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‘Dark as a dungeon’: technological change and government policy in the deunionization of the American coal industry

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This paper provides historical context for the precipitous decline of unionization in coal. It examines the contributions of technological/geographic shifts, government land use and environmental policies, and the changing legal/political environment for unions. Finally, it explores the impact of the internal struggles within the UMW, particularly around the crucial 1978 coal strike.

Keywords: *union, coal mining, technology, government policy, labor law, union reform*

JEL codes: *J4, J5, J8, L7*

1 INTRODUCTION

The organization of the Appalachian coalfields was central to the New Deal labor relations regime. The United Mine Workers’ (UMW) charismatic president, John L. Lewis, was a central figure in the founding and growth of the industrial union federation, the CIO, and the unionization of coal helped to fuel organizing efforts in steel and other heavy industries (Brueggemann and Brown 2000; Dubofsky and Van Tine 1986; Zieger 1995).

Several features of coal mining render it conducive to organizing. First, coal has been economically central not only to the US energy mix but also to US industrial production; that is, job actions in coal can severely impact the functioning of other sectors of the economy. Second, the geography and absolute immobility of coal seams reduces capital mobility and increases workers’ bargaining power. Third, the dangers of underground mining and the need for teamwork foster solidarity among miners; and fourth, the isolated nature of coal towns tends to increase community support for job actions.

These factors have contributed to the growth of radical craft unionism in coal, not only in the US, but around the world – from Poland (Bilski 1988) to South Africa (Hattingh 2010) to China (Kahn and Barboza 2007). Combined with the Wagner Act and related pro-labor legislation of the New Deal era, and the increased demand for coal during WWII, these factors contributed to the 90 percent rate of unionization in US coalfields in the 1940s (Navarro 1983, p. 228).

Many of these contributory factors remain. Coal is still central to the US energy mix, especially to the generation of electricity. In 2012, approximately 42 percent of the US’s 4 trillion kilowatt hours of electricity came from coal (EIA/DOE 2012a).

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And, despite improvements in safety, underground coal mining is still one of the most dangerous occupations in the country.[1]

Witness the 2006 mine disaster in a non-union mine in Sago, West Virginia, which trapped 13 miners underground for 2 days, killing 12 of them (West Virginia Office of Miners' Health, Safety, and Training 2006). Witness the collapse in the (non-union) Crandall Canyon mine in Utah in 2007, which killed three rescue workers in addition to six miners (Galuszka 2012). More recent is the 2010 explosion at Massey's (non-union) Upper Big Branch Mine that killed 29 miners (ibid.). The UMW investigation into the Upper Big Branch disaster, entitled 'Industrial Homicide,' concurred with the West Virginia State investigation in finding that Massey Coal (now part of Alpha Natural Resources) was liable for these deaths, as the mine's 'flagrant safety violations' concerning the build-up of methane gas and coal dust were responsible for the deadly explosion[2] (UMW 2010).

But the past 50 years have witnessed a dramatic reduction in the percentage of miners who are unionized. After a high of 90 percent in the 1940s, the percentage of coal mined under UMW contract fluctuated between the high 60 percents and 70 percents for decades, reaching approximately 67 percent in 1974. After the mid-1970s, we witness a dramatic and steady decline in unionization to 50 percent in the late 1970s, 44 percent in the early 1980s, and downward from there. In 2012, for instance, less than 22 percent of all US coal miners were unionized.[3] Union density for underground miners was slightly higher, at around 25 percent. But this still pales in comparison to the 90 percent rates of the immediate postwar era. And among surface miners, the fastest growing segment of mine workers, unionization rates hover between 17 percent and 18 percent[4,5] (BLS 2013; EIA/DOE 2013; Navarro 1983, p. 228).

1. Since accidents in mining often kill multiple workers, fatality rates vary widely among years. For instance, in 2009, the death rate per 200 000 hours worked in all US coal mines was 1.5 percent, but in 2010, when the Upper Big Branch accident occurred, it was 3.8 percent. To complicate matters, MSHA combines data from surface mining (where fatal accidents are very rare) with underground mining, and does not adjust its data to compensate for the changing mix of these two types of mining. So, as surface mining accounts for a greater percentage of coal mined, measured fatality rates will fall even if underground mining is no safer (US MSHA 2013).
2. In 'Coal Mine Safety: Do Unions Make a Difference?', Alison Morantz (2013) finds that 'unionization predicts a significant and substantial decline in traumatic mining injuries and fatalities.' Chief among the reasons is the right, written into every UMW contract, for any worker to stop production without fear of punishment or dismissal if she or he believes that there is a substantial risk of imminent danger. Greater training of miners, the presence of UMW-mandated safety officers in the pits, and the consequent stricter enforcement of mine safety regulations may also be contributory factors to the greater safety of unionized mines (ibid.).
3. Union density in coal mining increased significantly from 2011 to 2012, rising from approximately 16 percent to the current level of nearly 22 percent. Unfortunately, this increase was not due to a successful organizing drive by the UMW; rather, it was the result of a significant number of lay-offs in coal, with union members being somewhat protected from the initial lay-offs. Total employment in coal fell by approximately 1.9 percent between 2011 and 2012 (EIS/DOE 2013, table 18, p. 27).
4. Union densities calculated from Energy Information Administration Annual Coal Report, table 20, 'Average Number of Employees at Underground and Surface Mines by State and Union Status, 2012.'
5. Note that the percentage of coal mined under UMW contract is not directly comparable to the percentage of miners who are unionized, particularly given the differentials in per-worker productivities of surface vs underground mining. Also note that no consistent, reliable national data series exists for the postwar period on either the percentage of coal mined under UMW

In this paper, we will explore possible reasons for this drastic decline in unionization in coal. Section 2 examines changes in the industrial concentration and industrial structure of the coal industry in the postwar era and weighs their possible contribution to deunionization. Section 3 explores both the changes in technology (from room and pillar to longwall and surface mining) and changes in the geographic distribution of coal production (from Appalachia to the far West) for possible contributions to deunionization. In Section 4, the origins of these changes in technology and geography are found to reside in government policies towards the energy and transportation sectors. Section 5 discusses the increasingly hostile legal and political environment in which all US unions attempt to organize and to maintain their membership. Finally, Section 6 examines the battles within the UMW over democratization and corruption, particularly with respect to their impact on the 1978 coal strike, a strike which was crucial to understanding the future of coal unionization.

