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Coal

COLLECTIVE BARGAINING AND MARKET STRUCTURE
IN BITUMINOUS COAL: THREE STAGES
OF EVOLUTIONARY RELATIONS

WORKING PAPER #5

ENERGY EXTENSION PROGRAMS

Working Paper Series

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COLLECTIVE BARGAINING AND MARKET STRUCTURE
IN BITUMINOUS COAL: THREE STAGES
OF EVOLUTIONARY RELATIONS

WORKING PAPER #5

by

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The Pennsylvania State University
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INTRODUCTION

The bituminous coal industry achieved importance in 1890 with the production of over 11 million tons, and then peaked in 1918 at 579 million tons (Nyden, 1970, p. 195). In 1927 production fell to 517 million tons and remained low throughout the 1930's, rising only with World War II. With the advent of the "energy crisis" and renewed governmental emphasis on greater use of America's abundant coal resources, the industry has again achieved importance as an energy supplier for the voracious appetite of today's industrial society.

Also ensuing from the energy crisis is renewed interest in the structure, conduct, and performance of the oil industry and, concurrently, in its horizontal diversification into other energy fuels. The prospect of an "energy industry" developing to a position where a few large firms control all of the primary energy fuels has stimulated divestiture legislation and pro and con arguments among economists (see U.S. Congress, 1975; 1977; Moore, 1977). Product market and industrial organization analysis, then, is in no small quantity, but little attention has been paid to the impact of the changing structure of this important industry on its workers and their organizations, that is, to labor market and collective bargaining analysis. At least until the 1977-78 national coal strike, the concern of researchers by and large has been with coal miners' declining productivity, wildcat strikes, and health and safety conditions.

This essay analyzes the dynamic relations between the market structure and the collective bargaining structure in the bituminous coal industry. The specific issue addressed is the impact of oil's horizontal diversification

on industrial relations and collective bargaining in coal, and the general issue is the relation between market and bargaining structure over time.

It does not seem possible, in any meaningful sense, to present separately the important structural elements as theoretically distinct concepts. They are interrelated and react to one another. The analysis, then, proceeds along the continuum suggested by the actual interaction of these factors. This essay is stylized history. The events are examined by and large chronologically, but with greater attention to how they logically fit together and how the interactive structural relations contribute to an anticipated outcome.

The evolution of structural relations in coal can be clearly divided into three stages -- stages which exhibit not only the importance of market structure in shaping collective bargaining structure, but also the importance of collective bargaining structure in shaping market structure. Labor's tactics and goals, dictated in large part by the structure of its industry, further served to determine the evolution of the coal industry's structure.

Chapter 1 reviews the applicable literature, with the goal of establishing the explicit theoretical framework within which to analyze this evolutionary process.

Chapter 2 presents the structural development of the period 1890-1950, or State I. During this period the market structure was competitive, and the collective bargaining structure was decentralized. Centralized union decision making carried out policies aimed at eliminating interregional competition. Instrumental legislative support for the union's policies made the effort successful. The union's goals and policies coincident to the market structure, in turn, shaped structural development during Stage I.

Chapter 3 examines the stable, cooperative, and sometimes collusive capital-labor relations characteristic of the period from 1950 to the early 1960's. Mechanization became an explicit tool with which the major producers and the union, working through a new centralized bargaining structure, attempted to consolidate the industry and eliminate nonunion labor. No national strikes occurred during this period, and the industry achieved a certain level of product and labor market stability. But this cooperative structure led, in part, to the union's problems in the next stage.

Chapter 4, the focus of this essay, analyzes the impact of change in market structure on collective bargaining from the early 1960's to the present time, or Stage III. The changing pattern of ownership and control of coal resources and production suggests a shift in the relative balance of tactical bargaining power from labor to management. Support for this structural inference is found in the relationship which parent oil has with its coal subsidiaries. The financial staying power of large, diversified oil companies and the lack of public information is apparent in western bargaining between the oil industry's coal subsidiaries and the United Mine Workers of America (UMWA). This influence reached its quintessence in the 1977-78 contract negotiations, when a coal company -- whose acquisition in 1963 by a major oil company gave birth to the energy industry -- set the national bargaining pattern in coal, which meant the pattern had been set outside the institutionalized bargaining structure just fifteen years after oil's entry into the coal industry.

The last chapter presents a summary of the conclusions drawn from the evolution of structural relations and investigates labor's possible response

to industrial change. A larger strike impact is possible when a coordinated bargaining remedy meets corporate conglomeration, but for the energy industry this solution is unlikely. More likely, the future bargaining structures in bituminous coal will be decentralized. There is, however, the possibility of a change in union structure in order to stem the inevitable decline in the power of the UMWA.

John Kenneth Galbraith's The New Industrial State (1967) poses additional theoretical possibilities. Implicit in this work are the evolutionary relations between collective bargaining structure and market structure. Galbraith's analysis suggests a relationship between the evolved "technostructure" of the "mature corporation" and the "ministerial function" served by the union (pp. 262-281). Unions no longer serve their members as adversaries to management, but as capital's needed controllers of the instability which follows from having organized labor as a factor of production. Accordingly, the mature corporation, ready to trade high wages for stable labor conditions, is more accepting of the union's existence than was the entrepreneurial enterprise of the past.

Coal is the exception, however. That industry never attained the position of mature industries, such as oil, steel, aluminum, and autos. Although the UMWA had a cooperative relationship with major coal producers in the 1950's, this partnership never attained the status of the union-management scenario Galbraith was writing about in the 1960's. The evolution of structural relations in coal followed a different trend, one consistent with a theme suggested by both Galbraith and certain earlier writers -- Barnett (1912), Chamberlain (1951), Commons (1909), Simons (1948), and Ulman (1962). This line of thought finds an interactive relationship between

market structure and collective bargaining structure. Analysis of this evolutionary, interactive process continues here, emphasizing how the outcomes affected the institutional bargaining power of the United Mine Workers.

CHAPTER 1

RELATIONS BETWEEN MARKET STRUCTURE AND
COLLECTIVE BARGAINING STRUCTURE:
A THEORETICAL FRAMEWORK

The purpose of this first chapter is to establish the theoretical framework within which to analyze the empirical development of the relations between market structure and collective bargaining structure in bituminous coal. Any substantive research effort must begin with an examination of what has been done before, what is left to us by scholars as the foundation upon which to build our own work. The particular question in mind here is not generically new, but nevertheless has been investigated comparatively little, perhaps as a result of the limitation of the tools provided by orthodox neoclassical theory. Recognizing that neoclassical theory is important and its tools are useful, we can then proceed with an analysis that utilizes these tools where applicable, but must go farther. We must take into account various dynamic institutional relationships if we can ever hope to establish the link between the product market structure and the collective bargaining structure in the coal industry. Explicit formulation of product market structure is only briefly attended to since the purpose of this effort is an examination of collective bargaining structure. The relation between these two analytically separate structures is the underlying process.

This chapter is divided into two major sections. First, the key concepts -- market structure and collective bargaining structure -- are defined. Ownership and control of production becomes an explicit structural variable, which has only been implicitly formulated in the standard definition of market

structure. The theoretical determinants of collective bargaining structure are established, and the empirical research that has attempted to test the validity of these determinants by examining the relationship between structural elements and bargaining outcomes is reviewed. The discussion to this point is primarily of a static nature; therefore, the second section takes the framework farther by incorporating a dynamic perspective. It is from this dynamic perspective that the pattern of ownership and control of production must be pulled out of the market structure elements and examined for any impacts it may have on collective bargaining structure.

Definitions and Determinants of Structural Relations

The Elements of Market Structure

The structure-conduct-performance paradigm¹ of industrial organization studies states that the performance of an industry depends upon the conduct of buyers and sellers, which in turn depends upon market structure. There are, of course, feedback effects, and basic conditions of supply and demand influence conduct and structure (Scherer, 1970). Market structure is indeed a critical determinant of how a firm performs, in terms of production and allocative efficiency, full employment, and other desirable goals. These outcomes are not explicitly analyzed here. Nor is the emphasis directly on the effect of structural relations on the individual worker. The emphasis is the effect on the union as an institution, on its bargaining structure and power, and then indirectly on its members.

Market structure is generally said to be comprised of (1) the number of sellers and buyers, (2) the type and degree of product differentiation, (3) the barriers to entry that face new firms, (4) cost structures in the industry,

(5) the degree of vertical integration, (6) the amount of diversification that characterizes the individual firm's product lines, and (7) the geographic dispersion or concentration of buyers and sellers (Scherer, 1970, pp. 3-7).² To this list I add ownership and control of resources and production as an element critical to collective bargaining structure.

These various elements are not separate but interrelated. A high level of concentration (the percentage of production, sales, or shipments accounted for by a group of firms, usually the largest four, eight, and twenty) usually reflects high entry barriers, one of which may be the ratio of fixed to total costs in the short run, and another of which may be the advertising expenditures that accompany a high level of product differentiation. The level of concentration itself, however, may not truly represent an industry's market power; vertical control of the entire or one key stage of the production process, even in the face of low concentration levels, may constitute a significant source of market power.

Essentially, the elements of market structure are interrelated components of market power, which in this context affect collective bargaining structure. Particularly important for bargaining relations are product diversification, the ratio of labor costs to total costs, and the level of technological innovation in an industry. Product diversification tells us something about the pattern of ownership and control which confronts labor's organizing efforts and bargaining demands, but it is inadequate as an element that explicitly recognizes the distribution of industrial decision-making power. The changing control of production through horizontal diversification transcends traditional industry definitions -- definitions which may essentially include the same market structure elements, but which may not

explicitly identify the locus of power. Therefore, one must keep in mind when proceeding through the early stages of this framework that the evolutionary relationship between market structure and collective bargaining structure dealt with in the last section is affected by the pattern of ownership and control of production even though the other elements of market structure may remain the same.

In addition, the ratio of labor costs to total costs indicates the share of income that must go to labor as one of the factors of production; therefore, this should influence management's ability and willingness to grant wage increases. And technology is probably the key ingredient in improved productivity, which affects a firm's ability to pay and also the level of employment in an industry.³ The introduction of machinery into a production process affects the performance of an industry in terms of production efficiency and through a feedback effect may influence the industry's structure, making it more or less competitive. Aside from labor market impacts on employment levels and union membership, mechanization, by affecting the product market, affects collective bargaining. In fact, as we shall see, mechanization of a labor-intensive industry may come about through a union's efforts to effect its desired bargaining structure.

We are now beginning to see the interrelations (and complexity) of the factors that make up a collective bargaining structure. Having set the stage in this section by identifying the important elements of market structure, we can proceed to examine collective bargaining structure itself.

The Elements of Collective Bargaining Structure

A particular collective bargaining structure is said to be comprised of a "multiplicity of units tied together in a complicated network of relationships by social, legal, administrative, and economic factors" (Weber, 1967, p. 14). There are four basic elements to a bargaining structure: (1) the informal work group, (2) the election district, (3) the negotiation or bargaining unit, and (4) the unit of direct impact (Weber, 1967). The latter two can be characterized, for analytical purposes, as the two elements most affected by the existing industrial structure.⁴ Formal collective bargaining takes place within the negotiation unit; therefore, it is this element which may be shaped by corporate and union structure, and by multi-employer and multi-union alliances. The unit of direct impact is "a set of individual negotiating units whose decisions are directly affected by the terms of a bargaining agreement" (Weber, 1967, p. 14), in essence, the intra- and interunion bargaining units that comprise the working collective affected by a particular settlement, what today has become known as the "pattern."⁵

Within the framework of bargaining elements, decision-making power may be delegated along a continuum that ranges from local autonomy to central authority. This decision-making structure affects, and is affected by, the industrial structure. Pressures to consolidate and centralize decision making result, at least in part, from the exigencies presented by the confrontation of labor and capital. For our purposes, then, a collective bargaining structure may be defined as consisting of two primary elements: the functioning units of which it is comprised and the decision-making structure, or power organization as Chamberlain (1961) suggests, adopted by both labor and management.

The determinants of bargaining structure may be grouped into five categories: (1) market composition or structure, (2) the nature of bargaining issues, (3) representational factors, (4) government policies, and (5) power and tactics in the bargaining process (Weber, 1967, p. 15).

Bargaining structure is strongly influenced by the market structure within which negotiations take place. Unions generally seek to construct bargaining structures that have the same spatial or temporal scope as the market(s) within which they or their employers operate. A traditional goal for unions, within the context of structural relations, is to stabilize their industry by "taking wages out of competition," that is, to establish uniform wage rates among the employees who operate in their market-defined jurisdiction. For general analytical purposes, it can be stated that industrial unions often attempt to establish bargaining structures that coexist with the scope of the product market while craft unions are generally more sensitive to labor market considerations.

Employers can also be expected to respond to structural relationships. True competition is basically onerous to producers, and intense competition can be expected to breed formulas to stabilize or regulate cost conditions and pricing behavior among rival firms. To the extent, then, that their goals coincide, labor and management can be expected to work together, in a sense to "stabilize" their industry.

A bargaining structure also tends to embrace those markets that are characterized by a high measure of cross-elasticity of demand.

Within a market setting, the type of issues emphasized influences bargaining structure development. The wage package, for example, has market-wide implications and depending on its relative importance at any one particular time will probably be negotiated within an expanded,

centralized structure. Moreover, strong pressure will be exerted to centralize decision-making power in order to avoid destructive cost variations among producers and divisive earnings variations within the union negotiating unit. Conversely, when local issues, such as plant-specific work rules predominate, pressures will surface to decentralize and make bargaining more responsive to local problems.⁶

The relative importance of these analytically dichotomized issues must, of course, be viewed within a dynamic framework. Over time the degree of importance attached to "local" versus "national" issues will change, as will the bargaining structure. An important dynamic implication is that, once centralization occurs as a response to immediate market-wide issues, decentralization, when deemed the necessary response to increasingly important local problems, will be difficult to establish. The efforts by workers to achieve their aspirations via collective bargaining may frequently collide as well as coincide with each other (Chamberlain, 1961).

Following from the affect of the influence of the dichotomized nature of bargaining issues on bargaining structure are the problems this poses for representational determination. Since a union is composed of various work groups, the goals of any one work group must inevitably become secondary if the union as a whole ever hopes to form a common front.⁷ Each group will strive for, or acquiesce in, "the expansion of the worker alliance as long as the rate of substitution between the gains derived from the increment to bargaining power are greater than the perceived losses associated with the denial of autonomy in decision-making" (Weber, 1967, p. 18). A general relationship describing the motivation behind the behavior resulting from this type of choice set is a ratio of the marginal increment to bargaining

power that results from a centralized structure (MIBP_C) to the marginal increment to bargaining power that results from an autonomous structure (MIBP_A):

$$\frac{\text{MIBP}_C}{\text{MIBP}_A}$$

When this ratio is greater than one, the tendency is toward centralization, for both representational and bargaining issues. The two major factors that influence this ratio are the degree of homogeneity of the union membership and the nature and relative importance of the issues that confront this membership.

In a similar fashion, employers in the relevant market are confronted with such a choice set when deciding on whether or not to join (or establish) a bargaining alliance: some sort of an employers' association in which to confront the union. The sacrifice of discretion in individual wage setting, influenced by his labor cost to total cost ratio, must yield "immediate, discernible gains" to the individual employer (Weber, 1967, p. 19).

Government policies can be thought of as an external constraint or influence, shaping and molding structural elements. They can be both direct and indirect: direct in the sense of a National Labor Relations Board determination of the "appropriate bargaining unit," and indirect via policies that use economic force to intervene in the voluntary nature of the bargaining structure and determine the "area of allowable conflict."⁸

Each party attempts to utilize the structurally determined tactics that inflict immediate or expected costs on the other party. Borrowing Chamberlain's (1951) concept, each party tries to increase the other's costs of disagreeing and/or decrease the other's costs of agreeing.

Some variant of "whipsawing" by either the company or the union is a much used tactical maneuver. A union that bargains with a few large employers, who operate in a well-defined product market, often "try(s) to maintain the individual firm as the negotiating unit while using the industry as the effective unit of direct impact" (Weber, 1967, p. 20). In a "mature" bargaining relationship this tactic is particularly effective when confronting the oligopoly group; the union can derive its power from the industry's horizontal control of the product market. Conversely, a union that is faced with many small employers is not likely to institute whipsawing tactics to any great extent. For the reasons of administrative economies and maintenance of market-wide wage uniformity, the union, when confronted with this market structure, presses for a consolidated bargaining structure. However, unions may still try to maintain enough flexibility to be able to play one group of employers against another, especially when regional differences come to bear on the structural relations.

Bargaining structures are also influenced by tactical maneuvers in multi-plant companies. When faced with a firm which produces homogeneous commodities in a number of plants, the union attempts to extend the scope of its representation by bringing all of the production facilities under its control. The employer in turn seeks to establish and maintain single-plant bargaining, thereby enabling him to continue production in one plant while another plant is struck. Thus, the employer's "costs of disagreeing" are reduced.

In a dynamic context tactical considerations exercise their greatest influence in the early stages of bargaining structure development (Weber, 1967). This is not to say that over time, and in a particular case, the union, for tactical reasons, will not continue its efforts to effect a

bargaining structure that is more to its liking, more responsive to its demands. Table 1 summarizes the major structural elements, synthesizes the general interactive patterns of relations among the determinants of bargaining structure and the structure itself, and serves as an explicit guide to the actual relations analyzed in the chapters to follow.

Interindustry analyses of structural relations have largely focused on the determinants of bargaining outcomes, omitting in most cases the collective bargaining structure as the important intervening institutional variable. But these studies provide insight, and it is to these efforts that we now turn.

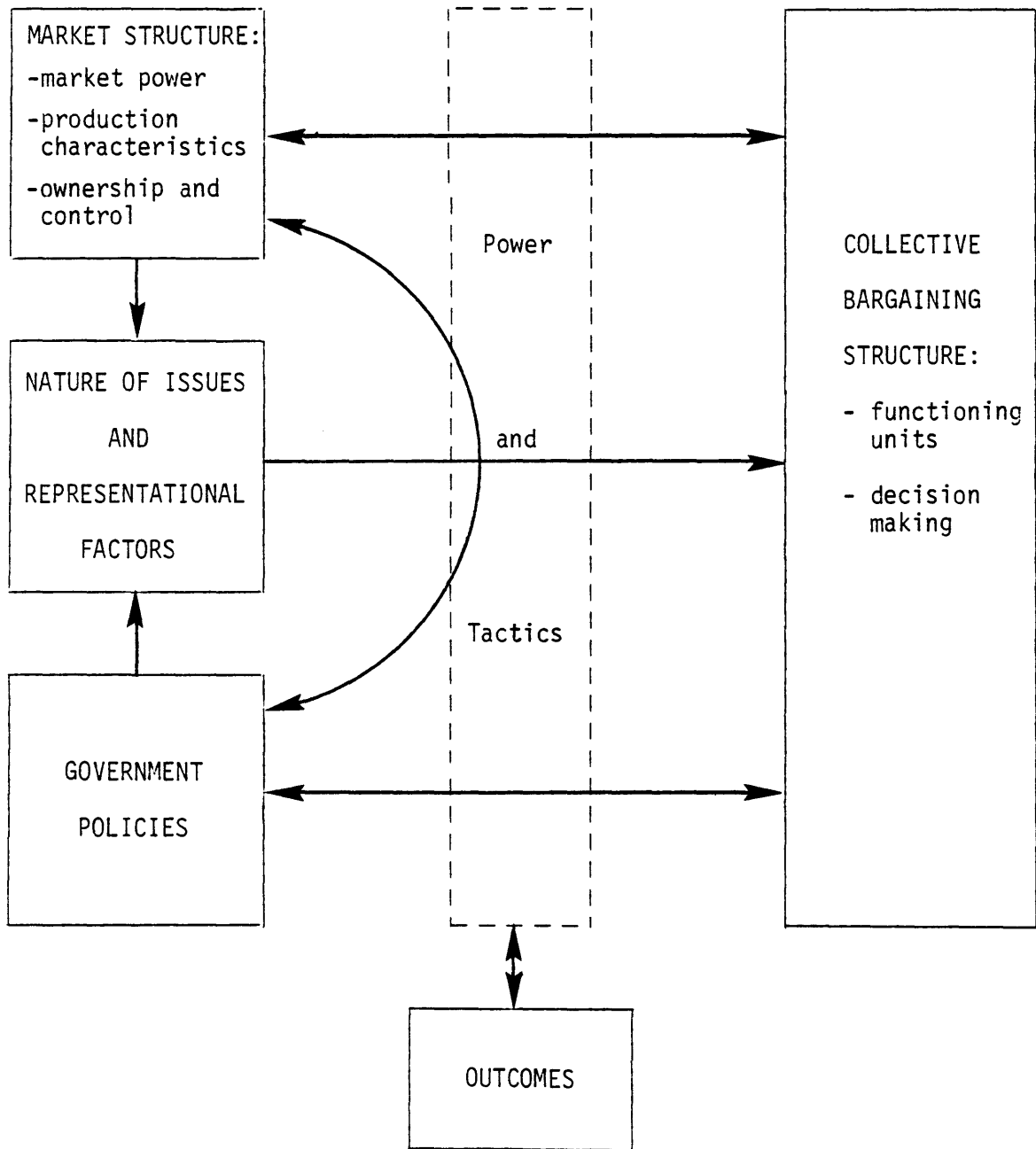
Structural Determinants of Bargaining Outcomes

One traditional approach to establishing the relationship between market structure and (indirectly) collective bargaining structure is to examine the determinants of wages and the impact of unions on wages. Generally, the question examined is whether wage rate changes are greater (or wage levels higher) in oligopolistic industries after productivity and other differentials are taken into account.⁹ The level of concentration (one aspect of market structure) seems to be a significant determinant of wages (one of the outcomes influenced by the collective bargaining structure); furthermore, the degree of unionism may somehow interact with product market power to determine interindustry wage rate increases.

In the initial major study Arthur M. Ross and William Goldner (1950) found a strong positive correlation between wage increases and concentration (CR), but believed that it was not possible to separate the degree of unionism (U) from this correlation. Albert Rees (1961) later argued that the manufacturing sector alone exhibits a strong relationship between unionism and

TABLE 1

PATTERNS OF STRUCTURAL RELATIONS



market power since "it just so happens" that strong unions deal with market power in manufacturing. Rees further argued that this is not true for the economy as a whole; bituminous coal, trucking, and building construction were all examples of industries that had strong unions and high wages, but were characterized by relatively competitive product markets. H. Gregg Lewis (1963), believing the Ross and Goldner comment and attempting to lend empirical support to the Rees position, added an interaction variable ($U \cdot CR$) to his regression equation in order to test for the effect of U and CR taken together. The negative sign of the unionism-concentration coefficient suggested that, given a certain level of unionism, the average relative wage of an industry is lower, the higher the degree of concentration in the industry (Lewis, 1963). The implication of this is that an industry's market power may hinder a union's ability to obtain wage increases. Additional support for this hypothesis came from Leonard W. Weiss (1966), who also found the interaction effect to be negative.¹⁰

Martin Segal (1964), in rejecting the Rees-Lewis interpretation, reiterated the argument that an industry's market power does afford a greater ability to a union to increase wages. Essentially, Segal asserted that, once a union is able to strongly organize an industry, it is easier for the union to maintain its organizational position in a concentrated product market structure than in a competitive one. The union's jurisdictional control is undermined by the ease of entry that characterizes competitive markets, but solidified by the barriers that would confront potential non-union entrants in a concentrated market. Furthermore, individual firms would have difficulty coercing the individual locals into accepting special concessions in order to attract more business with lower prices. Price movements that are rigid in the downward direction and price setting through price

leadership make an aggressive wage policy more viable for a union in a non-competitive industry.

Segal failed to clearly explain, however, the successes of the unions that existed in relatively competitive markets. He believed that a local product market enabled construction unions, for instance, to prevent the rise of nonunion employers. This does not particularly help our analysis of bituminous coal, for here the product market is national (or at least broadly regional) in scope.

Harold M. Levinson (1967) attempted to develop a more "unified" theory of the forces affecting the wages-concentration-unionism relationship by examining an additional characteristic of the production process. His explanation centered around the cause of union strength:

...the protection against nonunion entrants which is provided by concentration in the manufacturing industries is provided by ...the spatial limitations of the physical area within which new entrants can effectively produce (Levinson, 1967, pp. 201-202).

Bituminous coal, trucking, and construction were all industries that had strong unions and competitive product markets, a situation which, for the most part, still exists today. Yet certain technological or physical characteristics of the production process in these industries allow the union a certain amount of protection from nonunion entrants and maverick locals. Entry into any one of these competitive markets may be relatively easy, but the location of a new plant must conform to "the spatial characteristics of the area of effective entry into production" (Levinson, 1967, p. 202). In long-haul trucking, for example, the union need only effectively organize the few key cities within which all carriers must operate at some point.¹¹ The key relationship that Levinson developed was between the maintenance of union strength and the effective production conditions

that face new entrants (1967, p. 202). In the highly competitive product markets that are typically found in the nonmanufacturing sector, spatial production characteristics replace concentration as the primary mechanism through which the union maintains its jurisdictional control (Levinson, 1967, p. 203).

