuals are not always happy with the collective decisions made in their business. Bernstein (1976) reports that some of the highly skilled workers resent equal wages being paid to unskilled workers; even though the equal pay concept represents the central tenet of collectiveness. Also some workers fail to participate in the organization, because they perceive their job like work at any other company. The failure to participate places a greater burden on those who do participate and the ability to make the best collective decisions is less probable as the number of informed members decreases.
Social activists who have studied the cooperatives are disturbed by the inability of cooperatives to generate other cooperatives or even reproduce themselves. Zwerdling (1980) is troubled by the number of cooperatives which are selling out to large corporations for money. Also the plywood companies will not be able to reproduce themselves unless they create alternative stock distribution plans. At the present time the value of stock owned by retiring owners has increased to such an extent over time that young workers cannot buy into the company.

Consensus is another form of democratic rule which is found in some of the smaller cooperatives. Jackall (1984) provides a case analysis of the Cheeseboard, a small cheese and bake shop cooperative, which is governed by consensus. A special organizational framework is required in order to enact this type of governance. At the cheese shop employees are recruited through the informal network of employee friendships outside of the cooperative. All prospective employees must work with existing personnel in order to ensure harmonious relationships in the workplace. Through these means a homogeneity of beliefs and values among workers is secured. Also the Cheeseboard was originally owned by a charismatic couple who transformed their business into a cooperative, and remain a dominant example in providing guidance for the appropriate goals for the cooperative to follow.

In sum, social observers of the cooperatives conclude that these organizations have been extremely successful in economic terms and have created better working conditions. The cooperatives are not
utopias, but they do provide workers with greater opportunities in achieving their potential. In the next section the cooperative will be further discussed as a means of ownership.

All of the participatory programs discussed in this section provide an alternative organization to the conventional corporate enterprise. Many social scientists contend that the emerging alternative forms of management, with the possible exception of the cooperative which has different historical roots, is a reaction to Taylorism or the rationalized workplace (Derber & Schwartz, 1983; Grzyb, 1981; Brecher, 1978). All of the programs attempt to increase the meaning of tasks by workers and give them more responsibility which would satisfy ego needs. Underlying these programs is the premise that meaningful work will create satisfied workers which in turn will result in labor harmony and increased profits. The exact role that worker participation plays in contemporary society will be clarified as these programs are located within the economic structure.

Ownership and Worker Participation

As noted above many participation programs are concentrated in the core sector of the economy. In addition to conventional capitalist ownership, certain types of participation programs are associated with emerging alternative forms of employee ownership. In creating a typology of employee ownership, Toscano (1983) identifies three types of alternative ownership as: direct ownership, employee stock ownership (ESOPs), and producer cooperatives. In order to comprehend
the effects of participation on companies and their workforces, Toscano (1983) contends that they must be placed in the precise form of ownership.

Core Sector/Conventional Ownership

When placing participation programs within an economic context, social scientists locate participation in the core or monopoly sector of the economy (Mills, 1975; Walton, 1975; Heckscher, 1980; Wrenn, 1982; and Kornbluh, 1984). Recent studies also indicate that there has been a dramatic increase in the number of companies from the Fortune 500 list which have enacted participation programs. A review of this literature will enhance our understanding of why worker participation exists and its potential for alleviating workplace ills.

Mills (1975), director of the non-profit National Quality of Work Life Center, assessed the participation programs enacted during the mid-seventies. Six distinguishing characteristics of companies with Human Resource Development (his term for worker participation) were discerned by Mills (1975) which can be summarized as:

1. Large companies with assets well up in the Fortune 500 list.
2. Well managed companies with high past performance records and earnings.
3. A higher proportion of social psychologists on staff than the industrial average.
4. New participatory management policies are enacted by management at the top of the company which is then filtered down through the organization.
5. Efforts in these companies are focused on a combination of social and mechanical change of jobs.
6. Implementation has occurred in nonunion plants and offices. In fact some practitioners use effects to weaken union strength, however unions became more involved in the programs in the seventies and assert more control. (pp. 124-126)

Mills (1975) concludes his article by suggesting the increasing interest in worker participation or human resource development is that this new form of management is promising in providing a high return on investment. An underlying premise for this argument is that large companies which are located in the core sector retain the most far sighted and innovative management. This is one hypothesis for why worker participation evolved now and in the monopoly sector.

Kantor (1978), a well known authority on work, assessed worker participation in these unflattering terms:

such innovations are much more prominent in professional conferences than they are visible in practice. Hard data on the frequency of work innovations are difficult to find. But a recent New York Times estimate was that only 3,000 workers were under job enrichment schemes in the United States. (p. 69)

Walton (1979) reviewed the literature on worker participation and concluded that there had been a continuous growth in participation which represented only a minority of Fortune 500 companies. He further concluded that there was concentration among leaders of industry. Heckscher (1980) cited an inside source of the participation movement who estimated that from one-third to one-half of the Fortune 500 companies had some version of participation. The dramatic increase may be partly due to an inflated figure was provided by the informant, but the evidence suggests that there has been a dramatic increase in the number of participatory programs enacted in the core sector of the economy. Kornbluh (1984) in

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reviewing findings of a New York Stock Exchange survey conducted in 1982, confirmed the recent phenomenal growth in participation programs.

Heckscher (1980) not only argues that the companies of the competitive sector which are more concerned with survival than creating meaningful work, but also contends that conglomerates, "arrays of subcompanies united by their profitability," are disinterested in worker participation. In the case of the conglomerate there is little loyalty to the product or service provided; hence productivity is often a primary goal of worker participation within it. Often pursued in the core sector is not of interest to the conglomerate firm. Profit is acquired by the conglomerate through the selling of the declining business and the purchase of the rising star. Thus two parts of the economy do not have a vested interest in worker participation—namely, the competitive sector and the diversified corporation in the core sector.

The next step in explicating the role of participation in the economic system is to report why managers in the core sector are interested in worker participation. The most prevalent explanation given by managers is that the conditions they face requires a new solution. These conditions are an outcome of past conditions as explicated in the history chapters. Derber and Schwartz (1983) state that:

the new RWA (relative worker autonomy) structures are emerging because the existing hierarchial or Taylorist structures have produced unacceptable problems of job alienation and low worker commitment reflected in high absenteeism, turnover, etc., and contributing to crisis of performance and productivity. The new
structures are designed to fundamentally attack the problems of worker alienation by increasing job satisfaction and thus worker integration and performance. (p. 68)

The HEW (1973) report, Braverman (1974), and Garson (1977) are a few of the accounts which examine how the existing working conditions oppress the human spirit on the job. Work on the continuous flow production line in the modern capitalist factory is loud, dirty, boring, repetitive, and monotonous. As the same action is repeated thousands of times a day, workers minds drift into peaceful retreats of fantasy.

The organization of the labor process has become the naturalized right of management, but this right has resulted in costs. Workers in the rationalized factory are alienated. Workers find no meaning in their work for there is none, and they are estranged from themselves because they lack the opportunity to test their abilities. Alienation results in problems of high turnover, sabotage, high absenteeism, etc. Some Marxist oriented observers of the workplace perceive worker participation as a management strategy where some of the most odious ills of scientific management will be alleviated, but managerial control will be left intact where the accumulation of capital and exploitation of workers will continue (Wrenn, 1982).

Sidney Harmon (1977), former chairman and president of Harmon International Industries and a doctor of psychology, has been strong advocate of worker participation and has enacted important experiments in his own company (Macy, 1980). Harmon also recognizes that workers are not satisfied with their work, but offers a historical explanation which opposes the view established in the historical
chapters. In testimony before a U.S. House of Representatives sub-committee concerning the Human Resource Development Act, Harmon (1977) stated:

the day is past when the American worker can be viewed as a simple part of the productive process. There was a time in our history when people were quite prepared to serve as replaceable parts in the overall machine. They could perform mundane tasks at the factory or mine but were able to retain a sense of personal worth, dignity and equilibrium by returning at night to their positions as the head of their families. The family simply does not occupy that role in American or European life any longer. (p. 459)

Job enrichment/enlargement, QCS, Scanlon Plans, QML, Labor-Management Committees, and AWG have all been enacted in the core sector, indeed the cases reported indicate that there is a concentration of companies from the Fortune 500 list. These programs are designed to resolve the problems currently faced by management without relinquishing managerial control. Thus there are limits to the extent of decisions made by employees.

Direct Employee Ownership

Toscano (1983) defines direct ownership as a form of ownership where "employees own stock in a company personally and individually (p. 584)." Such a form of ownership is usually found in small businesses. The Vermont Asbestos Group (VAG) is an insightful case where a larger sized company attempted direct ownership due to problems created by the economic structure (Zwerdling, 1980; Carnoy & Shearer, 1980; Toscano, 1981; Simmons & Mares, 1983).

The 1973-75 recession brought a wave of divestiture from marginal plants by corporations seeking higher profit centers. One
such instance was an asbestos mine with a poor predicted future which was scheduled for closure by GAF (General Anahine and Film Corporation). Workers facing the loss of livelihood took collective action to avert catastrophe. Workers from the mine and members of the community gathered for a general meeting where a committee was formed to prevent the plant closure. Various tactics were utilized in seeking a solution before John Lupien, a maintenance supervisor suggested that the workers buy the plant (Zwerdling, 1980).

A complex financial package was offered GAF which included state and federal guarantees, a GAF mortgage and 2,000 shares of stock priced at $50 per share. A limit of 100 shares was placed on individual ownership and at least 51% of the stock would be retained by mine employees. Workers then spread out into the community selling stock door to door. The community was extremely supportive of the miners efforts and the employees took possession of the mine on March 31, 1975.

The early reports of employee ownership were very promising, the impact of ownership boosted the morale of the employees and high levels of satisfaction and productivity were recorded. The daily operations of the plant were firmly controlled by former management and no changes were made. Whyte et al. (1983) found that if no changes occur then employees will move from euphoria to resentment. At VAG management made no attempt at change, workers from the beginning were seen as merely saving their jobs, rather than as serious investors. Clear information was not provided workers which created a barrier to cooperative efforts, and there remained a
veil of mistrust and suspicion. In the spring of 1978, many of the workers sold their stock to Howard Manosh, a local contractor who wanted to acquire the mine and did (Zwerdling, 1980).

Few firms have been acquired through direct ownership tactics. The small number of cases which do exist suggest that there is no necessary relationship between worker or employee ownership and worker participation. In fact the VAG case demonstrated how the hierarchal structure endemic to capitalists enterprises was retained after the mine was acquired. Workers involved with direct ownership plans, however, do desire greater say in the decisions made by their company (Hammer & Stern, 1980). This issue will be discussed further in the next section on employee stock ownership plans which share similar characteristics to the direct ownership plans.

Employee Stock Ownership Plans (ESOPs)

Louis Kelso, a corporate and investment banking lawyer, was the creator of the employee stock ownership plan (ESOP). Kelso's belief was that making workers little capitalists would increase their commitment to the company and the capitalist system which would result in higher profits and more satisfied workers. Through his plan workers would be able to participate in capital ownership (Whyte et al., 1983; Ellerman, 1982).

There is a variety of ESOPs with different and often complex legal structures which serve different purposes (see Weyher & Knott, 1982). For this project only two purposes need to be mentioned which are capital investment and acquisition of workplaces by employees
(Berman, 1976; Ellerman, 1982). Originally corporations mainly enacted ESOPs in order to raise investment capital through a complex tax plan and financial reorganization. What made the ESOP germane to worker participation was that it became a means whereby workers could raise capital in order to buy their company.

Before proceeding into a discussion of ESOPs, it may be helpful to provide the following definitions of important terms:

1. ESOP: a particular form of employee benefit plan where employees may acquire stock under the guidelines of the Employee Retirement Income and Security Act of 1974.

2. Employee Stock Ownership Trust (ESOT): mechanisms whereby the stock purchased or granted to workers resides and is overseen by trustees.

3. Stock bonus plan: company contributes shares of its stock to the ESOT. A form of ESOP.

4. Leveraged ESOP: a type of ESOP which is utilized in financing capital investment. The ESOT secures a loan from a financial institution which is used to purchase stock in the company. The cash to the company can be used for capital improvement or investment capital for establishing a new firm, including the purchase of the company by employees (Toscano, 1983; Ellerman, 1982).

The stock bonus plan and the leveraged ESOPs are similar in that both carry shares of stock equal to the value of the company, and votes are tied to the ownership of stock. If the stock, however, is placed in a trust; then workers may not be entitled to voting rights. Voting rights are usually assumed by the trustees of the trust unless special provisions are made (Ellerman, 1982).

South Bend Lathe, Inc. a manufacturer of lathes, drills, and punch presses is a company where employees have become owners through an ESOP. In 1976 after years of economic troubles, the owner decided to rid himself of the company, but could not find a buyer except a
to rid himself of the company, but could not find a buyer except a
corporate liquidator who would close the plant. Richard Boulis,
president of the plant, brought in consultants who formed an ESOP as
an alternative to closing the plant which was readily accepted by
employees (Zwerdling, 1980).

South Bend Lathe followed the same pattern as VAG in its
management-employee relations. The workers believed somehow they
would have more say in company decisions. When self-management
never emerged many workers became dissatisfied. A difference from
VAG is that the management of South Bend Lathe has responded to the
demands of workers and has enacted participatory plans. The workers
at South Bend Lathe retain their union which has been involved in
trying to create a more democratic workplace (Simmons & Mares, 1983).

One option unavailable to workers at the lathe plant is control­
ling the company as stockholders. All of the company's stock has
been placed in an ESOP, thus voting, until the stock is distributed
to employees remains in the hands of trustees who usually vote in
the interests of management (Ellerman, 1982). The ESOP is a leverag­
ed type where bank loans were acquired to purchase the company from
the owner. The stock is to be distributed to employees as the bank
loan is repaid. If the company remains solvent employees will
individually own the company. At the point when a majority of shares
are acquired, it remains to be seen if workers can collectivize their
vote in their own interests.

ESOPs and direct employee ownership plans generally emerge when
a crisis is perceived as forcing the plant to close. Workers have a
jobs, but employees involved in plant acquisitions pay a price for ownership. In order to purchase the plant they must spend a part of their savings on stock purchases or forego benefits which is another form of stock purchase. Ownership is not just handed over to workers, rather it is something they have purchased. With ownership workers believe they are entitled to participate more in the development and implementation of decisions. Workers are likely to demand that the organization be changed to accommodate their needs. Worker participation programs in the core sector are initiated by management who reserve many rights including the return of their participatory gift to workers.

The location of ESOPs in the economic system has not been clearly established. The salient feature of ESOPs that has been established is that these companies face a dim economic future. In some cases the company may be an individually owned enterprise before the buyout or it may be a diversified company owned by a conglomerate.

Cooperatives

The sub-section on majority vote exemplifies the form of cooperative ownership in the review of the Northwest Plywood Cooperatives. At this point only a few comments will be added which further distinguishes cooperatives from other forms of ownership. First and foremost cooperatives contain the greatest development of democracy in the workplace in the United States. The final decision making power rests in the collective hands of the workers who own the company. Decision making is not a gift from management but a basic component of the organizational structure.
A second characteristic of a collective is that its size must be limited in order to be effective. Bernstein (1976) states:

Apparently a self-governing manufacturing unit cannot go much above 350-400 members without encountering serious discontinuities of communication, interpersonal knowledge, interaction, etc. Larger collectives that aim for self-government usually find they have to segment themselves into units of this size or smaller, and then send delegates from each unit to a coordinating unit. (p. 26)

Cooperatives are also restricted in the ventures they undertake due to limited capital. Carnoy and Shearer (1980) review historical evidence which indicates the hesitancy of conventional financial institutions to support cooperatives. Berman (1976) contends that even ESOPs are easier to finance, because bankers are more at ease with the financial structure of the ownership plans, and in some cases governmental support is involved which is not easy for cooperatives to obtain. Though in recent years more assistance has been available to newly formed cooperative companies, there remains limitations of economic support for their endeavors (Jackall & Levin, 1984).

A final characteristic of the cooperative is that some contain an explicit political ideology. Cooperatives with a political ideology are largely restricted to smaller concerns whose members share a counter-culture experience of the sixties and perceive their work as a rejection of the establishment (Case & Taylor, 1979; Jackall & Levin, 1984). The Hoedads is one exception where a large cooperative has retained a dimension of political activity. The Hoedads, a tree planting firm, supports laws which will protect the environment, but their support is limited and workers are not
mandated to accept their beliefs.

Most cooperatives are created from scratch and do not inherit the organizational structure of previous conventional management. Cooperatives are best conceptualized as anomalies in the capitalist system. They do not fit into the capitalist system, but their existence does not threaten capitalism. The lack of a threat may be due to the limited number in existence. Participation in cooperative is an integral part of these companies.

General Research Questions

In the next chapter data collected for this project will be presented which will clarify the relationships contained in this chapter concerning ownership and worker participation. Also the relationship between decision making and occupational injury rates will be examined. Certain types of decisions are contained within specific programs, and that association needs to be empirically established especially in light of confusion created by the interchange of terms. The analysis will clarify which types of decisions are associated with worker participation and ownership.