2 CHANGES IN INDUSTRIAL CONCENTRATION/INDUSTRIAL RESTRUCTURING

The dominant view in the literature is that industrial concentration tends to reduce profit pressures on employers and hence facilitates both organizing and successful collective bargaining. Okanade, for example, describes the increased 'rents' that large corporations in oligopolized industries receive and their consequent ability to accede to demands for higher wages and benefits (Okunade et al. 1992).

Examining the question of concentration from the vantage point of the unions, other observers have emphasized the lower cost of organizing workers who are more geographically centralized, as well as the higher expected benefit levels from unionization in more profitable, oligopolized firms[6] (Ashenfelter and Johnson 1972; Hirsch and Berger 1984; Lee 1978). Hirsch and Berger (1984, p. 667) comment that: 'Workers in firms located in highly concentrated industries are more likely to be unionized due to higher expected benefits and lower organizing costs from unionization'.

Conversely, the coal industry, historically, has been quite competitive, characterized by geographically dispersed, immobile production sites and a significant number of small-scale operators[7] (Adams 2006). For example, discussing the bituminous coal industry of the late nineteenth century, Rossel (2002, p. 5) states: '[The coal operators] were forced to resist miners' demands because the competition in mining did not allow them to pay higher wages than those of their competitors. Therefore, they had to fight vigorously against strikes.'

The postwar era (particularly the period since the 1970s) has witnessed a very substantial increase in concentration in coal. Mine-level data for the past 30 years shows a dramatic reduction in the number of active coal mines. From 1980 to 2012, for instance, the number of active mines decreased from 3967 to 1296. This is all the

contract or the percentage of miners who are unionized. 'Although MSHA originally collected data on unionization, the survey fell into disuse by the 1990s and the historical records on union status were not preserved' (Morantz 2013, p. 7).

6. For an interesting, early review of the debate concerning the relationship between industrial concentration and unionization, see Levinson (1967).

7. The discussion regarding industrial concentration and unionization in the labor relations literature largely uses the bifurcated concepts of competition and oligopoly/monopoly. For a more complex view of economic competition, see Botwinick (1993) and Moudud et al. (2012).

more surprising considering that, during this same period, coal production grew substantially, from 829 700 000 short tons in 1980 to 1 095 628 000 short tons in 2012 (EIA/DOE 2013, table 1, 'Coal Production and Number of Mines by State and Mine Type').

Further evidence that, on average, mines were growing larger comes from industrial concentration data. In 1980, the top four mines in the US produced 6 percent of US coal; by 2006, they were producing 22 percent (United States Geological Survey (USGS), table 4, 'Trends in Production (in millions of short tons), Number of Mines, and Concentration Among Mines by Producing Region').

However, using mine-level data, the industry still looks fairly competitive. In 2011, to account for half of all US coal production entails including the output from 47 mines (Annual Coal Report, table 9, 'Major US Coal Mines, 2011').

But mine-level data can be misleading, as most coal companies own multiple mines. By 2011, the top ten coal companies (each owning multiple mines) were producing 72.3 percent of total coal output. This represents a significant increase in concentration. In 1980, for example, the top eight firms in the industry were producing 31 percent of total coal output and the top 15 firms were producing 41 percent[8] (USGS/Attanasi and Freeman 2009, table 5, 'Concentration Ratios (Shares) of National Coal Production Accounted for by the 4, 8, and 15 Leading Coal-Mining Firms').

This concentration in coal was exacerbated in the 1970s by the energy crisis. When oil prices quadrupled in the mid 1970s, large oil and gas conglomerates, anticipating increased demand for coal and increased profit opportunities, began to buy up coal mines (Couto 1987, p. 190; USGAO 1977). In addition, manufacturers that required coal for their industrial processes and electrical utilities dependent on coal began to buy up coalfields and coal transportation networks to ensure uninterrupted, adequate supplies. As a result, by the late 1970s, the BCOA (Bituminous Coal Operators Association, created in the 1950s specifically to bargain with the UMW) contained not only Peabody and Consolidated Coal, but also Occidental Petroleum, Continental Oil, US Steel, and Bethlehem Steel (Couto 1987). Indeed, by 1986, nearly 44 percent of coal was produced by oil and gas companies (EIA/DOE 1993, table ES1).

However, as oil prices dropped in the mid-1980s, many of these energy conglomerates sold their coal holdings to traditional coal companies[9] (EIA/DOE 1993, table ES1; Turl 2010; Zajicek and Nash 1999). Quoting Elmes and Harris (1996, p. 522): 'Oil and gas investment in coal assets peaked in the mid-1980s and then went into reverse. By the beginning of the 1990s, oil corporations had initiated a massive disinvestment of coal properties.' This disinvestment by energy conglomerates did not restore competition to the industry, however, as the conglomerates' holdings were largely sold to the largest of the coal operators. 'Despite the ebb and flow of investment by particular oil corporations, coal ownership patterns remain firmly under the control

8. Those ten were Peabody, Arch, Alpha (which in January 2011 bought Massey Coal), Cloud Peak, Consol, Cerrejon, Alliance, Energy Futures, Peter Kiewitt, NACCO (EIA/DOE 2012a, table 10, 'Major U.S. Coal Producers').

9. Interestingly, these different types of corporations responded differently to UMW job actions. During the 110-day strike of 1977–1978, it was the steel and oil companies that wanted to 'hold out' against the strike; the coal operators exposed to the market were being harmed by the strike and were pushing for a compromise contract. This led to a 'coup' in the BCOA on February 21, 1978, which put market operators back in charge of the BCOA and undoubtedly shortened the duration of the strike (Turl 2010).

of large corporations. The industry has not reverted to the *status quo ante* with its multitude of medium- and small-scale independent operators' (ibid., p. 522.) Thus, by the early 2000s, the top ten coal companies were producing nearly three-quarters of total output, making concentration in coal comparable to that in other oligopolized industries.[10]

According to the dominant view regarding concentration and unionization, this decrease in competitive pressures in coal should have resulted in a less hostile atmosphere for unionization and less vigorous resistance by coal operators against union demands. This does not seem to be the case. Instead, the period of increasing industrial concentration in coal – as measured by the number of mines, the size of mines, the number of companies, or the share of production by the top companies – witnessed the defeat of several crucial UMW strikes and a significant *decrease* in unionization.