Levinson recognized the qualification of this analysis for coal mining. To some extent, the "area of effective production" is limited by the geographic location of coal resources; however, the spatial area is often quite wide,¹² making the union's ability to control new entrants much more difficult (Levinson, 1967, p. 202, n. 12)

Levinson further observed an important manifestation of the product market structure on the union's ability to organize. The ability of an employer to resist union organization is facilitated by an oligopolistic structure. A firm in the oligopoly group has greater financial resources available to employ such tactics as the use of strikebreakers and private police than does the competitive firm. Moreover, greater financial reserves are available to oligopolistic employers with which to absorb the losses resulting from a work stoppage over the union's demand for recognition than are available to the competitive employer (Levinson, 1967, p. 203).

The generalization that naturally follows is that a concentrated market structure has a "two-edged" effect on union strength.¹³ A concentrated industry will have greater resources (perhaps political as well as financial) with which to resist union organizational pressures, but once organized, the union will be in a better position to maintain its jurisdictional control by virtue of the barriers to nonunion entrants that are present in a concentrated market structure; the competitive market structure is easier to organize,

but provides less jurisdictional control to the union. Levinson's observations had provided a consistency to the different points of view expressed by the aforementioned studies.

Depending on the degree of union strength, the level of concentration (which essentially has been treated as an easily quantified proxy for a number of possible dimensions of market power that may affect performance) certainly appears to have an effect on wages. But what other aspects of market structure may have an effect on wages?¹⁴ And what other bargaining outcomes may be affected by market structure? These two questions remain. Nonwage bargaining outcomes (e.g., job security, working conditions, and other pay supplements), although substantive, are difficult to measure. But a recent study by Thomas A. Kochan and Richard M. Block (1977) finds "preliminary evidence" of structural forces that determine the interindustry variation in collective bargaining outcomes.

Kochan and Block's analysis is couched in an "interest group" approach to collective bargaining: a fundamental conflict of interests exists between the parties in a bargaining relationship.¹⁵ Collective bargaining is then essentially a power process. Variables that determine the variation in bargaining outcome differences across industries comprise the environment of this process. Implicit here is an important concept: collective bargaining structure, intertwined with market structure, determines each party's relative power, which then in turn determines the outcomes of the bargaining process. In order to measure the sources of power (in effect, the structural aspects), Kochan and Block analyzed zero-order correlations among indices of bargaining outcomes and certain "economic" and "institutional" measures of structural power sources for thirty-one two-digit level manufacturing industries in 1972.

Three of Kochan and Block's economic variables deserve mention, since they are important in our overall framework. First, the concentration ratio was found to be positively correlated with bargaining outcomes.¹⁶ In fact, this measure of market structure exhibited "the strongest and most consistent relationship" of all of their measures of the economic environment (p. 441). Their results support the view that unions can achieve favorable results from employers with market power, but do not contradict Levinson's (1967) and Segal's (1964) observations about the ability of the union to organize a concentrated industry in the first place. Second, the ratio of labor costs to total costs exhibited a negative and significant (at the 0.05 level) correlation with only the "pay supplements" index -- the index that was most directly related to pecuniary compensation -- but not with the other outcome measures.¹⁷ Finally, productivity, a measure of an employer's ability to pay, had a positive but "weak" (not significant at the 0.05 level) correlation with the bargaining outcomes.

What is really noteworthy about Kochan and Block's analysis is that they attempted to measure "institutional sources of power" and correlate them with bargaining outcomes. Their measures of strike activity, an indication of union "militancy" and labor-management "conflict," showed the most consistently strong associations with the outcome indices (working conditions, job security, and equity) that were the closest approximations to infringements on management prerogatives. One inference that could be drawn from their results is that the employer with market power is amenable to granting money benefits (and has the capability to do so), but that a militant union posture may be required for improvement in the substantive nonmoney conditions of employment. One could further infer that concentration not only resists

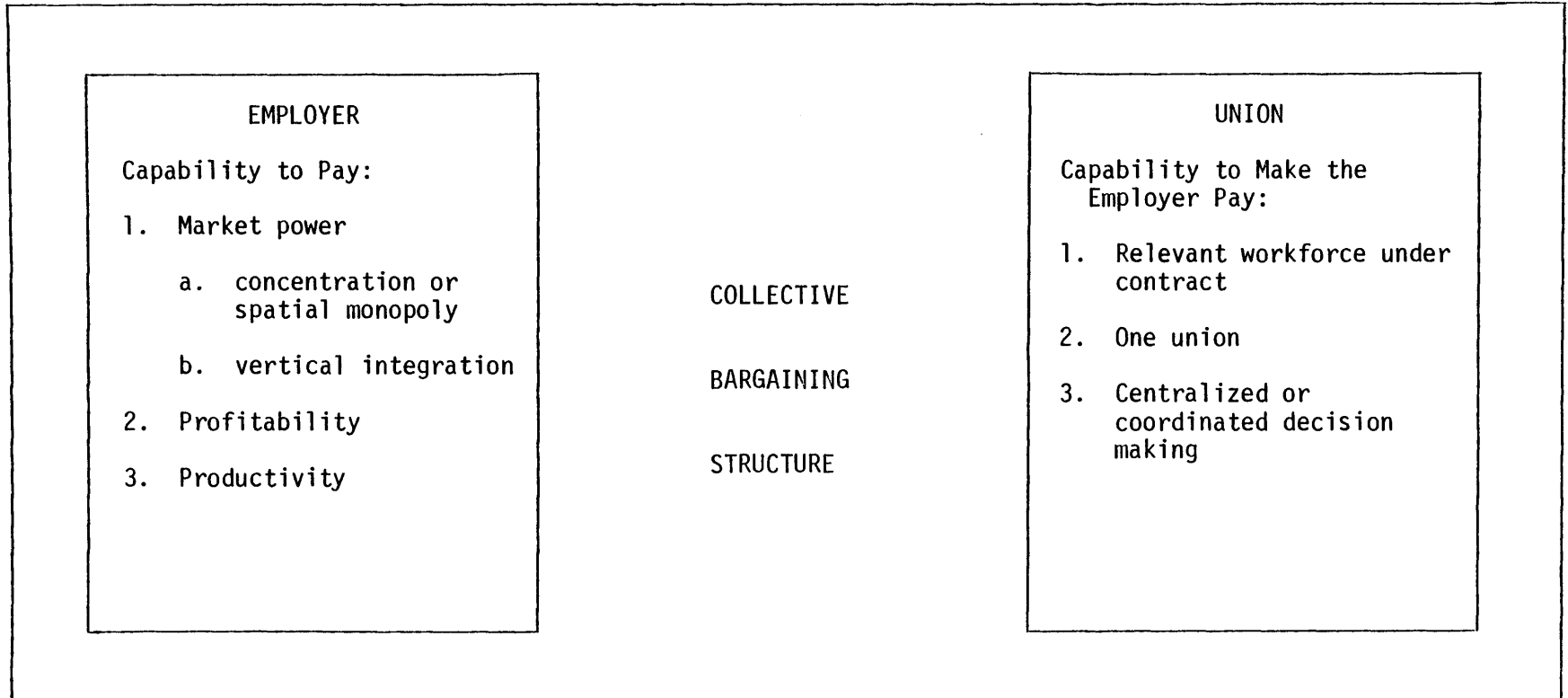
the union's initial organizing attempt, but it also resists the union's attempt to appropriate traditional management rights. When facing an employer with market power, the effectiveness of a strike becomes a major element in the collective bargaining process. The effectiveness of a strike, in terms of significantly increasing the employer's costs of disagreeing, is directly affected by the structural aspects of the product market (aside from the concentration level), which is part of the overall collective bargaining structure.

We would then expect that the collective bargaining structure most conducive to enhancing the unions relative bargaining power is one in which the employer has the capability to pay and the union has the capability to make the employer pay (see Table 2).¹⁸ The first characteristic is a function of the employer's market power: the ability to pass on costs, aided by a sufficient profit and productivity level. The second characteristic is a function of the union's ability to have the relevant workforce under contract: to have total organization in one union with the necessary level of centralized bargaining. The extent of unionization of an industry, defined in the context of collective bargaining structure as the relevant workforce -- the workforce that stands as potential competitors (Chamberlain, 1961) -- is an important element in the union's bargaining position. The elimination of rival unionism would also seem to be necessary to the union's strength.

But to the necessity of these two conditions, Kochan and Block's findings lend little empirical support. The fact that the degree of union organization in an industry "failed to show a strong or consistent correlation with the outcome indices" in Kochan and Block's study (1977, p. 444) must be accepted with caution. In addition, Kochan and Block conclude that "somewhat better

TABLE 2

SOURCES OF UNION BARGAINING STRENGTH: AN ANALYTICAL FRAMEWORK



outcomes are found in industries with a large number of unions and where the industry is less dominated by its largest union" (p. 445). These two findings are not consistent with either the accepted body of bargaining theory (for example, see Chamberlain, 1961) or the literature on industry case studies (for example, see Ulman, 1962, and Craypo, 1975). Moreover, these results may be due to the broadness of the industry definitions that were used. Industrial unionism can only be relevantly defined at the four-digit level. One would then assume that two-digit manufacturing industries would naturally include many unions organized on, and deriving their power from, a four-digit product market.

Kochan and Block's results are preliminary and provide only an "initial assessment" of the "general patterns of relationships" (p. 447). The subtleties of structural relations are often hidden by this type of an analysis, especially in a small aggregate sample of industries. Kochan and Block do present their study as a first step and state the need for examination at a more disaggregated level, for both inter- and intra-industry variations. And perhaps more meaningful than their specific results is the conceptual direction implicit in Kochan and Block's model:

...while the economic sources of power are clearly important factors in collective bargaining, a comprehensive theory of bargaining outcomes must go beyond the economic aspects of the relationship and include other dimensions that affect the power of the parties. In contrast to the differential effects found for the economic sources of power, the institutional sources of power showed more consistent correlations across the components of outcomes (p. 447).

In order to understand the sources of power in the collective bargaining relationship one must understand the structure of collective bargaining. And for an industry case study, one must go beyond static determinants to

an analysis of structural development, to an evolutionary framework, which must incorporate, as its fundamental perspective, the consequences of change.

Evolution in Structural Relations

Using the static definitions and determinants established so far as a point of departure, this section outlines the dynamic relations between market structure and collective bargaining structure. The direction taken is one of developing an interactive framework for our industry analysis. Bargaining outcomes are a function of the relative power of the concerned parties (including the state). Bargaining power is determined by the structure in which it is expressed. And the single most important element in the development of a collective bargaining structure, as I have tried to argue, is the structure of the product market; market structure change must affect collective bargaining structure and the power base of the parties. Depending on the type and severity of the change in market structure, the existing collective bargaining structure will be rendered ineffective as a power source, to a greater or lesser degree, for one or the other of the adversaries (structural change may also affect the government's ability to shape outcomes in the "public interest"). Only in a dynamic context can the sources of bargaining power be truly understood; development and change are the two key words in the following framework.

Structural Development

Trade unions in their organizing attempts have reacted against industrial development and change. John R. Commons commented on the "...social organization [for our purpose, the collective bargaining structure]" that struggled

for adaptation to the evolving economic series [the market structure]" (1909, p. 39). Commons was referring to the "historical extension of markets," which he believed was "common to all industries" and was what "epitomized American industrial history" (1909, p. 81). Whether one accepts the market extension interpretation of trade union development or not, one must recognize that implicit in Commons's analysis was the view that bargaining structure develops in relation to an evolving market structure.

The initial organization of the relevant workforce was the first stage in structural evolution. With industrial consolidation (kneaded by transportation improvements, expanding markets, and technological innovation in the production process), craft distinction -- which traditionally guided union organization -- became blurred. The union's tactical goal was then to organize the industry, instead of organizing the craft; the product market replaced the labor market as the major structural determinant. In a sense, however, the product market has always been the important variable, for once the craft has been defined so has the product (Alexander, 1973).

The characteristics of industrial development -- organization and control of productive activity -- led to a change in union structure as labor's response in the 1930s: The Congress of Industrial Organizations (CIO), in essence, was the belated adaptation in union structure (and consequently at that time in collective bargaining structure) to the first two merger waves.¹⁹ Structural adjustment did, however, arise prior to the turn of the century as, for example, multi-union bargaining in building construction (Alexander, 1973, p. 165). The key goals for the industrial union structure of the CIO were still to totally organize the industry and to eliminate nonunion competition.

Multi-employer bargaining structures arose in steel, for example, as employers realized their disadvantage as individual bargainers. Standardization of bargaining outcomes gave individual firms some assurance that competitors could not reduce (or raise unequally) wages as a prelude to cutting prices. To the extent then that wage manipulation enabled competitors to attract more business by reducing prices, individual market shares could become relatively inflexible. In addition, standard contract expiration assured the firm that competitors could not encroach upon its market share if it was the target being "picked off" during a strike (Alexander, 1973, p. 166). One must realize, of course, that each employer, and each regional group of employers, would weigh the benefits and costs involved in joining such a bargaining alliance; the lack of individual discretion in wage determination was no easy thing to relinquish.

Competition breeds centralized bargaining structures, and the standardization that comes with a centralized structure, in turn, supports the development of a noncompetitive market structure. This interactive relationship can be seen clearly in the steel industry's structural development. The large multiplant character of basic steel, enabling each firm to divert struck production, dictated that union structure must be at least company-wide (Ulman, 1962). But until the establishment of the Steel Workers' Organizing Committee (SWOC) by John L. Lewis in the late 1930's, the steel industry's structurally-based power kept labor at bay.²⁰ But unlike the development of the other national unions, SWOC had a decided advantage: national organization preceded the establishment of independent unionism (Ulman, 1962, p. 4). When confronting a concentrated market structure, a certain degree of centralized bargaining power is required for union success. Bargaining with established independent unions -- with the employer's ability

to play one against another -- can lead to greater difficulty in union consolidation than if a national organization exists in the first place.

It would appear that employers in an oligopoly will acquiesce, as they did in steel, to a centralized bargaining structure in order to achieve price stability; SWOC was the institutional support for steel workers' wages (Ulman, 1962) and stable (rigid in the downward direction) administered prices.²¹ Moreover, U.S. Steel's price leadership burden was substantially lessened by the wage floors provided by an industrywide collective bargaining structure: "In a speech before the Iron and Steel Institute in 1931, President Irwin of U.S. Steel had denounced many Little Steel executives in the audience for wage cutting" (Ulman, 1962, p. 5).²²

The tendency to develop centralized bargaining structures can be further reinforced if both adversaries have to "negotiate" with the government. And it would also seem to be politically astute, if not factual, for the employer to be able to "tie" his price increases to recently negotiated wage increases. The impetus for centralization, therefore, can come from one or both sides of the bargaining relationship. Initially, unions sought centralized structures as a way of eliminating geographic wage differentials, nonunion competition, and rival unionism. Later, industry sought centralized structures, if their characteristics and market structure development required it, as an institutional support to market stability. But if the mutual interdependence in the oligopoly group was not fully recognized and the benefits of such working to keep maverick firms in line, and if a decentralized bargaining structure existed, there was little incentive for the employers to assist the union in creating a solidified power base.

David Brody, commenting on the limitation of trade unionism as a labor movement, stated that "... [trade unionism is] shaped by pure and simple

doctrine: an incapacity to respond to adverse change" (1971, p. 122). And as we have argued, when it does respond, it responds in a belated fashion -- one structural change behind.

Structural Change

This final component of the theoretical framework gets at the heart of the current climate that surrounds collective bargaining structures. Structural change, as distinct from structural development, is defined as an alteration in market structure that presents a reorganization of production control, not just greater concentration in an industry. As industry definitions replaced craft definitions, so now have industry definitions been replaced by a new industrial form; the structure of a market as it affects the structure of collective bargaining can no longer be defined by a traditional industry definition. The relevant market structure that now faces labor cannot be defined by the product that labor produces, but only by the total enterprise for which labor toils.

The challenge of the most recent merger wave (approximately 1950 to the present) to collective bargaining is one characterized by some form of horizontal diversification. The impact on union and bargaining structure is most clearly seen in the most extreme form of diversification: the conglomerate firm. Here the boundary lines of production control make obsolete labor's response -- industrial unionism -- to the two previous merger waves. The market structure of the firm does not correspond to the jurisdictional purview of the existing collective bargaining structure.

In general, diversification (whether it be by conglomeration or expansion into related lines or substitute products) shifts tactical bargaining power

in favor of the employer.²³ The diversified firm bargains from a centralized position against separate and different bargaining units and/or nonunion groups. Bargaining with fractionalized opponents enables the employer to play one against the other and to whipsaw or permanently shift production. This "grand strategy," as Kenneth O. Alexander (1973, p. 168) calls it, is given its ultimate support by the financial staying power afforded by the total enterprise to any one unit being struck. With a fractionalized bargaining structure -- separate bargaining units facing a single enterprise -- labor's ultimate sanction can only affect a portion of the firm's total operations. (For the conglomerate firm the portion may be relatively small.)

In addition, there are other more subtle impacts implied by this new structural phenomenon. The union may find itself dealing with a level of management which no longer has significant labor relations decision-making power.²⁴ And the information void endemic to large, diversified corporations means that the union may not be able to examine the financial position of its industrial adversary with which to justify its demands.²⁵

For the maintenance of the union's power base in confronting this new market structure, our set of explanatory conditions (the capability of the employer to pay and the capability to make the employer pay) remain the same. But the impact of the multiproduct employer on collective bargaining suggests that labor's response should take the form of a change in collective bargaining structure, not, as in the past, in union structure.

Basic union identities are not likely to adjust their boundary lines to conform to the ownership boundary lines of the firm (in order to have the relevant work force of the total industry under contract and in one union): "Institutional survival, the inertia of tradition, the pride of separate

identity and the vested interest tied to an organization are powerful forces" (Alexander, 1973, p. 168). What structural response has occurred has taken some form of cooperation in tactics and goals among various locals and national unions and has been termed "coordinated, coalition, or joint bargaining" (Alexander, 1973, p. 169).²⁶

It is important to establish, to whatever degree we can, an explicit theoretical foundation upon which to base our treatment of the evolutionary relationship between market structure and collective bargaining structure in the bituminous coal industry. Hoping to have done this, we may now proceed with the task at hand.

NOTES TO CHAPTER 1

1

The broad relationships in this descriptive model were first developed by Edward S. Mason; see, for example, "Price and Production Policies of Large-Scale Enterprise," American Economic Review, Supplement, March 1939, pp. 61-74.

2

There is some contention on the relative importance and interrelations of the individual structural elements. For an attempt to fit models of market structure to data on United States corporations, see Shepherd (1972).

3

As Joan Robinson has so aptly put it, "...technical development, which from the point of view of capitalism is progressive, may reduce the share of wages in the proceeds of industry and generate long-period unemployment" (1977, p. 1333).

4

These elements may, in turn, affect the industrial structure, a relationship which is considered in more detail later in this paper.

5

In analyzing "orbits of coercive comparison," this notion was given explicit formulation by Ross (1948).

6

In practice, this division in issues is probably not symmetrical, but skewed toward centralization.

7

Representational problems are likely to arise when there is a substantial craft minority within a large industrial union, e.g., the UAW.

8

A certification election is an example of direct influence, and wage-price guidelines or controls, as well as laws dealing with union government, are examples of indirect influence.

9

The underlying theoretical concept is basically an ability-to-pay hypothesis; monopoly profits are expected to be available to meet union demands, and/or the firm with market power, ceteris paribus, can more easily pass on a wage increase in the form of a price increase than can the competitive firm.

10

Weiss's study differed somewhat from the previous efforts in that he examined relative levels of annual wages in 1960 rather than relative rates of change in hourly wages over a period of time. Also, the positive relationship found by Weiss between wage levels and concentration was not statistically significant when industry and personal characteristics were included. The reason proposed by Weiss was that concentrated industries could pay higher annual wages because they were able to obtain a better "quality" of labor.

11

James Hoffa understood the trucking industry; he knew that the Teamsters only had to control the major industrial centers in order to control the industry.

12

The Appalachian coal basin runs southwestward from north-central Pennsylvania to west-central Alabama.

13

Further empirical support has been given to the basic concentration-wages hypothesis by the recent effort of Dalton and Ford (1977). They conclude from their multiple regression analysis of 1970 census data that, ceteris paribus, wages are higher in the more concentrated industries, "even after separating out the possible effects of higher human capital requirements" (p. 57). But they admittedly fail to clearly determine the impact of unionization and place little reliance on their findings with respect to the unionization variable.

14

Implied in the level of concentration as a structural parameter is, of course, a certain a priori conduct, in particular, pricing behavior.

15

The state, in the role of an additional party, is omitted from their analysis: "...the legal environment is largely held constant...[and] it is almost impossible to measure differences in the political environment across the industries" (p. 438).

16

Profits, however, exhibited little explanatory power (pp. 441-442), which suggests that the ability-to-pay hypothesis is founded more on the employer's ability to pass on costs than it is on the existence of "excess" profits. One should consider the experience of the rubber industry; this concentrated industry has high profits but sells mainly to an oligopsonistic buyer -- the automobile industry. In Kochan and Block's own index of thirty-one two-digit industries, "rubber and plastic" was ranked number one in the total outcome index, but nineteenth and twentieth respectively in average hourly wages and pay supplements (p. 436).

17

The components of the pay supplements index were holiday pay, shift differentials, cost-of-living adjustments, and the like. The other nonwage indices were measures of fringe benefits (e.g., insurance and pension plans), working conditions (e.g., crew size regulation), job security (e.g., wage-employment guarantees and interplant transfer provisions), and equity (e.g., seniority provisions and job posting).

18

This simple yet explanatory set of conditions is the product of conversations with Dr. Charles Craypo, associate professor of economics, University of Notre Dame.

19

The first two waves of industrial consolidation occurred approximately during the periods 1898-1902 and 1925-1931.

20

For a more detailed explanation of the basis of the steel industry's formidable bargaining power, see Ulman (1962).

21

For a review of the administered price thesis and the arguments for and against its contribution to inflation, see Goldschmid, Mann, and Weston (1974, pp. 279-338).

22

Also, the steel industry's needed rebuilding program, which was supported by the NRA, would have greatly suffered from strikes (Ulman, 1962).

23

The problems for labor are exacerbated when the employer is both conglomerate and multinational in character. For an illustrative case study on Litton Industries, see Craypo (1975).

24

For an account of labor's frustration in dealing with absentee top-level management, see the statement of Joseph Molony, former vice president of the United Steelworkers of America, in U.S. Congress (1970), p. 5230.

25

See, for example, Gulf Oil Corporation, 1975 Annual Report and Form 10-K, which states that the names (let alone the financial statements) of "approximately" eighty consolidated subsidiaries are omitted from this report, since "...when considered in the aggregate they would not constitute a 'significant subsidiary' as defined in Rule 1.02 of Regulation S-X" (p. 56). And for a journalistic overview of the general problem of corporate secrecy, see Green (1977).

26

An analysis of this type of structural response is put aside for now and dealt with later with respect to the prospects for interunion cooperation in the energy industry.

CHAPTER 2

STAGE I: STRUCTURAL DEVELOPMENT AND
CONTRAPOSITION IN INDUSTRIAL RELATIONS

On January 25, 1890, the National Progressive Union was reorganized into the United Mine Workers of America, which was granted an industrial union charter from the American Federation of Labor. We shall take this as a point of departure for our analysis of structural development and begin by setting forth the initial structure of the bituminous industry, examining those characteristics which provided the basis for structural evolution. The union's crucial role in automating coal production is examined from the standpoint of how this policy affected the market and collective bargaining structures. Mechanization of the mines was directly related to the union's wage policy -- a policy, however, which may have been doomed without the aid of the government.

After acquiring a secure organizational base, the union, toward the latter part of Stage I, was able unilaterally to provide the industry with the monopoly conduct that it could not exercise on its own, or in tandem with labor. The union's strike weapon was consciously used as a price-support mechanism, restricting production in a fashion worthy of any monopoly firm. The union's decision-making structure is analyzed by how the nature of bargaining issues led to centralization and how centralization facilitated goal attainment. In this stage the union and the industry faced one another as adversaries within an environment characterized by contraposition. As set forth in Chapter 1, the interactive structural relations and resulting outcomes form the perspective from which this period is analyzed.

Initial Structure of the Industry

Competition and Market Instability

At the beginning of the period in question, 1890-1950, the coal industry generally met the requirements of perfect competition: a large number of small firms, relative ease of entry and exit, and the selling of an essentially homogeneous product.¹ In addition, the demand for coal was (and still is) a derived demand. Coal operators were dependent on the producers of other goods and sold little to the ultimate consumer. The market power of the coal industry was then partly a function of the market power of coal buyers. Moreover, wide fluctuations in demand were a factor particularly relevant to structural development. Coal companies were reluctant to close operations even when financial losses were substantial (Baratz, 1955).