The second thrust of the analysis is to examine the relationship between worker participation and injury rates. Instead of examining the label placed upon worker participation programs, the type of decisions will be associated with injury rates. Section 4.8 of the survey instrument contains 18 questions which describe different decisions workers can make. It is contended that the greater the decision power of workers, the lower the occupational injury rate will be.
In order to assess the potential of worker participation as an agent of social change, the precise role of alternative management or ownership needs to be explicated. A first step toward this goal is taken in this chapter. First, an overview of the method employed and the limitations of the study will be noted. Second, characteristics of businesses with participation programs will be described and these characteristics will be examined by the form of ownership. Third, the decisions made by workers participating in the different programs will be explicated; in an attempt to clarify the ambiguity contained in previous literature regarding the forms of programs. And finally, the relationship between the decision power of workers and occupational injuries will be examined.

Methods

A six page mail questionnaire was sent to companies which had been identified as having either an alternative form of management or ownership. Four contacts were made with respondents: (1) a pre-questionnaire letter explaining the purpose of the project, (2) a second explanatory letter accompanying the questionnaire, (3) a follow up reminder, and (4) a final reminder with a second copy of the questionnaire enclosed. This procedure has been found by Robin
(1965) as increasing the probability of obtaining a high return rate. The following section will describe the procedures enacted and encountered which place limitations on the interpretation of the analysis.

Sample and Subjects

A purposive sample was utilized in distributing the mail questionnaire which was entitled the "Work Life Questionnaire" (see Appendix A). A list of organizations concerned with alternative forms of management or ownership was generated while reviewing previous literature. These organizations were contacted and a listing of companies with either worker participation programs or employee ownership were acquired from three different organizations which provided the sampling universe for the study.

Labor-Management Services Administration in the U.S. Department of Labor has compiled a list of various types of worker participation projects including: Quality of Work Life, Quality Circles, Scanlon Plans, and Labor-Management Committees which was published in 1983. The list contains over 150 companies, and provides contacts as well as addresses. The National Center for Employee Ownership has identified 170 companies where employees own the majority of stock. Their list, which was generated through a clipping service and a network of university research contacts, only provides contacts for some companies. Cooperative League of USA has identified 300 worker owned businesses through their network of contacts involved with cooperatives.
The National Center for Employee Ownership and the Cooperative League of USA listed every known company which met their respective criteria. In order to be listed with the National Center for Employee Ownership, the workers in the company must either own fifty percent of the stock or have a plan where at least half of the stock would be acquired in the future. The Cooperative League of USA lists every company which is a worker cooperative, that is totally owned by the employees. The listings of these two organizations should not be considered exhaustive of companies with these characteristics for the technique of a clipping service and networking does not ensure the identification of all companies. These directories, however, do provide the most complete information available.

The Labor-Management Services Administration, on the other hand, was selective of their listing. The compilers only included companies where there was a cooperative effort between labor and management, and the listing was restricted to companies where a union negotiated the parameters of the participatory programs with management. Also, only companies which gave permission to be listed were contained in the directory. For example, Proctor & Gamble, a company which is considered to have a successful participation program that management considers to be a trade secret, is a notable exclusion from the directory. There was also an attempt by the agency to achieve a balance in the type of products produced by the companies and a geographic dispersion of workplaces. In the selection of companies these goals conflicted. Decisions, as to whether or not the company would be included, were made on a case by case basis.
Since the purpose of this research is different from that of the compilers of the original lists, some companies were excluded from the initial lists as inappropriate. The Labor-Management Services Administration listed some companies by the home office, and thus the case included multiple plants. For this research it was necessary to obtain information regarding specific plants, thus the questionnaire was sent to only single plants. The directory provided by the National Center for Employee Ownership contained companies which had reverted to conventional ownership or were listed as closing due to bankruptcy. These companies were excluded. The Cooperative League of USA listed food cooperatives among the worker cooperatives. Since food cooperatives are not always intended to provide a livelihood for their members, these listings were deleted. Finally some duplicated listings, especially between the directories provided by the National Center for Employee Ownership and the Cooperative League of the USA, were eliminated. The final sample or rather partial universe contained 467 companies. The sample is described as a partial universe, since the compiled lists are the most complete lists available but are not considered to be exhaustive.

A purposive sample was utilized to ensure that participation programs would be included. Workplaces which have an alternative form of management or employee ownership remain a minority of the population of workplaces. Thus, even a large random sample of workplaces would have included only a handful of participation programs, if any. Also, since the majority of research has utilized

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a case analysis approach, there has been no research delineating the common characteristics of companies involved in participation or employee ownership programs. By collecting information on as many companies as possible a clearer picture of worker participation programs can be established.

The Quality of Work Life Questionnaire and correspondence was addressed to a contact person when this information was available and to the Chief Executive Officer in cases where no contact person was known. Contact persons from the Labor-Management list often possessed titles within the Personnel Department or were highly placed administrative officials. The contact person, when available from the list provided by the National Center for Employee Ownership, was usually the president of the company. Since the Cooperative League of USA did not provide contacts, all companies from this list received material addressed to the Chief Executive Officer who in many cases in a cooperative would be a worker as well as an administrator. The differential in status presents a qualifier in interpreting the data. Answers to questions which depend on perceptions may vary because of the status differential among respondents or due to the differential in everyday activities within the workplace rather than differences in the objective reality of the workplace. The assumption is made that all respondents, whether highly placed officials in large corporations or a worker-owner of a small cooperative, have knowledge regarding how decisions are made in their respective companies. Thus differences which are demonstrated in the
analysis represent concomitant objective differences between workplaces.

Analysis

The three main objectives of the analysis are to delineate the business demographics of the companies, explicate the decision realm of employees involved in each type of worker participation program, and to test the relationship between participation and occupational injury rates. Since a sampling procedure was not utilized these objectives will be achieved through the use of descriptive statistics. Since the questionnaire was sent to the population instead of a sample, the differences found are assumed to reflect real differences in the population. This assumption is made somewhat tenuous due to the low response rate. The final return rate was much lower than anticipated, and many of the questionnaires were returned by the post office. Appendix B presents a detailed description of who ended in the final sample.

Business Demographics

This section will establish the basic social and economic characteristics of companies which have either adopted alternative management practices or a form of employee ownership. To this end, descriptive tables will be used to display the social characteristics of companies in the sample. It should be noted that this is only a first step toward a precise understanding of the role of worker participation in the American economy.
Type of Product

Table 1 presents a classification of the companies by the type of product or service they provide. Half of the companies whose representatives responded to the questionnaire engaged in manufacturing. Furthermore, the manufacturing companies are concentrated in the auto and steel industries. Only a handful of companies are contained in the other industries listed in the table.

One salient characteristic of the auto and steel industries is that they have been identified as sunset industries (Thurow, 1980). A sunset industry is defined as an industry which is declining from its previous prominent position in the economy. Due to foreign competition, auto and steel are forecasted as not having the potential of possessing their former share of the market. The waning position of these industries may have provided the incentives for steel companies to develop stock ownership plans and auto companies to accept worker participation.

Mills (1975) contends that large successful companies demonstrate a greater tendency to implement worker participation programs. Though the automobile industry has experienced a decline it remains a very powerful and leading industry. Worker participation in the auto industry may exemplify a willingness on management’s part to devote a small part of their company’s resources to new management strategies which promise to help retain a strong position in the economy. Another incentive for the auto industry to establish worker participation was the signing of a union contract by General Motors in 1973.
Table 1
Product or Service of Companies Responding to Work Life Questionnaire

<table>
<thead>
<tr>
<th>Product or Service</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing (n=44)</td>
<td></td>
<td>50.6</td>
</tr>
<tr>
<td>machinery, automation systems</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>aereo/automobile</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>steel/steel products</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>clothing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>others</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Wood Products (n=7)</td>
<td></td>
<td>8.0</td>
</tr>
<tr>
<td>lumber</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>forestry</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>paper board</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>plywood</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Printing</td>
<td>7</td>
<td>8.0</td>
</tr>
<tr>
<td>Warehouse/Freight Handlers</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Construction</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Sales</td>
<td>7</td>
<td>8.0</td>
</tr>
<tr>
<td>Service</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>Social Service</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Transportation-Airline</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Unclassified</td>
<td>7</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>99.6</td>
</tr>
</tbody>
</table>

which agree to the establishment of QWL programs in all plants (Horner, 1982). General Motors has been the standard setter in the auto industry, and other companies may have followed GM's lead in
developing worker participation.

Though the wood products industry contains only seven cases, this is much greater proportion than would be expected to occur by chance. Wood products is overrepresented because a number of plywood companies in the Northwest were included in the sample. In fact, the number of respondents was fewer than expected due to the number of plywood companies contacted. This overrepresentation will be further explored when product or service is crosstabulated with form of ownership (Table 4).

What is clear from Table 1 is that alternative ownership and management are concentrated in certain industries rather than being evenly dispersed in the economy. There are different reasons for this concentration. For example, the concentration in steel and auto may be due to the recent declining position of these industries whereas the concentration in wood products is due to past establishment of cooperatives. The mechanism which led to the concentration in certain industries needs to be further investigated.

Social Characteristics of Employees

Table 2 presents the cumulative percentage of workers employed by the responding companies by sex and race of employees. The percentage of employees by sex and race are collapsed in ten percent intervals. There are problems in comparing the percentage of employees by race and sex. First, the categories do not represent equal percentages of the total population. And secondly, in addition
to hiring discrimination, minorities face institutional discrimination which restricts their educational and life experiences which in turns limits their job entry possibilities. The information contained in Table 2 is a gross measure which will allow for a beginning

<table>
<thead>
<tr>
<th>Percentage of Workplaces</th>
<th>Race</th>
<th></th>
<th>Sex</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black</td>
<td>White</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>0</td>
<td>23.0</td>
<td>0.0</td>
<td>9.9</td>
<td>2.5</td>
</tr>
<tr>
<td>1 to 10%</td>
<td>63.5</td>
<td>2.7</td>
<td>42.0</td>
<td>7.4</td>
</tr>
<tr>
<td>11 to 20</td>
<td>82.4</td>
<td>4.1</td>
<td>54.3</td>
<td>9.9</td>
</tr>
<tr>
<td>21 to 30</td>
<td>87.8</td>
<td>4.1</td>
<td>66.7</td>
<td>11.1</td>
</tr>
<tr>
<td>31 to 40</td>
<td>93.2</td>
<td>6.8</td>
<td>74.1</td>
<td>14.8</td>
</tr>
<tr>
<td>41 to 50</td>
<td>97.3</td>
<td>10.8</td>
<td>84.0</td>
<td>21.0</td>
</tr>
<tr>
<td>51 to 60</td>
<td>98.6</td>
<td>13.5</td>
<td>86.4</td>
<td>32.1</td>
</tr>
<tr>
<td>61 to 70</td>
<td>98.6</td>
<td>23.0</td>
<td>88.9</td>
<td>37.0</td>
</tr>
<tr>
<td>71 to 80</td>
<td>98.6</td>
<td>36.5</td>
<td>90.1</td>
<td>50.6</td>
</tr>
<tr>
<td>81 to 90</td>
<td>100.0</td>
<td>59.5</td>
<td>92.6</td>
<td>61.7</td>
</tr>
<tr>
<td>91 to 99</td>
<td>100.0</td>
<td>86.5</td>
<td>97.5</td>
<td>90.1</td>
</tr>
<tr>
<td>100%</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

| N of cases | 74 | 74 | 81 | 81 |
| Missing cases | 13 | 13 | 6 | 6 |
conceptualization of the composition of the workforce in alternative workplaces and to help generate questions for further research.

The frequency is based on the percentage of employees in the workplace which fall into the appropriate categories. Twenty-three percent of the responding companies have no black employees, and 63.5% of the companies have a workforce which is composed of 10% or less black workers. All of the responding companies employ white workers, and 13.5% of the companies have an exclusively white workforce. Though the measure of racial composition is inadequate, the distribution in Table 2 clearly suggests that blacks are underrepresented in the companies contained in the sample.

The modal category of the percent of women employed is one to ten percent. This contains nearly one third of the total sample. Furthermore, half of the companies have workforces which are composed of 20 percent of fewer women. Eight companies employ no women at all, but two companies employ women only. The modal category for the percentage of male workers is 90 to 99%. This comprises nearly 30 percent of the entire sample. The median percent of male employment is 80; thus over half of the sample have workforces which are composed of at least 80% male. Hence, the comparison between male-female composition indicates that women are underrepresented in firms with alternative programs or ownership.29

Ownership and Characteristics

Tables 3 to 9 present crosstabulations of economic and social characteristics with the form of ownership. Four types of ownership
were derived from question 2.1 of the Work Life Questionnaire. These are: Family, Corporate, ESOP, and Coop. Family refers to any respondent who checked the response "Family or individually owned". ESOP includes any respondent who checked the response, "Employee stock ownership plan where employees own 50% or more of the stock", and Coop corresponds to the response "Producer Cooperative". The category corporate included any other response to question 2.1. Eighty-three of the eighty-seven respondents were placed in one of the categories (see Table 3).

Table 3
Distribution of Respondents by Form of Ownership

<table>
<thead>
<tr>
<th>Form of Ownership</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>6</td>
<td>7.2%</td>
</tr>
<tr>
<td>Corporate</td>
<td>44</td>
<td>53.0</td>
</tr>
<tr>
<td>ESOP</td>
<td>18</td>
<td>21.7</td>
</tr>
<tr>
<td>Coop</td>
<td>15</td>
<td>18.1</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Missing Cases=4

The respondents were not evenly dispersed among the four categories. Forty-four cases (53%) were placed in the corporate category. Only six cases (7.2%) were categorized as Family. ESOP consists of 18 cases (21.7%), and Coop contains 15 cases (18.1%).

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Table 4 presents the type of service provided or the type of goods produced by the responding companies crosstabulated with type of ownership. As stated previously, family ownership has too few cases to permit the drawing of conclusions. In the remaining forms of ownership, manufacturing stands our predominantly as the activity of responding companies. As Table 1 indicates, half of the respondents are engaged in manufacturing. What is even more astounding is

<table>
<thead>
<tr>
<th>Product or Service</th>
<th>Family</th>
<th>Corporate</th>
<th>ESOP</th>
<th>Cooperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacture</td>
<td>60.0</td>
<td>76.2</td>
<td>37.5</td>
<td>23.1</td>
</tr>
<tr>
<td>Wood</td>
<td>0</td>
<td>7.1</td>
<td>6.3</td>
<td>15.4</td>
</tr>
<tr>
<td>Sales</td>
<td>0</td>
<td>2.4</td>
<td>18.8</td>
<td>15.4</td>
</tr>
<tr>
<td>Printing</td>
<td>40.0</td>
<td>2.4</td>
<td>6.3</td>
<td>23.1</td>
</tr>
<tr>
<td>Warehouse</td>
<td>0</td>
<td>4.8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Construction</td>
<td>0</td>
<td>0</td>
<td>6.3</td>
<td>15.4</td>
</tr>
<tr>
<td>Service</td>
<td>0</td>
<td>4.8</td>
<td>12.5</td>
<td>7.7</td>
</tr>
<tr>
<td>Social Service</td>
<td>0</td>
<td>0</td>
<td>12.5</td>
<td>0</td>
</tr>
<tr>
<td>Transportation</td>
<td>0</td>
<td>22.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.1</td>
<td>100.2</td>
<td>100.1</td>
</tr>
<tr>
<td><strong>Number</strong></td>
<td>5</td>
<td>42</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>
that three-quarters of the corporate companies are classified as manufacturers. The remaining corporate companies are distributed rather evenly among the remaining service or product categories. Though manufacturing is the modal category for ESOPs, the concentration is less and ESOP companies are more evenly distributed than corporate companies.

The cell size of the cooperative companies is too small to evoke confidence but, in conjunction with previous literature, the distribution is worth mentioning. The cooperative companies are more evenly distributed among the service and product categories than workplaces with other forms of ownership. The modal response categories of cooperative respondents are manufacturing and printing. Print shops would appeal to workers considering the creation of a cooperative for several reasons. Printing is a skilled occupation which allows workers to test their ability and gain a sense of self-worth. Another reason for the attraction of printing is connected to the ideological component embedded in many small cooperatives (Jackall & Crain, 1984). A print shop can advertise their services toward a particular clientele. For example, a print shop may specialize in the production of fliers and monographs for organizations which share a commitment to the same values. Also the initial investment for equipment can be raised by a small number of investors. Finally, the technology of printing is readily accessible to workers. Even though printing presents attractions to cooperatives, it should be noted that printing companies are distributed among all types of ownership.
Two responding cooperatives are engaged in the wood products industry. Though this represents 15% of the cooperatives who responded, it may well underrepresent the number of cooperatives which are engaged in the industry. Greenberg (1975) reports that there are approximately 22 plywood cooperatives in the northwest part of the country. The names of companies listed as cooperatives on the mailing list suggest several plywood companies did not respond to the survey. As outlined in the review chapter, the plywood companies have a special history which separates them for other cooperatives (see Berman, 1967; Greenberg, 1984).

Table 5 crosstabulates the size of the company with the type of ownership. Size refers to the number of employees in the plant, and the variable was created by dividing the frequency of responses to the question "how many production workers were employed?" into three equal groups. The ranges of the groups were: small sized ranged 3 to 45; medium sized companies ranged from 50 to 325 employees; and large workplaces had from 340 to 9,000 employees. Two companies were excluded since they did not report their number of employees.