One can speculate that this seemingly perverse relationship between industrial concentration and deunionization in coal may be related to the increased ability of corporations that own multiple mines to move production in the event of strike, making them less vulnerable to the industrial actions that have been the hallmark of miners' power. But, whatever the reason, the restructuring of ownership in the coal industry has certainly not resulted in a less hostile climate for unions or less employer resistance to worker demands, and cannot be held responsible for the postwar deunionization of the industry.[11]

3 CHANGES IN TECHNOLOGY

Arguably some of the most important changes in coal mining in the postwar era have been technological and geographic. Two types of technological changes are relevant: the gradual adoption of 'longwall' technology (as opposed to traditional 'room and pillar' mining) in underground mining, and the increasing use of surface ('strip') mining, particularly west of the Mississippi.[12]

3.1 Changes in technology in underground mining: the switch from traditional 'room and pillar' to 'longwall' mining

Introduced from Europe in the 1950s, longwall mining was slow to be adopted by US coal operators, perhaps because the significant capital investment required upfront was not feasible for the small- to medium-sized operations that dominated US coal (Darmstadter 1997, p. 15). By 1980, only around 5 percent of US underground mining

10. Due to its high volume and weight-to-BTU ratio, it is unlikely that coal imports and exports will ever constitute a significant part of the market. Coal exports have never averaged more than approximately 10 percent of production and most of this was high-end specialty coal (for example, anthracite) used in particular production processes.
11. In 'Economic Restructuring in Primary Industries,' O'hUallachain and Matthews trace a similar process of consolidation in copper, another natural resource extractive industry. Their analysis focuses on corporations' interests in minimizing both transactions costs and interruptions in the supply chain (O'hUallachain and Matthews 1994).
12. For a brief explanation of the differences between longwall and room and pillar mining, see the UMW website: http://www.UMW.org/index.php?q=content/longwall-mining. See also EMFI (Energy and Minerals Field Institute): http://emfi.mines.edu/emfi2010/Coal%20Mining%20Methods%202010.pdf.

used the longwall technique; by 1995, as industrial concentration increased, approximately half of coal mined underground was extracted via the longwall method (EMFI 2011).

From the point of view of coal operators, longwall technology has several advantages. First, by substituting capital for labor (longwall mining generally has a capital/labor ratio of 4:3), longwall mining requires many fewer workers, thus lowering labor costs (and the potential for both safety hazards/legal liability and labor unrest). For instance, in 2011, a typical eastern underground mine produced 3 million short tons of coal with 350 workers, only 10 percent of whom worked directly at the longwall face[13] (Darmstadter 1997, p. 16).

Second, because it does not require that coal 'pillars' be left to support the cavern's roof, longwall typically recovers much more coal than room and pillar methods; typical longwall recovery rates reach 80 percent of available coal, while room and pillar methods average closer to 60 percent[14] (Darmstadter 1997; EMFI 2011). And, third, at depths of greater than 1000 feet, longwall mining is more economical, as the size of the pillars that have to be left to support increases as depth increases (Darmstadter 1997; EMFI 2011).

On the other hand, longwall mining has higher upfront capital costs, which may limit its applicability for smaller operators in the industry. Longwall technology also produces more coal dust and explosive gases (such as methane) that require expensive monitoring and control systems. And longwall (as well as retreat) mining is plagued by subsidence problems; that is, the collapse of the ground, streams, and other resources above the mine as the 'gob' (mined-out area) collapses, which can result in serious environmental problems for mining communities – and potential legal liability for coal companies (EMFI 2011).[15]

As with industrial concentration, the change from room and pillar to longwall mining certainly had a major impact on workers' experience in the mines (particularly regarding the increasing incidence of black lung disease), as well as on labor relations in the industry. But the timing of longwall's adoption (remember that, in 1980, only 5 percent of underground mining used longwall) casts doubt on the hypothesis that technological change in underground mining was the primary factor undermining the UMW. More consequential has been the joint geographic/technological switch to surface mining in the West – and the government's energy, transportation, and environmental policies that supported this shift.

3.2 Changes in technology and geography: the switch to western surface mining

By the mid-1990s, productivity of the western surface mines was three and one half times the national average and two and one half times that of eastern underground

13. In 'The Origins of Job Structures in the Steel Industry,' Katherine Stone (1974) masterfully explores the impact of conflictual labor relations on Carnegie's decision to impose massive technological change in the steel industry. The choice of technology cannot be divorced from the social relations of production; indeed, one could reasonably argue that the latter is as much a cause as an effect of the former.

14. When combined with 'retreat mining,' room and pillar methods can rival longwall extraction rates. However, 'retreat' or 'secondary' mining, where pillars are mined and the roof allowed to crumble, is an extremely dangerous form of mining. Retreat mining may have been a factor in the Sago disaster and was almost certainly implicated in the fatal Crandall Canyon collapse (Galuszka 2012).

15. For a moving and disturbing short film on the impact of subsistence on one Appalachian community, see 'Subsided Ground, Fallen Futures: The Legacy of Longwall Mining in Southwestern Pennsylvania' at http://www.sourcewatch.org/index.php/Longwall_mining.

longwall operations. For instance, in 1996, Arco's Black Thunder Mine in Powder Ridge, Wyoming, produced 40 million tons using only 500 workers (Darmstadter 1997).

By 2011, production in the western region, at approximately 588 million short tons, had greatly outstripped Appalachian production at 336 million short tons (EIA/DOE 2012a, p. 7) and Wyoming, with its output of approximately 439 million short tons, had become by far the largest coal-producing state in the US (Annual Coal Report, table 1, 'Coal Production and Number of Mines by State and Mine Type').