Mine labor was highly immobile. The specialized skills and physical and cultural isolation characteristic of coal miners meant that intractable pools of unemployment could result from the many downward trends in the demand for coal (Glasser, 1948). The marked cyclical instability of demand coupled with the immobility of labor (and capital) contributed to the high level of excess capacity that characterized the early bituminous industry.

Costs, Prices, and Production

Production costs varied widely among firms and regions. The cost differences arose mainly out of geological conditions, alternative types of mining, differences in operating time, and the degree of mechanization (Baratz, 1955). The most important cost category nevertheless was, and to a large degree still is, the cost of labor, representing upwards of

60 percent of total cost. When prices would tumble in this competitive industry, operators would look to reducing their labor costs as the predictable competitive response.²

The intense price competition in the industry in the early twentieth century was based on labor and transportation cost differentials (Baratz, 1955). Southern operators were able to overcome transportation cost disadvantages by paying lower wages to their nonunion labor. Southern mines enjoyed preferential freight rates; they were able to establish agreements with the railroads to have coal shipped at high volume and low rates. In addition, southern operators were able to establish an association, Appalachian Coals, Inc., whose essential purpose was to fix prices (Baratz, 1955). All of this combined to shift production from the unionized North to the nonunionized South. From the period 1916-1920 to the period 1926-1930, the percentage of total annual coal production in West Virginia and Kentucky increased from 21.8 to 38.1 (Glasser, 1948, p. 612). John L. Lewis characteristically attacked the Interstate Commerce Commission for its "favoratism" in setting lower freight rates for southern coal and not for northern coal, but to no avail (Coleman, 1943). So it was evident that the union and the northern operators both had a stake in imposing a certain industry-wide minimum labor cost level.

The interregional competitive nature of the product market, however, inhibited producers from consolidating their industry. In addition, geological conditions placed a constraint on any monopolistic tendencies in the bituminous industry. Farmers were able to open "gopher holes" on their land that was adjacent to the supposedly monopolized territories (Coleman, 1943). The coal industry did not generally conform to the notion of absentee capitalism, which was the emerging ownership pattern of U.S.

industry in the early 1900's. These conditions led to continuing pressure on the established companies to reduce costs in order to compete with these small, low-cost producers. This pressure, along with the nature of inter-regional competition, resulted in wage cutting in poorly organized fields or the introduction of machinery in fully organized fields.

The Mechanization Process

The "march of technology" is particularly relevant to structural development in the coal industry. The union's tactics in attempting to mold its bargaining structure and the structure of its industry into the desired shape can clearly be seen by its attempt to influence the factor market. Part of its effort to stabilize the coal industry was to allow the introduction of labor-replacing machinery in order to force out low-cost, hard-to-organize, small producers. The important point here is that the UMWA accepted and even encouraged mechanization as early as 1903 (Baratz, 1955). The UMWA's policy toward mechanization during this stage of structural development was, however, to minimize the displacement of labor by requiring that the introduction of machinery be at a rate commensurate with normal work force attrition (Baratz, 1955). In addition, since this policy was essentially the only alternative to wage cutting, the union demanded a "machine differential" that would compensate "pick miners" for the higher output of "machine miners" (Baratz, 1955; Coleman, 1943).

Although the union fully accepted mechanization essentially from its inception, its concern for technological unemployment appears to have changed over time. The union believed that excess capacity was at the heart

of the industry's problems: "too many mines and too many miners" (Baratz, 1955). The union actively supported child labor legislation and strictly enforced seniority provisions in its contracts, both of which had dampening effects on the employment level in the coal industry. Its policies toward automating the mines -- encouraging a substitution of capital for labor and forcing marginal employers out of the industry -- were tied directly to its wage policy. If union leaders took into account the employment effects of their wage demands, and it appears that they did, it seems likely that their strategy became not one of accepting reduced employment as a consequence of a demand for ever increasing wage rates and mechanization, but one of desiring reduced employment as a strategy to mold the structure of its industry into a viable form. The union, when confronted with the negative impacts of mechanization, was more likely to call for a governmental solution than to alter its policy.³ The union wanted to structure the coal industry into a form of highly automated, consolidated capitalism. Only efficient, mechanized, and profitable firms would survive, and their employees would be highly paid. It was to this end that the union's wage policy was directed. But this process could not be worked out while the industry "suffered" from intense interregional price competition and nonunion production. The union's wage policy was first geared toward eliminating these problems, and it is here that we start to see the emergence of capital-labor cooperation.

Union Wage Policy

The UMWA's wage policy, as noted, was one of ever increasing wage rates to encourage mechanization and a commensurate reduction in mines and miners.

The union also believed that wages must be made rigid in the downward direction to guard against cyclical shocks (Baratz, 1955).⁴ It further emphasized taking wages out of competition, especially with respect to interregional disparities. The union essentially acted as the motivating force to bring about change in the structure and behavior of the industry. It was the focal point in this developmental stage that the industry lacked and arrogated to itself the responsibility for stabilizing the industry.

The union's wage policy remained essentially the same from 1898 to 1933, since the first agreement was signed for the Central Competitive Field (an agreement that was an outgrowth of a strike for union recognition and that established basing points for fixing wage rates among the competing producers in Illinois, Indiana, Ohio and Pennsylvania). John L. Lewis believed that any "concession of wage reductions" would violate "natural economic laws" and enable "the unfit to hold out a little longer" (Lewis, 1925, pp. 15, 24, 41). However, intense price competition caused both the union and the industry to deteriorate rapidly. Many mines were liquidated, and union membership fell from an average of almost 446,000 in 1923 to approximately 150,000 in 1932 (Glasser, 1948, pp. 611-612). The rigidity of the union's wage policy became untenable. Increased interfuel substitution, along with intensified intraindustry competition caused by falling prices, decreased employment, a further shift of production to the South, and the continuing excessive number of mines, caused a revision in fact, if not in principle, in the union's wage policy (Glasser, 1948). The important factor at this point was that the union had so far failed to gain control of its industry.

By 1933 the union had been forced to revise downward many of its contracts. Between 1921 and February 1933 the decline in average hourly wages was greater in the South than in the Central Competitive Field; the differential between the two areas increased from about 10 to 18 percent (Glasser, 1948, p. 614). By this time John L. Lewis must have come to the realization that the "free market" could not afford the UMWA the opportunity to attain its goals.⁵

Government Policies

The National Industrial Recovery Act

The union's attempts to make wages rigid in the downward direction and standardized throughout the industry, thereby eliminating wage reduction as a vehicle for price competition, were aided by Section 7a of the National Industrial Recovery Act (NIRA). The NRA code fostered a widening of the area of collective bargaining by including the entire Appalachian region in a single wage contract (Glasser, 1948). Wages were then influenced by the southern level, as it presented a drag on the system, with attempts to increase the general level of miners' wages being pegged to the pace in the South.

Union Organizing and Interregional Wage Parity

The UMWA was rejuvenated by what it interpreted as the pronionization philosophy of the NIRA. Section 7a meant one thing to Lewis -- the basis for a massive organizing drive (Coleman, 1943).⁶ The year 1941 marked the signing of the first nationwide coal agreement, and by 1945 North-South wage differentials of daily-rated workers were virtually eliminated. In addition, the 1936 average hourly earnings of tonnage-rated "hand loaders"

(an occupational group that comprises the largest segment of the mine labor force) in the lowest wage district in Appalachia received 31 percent less than the industry average; in the highest district the average was 18 percent above the national figure. The range had narrowed by 1945 when the lowest district was 21 percent below, and the highest district 7 percent above, the national average (Glasser, 1948, pp. 620-621). The revised strategy of the union in 1933 -- a massive organizing drive and accelerating wage advances in the South -- led to the establishment of industry-wide wage-rate uniformity, effectively reducing interregional price competition. The important structural outcome of this period was that by 1945 nine out of ten underground mines were under a single union's contract, and the overall proportion of mine workers who were union members was even greater (Glasser, 1948, p. 621). The UMWA claimed its total membership to be 600,000, which must be compared with the estimated 150,000 union members in 1932, who accounted for only 20 percent of total coal production (Glasser, 1948, pp. 611, 621).

The important analytical concept that one must recognize here is the unit of direct impact -- the concept that enables one to understand the ramifications of having, or not having, the total relevant workforce under contract. One must realize that bargaining structure essentially is tied to a bargaining pattern and is inexorably intertwined with market structure.

Nonwage Bargaining Outcomes and Production Costs

By 1939 Lewis was comfortable with his government-bolstered organizational base and was determined to gain advances for the union. But

the economic position of the industry was such that the union was forced to downplay monetary demands. The union was willing to sacrifice demands that would directly affect the costs of production in favor of gaining greater security. It realized that the health of the industry would not afford mine workers significantly greater pecuniary benefits without reducing coal's viability as a competitive fuel. Lewis, however, was not willing to leave the negotiations empty-handed; he demanded that the operators sign union shop agreements or consent to the elimination of "penalty" clauses in district agreements (Galenson, 1960, p. 212).⁷ The operators refused to concede to the union's demands. Although the northern operators apparently were prepared to grant these demands (they would benefit from the interregional stability that would result from union security), the southern operators were adamantly opposed (Coal Age, June 1939, p. 86). The entire bituminous industry was then shut down.

Governmental Pressure and Operator Cohesion

The influence of the federal government became decisive. Individual operators who were in agreement with the UMWA were urged to sign contracts and begin operating (Galenson, 1960, p. 215). The government, recognizing the lack of cohesive operator resistance, was urging a split in the operators' ranks, a situation that we will see repeated in the 1977-78 negotiations. Sixteen operators' associations voted to grant the UMWA's union shop demand, but six southern operators' associations refused and withdrew from the bargaining conference (Galenson, 1960, p. 215). The southern mine owners, however, could not hold their resistance together and were forced to concede, with the exception of the Harlan County Coal Operator's Association in Kentucky, which decided to operate on a nonunion

basis (Galenson, 1960, p. 215). An agreement between the UMWA and the Harlan operators was finally reached (the union shop was not granted but the penalty clause was eliminated). With this victory, the union had attained a solidified organizational base; however, the mine owners were still a fragmented group.

By 1941 the union was able to achieve its desired wage structure: the North-South wage differential was eliminated as a mechanism for price competition, and the production drain from the North to the South stopped.⁸ The union was able to demand regional wage equalization in the 1941 negotiations. It had divided the operators into competing camps. The northern operators were offering a 10 percent wage increase if the North-South differential was eliminated. The southern operators countered with an 11 percent offer, coupled with the condition that the differential be retained (Galenson, 1960, p. 220). The southern operators eventually capitulated, as the government recognized the strike was being supported by a dispute between industry groups, much to Lewis's delight. The outcome represented a victory for the union's tactic of using the goals of one industry faction to achieve, with the help of the state, a market structure conducive to union goals.

The business cycle was again turning against the coal industry. In the fall of 1948 the demand for bituminous coal began to slip from its postwar peaks. In this instance, consolidated labor was able to exercise the monopoly conduct that atomistic capital could not.

Union Strike Policy: Production Control to Maintain Prices

As has been stressed, the union became the stabilizing force in the coal industry, providing the centralized locus of power necessary for

structural quiescence. The interests of the operators were so disparate that the union, by its inflexible stance on industry-wide wage-rate uniformity, acted as best it could to inhibit the process of "destructive competition." In the spirit of monopoly, the UMWA acted, where the industry could not, with a strategy of meeting falling product demand with product supply restriction.

With demand falling from late 1948, the union called a strike in June 1949. Lewis described it as "a brief stabilizing period of inaction" (Baratz, 1955, p. 140). Producers were pleased. One Pittsburgh operator said, "Many coal operators will be glad to see a shutdown. It has been all outgo and little income because of supply backlogs" (New York Times, June 9, 1949, p. 1). In addition, the union enacted a "share-the-work, divide-the-orders" plan in order to limit production and bolster prices and as a way of keeping most of its members working, at least on a part-time basis (New York Times, June 26, 1949, p. 1). Steel's influential captive mines objected to this plan, so the union ordered its members to work a three-day week until further notice (New York Times, July 1, 1949, p. 3).

The concept of using production control to maintain product price was not just a union strategy to meet the current crisis, but an ideal of the union since 1928 (Baratz, 1955). The 1935 negotiations appear to have exemplified Lewis's strategy: "The strike functioned more as a threat than a reality, more as a weapon to inveigle presidential intervention than as a club to beat employers," as Dubofsky and Van Tine (1977, p. 375) have so aptly stated. Rather than being protracted, strikes during the latter part of this developmental stage were short and industry-wide, designed partly to draw down price-eroding stockpiles. The

union would continue to approach the industry with production control schemes into the early part of Stage II⁹, but, as we shall see, industry structure was evolving to a point that would allow united capital-labor action.

The evidence is somewhat conflicting for a categorical conclusion as to which had the most important influence on industrial and bargaining structure development, union power or legislation. Some combination of both comes closest to the truth, with perhaps the power of the union's wage and strike policies, in the context of the market structure, weighing more heavily.

Union Decision-Making Structure and the Nature of Bargaining Issues

Issues and Policy

During the period in question, the UMWA's policy objectives could generally be categorized as (1) improved economic status for miners, especially relative to other industrial workers; (2) the stabilization of wage rates during downward cyclical fluctuations; and (3) the stabilization of interfirm and interregional competitive relationships (Baratz, 1955, p. 51). These issues were dominant over much of the course of the capital-labor struggle in coal. They reflected experiences in a competitive industry and made the nature of bargaining issues such that bargaining structure necessarily became consolidated. Recalling our theoretical determinants, the major issues in coal were market-wide, the criterion which sanctions a consolidated bargaining structure with centralized decision-making authority.

The bargaining power of a union is said to vary directly with the "cohesion of its members to the avowed objectives of the group" (Baratz, 1955, p. 77). In fact, Lewis's program for "leading labor out of the wilderness" was founded on the assumption that the rank-and-file perceived greater potential gains from joining together in a consolidated structure than from adhering to a fractionalized one that incorporated narrow group interests and greater representation (Weber, 1967, p. 24).¹⁰ Using our behavioral equation, representational factors and the nature of the important issues encouraged a centralized collective bargaining structure:

$$\frac{\text{MIBP}_C}{\text{MIBP}_A} > 1$$

Decision Making

The influence of Lewis's autocratic rule cannot be discounted as a factor in the development of a consolidated bargaining structure with centralized decision-making power. Lewis's power was structurally legitimized in his mind and, in most cases, in the minds of the union membership. As a survey by Bernard Karsh and Jack London revealed, the rank-and-file believed that the centralization of union authority, especially with regard to the power to initiate strike action, was necessary in view of "the many small units in the industry coupled with a national market for its product" (1954, p. 430).¹¹ Essentially, the economic rationale for subversion of local autonomy to central authority was that a single wage scale was necessary to prevent the adverse interregional competition of the 1920's and early 1930's and

to keep weaker districts from contracting below the national wage scale (Galenson, 1960). In order to prevent independent and disconnected action by employers within an industry characterized by a large number of small operators selling in a national market, Lewis believed that the only vehicle available for total industry unionization was industrial consolidation. Market stability meant a consolidated bargaining structure with centralized power.¹²

Summary

Table 3 adds context to the chronology by presenting the main structural features of the period. As a way of summarizing the evolution of structural relations in Stage I, one is drawn to what Henry Simons said about all trade unions. Simons perhaps carried his analysis to an extreme, but his description of union behavior appears applicable to the UMWA at this point in our analysis:

...labor...distrusts all free-market ideas. It wants tariffs; it wants complete freedom from the Sherman Act; and, in fact, it wants employers who can fix their selling prices collusively too. American trade and industrial unionism makes sense only as part of a tight cartelization of industries where it is strong. It wants no competition from abroad and none at home either in its own markets or in those of its employers. If employers will not or cannot police their product markets against chiselers, unions will undertake the task themselves. Wage-fixing is price-fixing; labor monopoly means product monopoly even if employers compete effectively; and better wage bargains can be obtained from employers who do not compete with one another than those who do (1948, p. 103).

TABLE 3

STRUCTURAL RELATIONS IN STAGE I: DEVELOPMENT AND CONTRAPOSITION

MARKET STRUCTURE		COLLECTIVE BARGAINING STRUCTURE	
Seller Concentration	Low (competitive)	Centralized union structure: coal labor and decentralized industry structure: coal production	Negotiation units: industry and union structure (decentralized → centralized)
Cost Structure	Interregional variation (wage-rate disparity) at the beginning was eliminated by the end (wage-rate uniformity)	Coal labor: one union with large regionally-based non-union work force became one union with most of the total work force under contract	Unit of direct impact: relevant work force under contract (many unions/nonunion labor → one/union total work force)
Vertical Integration	Only applicable to steel production	Centralized union control and decentralized industry control (three industry bargaining groups)	Decision-making structure (local autonomy → central control)
Product Diversification (horizontal integration)	Single product		
Ownership and Control	Fragmented (one-product owners)	National/industry-wide	Nature of issues (local/firm-specific → national/industry-wide)

NOTES ON CHAPTER 2

- ¹ Bituminous coal is homogeneous for a particular type and quality only. Within this generic category, however, there are differences in heat value, sulfur and ash content, friability (softness), and size. As one mineral economist noted, nature builds heterogeneity into the product, the businessmen spend their time trying to make it homogeneous, unlike the case in nonenergy products (Gordon, 1978).
- ² Baratz (1955) correctly pointed out that excess capacity was more a result than a cause of falling prices.
- ³ It was recognized at the 1936 UMWA convention that mechanization was jeopardizing the competitive position of the small mines and, concomitantly, the employment opportunities of the miners. The solution sought was "...a system of proper Federal regulations, which will encompass a synchronized system of price fixing and allocation of tonnages on a basis equitably fair to mine workers and operators alike" (UMWA, Proceedings, 1936, pp. 22, 211, 470, 471, 503). In addition, the 1927 contract provided for a "mechanized mining commission" to consist of union and operator representatives that would seek ways to mitigate mechanization's adverse impact on coal labor. Lewis also considered the idea of governmental retraining programs for technologically unemployed miners (UMWA, Proceedings, 1938, p. 211).
- ⁴ The experience of the 1920s and 1930s convinced the union that lower wages would not appreciably increase product sales, but would only lead to further price and wage cuts (Baratz, 1955).
- ⁵ Over the course of Lewis's reign, he vacillated on the issue of governmental interference in the marketplace, seeking help when the market could not grant him what he wanted (Baratz, 1955; Coleman, 1943; Glasser, 1948).
- ⁶ Lewis interpreted the "right-of-labor-to-organize" clause of Section 7 to mean that the government supported union organizing. Organizers swarmed into the coal fields where, not long before, troops had marched against union miners. They proclaimed an insolent rejoinder: "The President wants you to join. Your government says 'Join the United Mine Workers'" (Coleman, 1943, p. 148). The operators were comforted by the belief that the NIRA would be declared unconstitutional, as it was in 1936, when their antiunion defenses broke down in the face of the large number of miners eager to join the UMWA. The declaration of unconstitutionality came too late, as the union was able to claim 400,000 members at the 1934 AFL convention (Coleman, 1943, pp. 148-149).

- ⁷The penalty clause was a contractual vehicle for the operators to fire, suspend, or discharge a worker for unauthorized strikes. By eliminating this clause, UMWA miners would be able to walk off the job with impunity if nonunion workers were hired. In addition, Lewis was motivated to secure the position of the UMWA by the fact that the American Federation of Labor had taken over the Progressive Mine Workers and was attempting to build it into a rival to the UMWA (Galenson, 1960, p. 213; Dubofsky and Van Tine, 1977, p. 378).
- ⁸One can readily understand the tenacity with which the southern operators desired to hold on to the 40-cents-per-day wage differential, which amounted to approximately 3.6 cents per ton, in light of the 2-to-3-cents-per-ton profit margin which generally characterized bituminous mining (Baratz, 1955, pp. 100, 102).
- ⁹In 1952 the union reportedly proposed to the operators a similar production control scheme: "The scheme would operate this way: Coal operators would agree with the union upon a standard uniform wage scale, to be paid, say, three or four days a week. If the miners worked four to five days, the operators would pay a higher wage, in effect a penalty scale for those days. This, Mr. Lewis is represented as believing, by diverting production from full-time mining operations to mines which are working a short week, would tend to equalize work for all the coal diggers" (New York Times, Editorial, August 28, 1952, p. 22).
- ¹⁰Generally in manufacturing industries, decision-making authority has been transferred from the members of the union and the local union leadership to the national leadership of the union (Prooks, 1961).
- ¹¹The rank-and-file also saw nothing autocratic in the exercise of such power, since the authority was granted to the mine workers' leadership by convention action (Karsh and London, 1954, p. 430).
- ¹²Lewis's control was perhaps due not to his ability to achieve economic gains, but to his invulnerable political position (Galenson, 1960, pp. 236-237). The powers of the UMWA's leadership, based on the concept of "provisionalism," (constitutional provisions regulated the powers of the president, and the districts were governed by appointed officials) enabled them to perpetuate control (Karsh and London, 1954, pp. 416-418).

CHAPTER 3

STAGE II : STRUCTURAL STABILITY AND COOPERATION
IN INDUSTRIAL RELATIONS

Between 1941 and 1946 there was a single employers' bargaining unit which represented all Appalachian producers. But as noted, the southern operators withdrew from the Joint Conference shortly after the war's end and insisted upon making separate agreements with the UMWA. Although collective bargaining was not industry-wide in the strict sense, the bargaining power afforded by the union's consolidated structure resulted in essentially uniform working conditions for miners in the entire Appalachian area (Baratz, 1955). However, the situation was to change: the industry was going to form a centralized bargaining unit and attempt to consolidate its market structure.

While the sixty year period of Stage I was characterized by capital-labor confrontation, Stage II (approximately 1950 to the early 1960's) was a period which saw the attainment of relative structural stability through labor-management cooperation, and sometimes labor-management collusion. This chapter analyzes the impact of these new phenomena and, in addition, finds mechanization continuing to be a fundamental ingredient in the evolution of structural relations. Furthermore, the major influence of the government in this period is found not in its legislative and judicial roles, as in Stage I, but in its role as a consumer of coal. The last factors examined are the covert aims of such overtly beneficial events as mine safety legislation and the establishment of the UMWA Welfare and Retirement Fund. The relations-outcomes process continues to form the perspective from which the events are viewed.

The Bituminous Coal Operators' Association:
Centralized Bargaining for the Industry

Prior to 1950 the UMWA negotiated with three separate groups of operators: the Northern Coal Operators' Association, which represented principally the producers in Pennsylvania, northern West Virginia, Ohio, Illinois, and western Kentucky (a group essentially derived from the old Central Competitive Field); the Southern Coal Producers' Association, which represented companies in southern West Virginia, Virginia, eastern Kentucky, Tennessee, and Alabama; and the wholly-owned captive mines of the steel industry (Bethell, 1969, p. 20).

A massive strike was underway in 1950, and by mid-February the country was down to a two-week supply of coal. On March 3 President Truman went to Congress to request authorization to seize the mines, an instrument of governmental intervention which neither the operators nor the union was willing to accept (Bethell, 1969). On March 6, 1950, the last strike engineered by John L. Lewis ended, marking the beginning of a new era in collective bargaining. The National Bituminous Coal Wage Agreement of 1950 was the first truly industry-wide contract in the history of coal and ushered in an era of calculated, stable peace.

Just as Lewis had become a dominant force in coal labor, a personality was to emerge from the ranks of coal capital to dominate the industry during the 1950's -- George Love. Together the two men would chart the course of collective bargaining and market structure throughout Stage II.

Love, founder of Consolidated Coal Company (Consol), then the world's largest commercial coal producer, was determined not to repeat the government-induced coal settlement of March 1950 which, in his view, resulted

from the historical antithesis of industrial relations in bituminous coal (Bethell, 1969; Dubofsky and Van Tine, 1977). Through connections with U.S. Steel, Love succeeded in establishing an alliance between the Northern Operators and the captive mines -- the Bituminous Coal Operators' Association (BCOA) -- for the purpose of representing both groups in future negotiations with the UMWA (Bethell, 1969). Combined, the two accounted for approximately 50 percent of all the coal mined in the United States; they outproduced the Southern Producers by more than two-to-one (Bethell, 1969, p. 22; Dubofsky and Van Tine 1977, p. 497). Moreover, much of the remaining production came from small mines, many of which were not members of any operators' association and had little resources to spare for national bargaining.

Voting inside the BCOA was made proportionate to tonnage produced (one vote per million tons), and decisions were reached by a simple majority. Love, through Consol, accounted for 15.5 million tons and also represented other companies with 37.5 million tons. Therefore, he controlled outright 52 of the 110 total votes and, if needed, could call upon the steel industry's 19 votes (Bethell, 1969, p. 22).¹ The interests of one company, Consol, could then dominate this new industry bargaining unit.