The data in Table 5 support the notion that there is no difference in the number of plants in the different size categories by Family ownership; however only six respondents where classified as being Family owned. Corporate companies tended to be larger than the other forms of ownership with 53% of the corporate companies falling in the large size category. In comparison to corporate companies, ESOPs are smaller with the modal cell being medium sized companies. Cooperatives are concentrated in the small end of the table with 80%
Table 5
Size of Company by Type of Ownership

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Size</th>
<th>Sum</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Medium</td>
<td>Large</td>
</tr>
<tr>
<td>Family</td>
<td>33.3</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Corporate</td>
<td>9.3</td>
<td>37.2</td>
<td>53.5</td>
</tr>
<tr>
<td>ESOP</td>
<td>35.3</td>
<td>47.1</td>
<td>17.6</td>
</tr>
<tr>
<td>Cooperative</td>
<td>80.0</td>
<td>20.0</td>
<td>0</td>
</tr>
</tbody>
</table>

of the cooperatives categorized as such.

The corporate companies were expected to be larger than the other forms of ownership since many of these companies issue public stock which allows for growth. Also, many of these companies are involved in industries where large scale production has become a means of controlling the market and competition (see, Chapter III on the emergence of monopoly capitalism). Many ESOPs are former corporate owned firms. The characteristic which differentiates ESOPs from corporate firms is that employees now own at least half of the stock. The acquisition of a majority of the stock by employees places a burden on workers who must raise the necessary capital for purchase. Due to the difficulties faced in raising capital, the option for employee ownership is more feasible in smaller sized firms where less capital is needed and fewer people are involved in collective action.
Cooperatives are usually established a new rather than being converted from other forms of ownership. Many cooperatives are established by a few friends pooling their resources. Thus cooperatives start as small entities. Furthermore, Jackall and Crain (1984) document that many cooperatives have an ideological component to their organization. Members of the cooperative are concerned with creating a sense of community and family within the workplace. A concern for optimal social relations restricts the size of the business. Even when there is not a concern for social relations, the size of the cooperative is constrained. In a cooperative, workers own the means of production and workers have rights regarding how work is managed and how capital is invested. Cooperatives have been regarded as the best developed form of workplace democracy in the American economy. In order to enact democratic participation, the workplace must be relatively small where workers can understand all facets of the business in order to make intelligent decisions.

The next characteristic to be examined is the percentage of skilled workers within workplaces by ownership. In addition to the limitations mentioned in reference to the previous table, skill is problematic since it represents a much more subjective measure. Respondents were asked to report the percentage of skilled employees (question 1.9). The responses may well be filtered by the respondents' perception of skill and well as the objective skill level of employees. This is especially important because cooperative companies may have been filled out by workers whereas the corporate respondents were apt to be administrators. The worker owners have
experience in the actual performance of work and may place a greater value on their contributions than administrators. Therefore, difference in perception may result in worker-owners classifying a greater percentage of their workers as skilled and administrators classifying a lesser percentage of their workers skilled when objective conditions are the same.

The procedure for collapsing size into three groups was utilized in creating three categories of skill. The low percentage of skilled workers is from zero to 16%, the medium range if from 17 to 45%, and a highly skilled workforce is composed from 46 to 98% skilled workers. Sixteen companies did not provide information on the percentage of skilled workers which resulted in 69 valid cases.

Though Family ownership is included in the table, the cell size is too small for meaningful discussion. The modal response for corporate companies was a medium percentage of skilled employees. Only 14% of corporate companies fell into the high percentage of skilled employees category. ESOP companies tend to have a lower percentage of skilled workers than corporate companies. As expected the cooperative companies tended to have a greater percentage of skilled workers.

The most surprising finding was that more ESOP companies than corporate companies had a lower percentage of skilled workers with 67% of the ESOP companies falling in the low category. There were only 12 cases of ESOP ownership and the pattern may change with additional cases. One possible explanation for the low number of skilled workers is that skilled employees have other alternatives.
Table 6

The Percentage of Skilled Workers by the Form of Ownership

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Percent</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>4</td>
</tr>
<tr>
<td>Corporate</td>
<td>36</td>
<td>50</td>
<td>14</td>
<td>100</td>
<td>42</td>
</tr>
<tr>
<td>ESOP</td>
<td>76</td>
<td>33</td>
<td>0</td>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>Cooperative</td>
<td>0</td>
<td>36</td>
<td>64</td>
<td>100</td>
<td>11</td>
</tr>
</tbody>
</table>

Missing cases=18 Total=69

than ESOP ownership. Case studies (e.g., Zwerdling, 1980) indicate that ESOP ownership is an alternative to plant closures and that in converting to an ESOP, employees are often requested to forego benefits as a means of raising capital. Skilled employees may decide to reenter the labor market rather than return benefits to the company.

Though cooperatives were expected to have workforces which are highly skilled, the reason for the high number was not examined. Since workers often create a cooperative from scratch, it is reasonable to expect that potential worker-owners would select businesses which present a challenge and allow for personal growth. Thus, from the beginning, worker-owners would be concentrated in industries...
which require rather high levels of skill. Also, since workers control the production process through democratic means, workers would organize work in the most meaningful manner rather than the most routine, boring, and repetitive fashion. Cooperatives may be an organizational solution to the degradation of labor. What needs to be examined in future research is a comparison between comparable industries with different forms of ownership to examine whether cooperatives create more opportunities for meaningful work.

In the above analysis, the social characteristics of workers employed in the responding companies were described separately. The next stage of the analysis examines the relationship between social characteristics of workers with the form of ownership. This analysis will serve as a beginning probe of the role of alternative ownership as a force of change and enhance our understanding of worker ownership. As shown by Tables 2 and 3, neither the social characteristics of the workforce nor the form of ownership are evenly distributed. This concentration, though interesting, presents problems in establishing the social characteristics of workforces found in alternative workplaces. Due to concentration of cases in certain categories, many of the cells contain too few cases to be validly assessed. For example, family ownership in the following tables has too few cases for analysis and is only presented for the reader's interest.

Table 7 presents a crosstabulation of the percentage of female workers with the form of ownership. The category of female workers is dichotomized into workplaces with less than fifty percent female workers and workplaces which are composed of at least fifty percent
women. As indicated by Table 2 this did not lead to an equal
division of cases since 86% of the workplaces have workforces
composed of fifty percent or less females. Women are definitely
underrepresented in alternative workplaces. Since sex is a mutually
dichotomized variable, the overrepresentation of male
workers can be observed by reading the Table backwards.

Table 7
Percentage of Female Workers by Form of Ownership

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Percentage of Females</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 50%</td>
<td>More than 50%</td>
</tr>
<tr>
<td>Family</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Corporate</td>
<td>95.1</td>
<td>4.9</td>
</tr>
<tr>
<td>ESOP</td>
<td>68.8</td>
<td>31.3</td>
</tr>
<tr>
<td>COOP</td>
<td>46.7</td>
<td>53.3</td>
</tr>
</tbody>
</table>

Missing cases=10 Total=77

The astounding absence of female participation in corporate
enterprises is shown by the classification of 95% of the corporate
companies with less than 50% women comprising their workforces. The
percentage of companies with at least 50% female workers was higher
for ESOPs, but over two-thirds of the responding companies had
workforces composed of less than fifty percent women. Cooperatives
were the only form of ownership where workplaces were evenly divided between the two categories. This division, however, does not confirm that males and females were equally employed. Some cooperatives employed a small percentage of women whereas two cooperatives exclusively employed women. In general, women are underrepresented in workplaces with alternative management styles or ownership.

Tables 8 and 9 respectively crosstabulate the percentage of black and white employees in the workplace with the form of ownership. Percentage of black and white was collapsed into three groups by dividing the frequency distribution of these two variables into three equal parts. Thus the categories of low, medium, and high do not refer to an external population standard, such as the proportion of each racial group involved in the labor force, but rather is restricted to the population of workers contained in the responding workplaces.

In Table 8 the categories low, medium, and high percentage of the workforce have the following composition of black workers: 0 and 2, 3 and 11, and 12 to 88 percent.\textsuperscript{31} Table 8 like Table 2 clearly indicates that blacks are underrepresented in alternative workplaces. One external standard which demonstrates the lack of blacks is the percentage of blacks in the general population which is 11.7 percent (U.S. Bureau of the Census, 1981). Two-thirds of the responding workplaces employ less than the proportion of the black population.

Recognizing that black workers are underrepresented in the responding workplaces, the information presented in Table 8 can help determine if the representation of black workers is further clustered
Table 8
Percentage of Black Workers by Form of Ownership

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Total</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>66.7%</td>
<td>33.3%</td>
<td>0</td>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td>Corporate</td>
<td>32.5</td>
<td>40.0</td>
<td>27.5</td>
<td>100</td>
<td>40</td>
</tr>
<tr>
<td>ESOP</td>
<td>13.3</td>
<td>20.0</td>
<td>66.7</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Cooperative</td>
<td>66.7</td>
<td>16.7</td>
<td>16.7</td>
<td>100</td>
<td>12</td>
</tr>
</tbody>
</table>

Missing Cases=17

by the form of ownership. Surprisingly, ESOPs have the greatest percentage of workplaces with a high percentage of black workers. Cooperatives which are more apt to have an egalitarian doctrine enmeshed with their goals were most likely to have a low percentage of blacks.

Table 9 crosstabulates the percentage of white workers in the workplace with the form of ownership. Due to the higher proportion of whites in the general population (83.2%), the categories of white workers should be much higher. The low percentage category ranges from 1 to 79%, the medium 80 to 93%, and high from 94 to 100%. Though the pattern in Table 9 is somewhat the reversal of Table 8, workplaces are more evenly dispersed among categories. ESOPs are most likely to have a low percentage of whites and cooperatives the highest percentage of whites.
Table 9
Percentage of White Workers by Form of Ownership

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Percentage of White Workers</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Family</td>
<td>66.7</td>
<td>0</td>
</tr>
<tr>
<td>Corporate</td>
<td>22.5</td>
<td>37.5</td>
</tr>
<tr>
<td>ESOP</td>
<td>40.0</td>
<td>46.7</td>
</tr>
<tr>
<td>Cooperative</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Missing cases</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

The Work Life Questionnaire collected information on the social demographic characteristics of the workplaces, but did not collect information to help explain why these characteristics were distributed in a particular form. In the concluding chapter, however, some questions and possible answers generated from the analysis will be addressed.

Worker Decision Making

The second major objective of the analysis is to clarify some of the confusion created by the previous literature due to an unclear usage of terms. This goal will be achieved by creating a decision making typology, constructed from multiple items reporting the extent of worker participation. The dimensions of this typology will be
crosstabulated with social and economic characteristics of the workplace in order to understand the association between each dimension of worker participation in a social context. First, an examination of worker participation programs will be presented and associated with the decision typology. The decision typology was selected for further analysis since it is based on the perceived behavior and power of workers, rather than on names associated with management programs.

The first step in describing worker participation is presenting a frequency distribution of the percent of workplaces which have each particular type of worker participation program. In Table 10 the percentage of workplaces with each type of worker participation program is presented. Workplaces may have more than one program. Thus the tabulated percentage would exceed 100 percent.

The Labor-Management Committee is the most common program adopted by the responding workplaces; over half of the companies had a committee. The second most common programs were Quality Circles and Management by Objectives which are followed in order of frequency by Voting, Quality of Work Life, Autonomous Work Groups, Job Enrichment Programs, and finally Scanlon Plans. The frequency in Table 10 was created by counting the number of respondents who checked the space for the corresponding worker participation programs. Table 10 is simply intended to describe how respondents labeled their participation program.

An alternative classification to the reported name by respondents is classifying worker participation in terms of the decisions made by workers. Question 4.8 of the Work Life Questionnaire is
comprised of 18 Likert scale items with the response categories: none, a little, some, and a lot. The items were adopted from Herman (1982) who identified these as different decisions workers can make.

Table 10

Frequency of Worker Participation Programs

<table>
<thead>
<tr>
<th>Participation Program</th>
<th>Percentage of Workplaces</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Enrichment</td>
<td>17.1</td>
<td>13</td>
</tr>
<tr>
<td>Quality Circles</td>
<td>31.6</td>
<td>24</td>
</tr>
<tr>
<td>Scanlon Plan</td>
<td>9.2</td>
<td>7</td>
</tr>
<tr>
<td>Quality of Work Life</td>
<td>18.4</td>
<td>14</td>
</tr>
<tr>
<td>Management by Objectives</td>
<td>31.6</td>
<td>24</td>
</tr>
<tr>
<td>Autonomous Work Groups</td>
<td>17.1</td>
<td>13</td>
</tr>
<tr>
<td>Labor-Management Committees</td>
<td>52.6</td>
<td>40</td>
</tr>
<tr>
<td>Voting by Workers on Decisions</td>
<td>27.6</td>
<td>21</td>
</tr>
</tbody>
</table>

*n cannot be summed since there are multiple listings
11 workplaces did not check any response

The 18 items were entered in a factor analysis in order to ascertain the extent to which the items were intercorrelated. The items, shown in Table 11, were grouped into three factors which are conceptually distinct as well as statistically differentiated. The factors were labeled as capital, social, and labor. Capital decisions consisted of items concerning the distribution of capital and marketing decisions. "Who should be fired" was the only item which appeared to be inappropriately classified at least conceptually. The
firing of personnel is more connected to the social dimension of
decision making, and the social coefficient was .58, nearly the same
as the coefficient for the capital factor.

The social dimension was comprised of items assessing the
interpersonal relations between workers, such as who should work
together, and relations between management and employees. "Where a
worker is placed", "Which workers join a work group", and "Who should
get what job in each section or group" had the highest coefficients
and were most differentiated from the other factors. The third
factor, labor, was comprised of items pertaining to how work is
performed or the establishment of work procedures and working
conditions. A comparison of the coefficients between factors
demonstrated that the items in the labor factor are rather distinc­
tive.

Due to the intercorrelation of items between factors, a series
of crosstabulations, were constructed selecting for the other items
and further factor analysis which excluded ambiguous items. From
this analysis a refined set of factors were created. Capital
included four items: "How capital is raised," "How profits are
divided," "How capital is invested," and "Setting of prices." The
social factor contains the following three items: "Where a worker is
placed," "Which workers join a work group," and "Who should get what
job in each section or group." Due to the distinctiveness of the
the labor items, none were dropped from the factor. The items in the
labor factor included: "The quality or accuracy of work," "How much
work is done in a day," "The way work is done—methods and proce­
dures," "Implementation of technology," and "Establishment of
physical working conditions."

Table 11
Preliminary Factor Analysis on Decisions Made by Employees

<table>
<thead>
<tr>
<th>Decisions</th>
<th>Capital</th>
<th>Factors</th>
<th>Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where a worker is placed.......</td>
<td>.13</td>
<td>.65</td>
<td>.40</td>
</tr>
<tr>
<td>Which workers join a work group...........................................</td>
<td>.32</td>
<td>.59</td>
<td>.24</td>
</tr>
<tr>
<td>Who should be fired..............</td>
<td>.62</td>
<td>.58</td>
<td>.21</td>
</tr>
<tr>
<td>Who should be promoted..........</td>
<td>.53</td>
<td>.56</td>
<td>.28</td>
</tr>
<tr>
<td>Who should get what job in each section or group..........................</td>
<td>.42</td>
<td>.72</td>
<td>.21</td>
</tr>
<tr>
<td>The quality of work..............</td>
<td>.16</td>
<td>.26</td>
<td>.62</td>
</tr>
<tr>
<td>Amount of work done..............</td>
<td>.18</td>
<td>.38</td>
<td>.66</td>
</tr>
<tr>
<td>Complaints or grievances.......</td>
<td>.13</td>
<td>.46</td>
<td>.33</td>
</tr>
<tr>
<td>Payment or wages.................</td>
<td>.39</td>
<td>.55</td>
<td>.22</td>
</tr>
<tr>
<td>Methods and procedures............</td>
<td>.28</td>
<td>.21</td>
<td>.68</td>
</tr>
<tr>
<td>Implementation of technology....</td>
<td>.36</td>
<td>.16</td>
<td>.65</td>
</tr>
<tr>
<td>Working conditions...............</td>
<td>.37</td>
<td>.28</td>
<td>.55</td>
</tr>
<tr>
<td>Raising of capital..............</td>
<td>.83</td>
<td>.37</td>
<td>.20</td>
</tr>
<tr>
<td>Investing capital..............</td>
<td>.79</td>
<td>.40</td>
<td>.27</td>
</tr>
<tr>
<td>Division of profits..............</td>
<td>.75</td>
<td>.44</td>
<td>.20</td>
</tr>
<tr>
<td>New products......................</td>
<td>.74</td>
<td>.15</td>
<td>.46</td>
</tr>
<tr>
<td>Setting of prices..............</td>
<td>.81</td>
<td>.26</td>
<td>.29</td>
</tr>
<tr>
<td>Research and development............</td>
<td>.78</td>
<td>.18</td>
<td>.46</td>
</tr>
</tbody>
</table>

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The factors identified by the factor analysis are conceived as three hierarchial dimensions of participation, rather than as three independent variables. From low to high participation, the variables were conceptually arranged as: Labor, Social, and Capital. If workers are able to enact capital decisions, it is conceived that they also are empowered to enact social and labor decisions. Similarly workers who enact social decisions make labor decisions as well. At the low end of the participation continuum a fourth category comprised of workplaces where workers do not make decisions was included.32

Table 12 displays the number of workplaces contained in the different dimensions of worker participation. Herein the term worker decisions will refer to the four dimensions of worker participation. The no worker decisions dimension contained the fewest number of cases. If a random sample of workplaces would have been utilized, this category could be expected to have contained the largest number of cases. Since companies were not included in the sample unless they possessed alternative management or ownership, the no decision dimension contained the fewest cases. The modal category for workplaces classified was the social dimension which contains 46% of the classified companies. The labor dimension and capital dimension respectively contained 13 and 19 workplaces. Ten cases were not classified because they failed to meet the selection criteria for the scaling procedure and three cases were excluded due to missing data.
In Table 13 the worker participation programs are crosstabulated with worker decisions. Each cell displays the percentage of workplaces for each level of worker decisions with the specific worker participation program indicated by the column label. A workplace may be listed under multiple column headings but is classified in the same dimension of worker decision.