Compared to eastern coal, western coal has substantially lower calorific value. But the high productivity of these surface mines, combined with the low sulfur content of western coal, the reduced costs of transportation and land leases (more on these later), and shifts in population (and demand for electricity) from the Northeast to the Southwest, have all combined to make western coal a cost-efficient choice for many electrical utilities and other end-users of coal.

According to a study by the US Geological Survey, surface mining tends to be less unionized, and less prone to work stoppages than traditional underground mining. Attanasi and Freeman hypothesize that this is the result of the more capital-intensive nature of surface mining, which relies not on traditional miners' skills, but on skills used in construction and demolition – both of which draw on large pools of experienced and underemployed workers. In addition, the relatively safe working conditions and relatively high pay that characterize surface mining lead to more 'cooperative' and stable labor–management relations (USGS/Attanasi and Freeman 2009).

By our earlier criteria, the reduced danger associated with surface mining reduces worker solidarity as well as community support from more isolated coal towns. The larger pool of possible replacement workers probably also contributes to the more 'cooperative' and 'stable' labor relations in surface mining.

Whatever the causes, the existence of these more 'cooperative' and less unionized labor relations is borne out by the data. For instance, Alabama's 10 000 underground workers are nearly 99 percent unionized, while Alabama's small surface mining sector is virtually all non-union. Pennsylvania's 47 000 underground miners are 30 percent unionized, while their 10 000 surface miners have a unionization rate slightly over 6 percent. West Virginia's 84 000 underground miners are 42 percent unionized, while fewer than 17 percent of West Virginian surface miners are union members. And, finally, while virtually all of Wyoming's underground miners are unionized, there are only 3000 of them, compared to the 435 000 surface miners, who have a 1.4 percent unionization rate (calculated from EIA Annual Coal Report, table 7, 'Coal Production by State, Mine Type, and Unions Status, 2011').

4 GOVERNMENT POLICIES

These changes in the technology and geography of coal production have clearly been crucial in the deunionization of coal. However, these changes are not merely independent, market-driven developments; they are the result of changes in government policies towards the energy industry, the transportation sector, the environment, and labor unions. With respect to the increasing demand for surface-mined coal from the West, three sets of policies are particularly relevant: efforts to mitigate acid rain, the deregulation of the transportation sector (especially the railroads), and changes in the land lease policies of the Bureau of Land Management. Let us briefly examine each of these.

4.1 Acid rain

In an attempt to reduce acid rain, which was impacting the agriculture, forestry, and fishing industries, the 1970 Clean Air Act required all electrical power generation plants to dramatically reduce their emissions of sulfur dioxide and nitrogen oxides, two by-products of the combustion of fossil fuels, particularly of high-sulfur coal (US EPA 2006). The 1990 amendments to the Clean Air Act strengthened enforcement, particularly with respect to emissions generated by the burning of coal (US EPA 2006; USGS/Attanasi & Freeman 2009, p.7).

The Clean Air Act has been successful in reducing acid rain; since the passage of the Amendments in 1990, 'sulfur dioxide and nitrogen oxide emissions declined by 41.9% and 48.8%, respectively' (EIA/DOE 2010, p.12). The average acidity of rainfall has been reduced significantly, and waterways and forests downwind from coal-burning power plants are now much healthier (US EPA 2011).

However, the Act had at least one major unintended consequence. To meet the Act's emission requirements, utilities have increasingly spurned higher-sulfur eastern coal (particularly the high-sulfur coal in the Pittsburgh Range in southeastern Ohio/southwestern Pennsylvania and that of the Illinois Basin) and turned to lower-calorific but lower-sulfur coal from the Powder River Basin of Wyoming and Montana and other western areas.

According to the USGS: 'The market area for Powder River Basin coal is now national in scope. … From 1998 to 2006, Alabama, Georgia, Iowa, Illinois, Kansas, Kentucky, Michigan, Missouri, Oklahoma, Texas, and Wisconsin together increased coal shipments from the Powder River Basin by 129 mst (117 Mt). The expansion of output was driven by the substitution of low-sulfur coal for high-sulfur coal in response to the 1990 CAAA legislation'[16] (USGS/Attanasi and Freeman 2009, p. 29).

Without the governmental intervention provided by the Clean Air Act (and its subsequent enforcement amendments), it is highly questionable whether the low-calorific coals of the western basin would have become economically competitive with unionized Appalachian coal.

4.2 Deregulation of transportation

The deregulation of transportation, begun under the Carter administration, greatly accelerated in the anti-regulatory environment of the Reagan years. This opened up the possibility of western coal being economically competitive outside of its traditional regional markets, as barge-and-river transport (used extensively in the east) could now be supplemented by overland transport via railroads. From 1979 to 1993, for instance, the cost of rail transportation of coal per tonmile dropped from $24 to $15.40. (By 2011, this had risen only to $17.25.) This dramatic reduction in transportation costs made economically feasible the substitution of western surface coal for eastern, more heavily unionized underground coal (EIA/DOE 2012b).

According to a study by the Energy Information Administration, 'Coal to Gas to Coal Switching: A Look at Competing Coal Basins': '[Our] assessment shows a stark deterioration in the regional competitiveness of CAPP [Central Appalachian] coal compared to PRB [Powder River Basin] coal … CAPP delivered coal prices in 2010 ranged from $2.13 to $7.69 per million btu while delivered PRB costs (including the assumed $1 adder [to compensate for PRB coal's lower calorific value] ranged

16. mst refers to million short (American) tons; Mt refers to metric tons.

from $1.80 to $5.16 per million btu. … [By 2010], CAPP had been displaced over most of the Midwest outside of the Ohio River Basin and in virtually all of the Southwestern United States' (EIA/DOE 2012c).

4.3 Changes in the Bureau of Land Management's land lease policies

Western coal operators rely heavily on land leases from the federal government to gain access to coal reserves. In the deregulatory, anti-government environment since the 1980s, there is evidence that administrators at the Bureau of Land Management, guarantors of 570 million acres of public land, may have favored the interests of the coal companies over those of the American taxpayer – and the American coal miner.