Love intended to use his bargaining unit to establish a new collective bargaining stance, to persuade coal operators that, as Dubofsky and Van Tine relate, "...strikes were ruinous and should be avoided, that the government and public should be eliminated from dealings with the union that labor and management should work together to solve mutual problems in a businesslike way" (1977, pp. 496-497). Lewis initially treated this attempt at cooperation and stability with wary circumspection and demanded

that the 1950 contract be renegotiated only six months after the BCOA was formed, although the agreement still had almost a year to run (Bethell, 1969; Dubofsky and Van Tine, 1977).²

Lewis was perhaps always amenable to such a structure, since he no doubt was aware of the opportunities that this institution would provide for further realization of the UMWA's goals. He was apparently so aware in fact that he publicly stated that "there would be no further crises in the coal industry" (Bethell, 1969, p. 23). The implication seems inescapable: by changing, in essence, the union's strike policy -- removing the threat of a national strike -- Lewis must have viewed this new structure as one which would allow, for the first time, unified labor-management action. He must have become convinced that the operators now shared a similar conception of the problems in the coal industry and could, therefore, work together with the union to solve them.

What influenced Lewis to make this dramatic shift in policy? It was primarily economic forces -- forces which were taking a toll on the health of the coal industry, but which in his and the industry's view could be ameliorated by a consolidated market and collective bargaining structure.³ The abundance of small coal operators still presented, as Lewis stated, "a drag on the industry" (Bethell, 1969, p. 63). In addition, with every strike that interrupted supply and made coal appear as a less reliable fuel, oil and gas made competitive inroads.

The Southern Producers, although excluded from the BCOA-UMWA negotiations, had little choice in accepting contracts. They could be closed down while the signatories continued to operate. Stability and enforced cooperation resulted. Contracts were negotiated and signed without

strikes and without publicity in 1952, 1955, 1956, and 1958 (Bethell, 1969, p. 64). There was, however, during this period an exogenous variable which came to bear on structural evolution. In Stage II the state would not, by and large, act to influence structural evolution directly through legislation, but indirectly through its role as a major consumer of bituminous coal and only ineffectively through the judicial process of antitrust.

Purchasing Policy of the Tennessee Valley Authority

In 1948 the Tennessee Valley Authority (TVA) constructed a number of large coal-fired electric power facilities. Initially, these plants were designed to supply electricity to the Atomic Energy Commission's projects at Oak Ridge (Bethell, 1969). The market for TVA's electricity broadened beyond government use as the system of plants grew. Since TVA burned vast amounts of coal, it purchased this fuel on a long-term, lowest-bid contractual basis, without regard for the volume of coal each operator could supply. Moreover, the wage and benefits paid by TVA's suppliers as compared to prevailing (union) standards was disregarded, as were the effects of such a policy on the industry (Dubofsky and Van Tine, 1977). TVA's purchasing policy fostered the rise of hundreds of small mines in the traditionally anti-union states of Kentucky and Tennessee. These small operators would look to cutting labor costs as a way of becoming price-competitive suppliers.⁴ (Raising labor productivity through mechanization was not generally feasible for these marginal producers.) The result was that whereas the UMWA was approximately 400,000 members strong during the period 1945-1950, by 1955 their numbers were cut in half (Dubofsky and Van Tine, 1977, p. 495; Fink, 1977, p. 232).

The effect this had on the UMWA's organizational base is obvious. A strike no longer meant shutting down the entire industry, for the UMWA no longer had the total relevant work force under contract. These were the forces that the founder of the BCOA and the president of the UMWA responded to when creating a new collective bargaining structure. This new bargaining structure would enable the union and the major operators to effect change in the market structure, for each party perceived benefits to be gained by industrial consolidation. The larger operators were apparently willing to sacrifice individual discretion in wage setting because this alliance would yield the centralized structure necessary to achieve labor and product market stability. The fundamental policy tool would be, as in the past, mechanization tied to the union's wage structure but, unlike the past, the union apparently disregarded or miscalculated the effects of such a policy on its membership.

The Mechanization Process Revitalized

By virtue of the new relationship that came out of this centralized, cooperative bargaining structure, Lewis apparently gave up any say in the implementation of machines, for he allowed the major coal companies a "free hand" in mechanizing their operations (Bethell, 1969; Dubofsky and Van Tine, 1977; Hume, 1971). In addition, the union made its financial resources available to the large operators by encouraging them to borrow for purposes of modernization from the UMWA-controlled National Bank of Washington (Hume, 1971).

The drive to automate was now in high gear. Small mines closed and large mines laid-off workers; 300,000 men lost their jobs, with the impact in Appalachia being particularly pronounced (Hume, 1971, p. 22). What was

the rationale for the UMWA's apparent lack of concern for the resultant technological unemployment of its membership? Mechanization would reduce the number of miners working and, consequently, the UMWA's membership. But in Lewis's view, this would not threaten the UMWA's power base (Dubofsky and Van Tine, 1977; Hume, 1971). It would be better for the industry to support fewer, well-paid miners. Increased productivity would not only keep the price of coal at a level competitive with substitute fuels, but would also increase the income of the Welfare and Retirement Fund, which could then support the older, unemployed miners. In addition, well-paid miners could afford to pay higher union dues. Moreover, Lewis believed that, even if fewer miners worked, the union would still control all of the jobs in the coal fields.

Lewis may have also counted on the expanding postwar economy to absorb the unemployed miners (Hume, 1971). But the recessions of the late 1950's severely reduced the demand for coal, further aggravating unemployment in Appalachia: "Thousands of miners, too young to retire but too old to pack up and start over elsewhere, were cast adrift in the hills" (Hume, 1971, p. 23). It was essentially the consolidated bargaining structure with centralized decision-making power that made this policy possible.

The result was an intractable pool of cheap labor. Hundreds of small mines that had been forced to close by the terms of an industry-wide contract and the joint labor-management mechanization policy reopened (Hume, 1971). The incentive was, of course, an abundant supply of relatively inexpensive labor inputs that would enable these producers to price their products below that of the larger, unionized operators;

for the electric power industry, desiring an uninterrupted supply of fuel purchased on a lowest-bid basis, became a major consumer of bituminous coal. As these "dog-hole" mines were able to gain a sizable share of the nation's coal market, the union's hold on southern Appalachia was effectively broken.⁵ Consequently, the union and the large operators, working through the centralized bargaining structure, resorted to more direct methods of eliminating nonunion competition and consolidating product market power.

Labor-Management Collusion

Sweetheart Contracts

In order to try to maintain some semblance of organizational control in southern Appalachia, the union resorted to "sweetheart" contracts (Hume, 1971). These were collusive arrangements whereby both labor and management agreed to ignore certain terms of the national contract. In some cases wages were cut, in others payments into the Welfare Fund were reduced. These clandestine agreements did not stop the growth of nonunion mining, but fermented rank-and-file bitterness, which perhaps acted as the seed of internal union dissention, which would later grow into a call for decentralized decision making and which would affect structural relations in Stage III.

The Union as Coal Operator

A more extreme measure than "sweethearts" was undertaken by the power structure in coal in the 1950's. John L. Lewis loaned financier Cyrus Eaton some \$6 million from the National Bank of Washington and the UMWA

treasury in order for Eaton to gain controlling interest in West Kentucky Coal Co., a major nonunion employer (Dubofsky and Van Tine, 1977, p. 509). With additional union funds, Eaton merged West Kentucky with Nashville Coal Co., another nonunion operator. And once Eaton became West Kentucky's board chairman, the company signed a UMWA contract.

Some \$25 million were lent to West Kentucky by the union, and by virtue of this financial injection for consolidation and modernization, West Kentucky was able to lower its bids for prized TVA contracts. West Kentucky's prices dropped from \$3.70 per ton in 1954 to \$2.90 per ton in 1964, and its share of TVA business increased during this period from 9.6 to 16.2 percent (O'Hanlon, 1971, p. 150). When combining the other coal properties controlled by Eaton and the union with West Kentucky, the total output made the Eaton-Lewis combine the third largest bituminous producer in the nation (Dubofsky and Van Tine, 1977, p. 509).⁶ The effect, and perhaps the goal, of these arrangements was to further drive small coal operators out of business which, of course, exacerbated mine-worker unemployment.

The Capital-Labor Conspiracy to Create a Monopoly

It is not just conjecture that the union and the large operators, by virtue of the centralized bargaining structure that came to fruition in 1950, cooperated in an attempt to monopolize the market structure of bituminous coal. In 1968 a federal grand jury in Lexington, Kentucky, rendered a verdict against Consolidated Coal Co. and the UMWA for conspiracy since 1950 to create a monopoly of the soft-coal industry in

direct violation of the Sherman Antitrust Act (Bethell, 1969). This case marked the first time that such a verdict against a capital-labor conspiracy had been reached.⁷ For our purposes the tactics revealed by the South-East Coal Company vs. United Mine Workers of America and Consolidation Coal Company case are particularly revealing. In 1958 the UMWA and the BCOA included in the national wage agreement a "Protective Wage Clause." This clause had three elements: (1) it specifically prohibited the UMWA from negotiating any contract with any individual company or group, (2) it prohibited members of the BCOA from subcontracting with nonunion companies, and (3) it created a "Joint Industry Contract Committee" with powers to enforce the Protective Wage Clause (Bethell, 1969, p. 66). Operators who failed to sign "Certificates of Compliance" could expect to have their coal boycotted. Important here is the fact that this strategy was designed to capitalize upon a particular element of the bituminous market structure. Many of the marginal producers, who were often nonunion, were forced because of their size to market their coal through the distribution system of larger operators. When South-East Management, under the weight of royalty payments to the union Welfare Fund, decided to go nonunion in March 1962, they were repeatedly told by Consol officials that Consol would no longer market South-East coal (Bethell, 1969). In fact, Consol sold 270,000 tons of South-East coal in 1960, but sold not an ounce after March 1962 (Bethell, 1969, p. 69).

Mine Safety and the Union Welfare Fund:
Strategies for Market Consolidation

Before closing the analysis of structural evolution in this historical period, two additional strategies that grew out of the new capital-labor partnership must be mentioned. First, in the late 1950's the BCOA worked with the union to secure a stricter mine safety law. Although the overt purpose of this law was, of course, to save miners' lives, the covert purpose was to force smaller operators out of business by imposing on them the same costly safety standards required of the larger operators (Dubofsky and Van Tine, 1977). Second, the UMWA Welfare and Retirement Fund was used to force early retirement and reduce what, in Lewis' view, was still an excessive number of miners and small, nonunion mines. As hundreds of mines went nonunion in the early 1960's, the union withdrew all welfare cards from miners working for companies that were not paying royalties into the Fund, regardless of their years of service at union mines (Nyden, 1970). In addition, in February 1965 the Fund's trustees lowered the qualifying age from sixty to fifty-five to encourage older unemployed miners to retire rather than accept jobs at nonunion mines (Dubofsky and Van Tine, 1977).

Summary

In sum, the evolution of structural relations in Stage II suggests this theme (see Table 4): the product market structure of coal resulted in the union's imposition of noncompetitive tactics on its industry by virtue of its eventual monopoly power in the labor market (the union achieved consolidated labor market power before the industry achieved consolidated

TABLE 4

STRUCTURAL RELATIONS IN STAGE II: STABILITY AND COOPERATION

MARKET STRUCTURE		COLLECTIVE BARGAINING STRUCTURE	
Seller Concentration	Low (competitive) became moderate (imperfectly competitive)	Centralized union structure: coal labor and centralized industry structure: coal production	Negotiation units: Industry and union structure (decentralized → centralized)
Cost Structure	Interregional stability at beginning was lessened to some level of regional variation with wage-rate disparities	Coal labor: one union, but with increasing nonunion work force	Unit of direct impact: Relevant work force under contract (many unions/nonunion labor → one union/total workforce)
Vertical Integration	Only applicable to steel production	Centralized union and industry control through national bargaining alliance	Decision-making structure (local autonomy → central control)
Product Diversification (horizontal integration)	Single product		
Ownership and Control	Semi-consolidated (one-product owners)	National/industry-wide	Nature of issues (local/firm-specific → national/industry-wide)

product market power). This led to the formation of a centralized operators' alliance designed to eliminate the antipathy in collective bargaining and competition in market structure, which had characterized the prior history of the coal industry, and replace them with cooperation and consolidation. This new cooperative bargaining structure enabled unified labor-management action -- action designed to consolidate the product market. The union believed that it could then draw the benefits of the industry's consolidated market position. The primary strategy, the panacea, was intensified mechanization of the mines.

The UMWA's attitude in Stage II toward the introduction of machinery does not appear to have been a drastic change from that in Stage I; for the union never opposed, and even indirectly supported via its wage policy, mechanization of the mines. By foregoing a say in the rate of implementation of machines, the union was essentially giving its approval to an increased rate, a recrudescence, of mechanization, not tied to normal work-force attrition, and designed more directly as a vehicle for market consolidation. The union firmly believed that this policy was necessary to save the coal industry. The strategy would not now have to be one-sided. The industry had finally realized what the union had known all along: competition is ruinous.

Relations were indeed harmonious between the BCOA and the UMWA. There were no national strikes during Stage II, and there would be none until 1971. But the strategy was improvident; the number of UMWA miners fell from 416,000 in 1950 to 180,000 in 1959 (Fink, 1977, p. 232). Contract terms generally deteriorated during the period. Wages were high (as was productivity) for those miners still working, but fringe benefits

and safe mining conditions were sacrificed -- a situation one might expect in the absence of a union. The policies that had brought a stability to the industry that it had not experienced in a decade also brought growing dissent among the rank-and-file and a continuing erosion of the union's organizational base in southern Appalachia.

NOTES TO CHAPTER 3

- ¹ Harry Moses of U.S. Steel represented the interests of the captive mines. Love arranged to have Moses elected as BCOA's president (Bethell, 1969).
- ² Negotiations for this contract were conferred in complete secrecy -- the first time in sixty years that this process had been closed to the press, public, and union membership (Bethell, 1969).
- ³ Lewis may also have been influenced by the perceived communist threat of the 1950's. He may have believed that the free enterprise system could only be saved from communism by industrial concentration (Bethell, 1969).
- ⁴ By operating on a nonunion basis, these employers could pay the union wage scale and still maintain a competitive advantage by saving payments into the UMWA Welfare and Retirement Fund. In addition, without the UMWA to police safety practices, these operators could further reduce production costs (Dubofsky and Van Tine, 1977).
- ⁵ As a corollary to mechanization, Lewis had been urged by the BCOA to either organize or drive out of business the growing number of nonunion "truck" mines (Dubofsky and Van Tine, 1977). Mechanization could only benefit the large operators and working UMWA members if the small operators could not achieve the same result -- low output prices -- by producing on a nonunion basis. The result was a reign of violence reminiscent of the struggles of the 1930's. But unlike the NRA-supported organizing drives of the earlier era, the union was often publicly viewed as the labor monopoly, with the nonunion, price-cutting operators as the little guys just trying to survive (Dubofsky and Van Tine, 1977; Finley, 1972).
- ⁶ By its involvement with Eaton as an intermediary, the UMWA was able to keep its name out of the financial statements of West Kentucky. But when the facts became known, the union cancelled its loans to West Kentucky at a loss of \$8 million and in 1963 sold its interests to Island Creek Coal Co. (Bethell, 1969, p. 66) -- a major producer that would ironically become one of the oil-controlled energy companies just five years later.
- ⁷ The jury concluded that the plaintiff had been victimized and was entitled to collect \$7.3 million in compensatory damages, one-half to be paid by Consol and one-half by the UMWA (Bethell, 1969, p. 18). The judgment was let stand by the Supreme Court in 1971. The fact that the case was brought, not by the government, but by one directly injured party indicates the difficulty with which antitrust policy can be applied to such tactics. The financial settlement was probably of little consequence to either Consol or the union at that time and was not finally adjudged until twenty years after the tactics were first put into effect.

CHAPTER 4

STAGE III: STRUCTURAL CHANGE

From the late 1940s to the early 1950s the UMWA had most of the coal industry under its jurisdictional control, forcing the coal operators to consolidate their bargaining efforts in the form of the Bituminous Coal Operators' Association. The union had cartelized its industry. Joint capital-labor tactics successfully contributed to a doubling of the industry's concentration ratio. The four-firm ratio was 13.6 in 1950; but by 1960 it was 21.4, and by 1965 it reached 26.6 (see Table 5).

Collective bargaining stability generally reigned in the coal industry through the decade of the 1950s. The early 1960s, however, saw the following structure-affecting factors develop: (1) the rise of cheap substitute fuels for coal (primarily imported oil), with predictable demand effects; (2) internal union disputes; and (3) perhaps most importantly, a change in the ownership structure, accompanied by a shift in production to the predominantly nonunion West. These factors form the basis of our analysis of structural relations from the early 1960s to the present time.

Unlike prior evolutionary periods, the important structural element in Stage III will be horizontal diversification rather than horizontal consolidation. This represents a significant change in the pattern of ownership and control of coal resources and coal production. Under the earlier horizontal consolidation the decision makers were essentially the same, although more centralized. What

TABLE 5

PRODUCTION CONCENTRATION RATIOS^a IN THE
 UNITED STATES BITUMINOUS COAL INDUSTRY --
 1950 - 1976

	<u>FOUR-FIRM</u>	<u>EIGHT-FIRM</u>	<u>TWENTY-FIRM</u>
1950	13.6	19.4	30.4
1955	17.8	25.5	39.6
1960	21.4	30.5	44.5
1965	26.6	36.3	50.1
1970	30.2	40.7	56.5
1971	27.8	37.6	52.2
1972	30.2	40.0	55.8
1973	29.1	39.1	54.9
1974	26.6	36.7	51.2
1975	26.4	36.2	50.6
1976	25.1	34.2	49.7

^aConcentration ratios represent the percentage of production accounted for by the largest four, eight, and twenty producers.

SOURCE: Keystone Coal Industry Manual, U.S. Coal Production by Company.
 New York: McGraw-Hill, various years.

this change means for the structure of collective bargaining is the focus of our effort; it culminates in an analysis of the structural influences in the 1977-78 national bituminous contract negotiations.

We are concerned more with power than price. For whatever unions maximize, their ability to achieve such is a function of their relative bargaining power. To reiterate an underlying theme of this paper, bargaining power is determined by bargaining structure, and the main determinant of bargaining structure is market structure.

General Structure of the Energy Industry

One basic premise of this evolutionary stage is that in the United States today there no longer exists such distinct entities as the petroleum industry, the coal industry, the nuclear fuels industry, and other energy-source industries. Rather -- although not quite evolved to fruition -- a "total energy" industry exists, consisting of the producers of primary fuels. It is necessary, therefore, to outline the general structural features of the oil industry that have been brought to bear on the market structure of coal.

Seller Concentration and Vertical Integration

The energy industry has evolved via the petroleum industry's horizontal diversification into fuels that are substitutable for oil and natural gas.¹ It is important to realize that the market structure of bituminous coal, although it became more consolidated in the 1950s and 1960s, remained essentially competitive; it was mainly through the collective bargaining structure that the major operators were

able to invoke certain noncompetitive tactics.² But, unlike coal, the market structure of oil can be reasonably defined as an oligopoly: an industry where the sellers are sufficiently few that each seller's actions have, and it is recognized that they have, an effect on one another. Whether the horizontal concentration of the petroleum industry is at a level that would afford such mutual interdependence is a moot issue (see Table 6).³ But the first, and perhaps most important, structural element that contributes to market power is the oil industry's vertical integration. The larger firms are vertically integrated. These "majors" perform most or all of the several distinct functions -- production, transportation, refining, and marketing -- involved in supplying petroleum and natural gas to the ultimate consumer.⁴

Joint Ventures and Interlocking Directorates

The second potent structural feature of the petroleum industry is its institutionalized interfirm combinations. These consist of joint venture arrangements and some very curious intercorporate interlocks. Producing oil and gas wells are often owned jointly rather than individually. Partnership arrangements among vertically integrated majors and smaller independents abound in such production stages as exploratory drilling and pipeline transportation, as well as in federal lease acquisition.⁵ Moreover, there appears to be an extension of this joint ventureship to the majors' horizontal acquisitions. As an illustration, effective July 1, 1973, Gulf Oil Corporation entered into a "50-50" partnership with Scallop Nuclear Inc. -- a subsidiary of the Royal Dutch/Shell Group -- forming a separate

TABLE 6

SELLER CONCENTRATION RATIOS IN THE UNITED STATES
 PETROLEUM INDUSTRY BY VERTICAL STAGE -- 1975

	<u>PRODUCTION</u>	<u>TRANSPORTATION</u>	<u>REFINING</u>	<u>MARKETING</u>
Four-firm	31	24	32	32
Eight-firm	50	42	57	52
Total number of firms	10,000	100 ^a	131	b

^aRepresents pipeline companies, which in 1974 accounted for some 86 percent of refinery receipts of domestic crude oil, compared to 11 percent by tankers and barges, and 2 percent by rail or trucks.

^bConsists mainly of some 15,000 wholesale oil distributors and 18,000 suppliers of fuel oil.

SOURCE: American Petroleum Institute.

entity, General Atomic Company. The business of General Atomic, supplying nuclear fuels to electric utilities, had previously been conducted by Gulf's division, Gulf Energy and Environmental Systems (Gulf Oil Corporation, 1975).⁶

In addition to these intraindustry operational ventures, interlocking directorates contribute to the overt interdependence in oil. For example, the Chase Manhattan Bank has director interlocks with Exxon, Standard of Indiana, Shell, and others (Wilson, 1975, p. 328).

This discussion does not suggest, however, that, individually, petroleum firms undertake these arrangements for purposes of either overt or tacit collusion; but rather, when this unique structural integration is viewed as a whole, coupled with the certain lack of buyer-seller competition inherent in any vertically integrated industry, it cannot be presumed that workable competition is the guiding force in oil. The implication of this is that the organization of the petroleum industry brings certain economic and political power to its position in the market structure of the broader energy industry and, concurrently, to its collective bargaining position in each industry.⁷

Horizontal Diversification

The third major structural element of the energy industry is its growing tendency toward horizontal integration (stock) via horizontal diversification (flow). Horizontal diversification may be defined as mergers, acquisitions, or other combining arrangements involving firms which produce and/or sell, or in some way acquire an interest in the same or similar products and compete with one another for the patronage

of the same or similar consumers (Wilson, 1975). The extent to which products can be shown to be relevant substitutes is not only of critical importance for the public policy of antitrust, but also for the collective bargaining process -- especially where one trade union does not represent all the labor involved with producing these substitute goods. Several studies have shown that, for a number of final uses, most energy sources are fully substitutable for one another.⁸ Specifically, uranium, coal, oil, gas, and geothermal energy can produce heat which creates steam which turns the turbine-generator to produce the output of an electric utility power plant.

A new industrial form has been developing throughout Stage III, a new market structure which finds oil's influence extending far beyond its traditional interests. Moreover, the oil companies that have diversified to become integrated energy producers have generally been majors or large independents (see Table 7).⁹ The important change in market structure for our purposes¹⁰ has been a change in the pattern of ownership and control of coal resources and production, compounded by the fact that the new owners' primary product is a substitute for coal. This carries certain implications for production and employment.

Production and Employment Implications of Oil's Horizontal Diversification

In order to analyze the employment impact of these acquisitions and mergers, we must first attempt to answer this question: why have oil firms been establishing their position in coal? There is some evidence to suggest that petroleum firms have entered the coal market not for reasons of current production and contribution to current income,

TABLE 7

THE ENERGY INDUSTRY: HORIZONTAL INTEGRATION OF THE 25 LARGEST PETROLEUM COMPANIES,
RANKED BY ASSETS: THE 16 LARGEST TOTAL ENERGY PRODUCERS -- 1974

	1974 ASSETS (millions)	RANK IN ASSETS	RANK IN TOTAL ENERGY PRODUCTION ^b (Btu's)	HORIZONTAL INTEGRATION				
				GAS	OIL SHALES	COAL (c)	URANIUM (c)	TAR SANDS
Exxon ^a	\$31,332.4	1	1	X	X	X	X(5)	X
Texaco ^a	17,176.1	2	2	X	X	X	X	
Mobil Oil ^a	14,074.3	3	7	X	X	X	X	
Gulf Oil ^a	12,503.0	4	5	X	X	X(14) ^d	X	X
Standard (California) ^a	11,640.0	5	9	X	X	X(4) ^d	X	X
Standard (Indiana) ^a	8,915.2	6	3	X	X	X	X	X
Tenneco	6,401.6	7		X			X	
Atlantic Richfield	6,151.6	8	8	X	X	X	X	X
Shell Oil	6,128.9	9	4	X	X	X	X	X
Continental Oil	4,673.4	10	6	X	X	X(2)	X(9)	
Sun Oil	4,063.3	11	14	X	X	X	X	X
Phillips Petroleum	4,028.1	12	13	X	X	X	X	X
Union Oil (California)	3,458.6	13	12	X	X		X	
Occidental Petroleum	3,325.5	14		X	X	X(3)	X	
Getty Oil	3,003.6	15	11	X	X		X(16)	
Cities Service	2,897.9	16	15	X	X		X	X
Standard (Ohio)	2,621.5	17		X	X	X(11)	X	
Amerada Hess	2,255.3	18		X			X	
Marathon Oil	1,799.9	19		X	X		X	
Pennzoil	1,797.9	20		X			X	
Ashland Oil	1,715.8	21		X	X	X(7)	X	
Coastal States Gas	1,696.9	22		X		X		
Signal Companies	1,532.9	23		X				
Kerr-McGee	1,164.4	24	16	X	X	X	X(2)	
Murphy Oil	1,041.6	25		X				

TABLE 7 (continued)

^aRepresents six of the "Seven Sisters" of oil (the seventh is British Petroleum) -- the recognized oligopoly group in the international market for oil; see Blair (1976) and Sampson (1975).