A very surprising finding in Table 13 is that 50% of the workplaces (n=6) which reported having JEPS are classified in the capital dimension of worker decisions. Included in this cell are four cooperatives who responded as having job enrichment programs. One explanation for this is that the respondents were indicating that in general they try to enrich jobs rather than indicating the
implementation of a specific program where more tasks are assigned to workers by management. Also, the small number of respondents who reported job enrichment programs makes the distribution very sensitive to error. A couple of misclassified cases could alter the distribution pattern.

Table 13

Distribution of Worker Participation Programs by Worker Decisions

<table>
<thead>
<tr>
<th>Worker Participation programs</th>
<th>Worker Decisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Labor</td>
</tr>
<tr>
<td>JEPs</td>
<td>16.9</td>
<td>8.3</td>
</tr>
<tr>
<td>QC</td>
<td>5.3</td>
<td>26.3</td>
</tr>
<tr>
<td>SCAN</td>
<td>0</td>
<td>33.3</td>
</tr>
<tr>
<td>QWL</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>MBO</td>
<td>10.0</td>
<td>15.0</td>
</tr>
<tr>
<td>RWA</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LMC</td>
<td>11.1</td>
<td>13.9</td>
</tr>
<tr>
<td>VOTE</td>
<td>5.3</td>
<td>0</td>
</tr>
</tbody>
</table>

JEPs=Job Enrichment Programs  MBO=Management by Objectives
QC=Quality Circles           RWA=Relative Worker Autonomy
SCAN=Scanlon Plans           LMC=Labor-Management Committee
QWL=Quality of Work Life     VOTE=Voting on Decisions

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As expected, Quality Circles and Scanlon Plans tended to be concentrated in the labor and social dimensions of worker decisions. However, with only six Scanlon Plans in the sample the distribution pattern may be due to chance rather than a reflection of true characteristics. Over half of the workplaces with QWL projects are concentrated in the social dimension of worker participation. A majority of the case studies of QWL reported in the literature are concerned with giving workers greater responsibility in quality control and finding more efficient ways of producing goods which would lead to the expectation of a greater concentration in the labor dimension. Again, some respondents may have checked QWL without a formal project, but attempt to provide a quality work life for employees. Labor-Management Committees, which often serve the same function as QWL projects and are often used interchangeably with the term QWL, was distributed in the same manner as QWL. MBO, a management strategy which incorporates the principles of operant psychology, was unexpectedly distributed between all of the worker decision categories. MBO places decision making power in the hands of management and brings workers into the decision making process, more on a consultant basis. Thus, MBO was expected to be concentrated on the low end of the worker decision continuum.

Relative Worker Autonomy (RWA) and Voting on decisions are conceived as a break from the other participation programs in which workers are allowed a greater voice in the decision making process. The literature indicates that RWAs should be concentrated in the social dimension where workers have full control over the selection
of workers in a work group and collectively decide how work is to be performed but have little say in capital decisions. Voting or majority rule is strongly associated with cooperatives where workers collectively have full control of decisions made in the workplace. Seventy-nine percent of the workplaces with voting structures fell into the capital dimension of worker decisions. The one outlier, which was categorized as failing to provide worker decisions, is a senseless anomaly.

In sum, JEPs and MBO did not form the expected distribution pattern. QWL and Labor-Management Committees were closer to the expected distribution pattern with a tendency toward a greater degree of worker participation than expected. Quality Circles, Relative Worker Autonomy, and Voting formed the expected pattern. There were too few cases to judge the distribution pattern of Scanlon Plans. Overall, Table 13 indicates that there are some discrepancies between the decision power the literature ascribes to particular participatory programs and the association between decisions and the programs identified by respondents. The decision making enacted by workers is deemed more important than the nomenclature assigned by respondents. Hence, worker decisions will be utilized in examining the characteristics between worker participation and the workplace and in examining the relationship between worker participation and injury rates.

Characteristics Associated with Worker Decisions

Tables 14, 15, and 16 display the relationship between type of ownership, product/service, and size of workplace with worker decisions. A comparison of the tables combined with bits of socio-
logical knowledge regarding the organization of workplaces suggest that ownership, service/product, and size are interrelated. Each independent variable should serve as a control variable in examining the relationship between worker decisions and the independent variable of interest. Unfortunately the cell size is too small for such control procedures.

In Table 14 the relationship between the form of ownership and worker decisions is displayed. As noted previously, there are not enough cases of family ownership to ensure confidence in comparison, and the results are presented only for the interest of the reader. The modal category for corporate owned companies is the social dimension of worker decisions. Companies with corporate ownership were expected to be more concentrated in the labor dimension but the overall distribution was not unexpected.

Table 14
Type of Employee Decisions by Type of Ownership

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Type of Worker Decisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>None</td>
<td>Labor</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>16.7</td>
</tr>
<tr>
<td>Corporate</td>
<td>13.2</td>
<td>23.7</td>
</tr>
<tr>
<td>ESOP</td>
<td>15.4</td>
<td>15.4</td>
</tr>
<tr>
<td>COOPs</td>
<td>7.1</td>
<td>0</td>
</tr>
</tbody>
</table>

Missing cases=13
The distribution of ESOPs presented an unanticipated surprise with a concentration in the social and capital dimensions of worker decisions. The relationship between ESOPs and worker participation has never been studied systematically, and what can be gleaned from the case studies is not consistent (Zwerdling, 1980; Whyte et al., 1983). Some workplaces, when transformed from conventional ownership to employee ownership, retain conventional authoritarian management practices. Employees who now collectively own a majority of the stock find authoritarianism as unacceptable and demand a course to be set toward participation. This notion leads to a bimodal distribution with a concentration in the no worker dimension and a possible concentration in either the labor or social dimension. The concentration in the capital dimension indicates a much more democratic form of ownership than expected. Unfortunately the distribution must be qualified on at least three accounts: the small number of cases, the status of the respondent, and the response rate of authoritarian managers. There were only 15 companies with a majority ESOP, therefore leaving the distribution susceptible to error. Secondly, most ESOP questionnaires were completed by highly placed managers who may perceive the possession of stock as allowing workers and ultimate voice in decisions without much participation in the everyday enactment of decisions. And finally, authoritarian personalities may perceive the information requested as none of the business of an outsider, thus they may be more likely not to respond. This would help account for the absence of companies in the lower dimensions of worker decisions.
Of the responses from cooperatives, 86% indicated that workers made capital decisions. A defining characteristic of a cooperative is providing an organizational framework where workers have a great control over their everyday work lives. Cooperatives were thus expected to be concentrated in the capital dimension.

In general the distribution pattern of ownership corresponded with expectations derived from the literature. The form of ownership clearly has an impact on the type and extent of worker decisions. Cooperatives are the most democratic form of ownership and corporate ownership the most restrictive in allowing workers to make decisions. Many of the ESOPs allowed a greater amount of participation than expected.

Table 15 crosstabulates worker decisions with the type of service provided or product produced by the workplace. As noted in the discussion of Table 1, the responding workplaces were not evenly distributed among the type of service or product provided with a high concentration of workplaces in manufacturing. Due to the small cell size only manufacturing can be discussed. However, all of the service/product categories are presented in the table.

The distribution of manufacturing companies among the worker decision categories is very similar to the pattern of corporate ownership with worker decisions. This similarity is not be chance but the result of the concentration of manufacturing companies, like corporate ownership, are concentrated in the labor and social dimensions of worker decisions. The question remains as to whether this pattern is due to the form of ownership or if the technology which was shaped by an historical context limits the potential for
Table 15
Type of Employee Decisions by type of Service/Product

<table>
<thead>
<tr>
<th>Service or Product</th>
<th>Type of Worker Decisions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Labor</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>13.2</td>
<td>21.1</td>
</tr>
<tr>
<td>Wood</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sales</td>
<td>20.0</td>
<td>0</td>
</tr>
<tr>
<td>Printing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Warehouse</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Construction</td>
<td>0</td>
<td>33.3</td>
</tr>
<tr>
<td>Service</td>
<td>0</td>
<td>25.0</td>
</tr>
<tr>
<td>Social Service</td>
<td>0</td>
<td>66.7</td>
</tr>
<tr>
<td>Transportation</td>
<td>0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Missing cases=17 Total=70

further worker participation. The potential restrictions placed on worker participation by technology and ownership are important areas of study for future research.

Table 15 presents some interesting patterns which cannot be explained by the present findings. The type of service/product provided by the workplace has an impact on the dimension of worker decisions enacted. This relationship may be modified when controlling for the form of ownership and size of the company which are conceived as being interrelated with each other and decision making.

As indicated by Table 16 the size (number of workers) of the workplace has an impact on the type of worker decisions. Small
### Table 16
Type of Worker Decisions by Size of Workplace

<table>
<thead>
<tr>
<th>Size</th>
<th>None</th>
<th>Labor</th>
<th>Social</th>
<th>Capital</th>
<th>Percent</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>13.0</td>
<td>4.3</td>
<td>21.7</td>
<td>60.9</td>
<td>99.9</td>
<td>23</td>
</tr>
<tr>
<td>Medium</td>
<td>3.7</td>
<td>22.2</td>
<td>55.6</td>
<td>18.5</td>
<td>100.0</td>
<td>27</td>
</tr>
<tr>
<td>Large</td>
<td>18.2</td>
<td>18.2</td>
<td>63.6</td>
<td>0</td>
<td>100.0</td>
<td>22</td>
</tr>
</tbody>
</table>

Missing cases=17  Total=72

Workplaces are concentrated in the capital dimension of worker decisions. This concentration may reflect the relationship between size and ownership and may only be indirectly related to worker decisions. Cooperatives, which have a highly advanced form of democratic management, tend to be small in size (see Table 5). The modal category for medium sized firms is social and half of the large sized companies are categorized in the labor dimension of worker decisions. Table 16 demonstrates an inverse relationship between size and worker decisions; the larger the workplace the fewer the number of decisions made by employees.

**Summary**

In this section, worker decisions, a variable consisting of four
items regarding decisions made by workers. The dimensions of worker decisions are no decisions, labor, social, and capital. These are conceptualized as being hierarchial where each dimension contains the decisions of the previous dimensions. Worker decisions was found to be associated with ownership, service/product, and size of workplace. The variables associated with worker decisions are considered to be interrelated, and the exact relationship controlling for other independent variables was not determined due to the limitation imposed by the small cell size.

Worker Decisions and Occupational Injuries

In the final section of the analysis, the relationship between occupational injuries and worker decisions is examined. The form mandated by Occupational Safety and Health Administration (OSHA) was utilized in the Work Life Questionnaire to collect information on occupational injuries (see section V of the questionnaire in Appendix A). Injury rates were computed by dividing each response in Section V by the number of workers in each respective workplace.

OSHA collects injury data with six different measures: number of deaths, injury cases with days away from work or restricted workdays, injury cases with days away from work, total days of restricted activity, and injuries without lost workdays. Due to the lack of variation in the number of deaths and total days of restricted activity, these two variables were excluded from the analysis. Worker decisions was crosstabulated with the injury rates to establish whether or not worker participation has an ameliorative impact.
on occupational injuries.

In Table 17 the means of each injury measure is presented for each dimension of worker decisions. Worker decisions, the independent variable is arranged in a descending order established by its theoretical impact on worker injuries where none should have the least impact and the capital dimension the greatest impact. Approximately 40% of the responding cases were excluded due to missing data. This decreases the certainty of the differences, and correspondingly,

Table 17

Means for Each Measure of Occupational Injury Rate Per Worker for Each Level of Worker Decision

<table>
<thead>
<tr>
<th>Decisions</th>
<th>Days</th>
<th>Cases</th>
<th>Total</th>
<th>Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>.08</td>
<td>.07</td>
<td>1.82</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>(n=6)</td>
<td>(n=6)</td>
<td>(n=6)</td>
<td>(n=6)</td>
</tr>
<tr>
<td>Labor</td>
<td>.14</td>
<td>.15</td>
<td>2.04</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>(n=9)</td>
<td>(n=9)</td>
<td>(n=9)</td>
<td>(n=7)</td>
</tr>
<tr>
<td>Social</td>
<td>.07</td>
<td>.06</td>
<td>1.08</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>(n=24)</td>
<td>(n=22)</td>
<td>(n=21)</td>
<td>(n=23)</td>
</tr>
<tr>
<td>Capital</td>
<td>.04</td>
<td>.04</td>
<td>1.63</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>(n=13)</td>
<td>(n=15)</td>
<td>(n=15)</td>
<td>(n=12)</td>
</tr>
<tr>
<td>Total N**=</td>
<td>52</td>
<td>52</td>
<td>51</td>
<td>48</td>
</tr>
</tbody>
</table>

*Days=days away from work or restricted activity
Cases=cases with days away from work
Total=total days from work
Injury=injuries without lost workdays

**One case from each variable was excluded as an outlier.
the certainty that the demonstrated differences exist in the population is decreased. The previously stated assumption that the cases examined reflect the same characteristics as the population of workplaces with alternative management styles or employee ownership, is still made but is more tenuous.

In order to meet the theoretical expectations of a positive impact of worker decisions on injuries, the means should be arranged from high to low in the columns. If the no worker decision dimension is ignored, the expected pattern is discerned with one anomaly where the mean of total days from work in the capital dimension is greater than the mean in the social dimension of worker decisions. When excluding the no worker decision dimension the distributions of means indicates that worker decisions does have an ameliorative impact on occupational injuries.

If the accident means were merely ranked in size the worker dimension would fall between the labor and social dimensions of worker decisions. One explanation of the lower accident rates in the no worker decision dimension is that companies which adopt alternative management programs but do not allow workers any greater decision power have internal dynamics which function to lower injury rates. This would be especially plausible if MBO programs would have been concentrated in the no decision dimension, since this management style is directly concerned with the modification of behavior without a change in decision domains. A more likely explanation, however, is that the means for the no worker dimension are deflated because the six responding companies have lower injury rates than the population.
of alternative workplaces with no worker decisions. If a greater number of workplaces which do not allow workers to participate in decisions would have responded, then the injury means would have been larger. The final determination, of course, must be made through the collection and analysis of data which is presently not available.

The final two tables have respectively trichotomized injury cases involving lost work time and injuries without lost workdays with worker decisions. This allows for a better visualization of the distribution of injury rates within each dimension of worker decision. Cases with days away from work and total days away from work are not presented since these variable are measuring the same concept as days away from work, and the crosstabulation of these two variables presents the same pattern as days away from work.

In Table 18 injury cases involving lost work time was trichotomized by dividing the frequency distribution into three equal parts. The low injury cases includes workplaces which recorded zero to five injuries per thousand workers, medium contains 8 to 73 injuries per thousand workers, and high is composed of 87 to 5589 injury reports per thousand workers. Like the arrangement of means in the previous table, the distribution of cases in Table 18 indicates that there is an ameliorative association between worker decisions and occupational injuries. Again, the no worker decision dimension does not fit the theoretical model, but the distribution of cases in the remaining dimensions indicates that the greater the amount of participation by workers in the decision making process, the lower the injury rate will be. The modal response categories nicely demonstrates this
relationship where the respective categories for labor, social, and capital are high, medium, and low.

Table 18

<table>
<thead>
<tr>
<th>Worker Decisions</th>
<th>Injury Rates</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>None</td>
<td>16.7</td>
<td>50.0</td>
</tr>
<tr>
<td>Labor</td>
<td>11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Social</td>
<td>29.2</td>
<td>41.7</td>
</tr>
<tr>
<td>Capital</td>
<td>64.3</td>
<td>14.3</td>
</tr>
</tbody>
</table>

The distribution of injury rates without lost workdays by worker decisions is similar to the distribution rates with lost workdays in the preceding table. The same procedure for trichotomizing the distribution of injury rates was utilized in computing the categories for injury rates without lost workdays. In Table 19 the injury rates without lost workdays respectively equalled zero through 9, 1 to 78, and 85 through 700 injuries per 1000 workers.