A June 11, 2013 *New York Times* article reports that a study by the Inspector General of the Interior Department found

> that the Bureau of Land Management was improperly applying its own rules for assessing the fair market value of minerals beneath federally owned lands, shortchanging the government and providing a bonanza for a handful of large coal companies operating in the Powder River Basin of the Mountain West. … Despite rules adopted in the 1980s to insure competitive bidding … in the past twenty years, over 80% of the leases have been granted with only one bid submitted. The BLM also allows companies to expand their operations without additional competitive bidding. The bureau has approved 45 such lease modifications since 2000 without adequate documentation … potentially costing taxpayers $60 million. (Broder 2013)

Altogether, this systematic undervaluing of mineral rights on public lands is estimated to have cost the taxpayers (and to have transferred to the coal companies) up to $30 billion over the past 30 years (ibid.). Among other impacts, such a transfer has made western coal mined on publicly owned lands more price-competitive with unionized Appalachian coal.

In sum, although the changes in the technology and geography of production associated with the rise of western surface mining helped to undermine the UMW's strength in the coalfields, these changes did not occur in a vacuum; they occurred in a context in which government policy systematically (though sometimes inadvertently) favored the interests of western surface-mined, non-union coal over those of the more unionized underground coalfields of Appalachia. In addition, federal government policy towards unions, which establishes the legal/political context in which unions organize and operate, has been crucial. Let us now briefly examine this changing legal environment.

5 THE LEGAL ENVIRONMENT FOR UNIONS

The fact that technological/geographical changes and federal energy/environmental policies are not sufficient explanations for coal's deunionization is evidenced by the markedly differing rates of unionization in different states and jurisdictions. Miners working in adjacent states, with identical technologies, and often working on the same coal seams, can have wildly differing rates of union membership. For instance, as we have seen, West Virginia's underground miners are approximately 42 percent unionized. Yet right across the border, using the same technology on the same Pittsburgh Range coal seam, and often working for the same coal companies, Kentucky's underground miners are only 6.4 percent unionized. Similarly, West Virginia's 51 000 surface miners are 17 percent unionized; this is over seven times the unionization rate

of their fellow surface miners in neighboring Kentucky. Similarly large discrepancies are found among the 71 percent unionization rate of Texas's 46 000 surface miners, the 52 percent unionization rate among Colorado's surface mining industry, and the aforementioned 1.4 percent unionization rate among workers in Wyoming's enormous surface mining sector (calculated from the EIA Annual Coal Report 2012 (EIA/DOE 2012a)). Further research would be necessary to determine exactly which aspects of state and/or union policy were responsible for such differential rates of organization among miners working under virtually identical conditions.[17] But the differences in unionization (for example, between Kentucky and West Virginia) offer strong, if circumstantial, evidence that policies towards unions matter.

Clearly, changes in the technology/geography of coal extraction and government energy and transportation policies establish 'the playing field' on which capital and labor struggle. But understanding the deunionization of coal also requires knowledge of the impact of state and federal government policies towards unionization as well as the concrete history of the UMW in America's coalfields. Let us briefly review each of these.

5.1 The increasingly virulent legal and tactical assaults on the right to organize

In 1978, United Auto Workers (UAW) president Douglas Fraser stated, 'I believe the leaders of the business community, with few exceptions, have chosen to wage a one-sided class war today in this country – a war against working people, the unemployed, the poor, minorities, the very young and the very old, and even many in the middle class of our society' (Gilden 2007).

One crucial weapon in this one-sided class war has been the 1947 Taft–Hartley Act, which, among many other anti-labor provisions, outlawed secondary boycotts, solidarity strikes, and similar tactics. Taft–Hartley has been particularly problematic for the UMW, which has always relied heavily on inter-union solidarity and on community support efforts to win its strikes (for example, Teamsters and railroad workers refusing to deliver non-union coal).

The pivotal 1978 coal strike, for instance, spread initially through the tactic known as 'stranger picketing'; that is, striking miners at one mine setting up a picket line at an adjoining mine (Yarrow 1978). Given the UMW tradition of never crossing a picket line, stranger picketing is an effective way to turn local grievances into regional or even national job actions very quickly. But, under Taft–Hartley, 'stranger picketing' is legally questionable.[18]

17. West Virginia, for example, was the site of the infamous, bloody 'coalfield wars' of the 1910s and 1920s, which culminated in the Battle of Blair Mountain, 'the largest armed insurrection in the United States since the Civil War' (Hedges 2012). At Blair Mountain, the UMW's 10 000-strong 'Redneck Army,' led by Bill Blizzard and Frank Keeney, waged a 5-day battle against 3000 sheriffs' deputies, strikebreakers, and Baldwin Felts security guards under the direction of Logan County Sheriff Don Chafin. The uprising was defeated only when West Virginia Governor Ephraim Morgan convinced President Warren Harding to send in heavily armed federal troops. UMW leaders Bill Blizzard and Frank Keeney were later tried (and acquitted) on charges of treason (APWU 2010). For further information on the coalfield wars, see Blizzard (1921 [2010]), Corbin (2011), and Shogan (2004).

18. The fact that Taft–Hartley could be defeated by worker solidarity was also evidenced during the 1978 strike. The federal judge who had issued a temporary Taft–Hartley injunction ordering the miners to return to work later refused to renew it. 'The miners are not paying attention to what I do anyway' (Cole et al. 1981, p. 51).

Since the Taft–Hartley prohibitions, solidarity tactics have been regularly carried out by the spouses, relations, widow/ers, and coal town community members with no official ties to the union (and, hence, no Taft–Hartley vulnerability). During the 10-month 1989–1990 Pittston Coal strike, for example, the wives and daughters of the striking miners formed the Daughters of Mother Jones and occupied the office of the company CEO for over 30 hours. Along with committed community members, they also established Camp Solidarity, providing relief to the striking miners and their families, and organized supportive pickets that eventually included over 40 000 people (Zajicek and Nash 1999, p. 231).

But despite the creative tactics of family and community supporters, Taft–Hartley not only opened the UMW to substantial legal and financial liability; it also signaled a change in the federal government's attitudes towards worker organization, a change that was operationalized in many other ways.