^bMeasured in British thermal units (or similar scales), the quantity of heat required to raise the temperature of one pound of water from 62°F to 63°F. The tenth ranked producer of total energy, because of its number one position in coal, is Peabody, a subsidiary of Kennecott Copper until June, 1977, when, under a Federal Trade Commission divestiture order, Peabody was sold to a group of diverse companies headed by Newmont Mining (Wall Street Journal, June 8, 1977, p. 2).

^cRepresents the position of an oil company as one of the sixteen major producers in this submarket, by rank; Pioneer Oil Company, not one of the largest twenty-five, ranked eleventh in the uranium industry.

^dSignifies a 20 percent acquisition of Amax Coal Company's common stock (Wall Street Journal, June 2, 1975, p. 2).

SOURCES: U.S. Congress, Senate, Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary. Hearings on the Interfuel Competition Act of 1975 (S.489), 94th Congress, 1st Session. Washington, D.C.: Government Printing Office, 1975, various tables; "Proposals to Break Up Major Oil Companies," Congressional Digest, May 1976, pp. 131-160; Keystone Coal Industry Manual. New York: McGraw-Hill.

but for long-term speculation and control of this substitute resources for oil and natural gas.¹¹ In 1963, when Gulf acquired P&M, securities analyst A. D. Silber of Dominick and Dominick, Inc., made this observation:

...Gulf should enjoy a much higher long-term growth rate based on non-conventional energy development compared with other oil companies. A large scale effort has been made by Gulf to capture an important segment of energy sales which are potential to the nuclear and coal industries....The company has achieved the premier position among major oil companies in non-conventional fuels (U.S. Congress, 1975, pp. 267-268, emphasis added).

In 1969 Exxon (then known as Humble Oil), the largest, totally integrated energy company, purchased Monterey Coal Company. Carl Harrington, a Humble official, gave a similar explanation for the diversification:

We concluded that coal mining and the marketing of coal as a utility fuel offered an attractive long-term investment opportunity which draws upon Humble's experience in exploring for minerals and its established management and technical resources. Humble recognized concurrently that coal at some future date could become a suitable raw material to supplement crude oil and natural gas as an economically attractive use of hydrocarbons (U.S. Congress, 1975, pp. 268-269, emphasis added).

One further scenario should serve to clarify oil's intentions in coal. Island Creek Company was purchased by Occidental Petroleum Corporation (Oxy) in 1969. One year later Oxy acquired an additional coal firm, Maust Coal Company. At that time Island Creek expected an influx of capital from Oxy, with a concomitant expansion in output. William Bellano, Island Creek's President, proclaimed:

...Occidental moved Island Creek into a stronger competitive position within the coal industry, permitting us to open a number of new mines with

resultant increased supplies for all coal users, as well as a new metallurgical source for sales overseas. In the next 5 years, by example, we will open 21 new mines and by 1975 will have tripled production...we will produce a total of 61 million tons...(U.S. Congress, 1975, p. 268, emphasis added).

But by 1974 production was 20.8 million tons, a decrease of 20 percent. Furthermore, in January 1977 Oxy's position in the other energy forms was viewed by Wall Street as a most favorable asset. In December 1976 Oxy's stock climbed to \$24 from its 1976 low of \$13.50. This was, in part, due to Oxy's '36.5 percent interest in two rich North Sea oilfields... [where] Oxy expects it to repay its investment of \$255.5 million in two years." ("Why Wall Street Loves Occidental Petroleum," 1977, p. 36).

But it was also, in part, due to its holdings of 3.4 billion tons of recoverable coal. Albert Gore (the former U.S. Senator), the chairman of Island Creek, said that "...the company is aiming for 40 million tons of annual production capacity in five years vs. 25 million tons in 1976." However, according to one buyer of Oxy's steam coal, "...the quality of Island Creek's coal has diminished in recent months. That might suggest that Oxy's investment there has been held down to provide funds for its North Sea venture" (p. 37). Implicit here is certain, albeit presumptive, evidence that oil companies -- by virtue of their being horizontally integrated energy firms -- can transfer capital among energy submarkets according to where the return is greatest and, therefore, retard production and employment in such industries as coal. In other words, there has been a capital drain out of the oil-owned coal subsidiaries into their parent organizations.¹²

Reserves and Production

Certain difficulties exist in the true estimation of coal reserves (see Gordon, 1974). However, to the extent that they exist uniformly across the industry groups involved with coal, a comparison between the percentage of total coal production and the percentage of "known reserves" by industry group becomes particularly revealing (see Table 8). Two important conclusions can be drawn from these data. First, independent coal companies have been the most responsive to escalating coal prices.¹³ For the coal industry as a whole, production was lower in the years 1971 through 1973 than it was in 1970. Also during this period capacity utilization rates decreased from 100 in the first quarter of 1971 to 89 in the third quarter of 1973 (U.S. Congress, 1975, p. 504). Second, the oil and gas firms that participate in coal were the least responsive to price; in 1974 they accounted for 20 percent of production, but controlled 39 percent of the known reserves. More recently, there has been little proportional change, but the trend continues. In 1976 oil companies controlled 45 percent of the reserves and 21 percent of the production (ratio of production to reserves = .47).¹⁴ This suggests, a priori, that the supply of coal controlled by oil is relatively price inelastic compared with the supply controlled by independent coal operators; therefore, such a pattern of control over coal resources and production implies less of an expansion in mine-worker employment.

Mine Closing

An additional employment implication of this changed market structure is that oil-owned companies may operate differently with

TABLE 8

CONTROL OF COAL PRODUCTION AND RESERVES
BY INDUSTRY GROUP -- 1974

	(percent of total) ^a		RATIO OF PRODUCTION TO RESERVES <u>(1)/(2)</u>
	<u>PRODUCTION (1)</u>	<u>KNOWN RESERVES^b (2)</u>	
Independents	39	9	4.44
Diversified Companies ^c	28	21	1.33
Oil and Gas ^d	20	39	.51
Steel	8	5	1.60
Utilities	4	5	.80
Railroads	0	21	0

^aColumns (1) and (2) may not sum to 100 due to rounding.

^bThese estimated totals of the privately held reserves for each group (reported by each company) do not differentiate between recoverable and in-place reserves. Furthermore, there is an incentive for a firm to understate the reporting of reserves in order to avoid attaching a taxable value to the mineral (see U.S. Congress, 1977, pp. 5-7).

^cIncludes diversified mining and chemical companies, such as Reynolds Metals and Allied Chemical, and such conglomerate-type firms as General Dynamics and Union Carbide.

^dOther reputable sources have quoted these figures as low as 15 percent of production and as high as 44 percent of reserves.

SOURCE: U.S. Congress, Senate, Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary. Hearings on the Interfuel Competition Act of 1975 (S. 489), 94th Congress, 1st Session. Washington, D.C.: U.S. Government Printing Office, 1975, pp. 281-282.

respect to mine closings than would independent coal companies. One would expect that, ceteris paribus, an oil-owned coal mine would more likely be shut down than would an independently-owned mine. A case in point should serve to illustrate. Gulf Oil's Pittsburgh and Midway (P&M) strip mine near Hallowell, Kansas, was scheduled to shut down in mid-April 1974. In August 1973 P&M had laid off 40 of about 110 mine workers (Witt, 1974). The company claims they had been losing money on their No. 19 mine for the past three years:

They [P&M] say that their old utility customers prefer to import Wyoming coal because of its lower sulfur content, rather than install sulfur removal equipment on their smokestacks, so they could use local coal (Witt, 1974, p. 6).

Another reason apparently involved new reclamation standards proposed by the Kansas Mined Land Conservation and Reclamation Board. The "farmer-oriented" board proposed a requirement of "...placement of up to a foot of topsoil on reclaimed land." The theory of P&M's workers was that the closing was designed to put pressure on the Reclamation Board for lower standards. This was conjecture; however, the point is that since Gulf controls "several billion tons" of coal reserves in Montana, as a diversified energy company for which its coal operations are only a small proportion of its total business, it can more readily shut down a mine than can an independent coal producer for which coal is its entire interest. In fact, Mackie Clemens Fuel Company, an independent coal operator and the only other major producer in Kansas, expected that their "...two mines [would] continue to operate even if the new reclamation rules go into effect." Gulf, however, still planned to control reserves in Kansas until the price

reached some appropriate level. A company spokesman stated,

We do intend to hold on to our reserves in this area, hoping that the price of coal will be such in a few years that we could mine it again. If it's in demand -- if there's a shortage -- then buyers will be willing to pay more (Witt, 1974, p. 6).

Since Gulf maintained that it had been losing money at P&M No. 19 in the three years prior to its scheduled closing in April 1974 and that it hoped the price of coal would increase, it is interesting to note that in the period 1970 through 1973, the price index for all coal rose from 150.3 to 218.1 while average hourly wages in bituminous coal mining rose only 20 percent (U.S. Congress, 1975, pp. 499, 505). Moreover, in the first six months of 1974 the index jumped another 64.3 points (U.S. Congress, 1975, pp. 499, 505). This suggests that oil's target rate of return for its coal operations, based on that for its primary product, is greater than the rate acceptable to an independent company.

Gulf made an effort to transfer the out-of-work miners from No. 19 to other P&M mines in Missouri, New Mexico, Kentucky, and Colorado. However, of the forty laid off in August 1973, "only a handful" were relocated, at least by February 1974 (Witt, 1974, p. 7). Gulf should be able to lease its land to farmers until the price of coal reaches the designated level. With the changing structure in the coal industry, the mobility of capital relative to labor appears to be, at least, a portentous consequence of oil's diversification into coal.

Structural Information Void

An additional implication of such an energy market structure is a change in the availability of information. Whatever the true reason for the closing of P&M No. 19, the fact remains that in dealing with

the coal subsidiary of a large, diversified energy company, a trade union (as well as society) can no longer evaluate the financial motives behind such a shutdown. Specifically, Gulf is not required by the Securities and Exchange Commission (SEC) to report separately on its 10-K form the financial data of its coal subsidiary, since sales from these operations do not account for at least 15 percent of total revenues.¹⁵ Therefore, the profits of such coal companies will not be available to the union on which to base its negotiation demands. To be sure, not all of the oil companies that have acquired coal producers can similarly avoid the segregated reporting of such operations. But, the larger and more diversified an energy company becomes, and the more coal reserves it controls in relation to what it produces, the greater the likelihood that an information gap will develop and create a bargaining imbalance -- a shift of power towards the employer.

Efforts by the UMWA to evaluate their employers' financial status can be traced back to the union's struggle for recognition in the early 1900s. At the arbitration commission hearings that resulted from governmental pressure after a 163-day anthracite strike in 1902, Clarence Darrow, representing the union, asked to see the books of the operators (Coleman, 1943). For the first time, the union was raising some basic questions about the division of income between wages and profits and about the ability of an employer to meet labor's demands.

More recently, the Federal Trade Commission (FTC), in attempting to require eight major oil companies -- Exxon; Texaco; Gulf; Mobil Oil, a unit of Mobil Corporation; Standard Oil Company of California; Standard Oil Company (Indiana); Shell Oil Company, a member of the

Royal Dutch/Shell Group; and Atlantic Richfield Company -- to divest themselves of 40 to 60 percent of their refining capacities in certain markets as well as certain pipelines, had submitted to FTC Administrative Law Judge Alvin L. Berman a "...13-volume 1,800-page subpoena for their documents and records..." (Wall Street Journal, January 10, 1977, p. 2). According to Mr. Berman, these "...demands for documents and records, 'if granted, would impose unduly burdensome' requirements on the oil companies and 'make the case unmanageable.'" Moreover, Mr. Berman stated that if the FTC staff could not reduce its information demands, it "...should restructure [its] thinking on how to prove allegations of the complaint." Also, it was reported that Mr. Berman recommended to the FTC that it consider withdrawing the antitrust complaint entirely in October 1975. This FTC case, seeking divestiture, is in its fifth year. What began as an 1,800-page subpoena for company information was reduced to 300 pages, and later to 58 pages, of which 33 pages actually describe the materials sought (Wall Street Journal, January 13, 1978, p. 6).¹⁶

Oil companies seem to be particularly reluctant to make information on their operations public. They sharply criticized a U.S. Department of Energy (DOE) suggestion that data provided for statistical purposes "...might be passed on to department regulators and to other federal agencies" (Wall Street Journal, February 10, 1978, p. 2). One oil company executive suggested that if such a DOE policy came into effect, "we will become hesitant and reluctant in our data submissions." Another oil company official stated that "...[oil companies] must determine how to respond [to DOE demands] on the basis of the uses to which the information will be put."

Without arguing the antitrust policy implication of these individual incidents, the implication for labor seems clear. If the major companies in the industry are able to keep secret, or present selectively, information, then the UMWA is going to have less to work with as a basis for its demands now than it had in past evolutionary stages. As we have suggested before, this information void shifts tactical bargaining power away from the union.

Western Coal Development

In 1945 producing districts outside the Appalachian area altogether accounted for less than 20 percent of total bituminous production (Glasser, 1948, p. 619). Other eastern areas and most of the West were relatively undeveloped. In 1972 the western states accounted for only 10.8 percent of coal production. But by 1976, 20.3 percent of total tonnage was produced in the West, an increase in absolute terms of 71 million tons (National Coal Association, 1977a, p. II-5).

Distinguishing Characteristics

Why has coal production shifted to the West? Obviously, as demand for coal has increased, producers have sought reserves other than the exploited Appalachian seam. Moreover, western coal offers some appealing characteristics.

First, it is generally lower in sulfur content than eastern coal. But it is also lower in heat content, averaging 9,000 Btu's per pound as compared to 12,000 Btu's in the East. Facing pollution regulations, users have been forced to burn low-sulfur coal. For example, under pressure from the Environmental Protection Agency, TVA transferred

160,000 tons of its consumption to the West, part of which came from Amax Coal Company's Belle Ayre mine in Gillette, Wyoming (United Mine Workers Journal, January 1977, p. 16). (We shall see later that Amax figures prominently in western industrial relations.) Low sulfur content does not entirely explain increased western production, for Appalachian deposits contain approximately 28 percent of the nation's low-sulfur coal ("The Coal Industry's Controversial Move West," 1974, p. 136). What appears, then, to be a more important factor in western coal development is the relatively lower extraction-cost structure.

Second, strip mining as a method of extraction affords lower unit labor costs than underground mining (Baratz, 1955). In 1976 average output per person-day was 25.50 net tons in surface mining as compared with 3.50 in underground mining (National Cost Association, 1977a, p. II-6). Strip-mine operations have also increased in the Appalachian basin; the number of strip mines increased in West Virginia and Kentucky from 290 in 1965 to 828 in 1970, with the number of underground mines decreasing from 2,783 to 1,852 ("The Coal Industry Makes a Dramatic Comeback," 1972, p. 55). In general, however, western coal is surface mined and eastern coal is underground mined. In addition, strip mining enabled western operators to escape the cost of the 1969 Coal Mine Health and Safety Act, which at the time of its enactment added \$1.50 per ton to eastern deep mine costs.

Third, with the fragmented ownership structure in the East, western coal development meant a certain degree of insulation from the historical jurisdiction of the UMWA and, concomitantly, from payments into the Welfare Fund and from supply-diverting strikes.

All of these factors contributed to savings in production costs in the West of between nine and fourteen dollars per ton, enough to offset transportation costs as far east as West Virginia ("The Coal Industry's Controversial Move West," 1974, p. 136). However, National Coal Association data (1977a, pp. II-38 to II-44) on district or origin and geographical destination show a relatively low static level of western coal shipped to eastern markets. For example, in 1976 only 4 percent of the coal shipped to Ohio was produced in western districts, and 25 percent of the coal destined for Illinois was produced in the West (National Coal Association, 1977a, pp. II-39, II-42). However, over time, there has been an increase in western coal shipped to the East. Using these same two examples, Ohio received no coal from western districts in 1972 and 1973, and Illinois received 11 percent in 1972 and 15 percent in 1973 (National Coal Association, 1977a, pp. II-39, II-42). Still, Pennsylvania and West Virginia, two other coal producing states, which are farther east, receive little, if any, coal from mines outside their traditional regional suppliers.

Pollution Regulations

In addition, two controversial 1977 amendments to the federal 1970 Clean Air Act cloud the future picture of western coal development. First, the amendments include a "Best Available Control Technology" (BACT) provision for the burning of coal. As yet, the BACT interpretation has not been fully promulgated; but, if literally interpreted, BACT would require that the best available scrubbing equipment be installed on all coal boilers regardless of the sulfur oxide content

of the coal that is burned. This would, of course, eliminate the incentives to eastern consumers to purchase western coal on a pollution-control basis. Second, the 1977 amendments include a controversial local coal use provision, under which state governors may order utilities within their jurisdiction to buy only local coal. This amendment was invoked for the first time when Illinois Governor James Thompson challenged Commonwealth Edison's decision -- motivated by a 1979 deadline to meet sulfur emission standards -- to switch from Illinois to western coal at one of its plants (Coal Outlook, April 10, 1978, p. 3).

Considered together, these factors make the future of western coal development unclear relative to that in the East especially with respect to the prospects for large shipments of western coal to eastern markets. Interpretation of federal pollution regulations appears crucial. However, western production is expanding and will probably continue to expand, fostered at least by a relatively lower cost structure. In fact, one forecast divides a 0.6 percent increase in total U.S. coal capacity from 1975 to 1985 into a 16.8 percent increase in the West and an 8.3 percent decrease in the East (Federal Energy Administration, 1976, p. 4). The important structural feature of western coal is that here oil's involvement is the strongest and the union is the weakest.

Collective Bargaining in Western Coal

Market Structure and Strike Effectiveness

On March 3, 1975, a seven-week strike for a new three-year UMWA contract in the West ended. This new sub-bituminous and lignite

contract was achieved with a consortium headed by Peabody Coal Company (at that time, a subsidiary of Kennecott Copper), which represented, along with its own western mines, the mines of three independent coal operators. Five other western surface mines -- owned by Consolidation Coal (a subsidiary of Continental Oil); Amax Coal (20 percent ownership would be acquired in June by Standard Oil of California); Pittsburgh and Midway Coal (a subsidiary of Gulf Oil); and two large independents, North American Coal and Pieter Kiewit and Sons -- refused to sign the agreement and remained on strike. The Peabody agreement, patterned after the 1974 contract with the BCOA, covered approximately 60 percent of the surface mine tonnage in the West (United Mine Workers Journal, March 1-15, 1975, pp. 4-7). The structural significance is that three out of the five intransigent coal companies -- in essence, the ones attempting to "break the pattern" -- were controlled (or would be) by oil.

Admittedly, the UMWA has problems in the West other than with the changing structure of the coal industry. The Operating Engineers (IUOE) and the Progressive Mine Workers (PMW) have been attempting to organize in the UMWA's western districts. For instance, in the past, miners at three of Pieter Kiewit's operations have been represented by the UMWA, the PMW, and the IUOE (United Mine Workers Journal, March 1-15, 1975). As our theoretical framework suggested, this enables management to play one union against the other and, consequently, weaken the negotiating stance of any particular union.

As of June 1975 an agreement with one western surface mine remained unsettled -- Amax's Belle Ayre mine. Specifically, Amax was resisting safety, seniority, pension, and medical coverage provisions that apply

to all its eastern mines. Additionally, a UMWA demand for a common expiration date was a "...major sticking point in the union's negotiations with Amax" (United Mine Workers Journal, March 1-15, 1975, p. 6). Without common expiration dates, a company can "whip-saw" production between its various locations and lessen the effectiveness of the union's strike weapon. Amax clearly was trying to divorce itself from the established BCOA pattern. Furthermore, an Amax-proposed pension plan would not allow miners to transfer their accumulated pension time to other company locations. Under the proposal, if Amax closed one of its operations, displaced miners would not be able to establish vested rights against the Amax pension fund by transferring to other operations covered by the BCOA plan. Significantly, in the middle of this contract strike Standard Oil of California (Socal) acquired 20 percent ownership of Amax. The UMWA was convinced that Amax was able to hold out so long because of the financial support generated by this merger.¹⁷ The generalization that naturally follows is that the industrial structure of the energy industry enables parent petroleum companies to subsidize ("deep-pocket" finance) their coal subsidiaries in times of work stoppages. The effectiveness of the union's ultimate sanction -- the ability to shut down the total operations of an enterprise -- is reduced by a market structure which it does not have totally organized.¹⁸

The Changing Bargaining Structure

In the 1974-75 western negotiations the UMWA persuaded six major producers to bargain as a group. The purpose, it seems, was to carry

over the established centralized national bargaining structure to the newly developed western region to maintain some semblance of control over western strip mines and economize on bargaining resources. The pattern was established by the contract with this group and by contracts from separate negotiations with Gulf's and North American Coal's western mines. Amax refused to join the producer's bargaining alliance and, financially supported by parent oil, became the western holdout, effectively breaking the UMWA at its huge Belle Ayre mine (Coal Patrol,¹⁹ August 5, 1977, p. 2).

Rival unionism was continuing to affect the UMWA's power base. The Teamsters in Alaska, the International Brotherhood of Electrical Workers (IBEW) in Texas, and the IUOE (generally) were successfully organizing in the West (Coal Patrol, August 5, 1977, p. 2). The union was struggling for survival, and the stage was set for the elimination of common expiration dates in the 1977 western negotiations. Indeed, prior to the negotiations it was reported that each western producer would insist on individual bargaining (Coal Patrol, August 5, 1977, p. 1). Apparently, each company perceived its bargaining power to be enhanced in confronting the UMWA by not negotiating in a producer's alliance, relative to what it would be by continuing the 1974 structure. In addition, it was reported that two western producers -- Energy Fuels, a subsidiary of Crown Central Petroleum, and P&M, a subsidiary of Gulf -- offered "fat" contracts to UMWA miners if they would break away from the union (Coal Patrol, August 5, 1977, p. 1).

What we saw developing in the West in the mid-1970s was a crumbling of the Stage II-type bargaining structure. National bargaining was, in

fact, no longer national. And centralized bargaining would not hold up in the West. A decentralized western bargaining structure was emerging, the result, to a large degree, of oil's influence in the market structure.

One cohesive basis for the continuation of national bargaining was the Health and Welfare fund. But in November 1977, just prior to the end of the 1974 agreements, a plan for a separate pension and medical benefit fund was proposed by the UMWA in its negotiations with P&M (Wall Street Journal, November 9, 1977, p. 20). The concept of a separate regional fund for western UMWA miners was also discussed. The motivation was, in part, the western miners' dissatisfaction over cut-backs in benefits, which they perceived as being caused by eastern wildcat strikes (Wall Street Journal, November 9, 1977, p. 20). It also seems correct to conclude that the union was under pressure to relieve western operators from ties to the financially-ailing national Fund -- pressure effectuated through the market structure and supported by the union's slipping jurisdictional control. The UMWA could only claim control of 30 percent of western production, and the market structure was not likely to be conducive to further organizing.

Oil's influence on western bargaining was further evidenced by the fact that the first agreement in the West was reached with an oil-owned coal producer. On December 4, 1977, just two days prior to the expiration of the 1974 contracts, UMWA miners ratified an agreement with P&M's two western surface mines, which was expected to set the pattern for the remaining mines with which the UMWA was negotiating (Wall Street Journal, December 5, 1977, p. 6). Indeed, it was reported that four other producers immediately agreed in principle to the terms of the P&M

settlement (Wall Street Journal, December 5, 1977, p. 6). By the December 6 deadline six western mines had reached settlements with the UMWA. By the week of December 23 two holdouts settled on terms similar to those reached with the other western operators (Coal Outlook, December 12, 1977, p. 5; Wall Street Journal, December 23, 1977, p. 20). Negotiations continued into January with the remaining two mines -- AmCoal, an independent, and Empire Energy, a subsidiary of Houston Natural Gas.

The Nature of Issues, Internal Union Dissention,
and Bargaining Power

Before attempting to interpret the 1977-78 national contract negotiations in terms of structural relations, we must first examine the environment suggested by the forces at work in the UMWA. The theoretical framework of Chapter 1 stated that a component of bargaining structure is the nature of bargaining issues. If these issues change such that the structure for dealing with them is deemed inappropriate or ineffective, then pressure will result to change the structure. Internal union cohesion may be affected, and this, in turn, may affect a union's bargaining power.