The same distribution of cases displayed in Table 18 is found in the distribution of injury rates without lost workdays where labor, social, and capital dimension of worker decisions are respectively associated with high, medium, and low categories of injury rates. Though the pattern is similar, the percentage of cases in many of the
Table 19

Injury Rates without Lost Workdays by Worker Decisions

<table>
<thead>
<tr>
<th>Worker Decisions</th>
<th>Injury Rates</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>None</td>
<td>16.7</td>
<td>33.3</td>
</tr>
<tr>
<td>Labor</td>
<td>0</td>
<td>50.0</td>
</tr>
<tr>
<td>Social</td>
<td>26.1</td>
<td>39.1</td>
</tr>
<tr>
<td>Capital</td>
<td>83.3</td>
<td>0</td>
</tr>
</tbody>
</table>

cells is different. The percentage differences are largely due to two factors which are both concerned with the unfortunate small number of cases included. The first reason for the difference is that Table 19 contains four fewer cases which can produce a dramatic change in the cell percentages when so few cases are included in the table. Secondly, when collapsing variables, even when two variables are highly correlated, a few cases are expected to be categorized differently thus altering the cell percentage. Even though the cell percentage in Table 19 differs from the previous table, Table 19 demonstrates that fewer injuries will occur when workers are allowed to participate.

In sum, the data in the three tables presented in this section supports the contention that worker injuries will occur with less frequency as workers participate more in the decision making process. The no worker decision dimension did not fit the theoretical expectations, since the injury means for no participation were lower than
the labor dimension instead of having the highest injury means. This anomaly to the pattern may be due to the small cell size. A final cautionary note needs to be expressed in regard to the relationship between demographic business variable and worker decisions were explored, an association between size, ownership, and workforce composition was found to exist with worker decisions.

Summary

A Work Life Questionnaire, designed to collect information regarding the decision making power of workers and injury information, was sent to all workplaces identified as having either a form of alternative management or employee ownership. The objectives pursued in this project included: (1) to establish the social and economic characteristics of workplaces with either alternative forms of ownership or management, (2) to provide a better understanding of the context and form of worker participation, and (3) to assess the relationship between worker decision making and occupational injury rates. Since the questionnaire was sent to all workplaces rather than a sample, characteristics assessed through the use of descriptive statistics are assumed to reflect differences in the population. Due to the low response rate and the incompleteness of the population resulting from inadequacies in the compiling to the lists, this assumption is somewhat tenuous. Nevertheless, it is reasonable to assume that the results are generalizable to a population of subjects possessing characteristics similar to those who participated in this study.
In order to establish the social and economic characteristics of alternative workplaces in a meaningful manner, the characteristics of product/service, the inclusion of minorities in the workforce, size of the workplace, and percentage of skilled workers were crosstabulated with the form of ownership. Respondent companies were concentrated in the categories of corporate owned and manufacturing. Minorities were underrepresented in the workplaces examined. The representativeness of females and black workers was different. Workplaces with a higher percentage of female workers were apt to have a cooperative form of ownership, but cooperatives tend to employ a low percentage of blacks. ESOP ownership had the largest percentage of workplaces with a high percentage of black workers, but women were found to be underrepresented in ESOP owned companies. The percentage of skilled workers was also associated with ownership. As expected, cooperatives have a greater percentage of skilled workers; the that ESOPs tended to employ a lower percentage of skilled workers than corporate companies was unexpected. Corporate companies were also found to be larger than ESOP or cooperative companies.

The second step toward enhancing understanding of worker participation was taken by creating a worker decision scale based on the extent to which workers made different types of decisions. The dimensions of the scale were: no worker decisions, labor, social and capital which are arranged from low to high in denoting the amount of worker participation. Worker decisions was then crosstabulated with the business characteristics of form of ownership, product/service, and size of workplace. Corporate owned companies were concentrated
in the social dimension of worker decisions, ESOPs were distributed between the social and capital dimensions, and cooperatives were concentrated in the capital dimension. Workplaces which engaged in manufacturing were concentrated in the social dimension of worker decisions, and the other service/product categories contained too few cases to assess the distribution pattern. Finally, an inverse relationship was found between worker decisions and size; as the number of employees in the workplace increased, the amount of worker decisions decreases.

In the final section of the analysis the association between worker injuries and dimensions of worker decisions were described. In general, the association between the dimensions of worker decisions and injury rates met the theoretical expectations; the greater the decision power of employees, the lower the occupational injury rates. The dimension of no worker decisions, however, did not fit the theoretical model. Instead of having the highest number of injuries, the workplaces categorized in this dimension reported fewer injuries than workplaces in the labor dimension. It is expected that this anomaly was due to the low number of cases comprising the no worker decision dimension.

Some rather astounding findings emerged in the analysis regarding the relationship between ownership and business demographic variables, as well as the association of worker decisions and the demographics. These findings are considered to represent associations which exist in the population of workplaces with alternative forms of ownership or management. The attributing of correspondence
between the workplaces examined and the population of alternative workplaces is made with less confidence than desired because of the initial exclusion of workplaces from the population and the low response rate. The analysis did provide the opportunity to explore and test some associations between social characteristics of workplaces and ownership. In the final chapter the characteristics found and questions derived from the analysis will be placed in a social historical and theoretical context.
CHAPTER VII

A SOCIAL HISTORICAL DISCUSSION

A major thread developed at the beginning of this report was that an understanding of what exists in the workplace can only be obtained by examining the phenomena within the historical unfolding of capitalism. In Chapters II and III the historical process of capitalism was traced with an emphasis on how the outcomes of the struggle between labor and capital at each historical era shaped the future conflict and the organization of the workplace. Chapter IV utilized these historical insights in constructing a theoretical framework for understanding the relationship between worker participation and occupational injuries. In Chapters V and VI the direction shifted by reviewing what type of worker participation programs presently exist and an analysis of what exists in the workplace. In this final chapter, the primary goal is to reestablish the link of worker participation with the capitalist system by placing some of the findings back into a social historical context.

First, some specific issues derived from the analysis will be discussed, and the implications for further research will be explained. Second, some general issues which were not directly tested by this research will be examined in conjunction with the findings. The dissertation will conclude with a brief discussion of approaches to restructuring the economic system which will create greater opportunities for worker control in creating safer and healthier work
Specific Issues

The survey was designed to test an outcome of worker participation, i.e., the ameliorative impact on occupational injuries, and did not directly assess the dynamics of the process of worker participation. The findings are suggestive of the dynamics and in this section the process of worker participation within the theoretical context will be discussed. Also, some interesting and unexpected findings emerged in the analysis which will be placed in a theoretical context. First, a summary of the findings of the analysis will be restated.

The major findings included:

1. Worker participation was found to have four dimensions which are qualitatively distinct. The dimensions arranged from low to high are: none, labor, social, and capital.

2. Injury rates generally decreased as participation increased.

3. The form of ownership is related to the dimension of participation. Corporations were concentrated in the social dimension, ESOPs were split between the social and capital dimensions, and the majority of cooperatives were classified in the capital dimension.

4. Demographic business characteristics varied with the form of ownership. Size of the workplace, racial and sexual composition of the workforce, and type of product or service varied by ownership.
The specific issues which will be discussed include:

1. the fit between theory and the findings,
2. a discussion of the underrepresentation of blacks in workplaces organized as cooperatives,
3. the representation of women in cooperatives, and
4. the relationship of size and worker participation.

Theory and Findings

The theoretical orientation presented in Chapter IV predicted that the greater the participation of workers is in the decision making process, the lower the occupational injury rate. This relationship was demonstrated in the analysis with the major exception of the reverse ordering of the no worker participation and the labor dimension of participation. The processes which were conceived to be linked with participation were not tested. In this section the processes which are conceived as having the potential of decreasing the number of occupational accidents will be discussed in terms of the hierarchial model of participation. As noted above, the analysis indicated that there are three dimensions of participation, namely: labor, social and capital. The fourth dimension of no worker decisions was added to create an exhaustive continuum. The dimensions of the model are not considered to be equally applicable to the processes considered to have an impact on decreasing injuries.

The processes discussed in the theory chapter can be divided into four kinds: enactment of self-interest, change in the social interaction patterns, change in the relationship between the work and
worker, and a change in the attitude toward work. Each of the processes are considered to have an ameliorative impact on occupational injuries.

The no worker dimension represents the state of affairs in the typical capitalist workplace. As described earlier, the owners, as a consequence of a successful struggle, were able to separate thought from physical activity, and claim the organization of the labor process as their rightful domain. Through the management practices of Taylorism and Fordism, work became a boring repetitive execution. In many shops, the participation of workers was restricted to voting on a contract of wages and benefits negotiated by their union. Whereas, management retained the right to organize work in the manner it deemed appropriate.

The major goal historically followed by management in the organization of work has been the maximization of profit. In the pursuit of profit, managers attempted to create the highest levels of productivity and efficiency possible by dividing work into its simplest components where workers repeated the same action as quickly as possible. The monotony of these conditions and the stress took a high toll in worker injuries and deaths. Not all managers or owners are callous of the conditions faced by workers, and some companies do have strong safety programs where injuries are minimized, but the organizational goal of profit often led to the creation of conditions contrary to the health and safety interests of workers.

The negative impact of management controlling the labor process was not illustrated by the data collected and analyzed for this.
project. Companies which did not allow workers to participate in the decision making process reported fewer injuries on the average than workplaces where workers participated in labor decisions. In the analysis the possibility that the low number of cases did not represent the population of workplaces where workers are not allowed to make decisions was noted. Another explanation would be that workplaces with alternative forms of management or ownership which do not allow workers to participate in decision making has a particular set of dynamics which decreases injuries. For instance, companies which promise workers a change in practice but do not deliver, may create an illusion of participation which can affect the perception of material conditions and result in a decrease of injuries. This is not considered a very plausible argument since studies demonstrate that workers are very adept in identifying false promises.

The labor dimension consists of decisions regarding how much and how the work is done. Thus the labor dimension involves the designing of the labor process. As described in the history of the crafts worker, labor once held nearly absolute power in this realm in some industries. The labor dimension, however, does not mark the return to craftsmen control. In many corporations this participation is a collaboration between technical design experts and workers or cooperative efforts between upstairs managers and workers through regular Quality Circle meetings. In small cooperatives the participation of labor may well include the design of the operation and the selection of technology. Thus participation in labor decisions may provide an actual range of behavior from voicing an opinion to actual
implementation of decisions.

Given this range, the participation in labor decisions can have a tremendous impact on the relationship between workers and the work environment. The participation of workers in labor decisions requires the reversal of the degradation of work so well documented by Braverman (1974). The construction of the labor process is no longer solely in the hands of management. Workers are able at a minimum to offer suggestions of how their work should be performed. Utilizing the analysis of Grunberg (1984) the inference can be drawn that workers will choose to design work which can be performed at a comfortable pace which reduces stress and creates better working conditions. The organizing of work in a manner which meets the needs of workers instead of merely ensuring a high level of productivity will create a safer work environment.

A second aspect of how participation in labor decisions can reduce injury rates is concerned with the relationship between the worker and work. In the traditional workplace work is imposed upon the worker. Work has been organized by management experts who have been trained to design work in a fashion which meets the organizational goals of profit and efficiency. When workers participate in the organizing of work, they are provided with the opportunity of creating themselves. Marx (1964) described the capitalist system as alienating workers because they are robbed of their ability to transform nature.

For Marx this pertained to the commodification of labor where owners of the means of production have the right to determine how the
transformation of nature will take place. This right of management has two effects on the relationship between workers and nature: (1) in performing the same activity all day long, workers do not perceive how they individually create useful objects, and (2) even if workers are allowed to perform all of the activities necessary for creating a product, they do not engage in problem solving but merely follow directions. The latter problem is partially resolved through job enrichment or job enlargement programs where workers engage in a larger part of the labor process. As noted in the review chapter, this may merely entail the stringing together of a series of boring tasks. The latter outcome of problem solving is the process which has a greater impact on workers creating themselves. Through the controlling of the transformation of nature workers achieve a sense of accomplishment and achievement. In the rationalized workplace there is little opportunity even with participation to achieve this control. The opportunities for workers to create themselves is probably restricted to highly skilled labor whose work is not amenable to degradation and small workplaces where the implementation of a rationalized technology is less common.

The two outcomes of alienating workers from nature can be conceived as an organizational perspective of the worker carelessness thesis. Rather than blaming the victim, however, an organizational perspective seeks explanations beyond the individual which causes human behavior. Injuries may result from workers not paying attention to what they are doing in the performance of their work, but the reason workers do not pay attention is because thought has been
removed from the labor process. Participation has the potential of reuniting thought and action which increases the involvement of workers in the labor process and would decrease injury rates.

The preceding discussion indicates that there may exist different forms of participation in the labor dimension of worker decisions. The extent and form of participation is most likely related to the form of ownership. Corporations with a long history of rationalization and degradation are apt to be more restrictive in the form of participation than cooperatives which are based on worker ownership. The precise relationship between labor dimension and ownership needs to be explicated in future research.

The social dimension of worker participation, in addition to allowing workers to participate in the shaping of the labor process, changes the structure of the everyday interactions between workers and management and among workers themselves. In the traditional capitalist workplace the dispensing of directions and orders to workers is done in a very authoritarian manner. On the shopfloor foremen act as overseers of production where they enforce the rules and regulations of the organization through a formalized set of sanctions. If decisions concerning job assignment must be made, this is the responsibility of the foremen. The participation of workers in the social dimension of decision making requires a change in the interactions between workers and first line supervisors.

In making decisions of who should work together and the assignment of tasks, authoritarianism must be replaced with cooperation. The power of the traditional foreman is diffused among the workers
and a more equal status is created. Furthermore, these changes in the power distribution would enhance the ability of workers to enact labor decisions. The enactment of greater social equality on the shopfloor should make workers more aware of their everyday knowledge of the workplace and provide confidence in expressing their knowledge. Social equality is more compatible to democratic expression than authoritarianism; hence the interests of workers would be easier to express and form into action. This in turn would create a better work environment and fewer injuries would occur.

Participation in social decisions would also change the social interaction patterns between workers which would decrease injuries. Rather than being separated on the job as in traditional workplaces, workers would need to discuss with one another how the work would be accomplished. The increased interaction with one another and the pursuit of mutual goals may create an environment where workers take a greater interest in one another and share more information; this might create a safer environment and decrease injuries.

Since social decision making changes the traditional threatening role of the first line supervisor (Whyte et al., 1983), corporations where traditional management is the norm should have greater difficulty in enacting participatory programs at the social dimension level. The opposite was demonstrated by the analysis, the majority of corporate companies responded that their workers participate in social decisions. This finding is puzzling when placed in the organizational context of authoritarianism discussed above. In the corporate firm where the degradation of labor has been extensive,
there is little opportunity for workers to make social decisions even if granted. This is because workers are restricted to a small space along the production line. Possibly, workers are able to make decisions regarding work assignment within their section or workplace station. Such an arrangement would be easier to integrate within a rationalized work organization.

Workplaces where workers enact capital decisions reported the lowest injury rates. Capital decision making is conceived as the most developed form of participation which includes labor and social dimensions as well as the control of financial decisions. Hence the explanations for decreasing injuries in the other dimensions are applicable to the capital dimension. Also, workplaces where workers participate in financial decisions have their own set of dynamics. The majority of companies classified in the capital dimension are owned by workers.

First, workers as owners have property rights. In enacting labor decisions in workplaces with worker-owners, decisions are based on rights and not on privileges which can be rescinded. Workers who desire to create a change in the organization of work will meet fewer obstacles in a cooperative and not face negative management sanctions for pressing claims against the company.

Second, cooperatives often have some form of organization where each worker-owner has one vote on major decisions. Equality is a central component of the organization. Equality would accentuate participation in social decisions and reap the benefits of social decisions which would include lower injury rates.
Third, rather than labor being sold in cooperatives, it is better conceived as an investment by the worker-owners. One reasonable expectation would be that as owners, injuries would be greater, since they face the same competitive conditions as other owners. As noted, however, this is not the case. The dual role of worker-owner creates multiple organizational goals which protect the welfare of workers while pursuing profit.

Finally, some cooperatives have an ideological component which is external to the workplace. Some cooperatives consciously attempt to foster communal relations in the workplace, and workers tend to perceive co-workers as family. Injury to family members is painful to all which serves as a motivation for all workers to create the safest work environment.

In sum, each level of worker participation is conceived as diminishing the extent of worker injury. The labor dimension permits workers some say in the organization of work which will result in an environment which is safer. The social dimension requires a change in the way power is organized in the workplace which will help ensure the creation of a work environment to meet their interests. The capital dimension is associated with ownership where participation is based on rights. This ensures that the organization of work will reflect the interests of workers.

**Black Workers and Cooperatives**

An unexpected finding was that the majority of cooperatives contain a high percentage of workplaces with a low percentage of
black workers. This is particularly puzzling since a central value of cooperatives is reported to be equality. The underemployment of blacks suggests that the enactment of this value does not include racial equality.

At the present time there is no evidence to explain the lack of employment of blacks in cooperatives. The following reasons are offered as avenues for future research in explaining the anomalous finding:

1. Cooperatives exist where black workers comprise a majority of the workforce, but are not integrated into the cooperative movement and were excluded from the sample.

2. Workplaces with a higher percentage of black workers were included in the sample but failed to return the questionnaire.