In addition to prohibiting secondary boycotts and solidarity strikes, section 9(h) of Taft–Hartley attempted to purge communists and other leftists from organized labor. The resulting 'purge' of 11 unions from the CIO undercut the social movement and anti-racist orientation of much of the US labor movement and paved the way for the 'business unionism' of the 1950s and beyond[19] (Schrecker 1999).

Taft–Hartley's provisions for the 'free speech rights' of employers in union election campaigns have been particularly damaging. Among other practices, the courts have found it to be permissible for employers to conduct one-on-one interrogations of workers regarding their views on unionization, to hold captive audience meetings where workers are required to sit through anti-union presentations, and to present blatantly untrue statements about the impact of voting for unionization (Bronfenbrenner 2009).

In 'No Holds Barred: The Intensification of Employer Opposition to Organizing,' Kate Bronfenbrenner (ibid., p. 4) details employers' use of such tactics:

> According to our updated findings, employers threatened to close the plant in 57% of elections, discharged workers in 34%, and threatened to cut wages and benefits in 47% of elections. Workers were forced to attend anti-union one-on-one sessions with a supervisor at least weekly in two-thirds of elections. In 63% of elections, employers used supervisor one-on-one meetings to interrogate workers about who they or other workers supported, and in 54%, used such sessions to threaten workers.

In addition, when labor laws are blatantly violated by employers (for example, obvious firing of union supporters), affected employees do not have legal standing to sue in court; rather, such practices constitute 'unfair labor practices' (ULPs) which are arbitrated by the NLRB (Gross and Lynd 2011; Lichtenstein 2003). There are several problems with reliance on the NLRB to resolve industrial disputes. First, the average wait time between the filing of a ULP complaint and its resolution is at least 18 months. Second, the penalties for ULPs are generally too meager to constitute an effective

19. Taft–Hartley Section 9(h) required all union officials to sign affidavits stating that they did not belong to or sympathize with the Communist Party (CP) or any other organization advocating the overthrow of the US government. Those unions, such as the United Electrical Workers (UE) and others, that refused to comply were expelled from the CIO, and were denied legal access to Wagner Act protections such as NLRB elections, legal union certification for bargaining purposes, and the ability to file unfair labor practice complaints (Gross and Lynd 2011; Schrecker 1999). The most effective cross-racial organizing of the era was often initiated and/or led by those in or close to the CP. For example, see the FTA's (Food, Tobacco, Agricultural Workers' Union) success in organizing African American agricultural workers in the South (see Honey 2004; Kelley 1990).

financial deterrent to illegal behavior. For instance, the maximum penalty assessed against an employer found guilty of firing a worker for supporting a union is equivalent to the fired worker's lost wages, minus any wages s/he has earned in the interim (Brody 2004; Gross and Lynd 2011). Thus, it can be quite 'rational' for an employer to knowingly commit a ULP and to pay the resulting fine – if so doing significantly reduces the chances of a successful unionization campaign.

One common union response to the labyrinthine, biased structure of NLRB has been 'non-board' certification; that is, 'card check' or voluntary employer recognition. Several unions, including SEIU (organizing janitors), UFCW (organizing supermarket workers), HERE (organizing casinos workers), and CWA (organizing telecommunications workers) have successfully used card check for union certification in recent years (Benz 1998).

But two forces threaten this strategy: first, the defeat of EFCA (the Employee Free Choice Act), a bill strongly backed by the labor movement that would have amended the Wagner Act to force employers to recognize a union if it obtained cards signed by a majority of workers – and to force the two sides to arbitration if no contract was reached within 120 days after union recognition (CAP 2009). Introduced into both houses of Congress in 2009, EFCA failed to garner a filibuster-proof majority and was allowed to die. In addition, the Supreme Court is currently hearing a case, *Mulhall vs UNITE HERE Local 355*, that threatens the legality of the 'employer neutrality' organizing agreements that are an integral part of the card check process (USSC 2013).

Also damaging has been the growth of the 'union avoidance' industry, an industry that now encompasses hundreds of law and 'management consultant firms' dedicated to the maintenance of 'union-free' workplaces; approximately 75 percent of companies facing unionization now hire such firms (Bronfenbrenner 2009, p. 12). In *Confessions of a Union Buster* (1993), Marty Jay Levett details some of the 'dirty tricks' he participated in while working for such a 'management consultant' firm. These included planting drugs in union supporters' lockers, informing union advocates' spouses of (non-existent) affairs, and damaging property of union opponents and blaming it on the union (ibid.). Such 'gray' tactics are often combined with a flurry of legal actions – challenging everything from size of bargaining unit to the right of anyone with a modicum of supervisory authority to vote.

And such campaigns are very effective. Between 1997 and 2009, the number of NLRB-sponsored union certification elections declined dramatically, from 3261 to 1304. And although the percentage won by the unions actually rose (from 51 percent to 66 percent), the total number of new workers covered declined by more than half (Bronfenbrenner 2009; Simmons 2010).

Thus, despite the 1937 *Jones vs Laughlin Steel* decision by the Supreme Court affirming that workers have a 'fundamental right' to organize, Taft–Hartley, combined with increasingly anti-union case law and agency precedent, have increasingly rendered that right illusory (Brody 2004; Gross and Lynd 2011).

These and similar problems led Human Rights Watch, in 2000, to declare the US to be in violation of international human rights standards regarding freedom of association for its extremely restrictive labor laws[20] (Human Rights Watch 2000b). And, virtually alone among the advanced nations, the US has refused to ratify all but

20. Since that declaration, Human Rights Watch has issued a number of 'advisories' concerning the problems with both US labor statutes/case law and its enforcement. See, for example, 'Human Rights Watch Expresses Deep Concern About Recent U.S. National Labor Relations Board "Supervisors" Ruling' (October 2006); 'Abusive Child Labor Found in U.S. Agriculture' (2000a); and 'Abuses Against Workers Taint U.S. Meat and Poultry' (January 2005).

three of the 'core labor standards' of the UN's International Labor Organization (United States Council for International Business 2007). Those pertaining to forced labor, child labor, and discrimination have been ratified, but those pertaining to workers' right to freedom of association, protection of the right to unionize, right to collective bargaining, and equal remuneration remain unratified[21] (Charnovitz 2008).