As previously noted, there were no national coal strikes after the union's 1950 agreement with the BCOA -- until 1971. The decade of the 1970s brought growing rank-and-file unrest and militancy, which was reflected in the 1971 strike (Fink, 1977). Sparked by the Farmington, West Virginia, disaster in November 1968, where seventy-eight miners were killed in an explosion at one of Consolidation Coal's mines,

internal factions formed within the UMWA -- Miners for Democracy, Black Lung Association, Disabled Miners of Southern West Virginia, and others (Cassidy, 1971). As the names of these groups suggest, rank-and-file concern was growing over the issues of safety, health, and centralized decision making. The last of these, in particular, implies a certain dissatisfaction with the traditional way of doing things in the UMWA -- a bargaining structure that includes centralized control and subordination of local autonomy. The reformers had learned that the policies of the union hierarchy had worked against them and had been formed in collaboration with the operators (Cassidy, 1971).

Other issues began to surface that, in the minds of many mine workers, could only be addressed at the local level. For instance, at the UMWA's Forty-Seventh Constitutional Convention, the union reversed its 1973 position with respect to strip-mining legislation. The union withdrew support from federal strip-mining legislation in favor of state laws, in recognition of the priority of local employment concerns over national environmental problems (Hecker, 1977). The earlier position was based on the notion that it was the miners and their families who worked and lived in surface-mined regions and who bore the cost of land defacement (Cassidy, 1971). The underpinnings of these positions were the belief that the nature of the important issues in the 1970s required a decentralized decision-making structure.²⁰

At the 1976 convention, a resolution was drafted that directed union negotiators to seek a legal right to strike over local issues in the new contract. The importance of the local right to strike was founded on the membership's belief that mine safety was a local issue

and could only be enforced if miners had the right to walk off the job. The local right to strike, along with a demand that the ailing Welfare Fund be refinanced,²¹ would become the most important issues in the 1977-78 contract talks with the BCOA. Indeed, these two issues became the focus of candidates' platforms in the 1977 UMWA presidential election (Coal Outlook, May 30, 1977, p. 2).

Going into the contract talks, the UMWA was rife with internal dis-sension. There was a general dissatisfaction with the leadership. The nature of the important bargaining issues had changed from such broadly national issues as wage levels and interregional wage parity to what, in the minds of many rank-and-file miners, were thought of as local issues. It could be argued, of course, that such issues as Welfare-Fund refinancing and the growing threat of rival unionism were national in scope and could be more effectively addressed through a structure with centralized decision-making power. But it seems clear that the membership, through a historical perspective, either believed that the current structure was ineffective in dealing with these issues and un-responsive to local needs or that the union lacked the decisive leadership necessary in a centralized structure. Or, perhaps these issues were just recognized as being less important than the issues of safety, health, and district autonomy. It appeared then that the UMWA would enter the contract negotiations with less than complete membership solidarity. The union was factionalized. Moreover, in the minds of the operators, the UMWA, lacking stability and central direction, was vulnerable.

The Nature of Issues for the Industry and the
Structure of the Bituminous Coal Operators' Association

Productivity, Labor Stability, and the Welfare Fund

The issues that would become important in the BCOA's national bargaining position surfaced in May 1976 in a speech by the president of the BCOA, Joseph Brennan. Brennan explained the need to "fashion labor-management institutions [in a way that would] permit the industry to grow" (1976, p. 12). Brennan (1976) was emphasizing two interrelated strategies to growth: increased productivity and labor stability. The latter essentially meant eliminating wildcat strikes.²² Coal production losses had increased 12 percent in 1976 from the prior year and 60 percent in the first two months of 1977 (Wall Street Journal, May 9, 1977, p. 5)

The industry in its Stage II-type relationship with labor had desired a strong union with a centralized structure and a strong leadership which stabilized labor relations through control of the rank-and-file. The industry recognized that the union, weakened by its losses in the control of coal production, internal dissention, and ineffective and unsupported leadership, could no longer act as the agent for labor stability that it had in the 1950s. The BCOA, then, was apparently determined to bring labor stability back to the coal industry by its demands in the upcoming negotiations with the UMWA.

An additional bargaining issue for the industry, as for the union, was the Welfare Fund. Restoration of the Fund would add as much as two to three dollars per ton to the price of coal (Wall Street Journal, December 1, 1977, p. 46). Wildcat strikes had contributed to the Fund's

poor financial state. The industry wanted to eliminate revenue-reducing strikes by financially penalizing strikers, in part, through reduced benefits from the Fund. The Fund had revenue, cost, and payment problems in addition to strikes. This suggests that the BCOA's position with respect to severe penalties for strikers was more a function of its desire to achieve a greater degree of production control and stability than it was a means of restoring the ailing Welfare Fund.

The Industry's Bargaining Posture

The nature of bargaining issues for the BCOA and the eroding power base and internal dissention of the UMWA led to an industry bargaining stance shaped by a high cost of agreeing in terms of production control and Welfare Fund payments. Furthermore, certain structural conditions suggest that the operators were willing to take a long strike in order to achieve stability and increase productivity; their costs of disagreeing appeared to be low. The following factors indicate that the dominant participants in the BCOA--steel, oil, the large independents, and the conglomerate subsidiaries--believed they would be hurt little relative to what they would gain, and perhaps even benefit, from a strike: (1) the steel industry was operating at 70 percent capacity and would benefit from a reduction in unneeded coal reserves; (2) electric utilities and coal companies had amassed vast stockpiles (a shortage would boost price), although less than those that existed prior to the 1971 and 1974 negotiations, which suggests that the operators viewed the union's ability to hold out as being less than it had been in those prior years; (3) winter was a tough time to mine coal, and without a strike there would undoubtedly be layoffs, which are more costly, other things equal,

than a strike; (4) the BCOA may have reasoned that UMWA President Arnold Miller did not have a mandate to reach an agreement without a strike (he had won only 40 percent of the vote in the last election); and (5) the steel industry, a major force in the BCOA, was particularly wary of the UMWA gaining a local right-to-strike provision, which could perhaps become a contract target for steel workers, or at least add to the controversy surrounding Steelworkers' President Lloyd McBride's support of the Experimental Negotiating Agreement in steel, which essentially eliminates legal strikes (Coal Outlook, December 12, 1977, pp. 3-4; Coal Patrol, December 15, 1977, p. 3; Philadelphia Inquirer, December 7, 1977).²³

Market Structure and Operator Cohesion

The BCOA appeared to have a united front founded on a common operator conception of the bargaining stance required to address the important issues that confronted the coal industry. Beneath the surface, however, the market structure was working to counteract internal cohesion. In 1974, Amax had threatened to pull out of the BCOA, but had been contented with independence in the West where, as we have seen, it was successful (Coal Patrol, August 5, 1977, p. 2). Zeigler Coal Company, a subsidiary of Houston Natural Gas, did leave the BCOA in late 1977 and offered its workers a production incentive program designed to entice them away from the UMWA (Coal Outlook, September 26, 1977, p. 1). The Zeigler scheme was essentially one of offering greater overall benefits than those being demanded by the UMWA, but gearing them to productivity improvements (Coal Outlook, September 26, 1977, pp. 1-2). In addition, it was reported that Peabody Coal, shortly into the strike, had been meeting

separately with a district official of the UMWA, Harry Huger (Coal Outlook, January 30, 1977, p. 2). This suggests that, although the industry apparently held a common conception of its labor-related problems, it was not united in a conception of a bargaining structure that would afford the maximum bargaining power required to rectify those problems. The structure of the industry was such in 1977 that some companies were considering bargaining outside a centralized structure on a regional or company-by-company basis. Given labor's problems, this approach might enable them to separate their workers from the union, or at least it might give them greater structural bargaining power. The structure of the energy industry was engendering a disparity of producers' interests.

Structural Influences in the 1977-78

National Bituminous Coal Negotiations

The longest continuous strike--110 days--in the history of the bituminous coal industry began at midnight on December 6, 1977. Although negotiations proceeded months prior to the deadline, it is doubtful that they ever took a serious tone until the 50 percent of the nation's coal production that the UMWA actually controlled came to a halt. The following analysis will attempt to show that the market structure played a large part in determining how the strike was actually settled by establishing who were the effective (dominant) decision makers; the role and tactics of the government; and the pattern settlement that emerged, eventually resulting in a national agreement.

Relative Bargaining Power

The union's bargaining team apparently conceded early to the operators' demand for penalties to striking workers by offering a counter-proposal, which was essentially an attenuated management position. But this conservative union proposal was rejected by the operators (Coal Patrol, December 15, 1977, pp. 1-2). The operators' perception of their relative bargaining power allowed them, at this point, to press for total capitulation; they recognized that they had little reason to make concessions.

After one month, there had been no appreciable impact on energy supplies. The demand for steam coal (a grade of bituminous burned by electric utilities) was light in relation to supply; and the price, in face, had dropped (Wall Street Journal, January 6, 1978, p. 4). The supply of metallurgical coal (used in making steel) was also continuing to meet demand. The reasons were that nonunion steam coal was continuing to flow, and the steel industry had sufficient supplies to operate their coke ovens at the current level of capacity for some time.²⁴ So wide was the gap in relative bargaining power perceived by the operators, that when the union conceded on major issues, expecting greater direct-compensation benefits in return--perhaps as a way of cajoling rank-and-file acceptance of an agreement that did not meet convention-mandated demands--the operators still resisted. As a result, the talks broke off. In addition, the steel industry reportedly was trying to keep the BCOA's offer in line with the 1977 money package negotiated with the Steelworkers (Wall Street Journal, January 30, 1978, p. 3).

Oil Sets the Pattern

The first tentative agreement was reached in early February.²⁵ The BCOA's last benefit proposal prior to this agreement was a provision to manage welfare funds in a way similar to that already negotiated in the West--where oil had essentially determined the pattern (Coal Outlook, February 6, 1978, p. 8). The influence of the oil industry was extending indirectly into the national bargaining arena. Prior to these negotiations, oil's influence in national bargaining had probably been minimal²⁶--perhaps as a result of its being a new partner in a long-standing, institutionalized bargaining relationship. It seems that oil had been content with its growing strength and influence in the West. Oil's influence, however, had become more direct.

On February 20, the UMWA reached a tentative agreement with a company outside the BCOA structure: Gulf's P&M subsidiary. P&M was not a current member of the 130-member BCOA; it had left the association, after being a member since 1956, complaining that the steel companies dominated the bargaining alliance (Coal Outlook, Supplement, February 27, 1978, p. 1). This settlement, which included more concessions to the union than offered by the BCOA, was approved by the bargaining council. It was reported that the BCOA "fumed" at the P&M agreement, since it undermined the industry's entrenched bargaining stance (New York Times, pp. 1, 24; Wall Street Journal, pp. 2, 19, February 21, 1978). The agreement did not allow management to discharge miners who refused to cross a picket line, and it eliminated a good deal of the productivity-incentive proposals--both of which were major foundations of the BCOA's bargaining thrust. It was also reported that some BCOA members "could

live with it [the P&M agreement]," and were warning that they would break with the association and negotiate on their own if the BCOA refused to accept the P&M settlement as the industry pattern (New York Times, pp. 1, 24; Wall Street Journal, pp. 2, 19, February 21, 1978).²⁷

Why would P&M make concessions which tended to undermine the cohesive conception of the eastern coal industry's problems? These issues were less important to a company whose primary production base was in the West, where productivity and wildcat strikes were not major problems. This agreement was, however, for P&M's eastern mines, and would affect any national settlement. It may not have been a grand strategy by oil to alter the collective bargaining structure, as it had already altered the market structure, to one more to its liking. P&M may simply have decided that at this point, since its western mines were producing, its overall production program would benefit relative to what it could gain by following the BCOA line by having all its mines operating. In addition, governmental pressure was beginning to mount, and P&M may have simply been judged as the major company most amenable to the type of settlement that would put pressure on the stalemated negotiations.²⁸

The BCOA as a group, however, publicly rejected using the P&M settlement as a basis for an industry-wide agreement and refused to negotiate further. Instead, the industry suggested submitting the problems to binding arbitration (Pittsburgh Post Gazette, February 23, 1978, pp. 1, 3). Perhaps the BCOA did not want the P&M settlement forced upon them. Aside from the fact that the settlement did not contain the stringent production-control clauses desired by the BCOA, it might have become a harbinger of the association's and national bargaining's dissolution by

breaking the BCOA's hold on pattern setting. The BCOA may have reasoned that arbitration would grant a better agreement and enable it to hold together as the industry bargaining arm. (Institutions tend to act in ways which continue their existence.)

Perhaps realizing the BCOA's vulnerability at this point, the union's bargaining council proposed that a settlement be made on the basis of the P&M agreement. The union refused the arbitration suggestion and threatened to negotiate with individual BCOA members if the association would not settle. The union's bargaining council voted 25-13 to accept nothing less than the P&M agreement in the national contract (Pittsburgh Post Gazette, February 23, 1978, pp. 1, 3).²⁹ (The question this poses, and which is addressed in the final chapter, is whether it was also in the UMWA's long-term interest to follow this strategy, given the growing importance of oil.)

At this point, the gap in relative bargaining power was beginning to narrow for two reasons: First, the BCOA's strategy may have been miscalculated. It would be difficult to impose a contract on miners which would violate their traditions with respect to the sanctity of the picket line. In addition, an "innovative" labor bargain would be difficult to obtain with a weak, disorganized leadership. The very factor which the BCOA hoped to exploit, Arnold Miller's leadership weakness, was now preventing a settlement advantageous to the industry. Unlike their leaders, the rank-and-file was becoming unified around the position that BCOA proposals were an all-at-once effort by the operators to destroy their union and to alter drastically the relations between coal capital and coal labor (Wall Street Journal, February 24, 1978, pp. 1, 28). The operators wanted major changes in how labor was used as a factor of

production, not so much in dollars paid to this factor. Second, BCOA refusal to accept the P&M settlement as the industry-wide pattern paved the way for a reversal of governmental pressure from the union to the industry. Pressure from the administration was now being directed against the industry, in part, by the suggestion that only two possibilities remained: either the BCOA would accept the union's bottom-line offer (the P&M pattern) or the government would seize the mines (Wall Street Journal, February 24, 1978, p. 2).

Governmental Pressure and Market Structure

The government's key strategy was to strengthen the hand of the more flexible operators in the BCOA in order to force additional separate settlements or, if such were threatened, to force the BCOA into conceding for the sake of its own survival.³⁰ In fact, it was reported that President Carter met with top executives of several of the oil companies that had coal subsidiaries (Wall Street Journal, February 24, 1978, p. 2). The government was threatening to make it difficult for them to obtain strip mining and other permits, and administration support for a congressional bill banning the leasing of government-owned coal lands to oil-owned coal companies was used to coerce the oil industry into leading the way to a tentative settlement (Coal Outlook, March 6, 1978, p. 1; New York Times, February 24, 1978, pp. A1, A15). These events suggest that the state recognized who the effective decision makers were in the current structure of the coal industry.³¹ Moreover, it indicates that an element of market structure--the pattern of ownership and control--was shaping the way in which governmental pressure was being applied to achieve a collective bargaining agreement.

On February 24 President Carter announced that a "voluntary settlement" had been reached between the BCOA and the UMWA, just hours before he was scheduled to announce "drastic steps" (seizure of the mines and/or Taft-Hartley). The agreement was termed "somewhat improved" over the P&M settlement (New York Times, February 25, 1978, pp. 1, 3).³²

Factors Affecting the Final Settlement

The tentative agreement was, of course, rejected by the rank-and-file by a two-to-one margin, and Carter invoked Taft-Hartley.³³ It could be argued, therefore, that the P&M settlement was not the relevant pattern and did not affect the final agreement ratified on March 24 by 57 percent of the vote. The mine workers failed to approve this settlement reportedly because of the deductible payments included in the medical benefits provision. For the first time since the establishment of John L. Lewis's revolutionary 1950 Welfare Fund, miners would not have completely free medical care; they would have to pay up to \$800 of their yearly medical expenses. Other provisions were unacceptable to the rank-and-file, but the contract that was finally ratified contained significantly lessened (\$200) deductible payments.³⁴ The latter contract was still a version of the P&M settlement. And it was this settlement which set the pattern for the nonwestern industry-wide agreement.

The union's costs of disagreeing relative to its costs of agreeing rose with the length of the strike. The economic pressures of a tougher stand being taken on extending credit to striking miners by local lending institutions, businessmen, and health-care providers eroded some of the rank-and-file's militance and determination to achieve the best agreement (Wall Street Journal, March 23, 1978, p. 32). In addition, the

strike grew less effective as the demand for electricity decreased relative to the growing supply. Stockpiles remained static as the strike lasted into early spring; western coal was increasingly able to penetrate eastern markets, especially mid-western utilities.³⁵ TVA, in fact, had been boosting its stockpiles with western coal (Coal Outlook, February 27, 1978, p. 2). The week ending March 18 found coal production to be 58 percent of the same week in 1977 (Energy Resources Report, March 24, 1978, pp. 111,117).

Summary

The implications for the future of the petroleum industry's influence on the structure of collective bargaining in bituminous coal are explored in the final chapter of this essay. This section summarizes the salient features of Stage III-type structural relations (see Table 9).

First, the changing pattern of ownership and control of coal resources and production has made the term "coal industry" no longer the relevant market concept for an examination of structural relations.

Second, an energy industry in which petroleum companies maintain an important degree of control has adverse implications for mine-worker employment. Oil companies control a disproportionate amount of reserves in relation to what they produce; and they view coal, which is a substitute for their primary product, as a potentially price-eroding commodity. A diversified energy company can more readily close one of its operations than can an independent coal producer for whom coal represents his entire business.

TABLE 9

STRUCTURAL RELATIONS IN STAGE III: CHANGE AND BARGAINING POWER

MARKET STRUCTURE		COLLECTIVE BARGAINING STRUCTURE	
Seller Concentration	Moderate (imperfect oligopoly in the energy industry); coal sector still imperfectly competitive	National bargaining with regional separation in coal became eastern industry-wide bargaining and decentralized western bargaining	Negotiation units: industry and union structure (decentralized → centralized)
Cost Structure	Some variation across traditional industry lines; interregional variation (western coal mining vs. eastern coal mining)	Energy labor: growing number of unions and non-union work force in coal (coupled with company-wide bargaining with OCAW in oil)	Unit of direct impact: relevant work force under contract (many unions/nonunion labor → one union/total work force)
Vertical Integration	Vertically integrated energy industry	Centralized coal union and industry control became attenuated	Decision-making structure (local autonomy → central control)
Product Diversification (horizontal integration)	Horizontally integrated energy industry		
Ownership and Control	Consolidated into four major groups: oil, steel, diversified companies, and large independents (multiproduct owners)	Local/firm-or-product-specific issues; pressure for local union autonomy	Nature of issues (local/firm-specific → national/industry-wide)

Third, when dealing with a diversified employer, a trade union is confronted with an information void. Tactical bargaining power has shifted in favor of the employer.

Fourth, western coal production has increased and is likely to increase in the future, and it has had and will continue to have an impact on collective bargaining. Not only is the UMWA weakest in the West, but that is where oil interests are strongest. Oil-owned coal has played a dominant role in the two most recent contract negotiations in the West. In 1975, the financial staying power afforded by the market structure effectively attenuated the union's ultimate weapon. Rival unionism, weakening the UMWA's jurisdictional control, combined with oil influence to alter the bargaining structure in the 1977 western negotiations. A decentralized bargaining structure emerged, with an oil subsidiary establishing the settlement pattern.

Fifth, the nature of bargaining issues for the union and the industry, resulting from prior structural relations, affected the perceived and actual power of both groups in the 1977-78 national coal strike. The internal union environment was characterized by dissention, while the operators were committed to bring labor stability and increased productivity back to the coal industry. In addition, the operators prepared for and perhaps even desired a strike. However, the disparity of interests in the new market structure acted to abrogate the operators' alliance.

Sixth, and most important, the influence of the oil industry extended into 1977-78 national coal negotiations. An oil-owned coal company, one which is outside the BCOA structure, reached a separate agreement with the UMWA, and this settlement eventually became the pattern for the national contract.

Finally, governmental pressure played a role in bringing the parties to an accord. But the pattern of ownership and control in the coal industry had shaped the way in which this pressure was applied.

NOTES TO CHAPTER 4

- ¹ It should be noted that geophysical formations preclude the reasonable separation of crude oil and natural gas. For this reason, the largest oil producers are also the largest gas producers.
- ² Market control is more consolidated than the current level of concentration in coal would lead one to believe. It is often the case that the large coal producers lease the reserves and market the production of the small operators ("Back to Gold Ole Coal," 1974).
- ³ Consider a comparison with the automobile industry where the top four firms account for 93 percent of industry shipments, and the top eight account for 99 percent.
- ⁴ Potentially at least, the vertically integrated majors maintain significant economic leverage over their smaller, nonintegrated rivals because of this complete control of the production process from crude fuel exploration through retail consumer marketing. For example, the Federal Trade Commission has suggested that offshore oil leases in the Atlantic Ocean be denied to large oil companies to foster competition in the oil industry (Wall Street Journal, April 13, 1978, p. 2). It was reasoned that the large companies, integrated with East Coast refineries, would not offer nonintegrated companies prices for their oil that were high enough to be competitive. Therefore, the smaller, nonintegrated firms would either fail to bid or bid too little for leases, which would leave the offshore tracts open to control by the large, integrated companies. In addition, many of these same large companies control the pipelines that serve offshore fields and could discriminate against their nonintegrated rivals when setting transportation rates. But a large company with pipelines need not even have East Coast refineries in order to capture some control of the Atlantic oil. (See, also, a report of nonintegrated oil companies attacking the integrated majors, claiming that the majors subsidize their refining and marketing operations with the profits from their crude oil production, in Energy Users Report, April 20, 1978, p. 22.)
- ⁵ See, for example, Wilson (1975); U.S. Congress (1975, pp. 94-115); and for a journalistic description of these arrangements, see Greider (1977). Blair (1976) points out that these combinations are more prevalent among the "lesser majors" and the independents than among the majors. These joint ventures have, theoretically at least, a two-edged effect on the conduct of rival oil companies. It could be argued that without these arrangements the smaller companies would not be able to compete with the larger ones, since exploration in particular requires a huge capital investment, which would further preclude entry--the sine qua non of oligopoly power--into the industry. But it could also be argued that these ventures provide the opportunity for participants to share information, impeding competitive behavior and, furthermore, restricting the

degree of competition in the bidding for federal leases (see, for example, Duchesneau, 1974).

⁶There may be some dissention, however, among the "Seven Sisters." Exxon is bringing suit against General Atomic, alleging violations of anti-trust laws as well as fraud in connection with a uranium-supply agreement (Wall Street Journal, April 11, 1978, p. 10).

⁷For some examples of oil's politico-economic power, see the accounts of antitrust proceedings related to the 1957 Suez crisis and the Alaska pipeline in Wilson (1975) and U.S. Congress (1973, p. 375).

⁸See, for example, Duchesneau (1972). However, in a practical sense, conversion costs may be significant, as the processing capacity required to burn coal for electricity generation is greater than that required to burn oil. (It is much easier to convert from coal to oil, as many utilities did, than it is to convert from oil to coal.) Moreover, pollution restrictions make coal, *ceteris paribus*, less attractive than oil or gas since coal is a much "dirtier" fuel and, therefore, requires a greater investment in scrubbing equipment. However, when comparing the price movements of oil and coal, one can definitely see a correlation. But more importantly perhaps is the fact that the emphasis on coal use in the National Energy Plan is apparently based more on aggregate supply considerations than on demand constraints (see Comptroller General, July 25, 1977; September 22, 1977).

⁹For a detailed chronological presentation of oil's entry into the coal industry, see U.S. Congress (1975, pp. 40-41, 275-276).

¹⁰For an analysis of the oil industry's control of the entire vertical uranium fuel cycle, see Pollock (1977).

¹¹The same reasoning would hold for an assessment of the petroleum industry's influence on the development of synthetic fuels from coal. Given their potential as substitutes for the oil industry's main product, these fuels may not be developed as rapidly as possible. An example of oil's past efforts is the agreement between I. G. Farben, the German chemical firm that developed a process to convert coal to gasoline (coal liquefaction), and Standard Oil of New Jersey (now Exxon) to control and subsequently retard the development of coal as a substitute for oil (see U.S. Congress, 1975, pp. 270-272).

In addition, Thomas Woodruff (U.S. Department of Labor and formerly Staff Economist, UMWA) told the author that the National Coal Association (NCA) had lobbied against President Carter's policy directive in the National Energy Plan which provided for electric utility conversion from oil to coal. The dominant participants in the NCA are now oil companies (Washington, D.C.: personal interview, February 13, 1978).