3. The hiring practices of some cooperatives where potential employees are recruited from friends of employees may reflect discriminatory practices.

4. Due to the differential in past experiences, whites may be more motivated to create cooperatives than blacks. Specifically, the cooperative movement may be a disenfranchised white middle class movement.

5. There is a differential in resources, both economic and knowledge, between whites and minority groups.

6. The geographic dispersion where cooperatives are concentrated in certain parts of the country may affect the racial composition of the workforces.

Each explanation is briefly expanded upon by placing it in a social
context when applicable.

The first two explanations recognize the possibility that cooperatives with a higher percentage of blacks in the workforce do in fact exist, but did not participate in the study. The former explanation asserts that cooperatives with a high percentage of black workers were contained in the universe but did not return the questionnaire. If this is the case, the information in Table 8 is misleading. There may be a number of workplaces with a high percentage of blacks which would change the distribution pattern. In this instance, however, the case remains that there are a large number of cooperatives where blacks comprise a small portion of the workforce.

The latter explanation contends that there are cooperatives with a high percentage of black workers, but these workplaces were not included in the universe. The universe was provided by the Cooperative League of USA, and cooperatives with a high percentage of black workers may not be included in this organization. The reason for their exclusion may be that the cooperative movement is a white middle class movement and cooperatives which are predominantly black are not in this movement.

An implicit assumption above is that there are cooperatives which not only contain a higher percentage of blacks, but are also predominately black. The reasoning behind this assertion is that the black power movement which evolved out of the Civil Rights Movement contained a strong economic plank. Black citizens with a new consciousness attempted to form their own economic destiny through
community development. A percentage of these attempted an alternative form of ownership. The important question which remains is: Have the black experiments vanished or are they still part of some black communities?

The remaining explanations have some form of discrimination embedded in them. The differential in experiences expands on the notion of the cooperative movement as a white middle class movement as mentioned above. Some case studies indicate that cooperatives were founded by the disenfranchised youth of the sixties who rejected the dreams of security within the system that were held by their parents (Case & Taylor, 1979). This scenario, of course, does not include the establishment of cooperatives by the working class during hard times in order to provide a living. More importantly the organizations of the disenfranchised white middle class did not meet the needs of black people who were demanding entry into a world from which their group had been collectively barred. Thus the cooperative was an alternative which was more appealing to whites escaping from the system than blacks looking for participation in society.

As noted previously, cooperatives which emphasize personal relations in the workplace are apt to recruit new workers from their social circles. This provides another explanation for the low percentage of blacks in cooperatives. America remains a highly segregated society. Assuming that a high percentage of cooperatives were initiated by whites, the recruitment of new workers would be largely restricted to the white population.
A further explanation emerges on the basis that America was and remains a racist society. Historically, blacks as a group have been deprived of opportunities needed to further themselves. A worker cooperative is a business which requires investment capital and knowledge of business in order to be successful. A higher percentage of whites would also have the background in these experiences than blacks. As in other economic activities blacks lack the resources to enact cooperatives even if they have desire the opportunity.

The last explanation considers the geographic dispersion of cooperatives. Cooperatives are not equally spread across the country or between communities. Thus different populations have greater access and awareness of cooperatives. If cooperatives recreate themselves through example, blacks must be aware of their existence. This leads to a vicious cycle where if blacks do not have the resources to initiate cooperatives, then there are no examples to facilitate the creation of more cooperatives.

In conclusion, this research found that cooperatives tend to have fewer blacks in their workforce than other types of ownership. Reasons for the low rates of participation of workers were explored. The exclusion of blacks is extremely important, especially if the cooperative movement represents the practice of economic democracy (see Carnoy & Shearer, 1980). In pursuing the vision of a democratic society are we once again to exclude a segment of our people from participation?
Women and Cooperatives

In comparison to the other forms of ownership, cooperatives do appear to provide a haven for women. Table 7 demonstrates that cooperatives are the only form of ownership where women comprise at least 50 percent of the work force in over half the workplaces. The communal orientation of women and restrictive employment activities of women will be sketched out regarding the representation of women in cooperatives. As in the preceding section, there is no hard evidence to support the assertions which are only meant as guides for future research.

The communal orientation of women may be exemplified by the following scenario: A group of women who meet on a regular basis to make clothes find that there is a demand for their products and decide to form their social group into an economic unit. The formation of a business often entails someone assuming an instrumental role in planning and achieving goals. The literature on sex roles indicates that women are more socialized to enact expressive qualities (Frieze et al., 1978). After discussion someone suggests that their social group was very productive and why not organize their company on the same basis where everyone will have an equal say in the company. Because of their shared experiences this solution is satisfactory to the members of the group. For our purpose, the point is that cooperatives are often built from scratch and women who join together in an economic enterprise may be more apt to organize their efforts in a expressive, that is, communal fashion due to their sex role experiences.
The opportunities of women are restricted in several ways. Women have long faced resistance when they attempt to enter careers which have been traditionally earmarked by men for men. Women are channeled into particular careers which are defined as women's jobs. Another problem faced by married women who must work is that they are still expected by their spouses as well as their employers to remain the primary caretaker of the family. These social expectations limit the amount of commitment to work anticipated from women. Women who accept these limitations are forced to devise occupational plans which takes the needs of family into account. Cooperatives formed by women have a structure which is more amenable to the flexible needs of women than the traditional authoritarian workplace.

Some cooperatives may represent ventures by feminists who are attempting to provide women with the opportunities that are not provided by society and are flexible in order to meet the needs of women. Case studies are needed to enhance our understanding of the dynamics of women in cooperative workplaces.

**Labor Segmentation and ESOPs**

This study did not attempt to categorize responding companies into their appropriate segment of the economy. The characteristics of the Employee Stock Ownership Plans (ESOPs) suggests that many of these companies are located in the secondary market. Edwards (1979) refers to the workers in this market as the working poor. The characteristics which suggest that the ESOPs are in the secondary market include: the smaller size, the higher percentage of blacks
and females, and the high percentage of low skilled workers.

A further unmeasured characteristic of workplaces in the secondary market is the inability to offer stable employment for workers and high wages due to the fierce competitiveness of the market. These companies invariably do have problems generating finance capital in comparison to corporations which have a secure oligopolistic share of the market. The way owners may have resolved these problems is through the creation of investment ESOPs where workers forego wages or benefits as investment capital in return for stock in the company.

As noted above, wages in this segment of the economy are lower than the other segments. This is largely due to the market conditions faced by entrepreneurs in this segment, i.e., fierce competition and an unstable often seasonable market. These are the conditions that workers are buying.

The future of workers under these conditions does not become secure because the business is not secure. Also, if workers hope to improve their life circumstances through ownership, such an outcome is not likely under the given market conditions. Ventures which may appear to be the only alternative in the short run may prove to be disastrous in the end. There is a need to examine the success and failure rate of employee buyout which controls for market segmentation. Such information is vital in making workers aware of exactly what their investment entails and the prospects for the future.
Size and Worker Participation

Size of the workplace, i.e., the number of workers employed, is a possible confounding variable in the study. The size of the responding population was too small to perform any controlling crosstabulations. Furthermore, even if, the sample size had been larger, it is doubtful that there would have been any variability to control. Eighty percent of the cooperatives were classified as being small.

Cooperatives were largely associated with the capital dimension of worker decisions. The relationship between cooperatives and small workplaces naturally leads to the question: What is the relationship between size of the firm and capital decisions? Is it the small size which creates the environment for capital decision making?

Size may indicate that there is a constraint to cooperatives which are organized to ensure worker participation. One reason cooperatives can engage in democratic management is because they are small. Bernstein (1976a) points out that once an organization becomes large it cannot provide workers with the opportunities to engage in direct participation and a form of representative participation will emerge. If capital decision making is desirable by workers, then large companies will need to be decentralized or new organizational means must be created to facilitate worker decision making.

Also, in an earlier section the argument was made that workers were not allowed to engage in capital decisions because this would
attack the foundation of the capitalist system. While this remains a reasonable argument, the possibility exists that corporations do not foster capital decision making by workers due to their large size. In this case size may not be the crucial variable, but the analysis does suggest that size is important in the creation of the organizational structure which is needed to provide worker participation.

Global Issues

In order to focus on the connection between worker participation and occupational injuries, some important issues concerning worker participation were sidestepped or ignored. These issues must be explored in order to assess the best possible approach in implementing worker participation in order to ameliorate occupational injuries and other sufferings faced by workers. Before pursuing this task one caveat must be represented, namely, no direct empirical evidence was presented to indicate that participatory firms have fewer injuries than conventionally owned firms (see Chapter VI).

Though the evidence for a comparison between conventional firms and participatory companies has not yet been provided, there is reason for pursuing participation as a solution to occupational injuries. The evidence presented here which only gathered information on non-conventional firms demonstrated that the greater the input workers have in making decisions the lower the injury rate. The logic of the theory also indicates a path toward worker participation as a solution. What needs to be examined is the social context under which participation is to be enacted.
The global issues to be discussed below can be framed by the following questions:

1. Why has there been the recent increase in the implementation of worker participation programs?

2. Does participation and competence in one dimension lead to a desire for greater participation?

3. Is worker ownership a necessary but insufficient basis for creating a democratic workplace?

4. Where are alternative management and employee owned companies located in the economic system?

5. What is the role of the unions in gaining greater say for employees?

6. Is worker participation a cure for all of the debilitating conditions faced by workers?

These questions will not be satisfactorily answered here, but an attempt will be made to provide a basic understanding of the issues.

Explanations for the Increase

Different explanations with various degrees of supporting evidence have been suggested regarding the great increase of interest in worker participation. The four main explanations which all relate to management concerns for participation which will be discussed below are: material conditions, pacification of labor, profit, and professionalization of management. After outlining the main arguments for each explanation, the discussion will focus on how the social context relates to the arguments.
The material conditions explanation refers to the present problems faced by management due to the enactment of past management practices. The HEW (1974) report is often cited as the exemplar which documents the boring, repetitious, and meaningless nature of much of the physical activity of workers. In striving to maximize profit, management followed Taylorist principles where work is broken into its smallest components and workers perform the same task during a shift. Workers naturally find such conditions undesirable and unbearable which results in high absenteeism, high turnover, low quality, and even sabotage of the company's product. Worker participation is perceived as a solution where thought and action are reunited for the worker. This changes the relationship between work and labor in a positive manner which results in the resolution of problems for management. Thus worker participation is perceived as resolving the negative aspects which we have come to associate with work itself.

Ramsay (1977) is derisive of social analysts who perceive worker participation as a management strategy directed toward correcting problems stemming from the past oppression of workers. By utilizing an historical analysis of the British economy, Ramsay (1977) demonstrates that worker participation has previously emerged in England when capitalists were experiencing a legitimation crisis. During times of instability and recession when capitalists were not meeting the needs of workers as a collective, enticements of participation would be dangled before workers with promises of more. The rhetoric of management during tough times hailed that through joint activity a
better work environment would be created and workers would eventually receive the rewards they so justly deserve.

The analysis of Ramsay (1977) indicated that when the crisis passed the organization of work returned to its former oppression and the voices of workers were no longer heard. The main attribution of management motives made by Ramsay (1977) was that worker participation is a means of pacifying workers when their collective anger and dissatisfaction could lead to structural change. Though Fraser (1983) does not provide the detailed analysis of the American economy, he makes the same assessment of the present worker participation movement and the history of participation in the United States. From this perspective, worker participation does not offer any hope for structural change or any other type of lasting change.

The profit explanation is put forth by Mills (1975) who claims that management has recognized participation as providing a high potential rate of return on management's investment. Mills (1975) reports that managers have begun to see the positive results of participation including: lower accident rates, diminished absenteeism and error rates, improved morale, improved quality and higher productivity. These desirable outcomes appeared to have been gleaned from personal conversations between Mills and managers; no hard evidence is presented regarding the extent of the outcomes or the number of managers who perceive the relationship between participation and management goals. Later, empirical research does support the contention of Mills (Alber, 1979; Conte & Tannenbaum, 1978). Also, articles written by management executives demonstrate that
management is concerned with achieving their own goals through worker participation (Bere, 1978; Fuller, 1980).

Heckscher (1980) presents a much more sophisticated version of the profit explanation which places the increase of participatory programs within a social historical organizational context. Heckscher (1980) contends that worker participation is restricted to the core sector of the economy, i.e., large well established oligopolies such as: AT&T, Polaroid, General Foods, and General Motors. The reason for this is the bureaucratization of the monopoly firm offers a sense of security to workers which Heckscher contends is a necessary prerequisite for embarking into a relationship of cooperation. From the perspective of Heckscher, the goal of management is the maximization of profit which can be pursued through worker participation if the appropriate conditions exist.

The professionalization of management refers to managers who hold a more open minded view in the construction of alternatives due to their training experiences. Though Kornbluh (1984) mentions changes where younger managers are more apt to possess a change oriented style and perspective, there is a paucity of research and thought concerning changes in the profession of management. The basic assumption behind the other explanations is that corporate executives pursue corporate goals such as profit or control of workers. Though many of the historical accounts tend to support such a monolithic view of management, such a restrictive view misses internal changes of business. The point to be explored here is that credentialism, the raising of entry level credentials, may be a
source of internal organizational conflict and change within corporations.

As entry credentials are raised for managers entering large corporate enterprises with unknown stockholders, managers may owe a greater allegiance to the professions. The allegiance to the profession is increased since the potential manager attends classes where the learning of the professional role takes place. Also, the loyalty bonds to the company are weakened as on the job training is replaced with formalized education. The organizational context, of course, retains a very powerful influence over the action of managers who are expected to pursue corporate goals. Conflict may arise between the expectations of the profession and the organization which may provide an impetus for change and innovation. This connection needs to be explored in future research.

The motivations of managers are not usually unidimensional and reality may entail the combination of many of the above reasons, or the reasons for implementing change may be different from the continuation of the change. An example of the former would be where the material problems created from historical management practice may provide the innovative manager the rationale for implementing alternative programs which were developed during the period of formal education. An example of the later case would be the enactment of a participation program as a tactic for forestalling a labor confrontation but is continued by management because it is found to maximize profit. Thus, the reasons for the increase in worker participation may be complex and varied.
The impetus for the increase of worker participation is extremely important in assessing the future development of worker participation. If worker participation is based upon pacification, then the future of participation is very dim, since efforts will subside when economic conditions improve. Participation as a means of correcting past management practices places limitations to the growth of participation and will be designed to preserve the existing social relations of production. Profit or the pursuit of corporate goals also limits the extent of participation and additionally contradicts the interests of workers who are coopted into the organizational system without remuneration. The major shortcoming of the professionalization thesis is that participation is contingent upon management action and the organizational constraints placed upon them. If managers lack the desire or the incentive to initiate worker participation, then it will not occur.

The discussion presented thus far largely pertains to explanations of the increase of worker participation within the core economy. As discussed earlier cooperatives which are usually built from scratch are based on democratic principles where workers have rights regarding the management of their businesses. Explanations for the interest of worker participation needs to be grounded in the economic sector being examined. This has been done on a case by case basis, but a general analysis of the location of workplace democracy in the economic system is still missing.

A final characteristic of worker participation is as a social movement which is also an open area of exploration which will provide
important information in assessing the future of participation. Though participation has been implemented in the past (Fraser, 1983), there are now independent organizations; such as the National Center for Employee Ownership and the Association for Workplace Democracy which provide technological and informational resources for anyone concerned with developing alternative organizations. Historically the Knights of Labor provided nominal financial support for the creation of cooperative workplaces, but the commitment was not strong enough to create a lasting movement (Carnoy & Shearer, 1980). A social movements perspective has not been applied to the worker participation movement. An assessment of the worker participation movement is necessary in gauging the performance of worker participation. Whether or not worker participation is a passing fancy remains an open question to be answered by future historians. An understanding of the dynamics of the present movement will allow appropriate intervention to guide action toward desired social change.

**Participation Development**

In the last chapter a continuum model of participation was presented with four categories: no participation, labor, social, and capital. These dimensions are arranged from the lowest amount to the highest amount of participation. A critical characteristic of the model which was not tested was if the model is developmental. In other words, does the achievement of competence in one dimension create a desire for acquiring the power to enact decisions in the
next highest stage. This property of participation is crucial in the assessment of participation as an agent of social change.

Pateman (1970) and Mason (1983) contend that participatory democracy has the quality of creating a participatory citizenry who will seek to maximize their participation. Once citizens are provided with the opportunity to make decisions which gives them fate control, they will continue to enact such decisions because having control over one's life is more enjoyable than having decisions made for you. The General Food's Topeka dog food plant is cited as providing evidence for a developmental concept of participation. The experiment was perceived to be a failure because workers who were given a taste of workplace democracy wanted an even greater voice which threatened management (Zwerdling, 1980). Heckscher (1980), however, disputes this interpretation of the Topeka experiment by claiming that there is a lack of support for the contention that workers ever requested anything that the company was not willing to give. He asserts that the experiment died due to a lack of management interest rather than management feeling threatened.