6 THE UMW IN THE 1970s

It is within this changing legal and political context – as well as the aforementioned changes in the technology/geography of coal production – that we must view the continuing struggles within the UMW and the struggles between the UMW and the coal companies.

During the late 1970s and early 1980s, continuing internal struggles over democracy and decision-making within the union intersected with a particularly virulent assault by increasingly powerful coal operators on the contractual obligations they had negotiated with the UMW throughout the postwar era. This is particularly true of the crucially important 110-day contract strike of 1977–1978, and to a lesser extent, the strike of 1981. Although many observers called the outcome of the 1977–1978 strike a 'stalemate,' I will argue that its impact on union solidarity – and on the ability of operators to open and subcontract for non-union coal – spelled the beginning of the end for UMW dominance in the US coalfields.

6.1 Centralization vs democracy in UMW history

Melvyn Dubofsky has argued persuasively that there is a central contradiction in union governance and function. On a day-to-day basis, we want a union to act like a New England town meeting – with totally free expression, lots of dissent, and shared decision-making. But a union gains its primary power from its ability to withhold labor: to strike. And for a strike to be successful, a union must act like an army: disciplined and centralized (Dubofsky 2013). Various unions have erred on one side or the other of this central dilemma. One could certainly argue that, from at least the postwar era through the early 1970s, the UMW erred on the side of centralization and, at times, corruption.[22]

From the inception of his presidency in 1920, John L. Lewis set about constructing an extremely centralized, not particularly democratic organization from the aggregation of local fiefdoms that had previously constituted the UMW (Zajicek and Nash 1999, p. 221). Lewis believed that a powerful, centralized union with aggressive leadership, able to act unilaterally and rapidly on behalf of the membership, was necessary to battle successfully the forces within both the coal industry and the government that would, if given the chance, crush the union[23] (Dubofsky and Van Tine 1986).

21. This is particularly ironic, as the wording for these ILO labor standards was taken directly from the US Bill of Rights and the National Labor Relations Act (Wagner Act).
22. A thorough exploration of the UMW's intra-union politics is beyond the scope of this paper. See, for example, Clark (1981); Nyden and Nyden (1978); and Zajicek and Nash (1999). See also the official history of the UMW by Maier Fox (1990).
23. David Gordon (1981) and others have hypothesized that union structure tends to mirror industrial structure; that is, that unions organizing in highly oligopolized industries such as autos and steel will tend to centralize power in order to deal successfully with the concentrations of wealth and power in their respective industries. Although this hypothesis seems to hold true

Among other actions, Lewis changed the UMW constitution to enable the president to appoint local officers and he freely used the power of trusteeship to suppress regional and local dissent. Although his 40-year tenure as president was sometimes marked by internal strife, Lewis's militancy in the face of company intransigence maintained the loyalty of most of the UMW rank and file, and his disciplined, 'business union' approach to bargaining was successful both in dramatically raising the living standards of coal miners and in reducing the rates of serious injuries and fatalities in the mines (ibid.).

There is no evidence that Lewis himself engaged in corruption. But the highly centralized hierarchy he created, combined with the enormous amassments of money in the health benefits and disability funds, left the union vulnerable to corruption and graft. Following Lewis's resignation in 1960 at the age of 80, his elderly vice-president, Thomas Kennedy, briefly took the reins of power and 'preserved the business–unionist orientation and autocratic structure established by his predecessor. In 1963, only five of the UMW's twenty-seven districts had full autonomy … three had partial autonomy, and those remaining were controlled [via trusteeship] by the union president' (Zajicek and Nash 1999, p. 223).

Those familiar with Kennedy's successor, W.A. 'Tony' Boyle (1963–1972), are all too aware of his ties to organized crime and his lavish personal spending. During his 9 years in office, the Boyle administration spent considerable sums of miners' dues on indulgences and luxuries. 'The leadership maintained a fleet of three Cadillac limousines for its transportation and, in [one official's] case, a suite at the Washington-Sheraton-Carlton Hotel as a residence' (Clark 1981, p. 21). Boyle's daughter Antionette and his brother Dick joined the payroll, as did the two sons of his Secretary-Treasurer, John Owens (ibid., p.20). And Boyle created a special retirement plan for himself and Secretary-Treasurer Owens, transferring $650 000 from the UMW treasury to a fund which would guarantee the two of them full-pay pensions for life (ibid., p. 21).

Perhaps even more troubling than Boyle's theft from the union treasury was the fact that he was increasingly 'out of touch' with the needs, concerns, and culture of the new generation of coal miners. The slowly increasing use of longwall mining technology was introducing increased safety risks – the acute risks of mine explosions and the longer-term risk of contracting disabling pneumoconiosis or 'black lung.' Both of these were due to the higher concentrations of methane and coal dust generated by longwall technology.

But the autocratic nature of Boyle's administration (the bargaining agenda for contracts was set by the national leadership with minimal input from the rank and file) rendered it deaf to the membership's increasing safety concerns. And, in any case, Boyle's accommodationist 'business unionism' was designed to deal with questions of wages and benefits, not questions concerning control over the technology and the work process, which it had traditionally left in the hands of coal operators via 'management prerogative' clauses in UMW contracts.

'Community resistance to an autocratic and unresponsive union first emerged in the early 1960s' (Zajicek and Nash 1999, p. 223). When the 1964 UMW/BCOA contract was signed, containing significant wage increases but no attention to issues of health and safety, a number of union locals protested by engaging in brief wildcat (unauthorized) strikes (Fox 1990, pp. 434–435). Increasingly, miners would come to use wildcat

for many industrial sectors, it is certainly not applicable to coal mining. As we saw above, until fairly recently the coal industry was quite competitive. And yet the UMW, at least from the 1920s through the early 1970s, was a highly centralized, fairly autocratic union.

strikes as their weapon of choice – both against the coal operators and against their own increasingly out-of-touch leadership.

By the late 1960s, rank and file discontent was widespread. Two events crystallized the distance between the rank and file and their union leadership: the Farmington mine explosion and the struggle over black lung legislation.