- ¹²For a more complete presentation of this phenomenon, see United Mine Workers Journal (February 16-28, 1977, pp. 12-15); for the opposite conclusion, see National Coal Association (1977b).
- ¹³The bituminous price index rose from 151.9 in 1970 (1967 = 100) to 222.5 in 1973 (U.S. Congress, 1975, pp. 498-523).
- ¹⁴The 1974 figures include neither Amax nor Utah International (UI) in the oil and gas group. The 1976 figures include Amax, but do not include UI. Different interpretations of the same 1976 figures include one or both, or neither, of the companies as having an oil association. Amax was partially acquired (20 percent) by Standard Oil of California (Socal) in 1975, and some argue that the relationship is not one of subsidiary to parent (National Coal Association, 1977b). Other studies do include Amax in the oil and gas group (Comptroller General, 1977b), and Amax is included here since, as we shall see, certain behavior with respect to labor relations indicates that Socal does influence the operations of Amax. According to Moody's Industrial Manual, UI's principal business is mining coal, iron ore, uranium, and copper. However, in 1975, for example, UI produced 2,435 million barrels of crude oil and 26.9 billion cubic feet of natural gas. Further complicating the classification is the fact that in 1976 UI merged with General Electric Company (GE); but under the terms of the approved merger, UI's uranium business will function independently, prohibited from selling uranium to GE. If UI were included in the petroleum group, the figures for 1974 would show that oil controlled 41 percent of production and 21 percent of reserves, and for 1976, 46 percent of production and 22 percent of reserves.
- ¹⁵See supra n. 25, Chapter 1.
- ¹⁶The FTC staff (not the commission itself) has recently concluded that the largest oil companies (those producing more than 10 million barrels in 1976) should dispose of their coal and uranium reserves worth more than \$100 billion. "Caps" of 3 and 5 percent on the amount of reserves that each company could own of the total reserves in each of the three regional markets were studied by the staff--thirty-two oil and twelve natural gas producers would be affected (see Energy Users Report, April 6, 1978, p. 11). However, the Justice Department's Antitrust Division has concluded that oil companies should not be prohibited from acquiring or retaining coal properties, stating that this would "restrict the firms that seem most able and eager to invest in coal" (Wall Street Journal, May 16, 1978, p. 3).
- ¹⁷Thomas Woodruff, Staff Economist, UMWA (telephone conversation, January 17, 1977).
- ¹⁸It is interesting to note that the UMWA's western members supported Arnold Miller's "reform" candidacy for president in 1972 (see United

Mine Workers Journal, 83rd Year, No. 15, August 1, 1972). Also, a cursory reading of prior UMWA publications found no mention of the development of an energy industry and the resultant effects on the collective bargaining structure.

- ¹⁹Coal Patrol has been a useful source of information for this study. It is published by Brophy Associates, Inc., an independent nonprofit research and information organization, and edited by Thomas N. Bethell, an authority on coal labor relations and formerly UMWA research director.
- ²⁰The logic of having decentralized decision making address local issues was reinforced, for example, by the way in which a revision in the West Virginia workmen's compensation law was achieved. The revision was essentially formulated by a local coalition of dissident miners and the other trade unionists (see Cassidy, 1971).
- ²¹The Fund had been in trouble for a number of years. The demand for coal and concomitant royalty payments into the fund had been overestimated. Serious cash shortages, rising medical costs, and general mismanagement had forced cutbacks in the benefits paid out. Frequent wildcat strikes caused further revenue losses, and when benefits were cut, wildcats were the response, further exacerbating the Fund's problems.
- ²²Efforts by the industry to eliminate wildcats had extended into the courts, but were unsuccessful. A federal court suit, filed in September 1975, requesting a nationwide order compelling "prompt and affirmative" action by the union using "all reasonable means at its command" to stop a "national pattern and practice of illegal picketing and work stoppages," was rejected in May 1977 (Wall Street Journal, May 9, 1977, p. 5).
- ²³It was also suggested that a factor contributing to the likelihood of a strike was the animosity between Miller and Brennan. Brennan had been ousted by Miller from the position of UMWA research director prior to his joining the BCOA (Philadelphia Inquirer, December 7, 1977).
- ²⁴By the end of January, however, there were reports that stockpiles were starting to dwindle. There were problems in obtaining western coal, as weather conditions and some union success in interrupting transportation made deliveries unreliable. There were also technological constraints involved in readily switching to low-sulfur coal from the West (Coal Outlook, January 30, 1978, p. 8).
- ²⁵This first agreement was rejected by the union's bargaining council without being put to the membership for a ratification vote. The membership's dissatisfaction with their leadership and the operators' apparent dominance over the union's bargainers led to Miller being forced to bring three council members, who represented the dissident factions, onto the negotiating team (Washington Post, February 19, 1978, p. A16). Rank-and-file ratification was introduced in 1974.

- 26 This assessment was offered by Thomas Woodruff, staff economist, UMWA, in a telephone conversation with the author (January 17, 1977).
- 27 The impetus of this path-breaking settlement was apparently tripartite: one or a group of the union's bargaining council members, the Federal Mediation and Conciliation Service (perhaps independent of Secretary of Labor F. Ray Marshall), and P&M. This insight was provided by Thomas N. Bethell.
- 28 This type of settlement is commonplace in major industrial disputes in which employers negotiate collectively through associations. For example, in the Teamsters' last contract the initial settlement was reached outside the national contract talks--with a Chicago trucking industry association.
- 29 The bargaining council's acceptance of the P&M agreement was engineered by Kenneth Dawes, UMWA district president from Illinois, so that Miller, the embattled UMWA president, would receive none of the credit. A Miller-initiated proposal, it was felt, would be rejected (Pittsburgh Post Gazette, February 23, 1978, p. 3).
- 30 Under federal law, multi-employer bargaining groups are allowed to dissolve under "special conditions," with the members then negotiating separately. Many court rulings have indicated that a genuine impasse meets this definition (Wall Street Journal, February 24, 1978, p. 2). The word "impasse" in fact, was being mentioned by both Miller and Secretary of Labor Marshall (New York Times, February 24, 1978, pp. A1, A15).
- 31 Administration pressure was also apparently applied to another important decision-making group: the steel industry. U.S. trade negotiator Robert Strauss reportedly tried to get the steel industry to break with the BCOA and accept the union's proposal by suggesting that the government would allow more steel imports if domestic production failed to keep pace with demand (Washington Post, February 24, 1978, pp. A1, A20).
- 32 The P&M agreement had not yet been ratified by the P&M mine workers. By terming the tentative national settlement an "improvement" over the P&M pattern-setting contract, Carter may have hindered its ratification. P&M's workers, in fact, did not ratify the contract, either because they expected, or actually found, it to be less advantageous than the national settlement.
- 33 The administration's options were, individually or in some combination, the following: (1) invoking the back-to-work provision of Taft-Hartley; (2) seizing the mines (the most preferable to the union); (3) forcing compulsory arbitration; and, in the last few days, (4) dissolving national bargaining and seeking settlements at the local level (New York Times, February 26, 1978, p. E1).

- ³⁴The union was not successful in replacing the disparate pensions of retirees with equal pension payments.
- ³⁵Some southeastern utilities were able to maintain their stockpiles by importing coal from Australia, South Africa, and Poland (Coal Outlook, February 27, 1978, p. 2).

CHAPTER 5

THE EVOLUTION OF STRUCTURAL RELATIONS AND THE FUTURE OF
COLLECTIVE BARGAINING IN BITUMINOUS COAL

This chapter is divided into four major sections. First, some summary conclusions are drawn from the analysis of the structural relations presented in the previous chapters, with particular attention to the structural change of Stage III. Second, since the major conclusions of this first section suggest a shift in bargaining power from labor to management, possible remedial responses by labor are investigated. Third, the future of the UMWA and collective bargaining in bituminous coal is discussed. Finally, a historical parallel is drawn from the collective bargaining structure in the steel industry in the early 1900s to that in bituminous coal in the 1970s, for evolution in industrial relations is but one process in the broader evolution of industrial society.

The Evolution of Structural Relations:A Summary of Conclusions

The tactics and goals of the UMWA had essentially one underlying theme throughout the structural development of Stage I: eliminate interregional and interfirm wage-based competition. From this all else followed. At the forefront of union policy, mechanization was accepted as a way of compensating unionized employers for the union wage scale and as a way of destroying low-cost, nonunionized employers. Then, in order to achieve industry-wide wage-rate uniformity, a centralized

decision-making structure was deemed the only effective mechanism with which to confront the factionalized, atomistic structure of the coal industry. In order to convert this policy into reality the union adopted legislative means to build its power base into one which would enable it to achieve its ends: improved economic status for miners via standardized industry bargaining outcomes and market consolidation. The union acted, where the industry could not, as the primary force which shaped market and collective bargaining structure throughout Stage I.

Stage II saw cooperation replace contraposition in collective bargaining. The recrudescence of mechanization and the joint capital-labor tactics to consolidate the industry, which resulted initially in market stability and continuation of union bargaining power led eventually to an erosion of the UMWA's ability to organize the relevant work force. The union did indeed draw the benefits of the industry's consolidated market position. UMWA miners still working were highly paid, but at a cost borne largely by mine-worker unemployment. Job losses resulted in a continuing loss in the union's jurisdictional control and eventual erosion of its bargaining power. Table 10 summarizes the pivotal features of market and collective bargaining structure in each of the three stages and the subsequent effect on union bargaining power.

For analytical purposes, the three stages are nicely separated in chronological sequence, but in reality the evolution of structural relations was (and is) a process of continuing change, where structural relations, policies, and outcomes build upon one another and march through time up to the present. The process, in other words, is holistic: "an

TABLE 10

MARKET STRUCTURE, COLLECTIVE BARGAINING STRUCTURE, AND
UNION BARGAINING POWER IN BITUMINOUS COAL BY EVOLUTIONARY STAGE

	<u>STAGE I: 1890-1950</u>	<u>STAGE II: 1950-1963</u>	<u>STAGE III: 1963-1978</u>
MARKET STRUCTURE; OWNERSHIP AND CONTROL	Decentralized; single-product ownership (except for steel)	More centralized: large independents and steel; single-product ownership (except for steel)	Decentralized as a whole but comprised of consolidated industry groups: oil, steel, diversified firms, and large independents; multiproduct ownership
COLLECTIVE BARGAINING STRUCTURE	Decentralized: one union bargaining with separate industry groups	Centralized: one union bargaining with one producer's alliance for national contract	Decentralized: one major union (plus several smaller unions) in coal bargaining separate regional and company-by-company agreements; centralized bargaining only in the East
UNION BARGAINING POWER	Weak became strong	Strong became weak	Becomes weaker

event or action [in this case union and industry policies and their results] is explained by identifying its place in a pattern that characterizes the ongoing process of change in the whole system [structural relations]" (Wilbur and Harrison, 1978, p. 73). In the system being examined here the nature of the product market in Stage I and the concurrent nature of important bargaining issues led to the formation of a centralized union structure. This, along with the omnipresent vagaries of the bituminous market, led to the formation of a centralized producers' alliance and a collective bargaining structure whose salient feature was capital-labor cooperation. Mutually beneficial and sometimes collusive policies resulted. Through hindsight these policies seem to have been improvident for the union: they paved the way for the rise of nonunion labor and the onset of internal union dissention, which were then exploited in the 1977-78 coal strike of Stage III. An exogenous event was introduced into the relationship at this point: oil's horizontal diversification into coal. The energy industry then became the relevant definition.

The first general conclusion of Stage III is that changes in product market structure change collective bargaining structures. Altered product markets as experienced in coal shift tactical bargaining power in favor of employers. This is because after changes occur in the pattern of ownership and control of an industry it is extremely unlikely that the relevant work force stays within the organizational control of one union. Such control is a necessary condition for optimal union bargaining strength. The new bargaining adversary, the parent firm, if the occasion arises, can attenuate the union's bargaining power by subsidizing out of unaffected enterprises the operations of the old bargaining adversary, not its subsidiary, during a strike. Such a bargaining

relationship shift -- an imbalance in relative power -- is an elusive phenomenon; it is not something to be found to exist categorically, but something which develops from an accomplished situation. It is probably not the objective outcome of a grand strategy on the part of the employer, but the result of conduct being determined by structure. The empirical inference drawn from Amax's intransigence in the West -- that the financial staying power afforded by Socal's partial ownership enabled it to break the UMWA at its Belle Ayre mine -- was just such a situation and just such an outcome.

The second general conclusion is that oil-owned coal companies, ceteris paribus, tend to act in ways which are more adverse to labor than independent coal companies. For example, in the case of mine closings the structural inference is that, facing the same event, parent oil is more likely to close one of its subsidiary coal operations, which represents only a portion of its total business, than is an independent producer, for whom its coal operations are its entire interest. Gulf's closing of one of its P&M mines in Kansas, where a similarly situated independent continued to operate, supports this inferred hypothesis.

Mines continued to close during and immediately following the 1977-78 strike, particularly West Virginia metallurgical mines. Three of the four mines which have been permanently closed in West Virginia are owned by Consolidation Coal, a subsidiary of Continental Oil, and the fourth closing was an Island Creek mine, a subsidiary of Occidental Petroleum (Charleston Daily Mail, May 5, 1978). Some 750 miners were laid off at these operations which, when combined with other idled metallurgical mines in West Virginia, bring the total affected work

force to between 2,500 and 3,000 workers. Mine-specific transportation dislocations resulting from the strike are offered as part of the reason for these closing. But the major cause appears to be the depressed international steel market, which necessarily results in a depressed metallurgical coal market.¹ Furthermore, for what export market there is, West Virginia metallurgical coal is less price competitive than that of other countries. In 1976 the price per ton of American coal delivered to Japan was \$63.85, compared to \$47.10 for Australian coal and \$54.95 for Canadian coal. Recently negotiated UMWA wage increases will probably widen this differential. The deteriorating competitive position of domestic metallurgical coal supports the hypothesis presented earlier that the steel industry had little to lose by a long strike and, therefore, was reluctant to grant the union's demands. It also supports a contention that, until the government threatened to allow greater steel imports if steel refused to support the settlement pattern in coal, the industry, a powerful group in the BCOA, was a major force behind the association's intransigence in settling on the basis of the P&M pattern.

A similar scenario, but one from which a different inference may be drawn, involves the recent closing of Amax's Ayrcoe strip mine in Indiana. In late December 1977, almost a month into the strike, Amax announced plans to close this mine, which employed 124 UMWA miners (Evansville Courier, May 6, 1978). The reasons given were increasing operating costs, a poor market for the mine's high-sulfur coal, and declining productivity. However, in late January Amax reportedly hinted at the possibility that the mine would continue to operate and produce

more coal once the strike was ended. But in early May, when the strike was over, the mine closed and 95 miners were laid off and given an opportunity to relocate to other Amax operations.

The timing of the announcement to close and the eventual closing suggest a tactic to increase the pressure on striking Ayrco miners to go back to work. The more important structural inference is that, since Amax is a diversified mining company, a portion of which is owned by an oil company, its structure allows greater freedom to close an operation than would accrue to an independent coal company. Amax is not abandoning the mine, but attempting to sell it to an undisclosed party. If there is a market for this mine, then the profit seen in it by a potential buyer must not be sufficient to induce the parent oil company to continue operations, relative to other alternatives.

Parent-Subsidiary Relations

Underlying the analysis of Stage III is an implicit proposition. Centralized control of decentralized operations exists in parent oil's relationships with its subsidiaries, but this does not necessarily imply a grant strategy to destroy the union, only a functional relationship between oil and coal properties through which labor policies are carried out. Coal companies owned or controlled by oil do not function autonomously. In support of this proposition is the stated claim of the oil industry -- whenever horizontal divestiture (legislation designed to divest the oil industry of its non-oil energy holdings) is proposed -- that it has brought needed management expertise and technological knowhow to its coal operations. If this has been true, although it is not clear that it has, it seems likely that labor market policies, which are

logically controlled from the parent firm if not conducted on a day-to-day basis, flow down from the top along with product market policies.

In any system there are effective (dominant) participants. A de facto distribution of decision-making power exists in coal's collective bargaining system, which was recognized and acted upon by the state in its efforts to settle the recent national strike. Oil and steel were the targets of governmental pressure to end the strike.

Other events support the link between oil management and coal labor relations. One of the major changes made by Occidental Petroleum president Joseph E. Baird when he came to office at the end of 1973 was a system of "tight financial controls [over] and detailed monthly reports [from]" those divisions which previously were left on their own (Wall Street Journal, May 12, 1978, p. 32). Decentralized management of decentralized divisions thus becomes centralized management of decentralized divisions. In this instance Island Creek Coal Company is the decentralized division. A broader link is implicit in the fact that Island Creek president Stonie Barker, Jr., who is also vice president of Occidental, vice chairman of the National Coal Association, and chairman of the board of the BCOA, as of early April 1978, was on the BCOA negotiating team.

Oil control over coal subsidiary labor relations is additionally supported by Gulf's apparent relationship with its P&M subsidiary. A worker at P&M No. 19 stated before it closed,

Its been a lot different atmosphere since Gulf Oil came in. It used to be a man could even borrow a tractor after work to do something around his house and bring it back in the morning and the bosses said, 'sure, go ahead.' You sure couldn't do that now (Witt, 1974, p. 7).

Gulf acquired P&M in 1963 by purchasing Spencer Chemical Company, which had acquired P&M a few years before. The president of P&M in 1974 came from Spencer, and every member of P&M's board of directors came from Gulf which, according to a UMWA account, "has made a difference in day-to-day operations as well as in the long-range future of the mine" (Witt, 1974, p. 7).

If indeed a centralized labor relations policy exists in oil company management, then the next step is briefly to examine the development of the collective bargaining system in oil in order to extrapolate historically to the collective bargaining orientation in coal subsidiaries the frame of reference brought by the oil industry to its confrontation with coal labor. This brings the analysis to labor's response and the prospects for a labor remedy to the bargaining imbalance caused by market structure change.

Labor's Response: Coordinated Bargaining for the Energy Industry

Efforts to diversify a union's membership, either to include a greater proportion of the relevant work force under its jurisdiction, to expand its power base, or just to "organize the unorganized," are not really new. The "one big union" concept of an earlier era represented this philosophy, although it was underpinned more by a desire for political emancipation of the work force than by market exigencies. More immediate and viable was the UMWA's catch-all District 50, which attempted to bring into its fold coal by-product and chemical workers in the late 1930s and early 1940s (Coleman, 1943, pp. 181, 218).

The contemporary phenomenon of coordinated bargaining, as was suggested in the theoretical framework of Chapter 1, is a difficult remedy to establish. It would seem especially difficult for the various unions in the energy industry. The diminished power of the UMWA as a national representative of coal labor, continuing to exist in a bargaining environment of rival unionism and nonunion labor, might require that its efforts be geared toward the narrower and seemingly more immediate problems of the coal labor market rather than toward those of the broader energy labor market. And the Oil, Chemical, and Atomic Workers Union (OCAW), which finds itself existing in a decentralized bargaining system, has little effective control over its labor market to offer the UMWA.

The Collective Bargaining Structure in Oil

A pattern of industrial relations decidedly different from that in coal emerged in oil. By contrast, oil continually frustrated labor organizing drives. Oil firms paid relatively high wages and provided good working conditions. In general, the oil industry was and still is characterized by a low labor-cost-to-total-cost ratio, increasing labor productivity (production workers have declined in proportion to highly skilled technical workers), and a stable product demand. Moreover, the industry successfully encouraged independent unionism and bargaining on a single-plant basis, even after the legal dissolution of their "company unions" which, in the case of Standard Oil of New Jersey, were referred to as "Worker Representation Plans" (Chase, 1946). The independent unions themselves were characterized by rivalry and decentralized decision-making authority, perhaps as a result of, but at least

encouraged by, the industrial structure (see Marshall, 1961; O'Conner, 1950; Rothbaum, 1962). The most important structural determinant was perhaps the fact that, unlike the coal sector, the oil sector of the energy industry had substantial product market power long before any significant attempts were made by its workers to gain labor market power.

In 1950 John L. Lewis realized what is still true today. Capital intensive production processes in oil tend to abrogate a strong alliance between industrial unions (Nyden, 1970). Coal mines cannot be operated by supervisors alone during a strike, but oil refineries can. The implication is that automation exacerbates the tactical bargaining imbalance which, in this case, already follows from the structure of the energy industry.

The petroleum industry's collective bargaining orientation revolves around a decentralized structure. The OCAW negotiates 400 contracts covering only some 60,000 refinery workers who, for the most part, are highly skilled and whose high wages are more a function of labor market supply and demand and low direct labor costs of the refinery process than of union bargaining power.² One could assume logically that this industrial relations system projects the atmosphere in which the oil industry is conditioned to operate and, therefore, the frame of reference which may be brought to its bargaining relationship with mine workers.

Horizontal Diversification Continues

Horizontal integration of the market for energy fuels continues. Mobil buys Mr. Olive and Staunton Coal Co. in Illinois (United Mine

Workers Journal, September 1-15, 1977, p. 13). Adobe Oil and Gas buys two coal companies in Western Pennsylvania (Wall Street Journal, November 15, 1977, p. 2). Patrick Petroleum buys two coal companies in Virginia (Coal Outlook, March 27, 1978, p. 7). And Standard Oil of Ohio acquires Pennsylvania coal reserves for \$15.8 million, but plans to hold off development for one to two years (Coal Outlook, April 17, 1978, p. 8). One source indicates that oil will control 50 percent of 1985 projected new steam coal production (Coal Patrol, August 5, 1977, p. 8). Oil diversification into coal may become multinational, as Gulf establishes a joint venture with Denison Mines (Canada) to purchase a coal property in British Columbia (Coal Outlook, April 17, 1978, p. 8), and Atlantic Richfield buys an Australian coal firm (Wall Street Journal, April 10, 1978, p. 5).³

The market structure of the energy industry appears to be continuing along the lines established in the early 1960s, and coordinated bargaining efforts between coal workers and oil workers would be one response to attempt to rectify the power imbalance afforded by the energy market structure. However, the UMWA has made no effort to date to develop coordinated bargaining with the OCAW. With rival unions vying for a share of the UMWA's traditional jurisdiction, in many cases successful, and for a share of expanding coal operations, coordinated bargaining among coal unions-- let alone among energy unions -- is an unlikely prospect.⁴

The Future of Collective Bargaining in Coal

Decentralization is the theme which appears to underlie the future of collective bargaining in the bituminous coal industry. Implicit in this theme is a continuing erosion of the UMWA's bargaining power -- the seeds of which were sown by the outcomes of the cooperative structure of the 1950s and which proceeds unabated as a result of structural change and as an outcome of the 1977-78 negotiations. The changing

industrial structure and the related union's loss of jurisdictional control coalesced to bring about portentous events in the western and UMWA-BCOA negotiations. Common expiration dates were lost in the West, and decentralized bargaining there is clearly a reality. Oil set the "national" pattern outside the institutionalized structure which existed more or less unchanged for more than two decades. And the disparate interests of coal producers and the call for local autonomy within the union resulted in some localized negotiations occurring while national bargaining was still underway.

Decentralized Bargaining and the UMWA

The impetus to decentralize bargaining appears to be coming from both the companies involved and, at least, certain factions in the union. The age composition of the UMWA as a whole is such that its larger number of younger miners today, who are less tied to the autocratic decision-making process of the past, are more prone to demand local autonomy than were their predecessors (Coal Outlook, April 10, 1978, p. 4). The union's motivation for establishing a separate benefit plan in the West may have come from its need for an organizing carrot (Coal Outlook, May 22, 1978, p. 3). Western miners are a different breed, with traditions which are not a function of the historical cultural cohesion which surrounds working in the Appalachian pits and who desire contracts tailored to their own needs.⁵ In addition, with the continued and stronger organizing efforts of rival unions, in particular the PMW and the Southern Labor Union (SLU), and with the continued undermining pockets of nonunion labor, the UMWA may find itself sacrificing a long-term future with a

short-term strategy of decentralized relations. But the weight of immediate concerns can dictate that such a precipitant strategy be followed. For example, in 1977 the UMWA lost two out of five representation challenges to the SLU in Appalachia -- the UMWA's traditional but currently porous bulwark (Coal Outlook, May 22, 1978, p. 3). The SLU's current strategy is to get in at the mines which have not yet signed the BCOA agreement. In order to prevent these losses, the UMWA may be forced to grant special concessions outside the national contract, which then essentially establishes separate agreements. This is apparently the case with respect to the influence of nonunion Appalachian miners. UMWA wages are three to five dollars per day less than nonunion wages (Coal Outlook, May 22, 1978, p. 3). Incentive schemes, which the UMWA has historically resisted, are now being proposed by the union as a way to eliminate the wage differential.