By applying the material conditions explanation of the preceding issue with the concept of participatory citizen, an important limitation to worker participation can be noted. Worker participation takes place within an organizational context, i.e., a business, with a set of organizational goals. Participation may only be nurtured by management as long as it meets organizational goals or does not threaten the fabric of the organization. This limitation is supported by Table 14 of the previous chapter where only one of 38
questionnaires returned by corporate respondents was classified in the capital dimension of participation. Allowing workers to make decisions regarding capital strikes at the heart of capitalism, namely the rights historically attached to property. Within the core sector workers will not be allowed to participate in the capital dimension of decisions since this would threaten the existing social relations of production. The obverse of this question or how does ownership effect democracy, will be reviewed at the end of the next issue.

In comparison to corporate companies, 12 out of 14 cooperatives included in Table 14 were classified at having developed worker decision making at the capital dimension. In the case of cooperatives, the business is often organized on a foundation of participation. Workers from the inception of the company have a say in the management of their company. Cooperatives in the United States exist within a capitalist system, and the structure of this system places limitations on the extent of democracy that will be developed.

A second major contention of Pateman (1970) and Mason (1980) is that as citizens obtain democratic skills in one sphere of the community they will transfer their knowledge and skills to other areas of the community. This conception is exemplified by a worker at the Topeka plant who reported learning how to communicate and share his feelings with co-workers; he decided to apply these skills in his marriage (Zwerdling, 1980). This idea was not supported by Greenberg (1980).

Greenberg (1980) compared the political attitudes and actions of
workers from a plywood cooperative and plywood workers from a conventionally owned firm. The results of Greenberg's study were disappointing in providing support for the democratic citizen thesis. Rather than expressing ideas which would facilitate democracy in all areas of life worker-owners tended more than workers at the conventional plant to express ideas of corporate liberalism—ideas which limit governmental interference in the economic sector. Greenberg (1980) explains this finding by reminding activists and theorists who perceive all participation as liberating society, that many worker-owners merely perceive their work as a means of earning a living. Worker-owners have material interests which align more with small businessmen than with activists seeking paths for massive social change. Greenberg (1980) also cites the recent sell outs of plywood companies to multi-national corporations for large profits as support for his contentions.

Not all cooperatives are perceived as strictly businesses by worker owners. Jackall (1984) documents the importance of social relations to cooperative owners of a cheese store. Cooperatives may well be the bastions of worker democracy in the United States and the evidence of this research demonstrates that cooperatives are apt to provide workers with the opportunity to enact capital decisions. The extent of democracy in the workplace and its spread to other areas of society may be hampered by the structure of society.

The evidence is unclear as to whether or not participation leads to a desire for greater participation. Case studies report that workers do desire more decision making power which threatens the
power of management, but critics report that there is no basis for these claims. Anecdotes also indicate that democratic skills are transferred from one sphere of society to another, but Greenberg's (1980) analysis demonstrates the opposite.

Ownership/Democracy

The question of whether or not worker ownership is necessary for democracy was raised and explored by Bernstein (1976b). Bernstein (1976b) conceives ownership to be a package of rights and functions where the right to make decisions regarding the organization and performance of work is one claim of ownership. Bernstein's (1976b) analysis indicates that the dimension of decision making can be transferred to workers and democracy enacted without the disintegration of all of the owner's property rights. He does, however, maintain that a portion of the surplus produced by workers must be returned to them at a rate beyond their regular wage, if participation is to succeed in the long run.

Bernstein (1976b) also describes cases where ownership has been acquired by workers, but democracy, the full participation of all workers, has not naturally occurred. Many cooperatives face a problem of worker apathy where a core group of concerned workers accept the major responsibilities for organizing and managing the workplace. Thus worker ownership does not ensure the democratic management of a workplace.

Other cases provide evidence that the acquisition of a company by employees does lead to expectations by workers that their role in
the decision making process will change. Workers expect a greater say in how the company is managed and if this does not happen then workers become bitter and resentful. Zwerdling (1980) documents this bitterness at the Vermont Asbestos firm where workers became so angered by the lack of change that enough workers sold their stock at a profit to an entrepreneur which resulted in the firm reverting to conventional ownership. Also Whyte et al. (1983) recorded a conversation with workers at Rath Packing Plant, an employee owned plant acquisition, which indicated a desire for participation was born with the plant takeover. Americans associate a bundle of rights with ownership as described by Bernstein (1976b). When employees become owners they naturally assume they acquire property rights with ownership, though this is not always the case (Ellerman, 1979). Also Whyte et al. (1983) observed that workers are often uncertain exactly what their property rights are and sometimes possess a naive view of ownership rights. In the capitalist system ownership and decision making rights are intertwined, and workers often demand participation when they become owners. Thus, there is a connection between ownership and participation.

The evidence cited above and the concomitant arguments pertain to smaller firms which were formed as a cooperative or were purchased by employees. The relationship between participation, ownership, and democracy becomes murky and speculative when attention is turned to the corporate sector of the economy. In the previous examples, democracy stemming from the acquisition of ownership was illustrated. In the corporate sector the obverse relationship is of interest; that
is, participation is a pathway to employee ownership. One argument that participation will lead to a change in the structure of the economic system is an extension of Pateman's (1970) democratic citizen argument. As workers acquire participatory skills they desire to extend the boundaries of participation. When workers would reach the level where they are enacting capital decisions, the rights of ownership attached to property would no longer make sense. If workers are making decisions which have historically justified the unequal division of profits, then their entitlement to profits should increase with their decision making. As noted earlier the corporate managers have an interest in restricting the decision making of workers from the capital dimension which makes the entitlement concern a moot issue.

In sum, there is a relationship between ownership and democracy but the relationship is yet unclear and varies by the location of the workplace within the economic system. Cooperatives have ownership but in some cases there is trouble in maintaining the interest of workers in participation. Many corporations have an interest in enacting participation programs but also an interest in restricting participation from areas that threaten the rights attached to private or more precisely corporate property.

Participation and the Structure of the Economy

Numerous terms have been utilized to describe groups of workplaces with similar characteristics throughout the text. Terms that have been utilized include: oligopolies, market segments, sunset
industries, conglomerates, and Fortune 500 companies. The coining of these terms indicates the recognition by social analysts that the capitalist system is comprised of more than one segment.

Market segmentation is a promising conceptual framework for examining worker participation. The analysis demonstrated that the form of participation and the decision making process varied by the form of ownership. Moreover, the form of ownership appears to be concentrated in particular segments of the economy.

Three connections were suggested between the form of ownership and the economic structure by the analysis. First, corporations with participatory programs are often referred to as being in one of two groups, namely, sunset industries or Fortune 500 companies. These two types are considered to have different motives for the implementation of worker participation programs. Companies which are referred to as a sunset industry contend with an eroding market and enter participation as a means to achieve profit. Fortune 500 companies, the corporations with the largest assets, enact participation programs because they are the leaders of their industry and are the first to implement promising new management practices.

Second, the analysis of this research suggests that ESOPs may be concentrated in the secondary market, that is, the competitive sector of the economy. These companies are smaller and thus do not control their industrial market. They face competition and do not have the stability of companies in the primary sector.

Finally, the cooperatives are not easily placed into the typology provided by market segmentation. Cooperatives are better
conceived of as alternative organizations to capitalist production. They should be considered a different type of business organization.

The market segment typology presented by Edwards (1979) captures the typical characteristics of the majority of companies in the American economic system, but needs to expanded and refined in order to be applied to worker participation. The primary sector needs to be refined by creating categories to explain either participation or non-participation of companies. Such a refinement should include at least the categories of conglomerate, Fortune 500 or successful oligopolies, and sunset industries. The typology needs to be expanded to separate out categories such as cooperative which remains a small percentage of companies. With such modification market segmentation can be a very powerful tool in examining the environmental pressures which can encourage or hinder a group of companies from developing worker participation.

The Role of Unions

One constraint on unions actively participating in the implementation of participation programs is that only 24 percent of the workforce is unionized (Bluestone & Harrison, 1982). Unionized workers, furthermore, are concentrated in the subordinate primary market. Thus unions are apt to play a more substantial role in regards to participatory programs enacted by corporations.

Some social critics are dissatisfied with the performance of unions (particularly at the national level) in regards to worker participation and worker ownership. Whyte et al. (1983) contend
that national unions have not been responsive to the needs of the rank and file in pursuing employee ownership as a means of preserving jobs. They report that national union leaders are ambivalent about the ambiguous role of rank and file as owners. The union organization is not conducive to workers who are owners. Also the structure of the union organization has evolved to handle the economic concerns of issues through collective bargaining and they have not developed the expertise to handle the problems of implementing worker participation or ownership.

Union involvement in the acquisition of ownership has been largely devised by local leaders as a last resort in saving the jobs of local members. Local leaders report frustration from their dealings with the national organization in seeking support for their plans. The national leadership is perceived as removed from the everyday problems of the rank and file.

Barbash (1977) provides a scathing critique of the union critics in regards to worker participation. He contends that intellectuals are overly concerned with the concept of alienation. The intellectuals are obsessed with a perception of workers experiencing meaningless work activity while workers are more concerned with providing for the needs of their family. He agrees with the national labor leaders who perceive of no poor jobs, only poorly paid jobs. There are national labor leaders such as Bluestone (1977) who perceive worker participation as being in the interests of workers. Worker participation will create a better work world for themselves.

The role of union leadership in regards to worker participation
and worker ownership is not yet clearly defined and in a process of change. Whyte and Blasi (1984) report that the posture of national labor negotiators are quickly changing due to the material conditions faced by labor leaders. Amidst the recession union negotiators are unable to achieve pay increases and have negotiated the transference of stock to employees in lieu of improved wages. They also report that the union for A & P workers provided resources to help workers form O & O, an employee owned market. In order to meet the conditions faced by workers, national unions have been forced to seek new strategies including how to make workers the owners of their companies. In regards to worker participation, Greenberg and Glaser (1981) report the more experienced union officials are with participatory programs the more likely they are to favor the implementation of programs.

The future role of the national unions is still uncertain. The problems faced by rank and file may lead to a change in the organization of national unions in order to meet the needs of union members. Economic changes may force unions to take a more aggressive strategy in regards to worker participation and worker ownership.

**Worker Participation as a Cure-all**

The data collected for this project were restricted to injury rates. As recognized from the offset worker participation can be a solution to a multitude of workplace problems. The most important concern, at least the relationship most often cited, is the link of worker participation with productivity.
Alber (1979) examined 56 job enrichment programs and found that most programs contain multiple goals and objectives. Moreover, most companies enact both management and employee-oriented goals. For example, productivity or quality is pursued simultaneously with worker satisfaction. He demonstrated that a majority of companies meet their established goals. Alber's survey indicates that worker participation can achieve many goals including: reducing absenteeism, increasing job satisfaction, improving quality, and reducing grievances.

Greenberg (1980) examined a plywood cooperative which provided better working conditions and more satisfied workers than conditions and satisfaction than a conventional plywood company. Also, Berman (1967) demonstrated the high productivity and profitability of plywood cooperatives. This present research also found jobs require more skill in cooperatives than other forms of ownership. Worker ownership, where participation is embedded in the organization, produces a multitude of benefits for workers.

In a study of 87 companies with employee ownership (67 with ESOPs and 27 with direct ownership), Conte and Tannenbaum (1978) found better relationships and greater profitability. Conte and Tannenbaum (1978) perceive their conclusions to be tentative when they state:

The industrial relations climate in employee-owned companies appears to be good, in the judgement of managerial respondents in these companies see employee ownership as having a positive effect on productivity and profit; the employee-owned companies that have been studied appear profitable—perhaps more profitable than comparable, conventionally owned companies; the owner-variable most closely associated with profitability is the percent of equity owned by workers themselves. (p. 27)
Worker participation and worker ownership have been found to provide solutions or improvements to problems faced by workers due to the capitalist system. Worker participation and worker ownership provide a process for changing the present economic system. Not all social observers agree how much potential is offered. Also, there is a disagreement of how the change is to be enacted. In the next and final section, a discussion of how worker participation and worker ownership can resolve the problems of workers will be provided.

Democratic Action

A growing concern which has reemerged in sociology, is how to transform an understanding of society into a dynamic process of social change. Many sociologists argue that social scientists may utilize personal beliefs and values in the selection of a problem, but once the research process begins a position of neutrality should be attempted. With exceptions this process was followed in this research up to this point.

The implementation of change and the research process itself contains a personal component. The first person case will be utilized in expressing my conception of the total research process, and my intrusion into the research process. This should enhance the reader's understanding of both the research and the implications for the implementation of social change.

I do not consider either the creation or the acceptance of sociological theory as a value free activity. As Gouldner (1970) points out there are domain assumptions embedded in theories and our
sentiments play a vital role in the adoption of a theoretical perspective. The theory presented in this research reflects my convictions that collectively human beings can change the conditions of society in a directed manner.

The acceptance of directed social action as a sociological concern mandates a vision of a social goal and a means for obtaining the goal. The best way of describing the process and the ends is by first explicating the basic problem I perceive which creates the conditions I find objectionable. The basic problem which is the root cause of all of the problems described throughout the text is the solution to the production and distribution of goods problem.

Every society, in order to maintain its existence, must create a means for producing the goods required to reproduce the society and a basis for distributing the goods to members of society. In American society late capitalism is the economic system which serves as the basis for producing and distributing goods. As described earlier this system has lead to a concentration of power and resources which are utilized to maintain an inequitable division of products and activity. My contention is that the only means to resolve the present inequities of society is through a change in the present economic system.

I seek a society where there is less inequality, less social stratification, equal opportunities for all regardless of sex, race, or social class, equal justice, and meaningful work for all. The process whereby this restructuring will occur for the good of society must be a democratic one. The result of the democratic process where
greater equality will be achieved is a democratic society. Carnoy, Shearer, and Rumberger (1983) correctly observe that the process and ends are the same in this vision. A democratic society cannot be achieved through elitist or authoritarian means. Pateman's (1970) concept of the educative process whereby the democratic citizen will be created is a powerful tool in achieving the goal of equality.

The creation of a democratic citizenry will be achieved through multiple approaches. This is call for the creation of democratic structures in every aspect of our social lives. We need to create democratic relationships in the political system, in the family, in education, and of course in the workplace.

The creation of democratic organizations will also be achieved through multiple modes. In regards to work the organization of work can be changed through the means discussed in this research. Worker participation can create democratic citizens who learn to change the authoritarian organizations with more democratic ones. At the very least ESOPs and cooperatives serve as exemplars to society of an alternative way of distributing the products of labor.

Another important mode of change in regards to work is through a change in legislation. Carnoy, Shearer, and Rumberger (1983) describe a grassroots political movement working within the Democratic Party where labor as an interest group can flex their collective muscle in pursing laws which meet their interests. Legislative needs suggested by this research includes: the creation of a public banking system which gives workers greater access to the capital required to buyout employers, plant closure legislation where
conglomerates are punished for moving capital from communities, information laws regarding health and safety hazards as well as opening the books of the company, and tax reform which closes tax loopholes which provide incentives for plant closures. All of these proposals have been made by other advocates for a change in the economic system (see Bluestone & Harrison, 1982; Carnoy, Shearer, & Rumberger, 1983).

A specific contribution reinforced by this research is that the potential and limitation of worker participation must be recognized. If worker participation is allowed to only pursue management goals workers will not gain the decision making power necessary to create their own environment. We need to allocate resources including our energies in providing opportunities for workers to enact decisions at the capital dimension level which demonstrate the optimal safety conditions for workers.

The contribution of this research was to create a theoretical framework within an historical framework which explicated the relationship between worker participation and injury rates. Also, many characteristics associated with the form of ownership were examined which clarified and identified some potential dynamics within these parts of the economy. But the main work lays ahead which is utilizing the insights of this work in changing society.
FOOTNOTES

1 Up to this point the term capitalists has been utilized in describing those who interacted with workers in regards to daily decisions. Monopoly capitalism resulted in a change where capitalist interests where pursued by a hired manager. This is best documented by Berle and Means (1933). Herein I will use the term monopoly capitalists in regards to the interests of the class of capitalists in the core sector and management in regards to the enactment of decisions.

2 Industrial sociology can also be labeled as union sociology with notable exceptions. During the sixties a group of young sociologists influenced by Everett Cherrington Hughes explored careers of many who had been ignored in so called exotic careers. Liebow (1967) provided an extraordinary insight into the daily lives of the working poor. Cohen (1983) also documents earlier works at the turn of the century where sociologists were more concerned with all workers. The focus, of mainstream sociology has been the core sector which is epitomized by the auto assembly line worker. This attention has allowed us to ignore the struggles for existence by the working poor who comprise one-third of the labor population. These workers face dead end jobs, uncertainty, insecurity, and a daily struggle.

3 Brecher (1972) provides the following figures to demonstrate the growth of the Knights of Labor:
   
<table>
<thead>
<tr>
<th>Date</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, 1884</td>
<td>71,326</td>
</tr>
<tr>
<td>July 1, 1885</td>
<td>111,395</td>
</tr>
<tr>
<td>July 1, 1886</td>
<td>729,677</td>
</tr>
</tbody>
</table>

   (p. 28).

4 Not all trade unions within the federation were shy in calling a strike action. For example, 98.3% of strikes in the construction industry were called by the union (Montgomery, 1979).

5 In 1955 Fred Thompson, a member of the I.W.W., furnished a history of his union which was updated by Patrick Murfin in 1976. This work provides an interpretation of the history of the I.W.W. from their own perspective. This provides a balance to the fanatical dynamiters image provided by the media of their time and historical accounts since. Also the Commission on Industrial Relations provides an insightful dialogue between Commissioner Weinstock and Bill Haywood, an important and colorful leader, who provides a vision of the society he seeks (testimony excerpted in Auerbach, 1969, pp. 74-86).
Historical accounts document many cases where local governmental officials suspended civil liberties and any semblance of justice in dealing with labor organizers who were falsely charged or beaten in the dead of night. Owners, however, could not always depend on the government to use force in dealing with workers. Depending on the geographical location of the strike and mood of the public, local officials backed workers and the national guard was sometimes untrustworthy due to their sympathy for workers (Brecher, 1972; Montgomery, 1979).

Montgomery (1979) presents an interesting measure of the deskillling process. He states: "In 1900 the category 'tool and die maker' had not existed in the national census of occupations. In 1910 there nine thousand of them listed, and by 1920 there were 55 thousand" (pp. 118-119). Before 1900 the skilled worker could create tools or implements needed from what was in their tool chest.

Ford did not restrict his innovation to flow line production. He also initiated the $5.00 a day wage which was paid on an incentive basis (another means of managerial control) and hired a staff of 100 sociologists to weed out unacceptable workers by delving into their attitudes and personal lives (Montgomery, 1979, p. 120).

Company housing emerged much earlier but more as a means of controlling the mobility of workers rather than control through benevolence (Brody, 1960).

Judge Gary expressed this paternalism at a diner for businessmen when he stated: "The man who has the intelligence and the success and the capital to employ labor, has placed upon himself voluntarily a responsibility to his men. We have the advantage of them in education, in experience, in wealth, in many ways, we must make it absolutely certain that...we treat them right" (quoted in Brody, 1960, p. 177).

Lembcke and Hart-Landsberg (1981) offer an alternative interpretation which is shared by many leftist scholars. They claim that Roosevelt usurped the consciousness formed at the ground level, and by placing himself at the head of the movement was able to prevent any structural change. Both interpretations recognize the importance of worker action in the political realm.

Actually section 7a of the National Industrial Recovery Act first gave workers the right to organize, but this act ran into constitutional problems and was replaced by the Wagner Act.

Section 7 of the Wagner Act reads:

Employees shall have the right to self-organization, to form, join, or assist labor organizations, to bargain collectively through representatives of their own choosing and to engage
in concerted activities, for the purpose of collective bargaining or other mutual aid or protection (in Auerbach, 1969, p.367).

A note of caution must be attached in regards to the data behind this paragraph. Dowd (1974) and Sherman and Hunt (1978) who characterize this as a period of vertical mergers only provide a couple of examples as evidence.

The industrial part of this complex is concentrated in the core sector of the economy. Reich (1978) convincingly outlines reasons why military contracts are so important to the core sector.

The career of John L. Lewis provides a fascinating social psychological case study of a social movement. Though he could be charming and pragmatic, his drive and ego could have devastating effects on friends and the movement. His fall from power has been traced to his unrealistic competition with President Roosevelt (Bernstein, 1969).

Also the War Labor Board played an important role in the growth, maintenance, and stability of unions. Workers who joined the union were required to remain members during that contract period (Kirkendall, 1974).

Brecher (1972) claims that the sitdown was the result of an argument at a baseball game. Two rubber factory teams disliked an umpire who not a union man and sat down on the field until a union umpire was found. When workers returned to work and were struggling to change conditions, they decided to use the tactic that was so successful on the baseball field.

This story may belong in the category of worker mythology rather than labor history, since Bernstein (1969) documents the first sitdown strike as occurring two years before the baseball game.

Self-governance included: keeping the place clean, preventing the destruction of property, and organizing social activities including dances. Also wives of the strikers organized in order to bring food and words of encouragement to their husbands (Brecher, 1972).

Bluestone and Harrison (1982) actually document three periods of mergers during this era: 1949 to 1955, 1964 to 1968, and 1973 to the present. The first period is much smaller in the number of mergers and all periods are considered to share the characteristic of being conglomerate in form.

Such an attribution clearly denies the labor history outlined here and contains a subtle blaming of workers for the present problems.
The social meaning of feedback has not been recognized by MBO practitioners. Feedback often requires the enactment of a different type of social interaction where supervisors listen and ask for suggestions from employees. This aspect of MBO changes the authoritarian relationship between management and workers which may account for the success of MBO.

Baseline data is a behavioral term which refers to establishing the response pattern of subjects prior to the intervention.

Though QWL is now concentrated in union workplaces and based on cooperation, it is a recent development. At the beginning QWL tended to be in the south and enacted in non-union shops. Critics from a union perspective charge that QWL was a means to ensure a non-union shop. In the last decade unions have taken more interest in being involved with QWL projects.

Guzda (1984) traces the history of labor-management committees back to the early nineteenth century. During both of the World Wars the government encouraged such committees to ensure the war effort in the factory. The use of committees waned after each war and cooperation broke down. The new Labor-Management Committees, however, are not a continuation of the past, but a new entity.

From a corporate perspective a good business climate is a passive non-unionized labor force, and local government provides incentives (see, Bluestone & Harrison, 1982).

This is not a problem for workers, but for activists who envision a new society emerging from the cooperatives. Greenberg (1980) points out that the workers in the plywood cooperatives perceive their cooperative as a means of earning a living. Other cooperatives do perceive themselves as alternatives to capitalist employment (Jackall & Levin, 1984).

The failure rate is unknown. It is better to say the cooperatives which have achieved stability have been very profitable.

Toscano (1983) distinguishes between worker and employee control. Employee control entails the purchase of stock by all employees. Because of their higher salary management personnel are apt to purchase a greater proportion of the stock. Worker ownership is restricted to workplaces where the stock is owned by those who perform the labor.

Labor-Management Services Administration also included worker participation programs in the public which were not considered apart of the population of interest. Carnoy, Shearer, and Rumberger (1984) document that the inroads to employment by minorities have been made in the public sector. Hence the
overall participation of minorities in employee participation projects may be higher than suggested in this study.

Unfortunately respondents were not asked to identify their position in the company.

The high percentage category of black workers contains two outlier cases where the composition of the workforce is greater than 50 percent. Cases in the high category are clustered at the lower end of the range where over 90% of all workplaces have workforces composed of less than 35% blacks.

A means was devised to assign cases to the appropriate dimension of the scale. The values for each of the selected variables for each of the dimensions were summed and then placed in the dimension in accordance to the criteria established. The criteria for selecting were:

No decision = Labor less than 10, social equal 3, and capital equal 1.

Labor = Labor greater than 10, social less than 5, and capital equal 4.

Social = Labor greater than 10, social greater than 5, and capital less than 7.

Capital = Labor greater than 10, social greater than 5, and capital greater than 8.
Appendix A

Work Life Questionnaire
Name of Company: ________________________________________

I. BACKGROUND INFORMATION

1.1 What year was your company founded?_____

1.2 What is your major product or service?___________

1.3 If known, list your Standard Industrial Code number?_______

1.4 In 1984, about how many production workers were employed on a year-round, permanent, full-time basis?__________

1.5 During 1984, what was the average number of employees including full time, part-time, seasonal, temporary, etc.?_______

1.6 How many unions represent workers in your company? (Circle the appropriate response)

None 1 2 3 4 5 6 More than 6

1.7 Approximately what percentage of production workers are represented by a union? (check one)

0% 1-25% 26-50% 51-75% 76-99%

1.8 What percentage of production workers fall in the following categories? (Please indicate if figures were estimated or documented (actual) by placing the figure in the appropriate column). Write in the percentage.

<table>
<thead>
<tr>
<th>Estimated</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>_________</td>
<td>______</td>
</tr>
<tr>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
</tr>
</tbody>
</table>

1.9 What percentage of employees fall in the following categories?

Managerial Clerical Skilled
Semi-skilled Unskilled

1.10 Does your company have a formal committee which considers safety issues?

Yes No
II. TYPE OF OWNERSHIP

2.1 Check the form of ownership which pertains to your company. (There may be more than one form, check all appropriate descriptions.)
- Family or individually owned.
- Corporate enterprise with private stock.
- Corporate enterprise with public stock.
- Subsidiary stock ownership plan where employees own less than 50% of the stock.
- Producer cooperative.
- Other, Please Specify: __________________________

2.2 Check the following ways in which employees can obtain stock in your company?
- Company does not have stock.
- Open stock market purchases.
- Stock options.
- Stock bonus plans.
- Other, Please Specify: __________________________

2.3 What percentage of stock is owned by employees:
- 0%  51-75%
- 1-25%  76-99%
- 26-50%  100%
- Unknown

If your company is not an ESOP or Cooperative, skip to Section III, below.

2.4 What type of employee stock ownership plan does your company have:
- Stock bonus plan through a trust.
- Stock bonus plan through profit sharing.
- Leveraged ESOP.
- Investment Credit ESOP.
- Other, Please Specify: __________________________

2.5 Does the stock owned by employees carry voting rights at this time?
- Yes  No

2.6 If your company is a producer cooperative, which type of voting rights best describes your company?
- Voting rights are restricted to members who own stock.
- All workers have voting rights regardless if they own stock or not.
- Voting rights are restricted to stock owners who are also workers.
III. ORGANIZATIONAL DEVELOPMENT

Sections III and IV are concerned with worker participation in workplace decisions. If your company does not have any programs which allow for workers to participate in the decision process, then check no on question and skip to Section V.

3.1 Do workers participate in any decision making in your company?
   __Yes __No (If no, skip to Section V)

3.2 Below is a list of programs described as providing worker participation. Check all programs which are part of your organization and indicate the year that program was initiated.

<table>
<thead>
<tr>
<th>Program</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job enrichment or job enlargement</td>
<td></td>
</tr>
<tr>
<td>Quality Circles</td>
<td></td>
</tr>
<tr>
<td>Scanlon Plan</td>
<td></td>
</tr>
<tr>
<td>Quality of Work Life</td>
<td></td>
</tr>
<tr>
<td>Management by Objectives</td>
<td></td>
</tr>
<tr>
<td>Autonomous Work Groups</td>
<td></td>
</tr>
<tr>
<td>Labor-management cooperative committees</td>
<td></td>
</tr>
<tr>
<td>Voting by workers on major decisions</td>
<td></td>
</tr>
<tr>
<td>Others, Please list</td>
<td></td>
</tr>
</tbody>
</table>

IV. WORKER PARTICIPATION

4.1 Has your company offered employees training in work related problem solving skills?
   __Yes __No (if NO, skip to 4.3).

4.2 If yes, approximately what percentage of employees have received problem solving training?
   __1-25%  ___76-100%
   ____26-50%  ____Don't know
   ____51-75%

4.3 Does your company have special experimental programs where some workers are more involved in making decisions than other workers?
   __Yes __No (If no, skip to 4.6)

4.4 What percentage of workers are involved in experimental programs?
   __1-25%  ___26-50%  ____51-75%  ____76-100%
   ____Don't know
4.5 Which of the following means of communication within the company do employees use on a regular basis?

- Face to face discussion with immediate supervisor or appropriate committee person.
- Face to face with top level management.
- Voting on decisions.
- Suggestion box.
- Committee representation.
- Intervention by a third party.
- Other, Please specify: _______________________

4.6 In 1984, approximately what percentage of employee suggestions where implemented by management?

- 0%
- 1-25%
- 26-50%
- 51-75%
- 76-100%
- Don't know

4.7 Check one response for each of the following.

How much say do workers have in these areas?

- None
- Little
- Some
- Lot

- Where a worker is placed
- Which workers join a work group
- Who should be fired
- Who should be promoted
- Who should get what job in each section or group
- The quality/accuracy of work
- How much work is done in a day
- Handling complaints or grievances
- Payment of wages
- The way work is done-methods and procedures
- Implementation of technology
- Establishment of physical working conditions
- How capital is raised
- How profits are divided
- How profits are invested
- Introduction of new products
- Setting of prices
- Research and development
V. OCCUPATIONAL INJURY

This section is concerned with occupational injury. For your convenience, this section has been arranged in accordance with OSHA form 200. You may copy the totals from your annual summary report. This information is strictly confidential and voluntary and is not connected with your obligation to OSHA in any manner.

Occupational Injury Cases (Covering Calendar Year 1984)

*Complete this section by copying totals from the annual summary to OSHA (Section VI) or from your log.
*If there were no OSHA recordable injuries during 1984, please record as zero.

<table>
<thead>
<tr>
<th>Injury Related Fatalities</th>
<th>Injuries with Lost Work Days</th>
<th>Injuries Without Lost Workdays</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Injury cases with days away from work or restricted workdays</td>
<td>Injury cases with days away from work</td>
</tr>
<tr>
<td></td>
<td>5.1</td>
<td>5.2</td>
</tr>
</tbody>
</table>
APPENDIX B

RESPONSE RATE
The major factor which cannot be controlled in a mail survey is the number of respondents who will return the questionnaire. A low return rate threatens the validity of the findings since a researcher is not certain if the respondents and the non-respondents share the same characteristics. A high return rate was especially desirable in this project since the characteristics of the population had not been systematically explored in previous research.

In Table 20 the distribution of the questionnaires and the final disposition of the questionnaires is crosstabulated by the three lists. As described in Chapter VI the first list was provided by the Labor-Management Services Administration, the second by the National Center for Employee Ownership, and the third by the Cooperative League of USA. The three lists respectively have a concentration of corporate, ESOPs, and cooperative workplaces.

The figures in Table 20 indicate that list one and two had the same proportion of total workplaces and cooperatives had the largest number of workplaces. The columns under the disposition of the questionnaire describes what happened to the questionnaire. Return to sender refers to questionnaires which were unable to be delivered by the Post Office. The questionnaires could not be delivered because the company had either moved or had gone out of business. The later is more likely in many instances since a high number were cooperatives. Cooperatives are like small businesses and like small businesses probably suffer a high rate of bankruptcy. The refusal category referred to companies which answered our correspondence with a refusal statement. The unusable returns
consisted of either respondents who did not get beyond the first page of the questionnaire or represented fewer than five workers. Also companies were excluded if the workplace possessed neither an alternative form of ownership nor an alternative form of management. The usable questionnaires, of course, consists of the workplaces which were analyzed in Chapter VI. Finally the "no return" column consists of seven companies who did respond but could not be identified. Two respondents left the line for the name of the company blank, and five names recorded did not match the population list.

Table 20
Disposition of Questionnaires by Sample Lists

<table>
<thead>
<tr>
<th>Sample List</th>
<th>Questionnaires mailed</th>
<th>Refused</th>
<th>Return to Sender</th>
<th>Unused</th>
<th>Used</th>
<th>No Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>List 1 (Corporate)</td>
<td>124</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>36</td>
<td>79</td>
</tr>
<tr>
<td>List 2 (ESOP)</td>
<td>125</td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>27</td>
<td>80</td>
</tr>
<tr>
<td>List 3 (Coops)</td>
<td>217</td>
<td>2</td>
<td>61</td>
<td>9</td>
<td>19</td>
<td>127</td>
</tr>
<tr>
<td>Undetermined</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>466</td>
<td>12</td>
<td>73</td>
<td>16</td>
<td>87</td>
<td>206</td>
</tr>
</tbody>
</table>

In Table 21 the number and percentage of the returns by the lists and by total are presented. The population was computed by subtracting the 'Return to Sender' questionnaires from the number of...
questionnaires mailed. Since questionnaires were most likely returned by the Post Office because the company has been dissolved then these cases are no longer part of the population of interest. The number of returns contains both usable and unusable returned questionnaires. The percentage of returned questionnaires was computed by dividing the number of returns by the population. The usable return percentage utilized the same procedure but the discarded questionnaires were subtracted from the returned questionnaires.

Table 21

<table>
<thead>
<tr>
<th>Sample Lists</th>
<th>Population</th>
<th>Return Number</th>
<th>Return Percent</th>
<th>Return Usable Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>List 1 (Corporate)</td>
<td>122</td>
<td>37</td>
<td>30.3</td>
<td>29.5</td>
</tr>
<tr>
<td>List 2 (ESOPs)</td>
<td>115</td>
<td>31</td>
<td>27.0</td>
<td>23.5</td>
</tr>
<tr>
<td>List 3 (Cooperative)</td>
<td>156</td>
<td>28</td>
<td>17.9</td>
<td>12.2</td>
</tr>
<tr>
<td>Unclassified</td>
<td>—</td>
<td>7</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>393</td>
<td>103</td>
<td>26.2</td>
<td>22.1</td>
</tr>
</tbody>
</table>

The corporate and ESOP lists generated a 30% return rate which is fairly respectable. The cooperatives did not fair as well with a less than 20 percent return rate and only 12 percent of usable questionnaires. The percentages of the individual lists are not totally accurate since seven companies could not be located on

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the appropriate list. The overall return rate was 26.2 percent and 22.1 percent were utilized in the analysis.

The return rate was disappointing and places limitations on the confidence in the interpretation of the results. Since a population was examined, the characteristics presented are assumed to represent the characteristics of the population examined. The possibility, however, remains that the characteristics of the population and the respondents may differ because workplaces whose representatives did not respond may possess a different set of characteristics.
BIBLIOGRAPHY


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