Decentralized Bargaining and the Industry

The evidence to date indicates that, from the industry's position, decentralized bargaining is only a matter of time and particular form. Some non-BCOA members, who have traditionally followed the patterns handed down in the past, are not automatically signing the 1978 agreement. For example, North Cambria Fuel Co. in western Pennsylvania, which is not a BCOA member has, unlike previous years, decided not to sign the recent national agreement, causing an unauthorized strike which, after spreading to other mines in the area, idled 6,500 miners (Wall Street Journal, June 2, 1978, p. 11). In addition, six independent operators in southwestern Virginia and three in Harlan County, Kentucky, have

refused to sign, and along with North Cambria have remained on strike some seven months after the national pact was signed. However, it has been reported that 2,000 independents are expected to initial the BCOA agreement (Coal Outlook, April 3, 1978, p. 7). But a changed bargaining structure is not likely to develop out of relations with small independents, but only from the major independent, oil, steel, and diversified companies, which see it in their interests to dissolve centralized bargaining. If these interests prevail by the expiration of the 1978 contract, then the host of small independents would follow suit.

The concept of specialized agreements has been endorsed by both Consol (Continental Oil's subsidiary) and Peabody (owned by a diversified holding company), the two largest coal producers. In fact, Peabody reportedly will initiate preliminary talks with the UMWA within the first year of the new contract, talks focusing on regional and specialized agreements to take effect in 1981 (Coal Outlook, April 3, 1978, p. 1). Peabody reportedly will recruit the aid of such strip-mine operators as Amax (partially owned by Socal) to seek separate agreements with non-western surface miners and hopes to create mine-by-mine incentive schemes geared toward safety and absenteeism.⁶

Decentralized Bargaining: The Future Pattern

In general, then, the 1978 BCOA agreement need no longer be followed on a mechanical and unassenting basis as in the past, since the ability of the association to set the pattern is at best suspect, and the UMWA has little power with which to enforce pattern-following. Although it is likely that most coal producers will sign the 1978 national agreement, it is also probable there will not be any 1981

national agreement. If centralized bargaining is to survive, it will probably include only broad issues, such as the protection of UMWA pension rights.⁷

The future pattern of industrial relations in bituminous coal is likely to revolve around one or some combination of the following decentralized bargaining structures and may only include centralized negotiations over a few issues common to all employers: (1) type-of-mining bargaining (surface vs. underground), but regionally separate; (2) bargaining in regional operators' alliances (southern, northern, and western producer groups) reminiscent of the structure in the latter part of Stage I; (3) type-of-primary-product bargaining with oil, steel, and the major coal independents; and (4) company-by-company or even mine-by-mine bargaining with no common expiration of contracts and little enforceable pattern or, in other words, complete decentralization.

The Future of the UMWA

So what, then, will the future hold for the United Mine Workers of America -- the once mighty "house that Lewis built"? Their depleted resources and internal dissention are not factors which would support their effort to stem the tide of contracting jurisdictional control. The hypothesis of William Miernyk is that the UMWA "will slowly shrink back to the Middle West and Appalachian coalfields," and by 1985 evolve into a "largely Appalachian union" with little or no bargaining leverage (Wall Street Journal, May 25, 1978, p. 32). The union's inability to stop coal production during the 110-day strike supports such a trend. Aside from localized electric power curtailments and isolated pockets of

unemployment, the strike had little real impact on the nation as a whole. Only in one state, West Virginia, was the UMWA able to affect coal output significantly: production decreased from 1,969,000 to 33,000 tons (Charleston Gazette, May 8, 1978). If the UMWA were to become only an Appalachian union, West Virginia and UMWA coal would continue to be of little consequence to the nation.

There is another possible bargaining structure scenario, which would entail an altered union structure and which may enable the UMWA to survive, perhaps without a further loss of jurisdictional control, but in different form: a merger with the United Steelworkers of America. There is apparently some movement underway within the Steelworkers to bring coal miners into their increasingly conglomerate-type union. The logic of this consolidation from the Steelworkers' point of view is clear. As their membership and power in basic steel has steadily decreased, the union has attempted to escape diminution by diversifying outside their traditional jurisdiction into such industries as chemicals, refractories, nonferrous mining, stone, and even public employment. Such a move into coal is more natural in fact than their current overtures. Coal and steel have always had a production relationship and, in some ways, a labor relationship. It was Lewis's Steelworkers Organizing Committee which gave birth to the United Steelworkers. He recognized the relationship between coal and steel and the undermining effect that an unorganized steel industry had on the UMWA. At the 1935 AFL convention, Lewis expressed the Mine Workers' self interest in having the steel industry organized:

We are anxious to have collective bargaining established in the steel industry, and our interest in that is, to that degree, selfish

because our people know that if the workers were organized in the steel industry and collective bargaining there was an actuality, it would remove the incentives of the great captains of the steel industry to destroy and punish and harass our people who work in the captive coal mines throughout the country, owned by the steel industry (Coleman, 1943, p. 159).

Furthermore, the logic of such a merger today is supported by the Steelworkers' power in nonferrous mining the the West, where the UMWA's control is waning the most, and rationalized by the prospect of saving coal miners from the anarchy and divisiveness which now characterizes the UMWA.⁸

Former Steelworkers' president I. W. Abel solicited contributions from top steel-union officials for Lee Roy Patterson, a challenger to Arnold Miller in the UMWA's 1977 presidential election (Wall Street Journal, July 6, 1977, p. 12). Patterson was reportedly considering merging the Mine Workers into the Steelworkers if elected, which was probably the motivation behind the contribution and which was exploited by Patterson's opponents. Abel clearly wanted such a merger because, as he stated, "it wouldn't be out of the question to foresee the Steelworkers and the Coal Miners one day get together...[and the unions could] out of our mutual interest, work out some kind of accommodation" (Wall Street Journal, July 6, 1977, p. 12). It is not clear, however, that Lloyd McBride, current Steelworkers' president, shares these feelings.

From the UMWA's point of view, the prospect of merger is perhaps less desirable, but possibly just as advantageous. Patterson's apparent support worked against him in the election. The history of Mine Worker independence as a union and the more recent desire for

local decision making within the union suggest major opposition to such a merger. But there are some benefits to be gained by the UMWA from the Steelworkers' solid organizing structure -- benefits which are perhaps never more sorely needed than now and which reportedly prompted both W. A. Boyle and Arnold Miller, the 1972 presidential contestants, to approach the Steelworkers during their campaigns about a merger (Wall Street Journal, July 6, 1977, p. 12).

The destiny of the UMWA as a force in coal labor lies in its recapturing some control over the relevant work force, as it will be influenced by the future evolution of the energy market structure. The position of the UMWA is not now one conducive to attaining a bargaining structure countervailing to that of the energy industry, but a merger with the Steelworkers may provide a vehicle to solve some of their pressing basic-industry problems.

A Historical Parallel

The underlying theme and analytical perspective of this essay has been the interactive nature of the relations between market and collective bargaining structure. This is not a new perspective, but one which is implicit in earlier writings on collective bargaining. George E. Barnett wrote in 1912 about the success and failure of the major collective bargaining systems which existed in the early 1900s. Implicit in his analysis is essentially the same issue discussed in this essay: the effect of the market structure on relative bargaining power. Barnett (1912) compared the ability of two types of collective bargaining systems -- those under which national or district wage rates were established and those under which local wage rates were

established -- to survive during the period 1898-1911. Essentially comparing centralized versus decentralized structures, he found the former to be more permanent, with the conspicuous exception of those systems in which U.S. Steel was an influential factor. These were the collective bargaining conferences between the Longshoremen and Lake Carriers' Association and the Lake Erie Dock Managers, those between the Seamen and the Lake Carriers and Lumber Carriers, and those between the Marine Engineers and the Lake Carriers. The structural inference was drawn from the fact that U.S. Steel's Pittsburgh Steamship Company was the largest vessel owner in the Lake Carriers' Association, and the Lake Erie Dock Managers was comprised largely of managers of ore docks, of which U.S. Steel was a major user (pp. 432-433). Furthermore, the Amalgamated Association of Iron, Steel and Tin Workers diminished as a viable craft union chiefly because it lost control of the mills owned by U.S. Steel in its 1901 and 1909 strikes. The Amalgamated Association's strike response was too weak in 1901 and 1909. It mistakenly assumed the indispensability of its "experienced men" to U.S. Steel in the face of mechanization and concomitantly lowered skill requirements (Brody, 1969, p. 67). In 1909, as well as in 1901, U.S. Steel commonly used the structurally-based threat of moving its operations unless labor trouble ceased and more community cooperation came forth. It also had the policy of idling its unionized mills, with work becoming available if workers in those mills went nonunion (Brody, 1969, pp. 69, 114). It was U.S. Steel's structurally-based bargaining power and the union's related inability to control the relevant work force in the early 1900s which resulted in capital's success and labor's failure in the steel industry, much the same as the situation in the

bituminous coal industry seventy years later.

Failure of industrial unionism in steel stopped the evolving centralized industrial union structure of American labor, which Barnett felt was important enough to analyze. As a result, labor was unprepared for the consolidation of American industry in the two great merger waves during the turn of the century and the 1920s. The problems of horizontal and vertical consolidation were solved by the CIO in the 1930s, with the crucial help of the UMWA. In coal, meanwhile, the union helped consolidate its industry horizontally. Now, however, the old structure has come apart and with it the strength of the UMWA.

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NOTES TO CHAPTER 5

- ¹It must also be noted that, while Occidental has been closing some metallurgical operations in southern Appalachia, it has been increasing its western (low-sulfur bituminous and lignite) coal reserve purchases to the point where its western reserve base is nearly 500 million tons, with 41 million tons assigned to planned operations in Wyoming (Coal Outlook, June 5, 1978, p. 3).
- ²It is at least interesting, if not portentous, to note that the first settlement in the last oil industry-OCAW contract talks in January 1977 was reached with Gulf (Wall Street Journal, January 10, 1977, p. 2). whose P&M subsidiary later reached the first agreement with the UMWA which then set the pattern for the eventual national coal settlement.
- ³The oil industry is not only diversifying into coal mining, but also into copper mining. Six of the thirteen largest U.S. copper producers, which account for 95 percent of the U.S. copper production, are owned or controlled by oil companies (Washington Post, March 31, 1978, p. A1).
- ⁴One possible scenario involves the Operating Engineers' western bargaining structure. The IUOE has been the most successful rival of the UMWA in the West. Virtually the entire western area is under the jurisdiction of one of its locals. If the IUOE continues to be a successful organizer, a bargaining structure might develop which would be more conducive to union bargaining strength than the current fragmented structure. Having thirty to forty operations under the jurisdiction of one IUOE local would be tantamount to having a sizable portion of western production under the control of one international union, much the same structure as enjoyed by the UMWA nationally prior to the structural change of Stage III. The key, of course, is gaining such organizational control of the relevant work force.
- ⁵Western surface miners desired a separate benefit plan, in part, because the national plan would not pay for services provided to members by Indian medicine men (Wall Street Journal, November 9, 1977, p. 20).
- ⁶The chairman of Peabody, Roderick Hills, maintains that decentralization is the key to the coal industry's ability to cope with its increasingly specialized needs (Coal Outlook, April 3, 1978, p. 1). "One contract no longer serves all . . . [W]e have seen the end of national coal bargaining as we have known it," states Bobby Ray Brown President of Consol (Coal Outlook, May 1, 1978, p. 3).
- ⁷The reported interest of the BCOA in merging with the National Coal Association and the American Mining Congress stems perhaps from its realization that no more national contracts are likely to be negotiated (Coal Outlook, May 22, 1978, p. 1).

⁸It could be argued that mine workers are a 'different breed' not likely to mesh well with the Steelworkers. But the Steelworkers did essentially the same thing in the past with the old Mine Mill union, whose workers were known at that time as a 'different breed'.

BIBLIOGRAPHY

- Alexander, Kenneth O. "Conglomerate Mergers and Collective Bargaining." Industrial and Labor Relations Review, Vol. 24, No. 3 (April 1971), pp. 354-374.
- _____. "Union Structure and Bargaining Structure." Labor Law Journal, (March 1973), pp. 164-172.
- "Back to Good Ole Coal." Southern Exposure, Vol. 11, Nos. 2 and 3 (Fall 1974), pp. 164-169.
- Baratz, Morton S. The Union and the Coal Industry. New Haven: Yale University Press, 1955.
- Barnett, George E. "National and District Systems of Collective Bargaining in the United States." Quarterly Journal of Economics, Vol. XXVI (May 1912), pp. 425-443.
- Bethell, T. N. "Conspiracy in Coal." Washington Monthly, Vol. 1, No. 2 (March 1969), pp. 16-23, 63-72.
- Blair, John M. The Control of Oil. New York: Pantheon, 1976.
- Brennan, Joseph P. "Labor Relations and the Coal Industry." Paper presented before The American Mining Congress 1976 Coal Convention, Detroit, Michigan, May 10-13, 1976.
- Brody, David. "The Expansion of the American Labor Movement: Institutional Sources of Stimulus and Restraint." In D. Brody (ed.), The American Labor Movement. New York: Harper & Row, 1971.
- _____. Steelworkers in America: The Nonunion Era. New York: Harper & Row, 1969 (1960).
- Brooks, George W. "Unions and the Structure of Collective Bargaining." In A. R. Weber (ed.), The Structure of Collective Bargaining. New York: The Free Press of Glencoe, 1961, pp. 123-147.
- Cassidy, Robert. "Mine Workers United Against the United Mine Workers." New Republic, Vol. 164, No. 10 (March 6, 1971), pp. 14-16.
- Chamberlain, Neil W. Collective Bargaining. New York: McGraw-Hill, 1951.
- _____. "Determinants of Collective Bargaining Structures." In A. R. Weber (ed.), The Structure of Collective Bargaining. New York: The Free Press of Glencoe, 1961, pp. 3-19.
- Charleston Daily Mail, various issues.

Charleston Gazette, various issues.

Chase, Stuart. A Generation of Industrial Peace: Thirty Years of Labor Relations at Standard Oil Company (N.J.). Standard Oil Company, New Jersey, 1946.

"The Coal Industry Makes A Dramatic Comeback." Business Week, November 4, 1972, pp. 50-58.

"The Coal Industry's Controversial Move West." Business Week, May 11, 1974, pp. 134-138.

Coal Age, various issues.

Coal Outlook, various issues.

Coal Patrol, various issues.

Coleman, McAllister. Men and Coal. New York: Farrar & Rinehart, 1943.

Commons, John R. "American Shoemakers, 1648-1895: A Sketch of Industrial Evolution." Quarterly Journal of Economics, Vol. XXIV (November 1909), pp. 39-81.

_____. Institutional Economics: Its Place in Political Economy. New York: MacMillan, 1934.

Comptroller General of the United States. An Evaluation of the National Energy Plan, Report to Congress. Washington, D.C.: General Accounting Office, July 25, 1977a.

_____. The State of Competition in the Coal Industry, Report to Congress. Washington, D.C.: General Accounting Office, December 30, 1977b.

_____. U.S. Coal Development -- Promises, Uncertainties, Report to Congress. Washington, D.C.: General Accounting Office, September 22, 1977c.

Craypo, Charles. "Collective Bargaining in the Conglomerate, Multi-national Firm: Litton's Shutdown of Royal Typewriter." Industrial and Labor Relations Review, Vol. 29, No. 1 (October 1975), pp. 3-25.

Dalton, James A. and E. J. Ford, Jr. "Concentration and Labor Earnings in Manufacturing and Utilities." Industrial and Labor Relations Review, Vol. 31, No. 1 (October 1977), pp. 45-60.

Dominion Post, various issues.

Dubofsky, Melvyn and Warren Van Tine. John L. Lewis: A Biography. New York: Quadrangle, 1977.

Duchesneau, Thomas D. Competition in the U.S. Energy Industry. Cambridge, Massachusetts: Ballinger, 1975.

Duchesneau, Thomas D. "Energy Industries Structure." In Hans H. Landesberg, et al. (eds.), Energy and the Social Sciences: An Examination of Research Needs. Washington, D.C.: Resources for the Future, July 1974, pp. 351-373.

_____. Federal Trade Commission. Interfuel Substitutability in the Electric Utility Sector of the U.S. Economy. Washington, D.C.: Government Printing Office, 1972.

Dunlop, John T. "The Development of Labor Organization: A Theoretical Framework." In R. L. Rowan and H. R. Northrup (eds.), Readings in Labor Economics and Labor Relations. Homewood, Illinois: Richard D. Irwin, 1968, pp. 41-58.

Energy Users Report. Bureau of National Affairs, various issues.

Energy Resources Report, various issues.

Evansville Courier, various issues.

Federal Energy Administration, Office of Coal. Electric Utility Coal Consumption and Generation Trends, 1976-1985. Washington, D.C.: FEA/G-76-428, November 1976.

Fink, Gary M. (ed.). Labor Unions, The Greenwood Encyclopedia of American Institutions. Westport, Connecticut: Greenwood Press, 1977.

Flanders, Allan. "The Nature of Collective Bargaining." In A. Flanders (ed.), Collective Bargaining: Selected Readings. Baltimore: Penguin Books, 1969, pp. 11-41.

Galbraith, John Kenneth. The New Industrial State. Boston: Houghton Mifflin, 1967.

Galenson, Walter. The CIO Challenge to the AFL: A History of the American Labor Movement, 1935-1941. Cambridge: Harvard University Press, 1960.

Glasser, Carrie. "Union Wage Policy in Bituminous Coal." Industrial and Labor Relations Review, Vol. 1, No. 4 (July 1948), pp. 609-623.

Goldschmid, Harvey J., H. Michael Mann, and J. Fred Weston (eds.). Industrial Concentration: The New Learning. Boston: Little, Brown, 1974.

Gordon, Richard L. "Mythology and Reality in Energy Policy." Energy Policy, Vol. 2 (September 1974), pp. 189-203.

_____. "Problems in the Economics of Coal." Paper presented at the Faculty Workshop Series, Department of Economics. University Park The Pennsylvania State University, April 13, 1978.

- Green, Mark. "Ending Corporate Secrecy." Washington Post, January 16, 1977, pp. B1, B4.
- Greider, William. "Oil Industry Stakes Out Role for the Future." Washington Post, May 22, 1977, pp. A1, A16-A17.
- Gulf Oil Corporation. 1975 Annual Report and Form 10-K.
- Hecker, David B. "Internal Politics Splits Mine Workers Convention." Monthly Labor Review, Vol. 100, No. 1 (January 1977), pp. 58-61.
- Hume, Brit. Death and the Mines: Rebellion and Murder in the United Mine Workers. New York: Grossman, 1971.
- Karsh, Bernard and Jack London. "The Coal Miners: A Study of Union Control." Quarterly Journal of Economics, Vol. LXVIII, No. 3 (August 1954), pp. 415-436.
- Keystone Coal Industry Manual. New York: McGraw-Hill, various issues.
- Kochan, Thomas A. and Richard N. Block. "An Interindustry Analysis of Bargaining Outcomes: Preliminary Evidence From Two-Digit Industries." Quarterly Journal of Economics, Vol. XCI, No. 3 (August 1977), pp. 431-452.
- Levinson, Harold M. "Unionism, Concentration, and Wage Changes: Toward a Unified Theory." Industrial and Labor Relations Review, Vol. 20, No. 2 (January 1967), pp. 198-205.
- Lewis, H. Gregg. Unionism and Relative Wages in the United States. Chicago: University of Chicago Press, 1963.
- Lewis, John L. The Miners' Fight for American Standards. Indianapolis: Bell, 1925.
- Markham, Jesse W., Anthony P. Hourilan, and Francis L. Sterling. Horizontal Divestiture and the Petroleum Industry. Cambridge: Ballinger, 1977.
- Marshall, F. Ray. "Independent Unions in the Gulf Coast Petroleum Refining Industry -- the Esso Experience." Labor Law Journal, Vol. 12, No. 9 (September 1961), pp. 823-840.
- Moore, W. S. (ed.). Horizontal Divestiture: Highlights of a Conference on Whether Oil Companies Should be Prohibited From Owning Nonpetroleum Energy Resources. Washington, D.C.: American Enterprise Institute for Public Policy Research, January 27, 1977.
- National Coal Association. Coal Data, 1976. Washington, D.C.: NCA, 1977a.
- _____. Implications of Investments in the Coal Industry by Firms From Other Energy Industries. Washington, D.C.: NCA, September, 1977b.

New York Times, various issues.

Nyden, Paul. "Coal Miners, 'Their' Union, and Capital." Science and Society, Vol. XXXIV, No. 2 (Summer 1970), pp. 194-223.

O'Connor, Harvey. History of Oil Workers International Union -- CIO. Denver: OWIU, 1950.

O'Hanlon, Thomas. "Anarchy Threatens the Kingdom of Coal." Fortune, January 1971, pp. 78-82, 147-152.

Philadelphia Inquirer, various issues.

Pittsburgh Post Gazette, various issues.

Pollock, Richard. "Ownership of the Atomic Energy Industry." Critical Mass Journal, Vol. 3, No. 5 (August 1977), pp. 1, 6-7.

"Proposals to Break Up Major Oil Companies." Congressional Digest, May 1976, pp. 131-160.

Rees, Albert. The Economics of Trade Unions. Chicago: University of Chicago Press, 1962.

_____. "Union Wage Gains and Enterprise Monopoly." In R. L. Aronson, et al. (eds.), Essays on Industrial Relations Research. Ann Arbor and Detroit, Michigan: University of Michigan-Wayne State University, Institute of Industrial Relations, 1961.

Robinson, Joan. "What Are the Questions?" Journal of Economic Literature, Vol. XV, No. 4 (December 1977), pp. 1318-1339.

Ross, Arthur M. Trade Union Wage Policy. Berkeley: University of California Press, 1948.

_____. and William Goldner. "Forces Affecting Inter-Industry Wage Structure." Quarterly Journal of Economics, Vol. 64, No. 2 (May 1950), pp. 254-281.

Rothbaum, Melvin. The Government of the Oil, Chemical and Atomic Workers Union. New York: John Wiley, 1962.

Sampson, Anthony. The Seven Sisters: The Great Oil Companies and the World They Shaped. New York: Viking Press, 1975.

Scherer, F. M. Industrial Market Structure and Economic Performance. Chicago: Rand McNally, 1970.

Segal, Martin. "The Relation Between Union Wage Impact and Market Structure." Quarterly Journal of Economics, Vol. LXXVIII, No. 1 (February 1964), pp. 96-114.

Shepherd, William G. "The Elements of Market Structure." Review of Economics and Statistics, Vol. 54, No. 1 (February 1972), pp. 25-37.

Simons, H. C. Economic Policy for a Free Society. Chicago: University of Chicago Press, 1948.

Ulman, Lloyd. "Influences of the Economic Environment on the Structure of the Steel Workers' Union." Industrial Relations Research Association, Proceedings of the Fourteenth Annual Meeting, 1962, pp. 1-11.

United Mine Workers of America. Proceedings of the Twenty-Fourth Constitutional Convention, 1936.

_____. Proceedings of the Twenty-Fifth Constitutional Convention, 1938.

United Mine Workers Journal, various issues.

U.S. Congress, Senate, Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary. Hearings on Economic Concentration: Part 8, the Conglomerate Merger Problem. 91st Congress, 2nd Session. Washington, D.C.: Government Printing Office, 1970.

_____. Hearings on the Interfuel Competition Act of 1975 (S. 489), 94th Congress, 1st Session. Washington, D.C.: Government Printing Office, 1975.

U.S. Congress, Senate, Subcommittee on Energy Research and Development of the Committee on Energy and Natural Resources. Petroleum Industry Involvement in Alternative Sources of Energy, 95th Congress, 1st Session. Washington, D.C.: Government Printing Office, 1977.

U.S. Congress, Senate, Special Subcommittee on Integrated Oil Operations of the Committee on Interior and Insular Affairs. Hearings on Market Performance and Competition in the Petroleum Industry, 93rd Congress, 1st Session, Pt. 1. Washington, D.C.: Government Printing Office, 1973.

Wall Street Journal, various issues.

Weber, Arnold R. "Stability and Change in the Structure of Collective Bargaining." In the American Assembly, L. Ulman (ed.), Challenges to Collective Bargaining. Englewood Cliffs, New Jersey: Prentice-Hall, 1967.

Weiss, Leonard W. "Concentration and Labor Earnings." The American Economic Review, Vol. 56, No. 1 (March 1966), pp. 96-117.

"Why Wall Street Loves Occidental Petroleum." Business Week, January 10, 1977, pp. 36-37.

Wilbur, Charles K. and Robert S. Harrison. "The Methodological Basis of Institutional Economics: Pattern Model, Storytelling, and Holism." Journal of Economic Issues, Vol. XII, No. 1 (March 1978), pp. 61-89.

Wilson, John W. "Market Structure and Interfirm Integration in the Petroleum Industry." Journal of Economic Issues, Vol. IX, No. 2 (June 1975), pp. 319-335.

Witt, Matt. "We're Caught in the Middle." United Mine Workers Journal, 85th Year, No. 5 (February 16-28, 1974), pp. 5-7.

"The Year of the Coal Miner." Business Week, August 31, 1974, pp. 44-50.