In the early morning hours of November 20, 1968, a ventilation fan failed at the Consolidated Coal Company mine in Farmington, West Virginia. But no alarm sounded; it had been disabled by management to avoid 'unnecessary interruptions' to the work. The resulting blast, triggered by a toxic build-up of methane and coal dust, was felt 12 miles away and sent flames 150 feet in the air. Ninety-nine miners were trapped; twenty-one of these were rescued and the remaining seventy-eight were entombed underground as the company sealed the mine in an attempt to smother the fire. Nineteen of these miners' bodies would never be recovered (Stewart 2011).

When Tony Boyle arrived on the scene, his first comment to television news reporters, 'As long as we mine coal, there is always this inherent danger' (Clark 1981, p. 24) shocked and outraged family members of the victims. And his subsequent grandstanding – and lack of militancy regarding the state investigation into the causes of the disaster – outraged much of the UMW rank and file (ibid., p. 24).

Boyle's inattention to the growing problem of black lung further alienated the rank and file – and revitalized the Black Lung Association (BLA), a militant West Virginia-based organization dedicated to the passage of legislation both to prevent the disease and to compensate its victims (Seltzer 1985, p. 96). In 1969, the Boyle administration supported a weak-kneed, proposed black lung bill in West Virginia. The BLA opposed the bill, demanding stricter safety standards and more generous compensation for victims. 'When the state legislature balked at passing the stronger measure, a spontaneous wildcat strike, *opposed by the union but involving 95 percent of the state's miners*, swept West Virginia' (Clark 1981, p. 24, emphasis added). The BLA was successful; West Virginia passed a generous and accessible workers' compensation law (ibid., p. 24).

The battle over the West Virginia black lung bill would propel the BLA into the forefront of dissent within the union, where it served as a meeting place for dissidents and 'as a vehicle for union reform' (Zajicek and Nash 1999, p. 224). Out of the BLA would come the seeds of Miners for Democracy, and the dissident presidential candidacy of J.A. ('Jock') Yablonski, who advocated not only ending corruption in the union, but decentralizing decision-making and returning control of the UMW to the rank and file. Yablonski also promised to give worker health and safety the highest priority in contract negotiations.

In 1969, Yablonski lost to Boyle in what was widely regarded as a fixed election. (Yablonski and his lawyer, Joe Rauh, had repeatedly asked the Department of Labor to intervene in the campaign due to threats to his supporters, Boyle's use of the UMW newsletter for campaign purposes, and other irregularities (Clark 1981, p. 26), but the DOL had refused to do so.) Twenty-one days after the election, Yablonski and his wife and daughter were murdered in their beds by thugs hired by Tony Boyle; Miners for Democracy was officially initiated at Yablonski's funeral (ibid., p. 26). After Yablonski's assassination, the Labor Department finally investigated the election, finding massive voter fraud and intimidation. At the Department-supervised new election in 1972, Arnold Miller and his MFD slate won handily. Miller's historic victory 'was the first successful, rank-and-file challenge to the UMW hierarchy in the union's history' (ibid., p. 31). And the MFD victory gave impetus to reform movements in other unions, including the TDU (Teamsters for a Democratic Union) and the New Directions Caucus within the UAW (Zajicek and Nash 1999).

Miller quickly set about dismantling the overly centralized and out-of-touch structures of decision-making established by Lewis and strengthened by Boyle. Miller established a Bargaining Council, which collected information on possible contract demands both from the rank and file and from local officers and shaped these concerns into a coherent set of negotiating demands. At the 1973 convention in Pittsburgh, Miller (successfully) proposed direct rank and file discussion of, and ratification of, any proposed contract. He introduced changes in the constitution that protected district and local autonomy from trusteeship, except in cases of financial malfeasance, and instituted rank and file election of both district officers and the national union's Executive Board (ibid., p. 226). He initiated serious discussions about racism and sexism within the union. And he urged the union to engage in – and to accept – solidarity with other progressive unions, including sanitation and hospital workers, and British coal miners (ibid., p. 227). In the words of Paul Nyden, Miller succeeded in turning the UMW into a 'weapon in the hands of the rank and file against the coal operators' (Nyden and Nyden 1978, p. 479).

But Miller faced several enormous and ultimately overwhelming obstacles. First, as we have seen, by the mid 1970s the UMW was facing an increasingly centralized and powerful set of coal operators, some of whom – Occidental Petroleum, Continental Oil, etc. – being among the largest energy conglomerates in the world. And these companies, armed with immense legal departments and deep financial pockets, were able to withstand prolonged work stoppages. They had the power to battle the UMW in a way that the earlier, Appalachia-based BCOA could never have imagined. (It is indeed ironic that, during the period when it was facing a smaller, mostly regional and decentralized coal industry, the UMW's structure was arguably the most centralized in the American union movement. But, as the coal became more centralized and powerful, the UMW went in the opposite direction, becoming more democratic – but also less organized and less able to confront the newly Big Coal/Big Oil.)

These newly enlarged and empowered corporations were determined to take advantage of the potential profit opportunities the energy crisis presented in coal; for example, the average price of coal more than doubled from $8.53/ton in 1973 to $15.75/ton in 1974 (Simon 1983). And this required an uninterrupted flow of production – and an end to the wildcat strikes so prevalent in the industry. Quoting one BCOA spokesperson: 'The prosperity and efficiency of the coal industry are dependent upon the ability of the (parties) to work cooperatively …' (ibid., p. 24). In other words, the BCOA expected the UMW to act, not as an advocate for the increasingly militant and empowered miners, but as their disciplinarian.

Finally, Miller had risen within the MFD, and been elected as UMW president, partly on the basis of his exemplary earlier work with the Black Lung Association, of which he was a founding and active member. But Arthur Miller wasn't just an advocate for black lung victims; he was one of them. And as the demands of his office intensified, and his health worsened, he often did not seem up to the task of hard-hitting negotiation. (Indeed, Miller had both a stroke and a heart attack while in office and was forced to step down from the presidency in 1979, before the end of his term; he died in 1985 at the age of 62.)

Expectations – on the part of both the BCOA and the rank and file miners – were running high for the 1974 contract negotiations. The price of coal was at an all-time high, the oil embargo had increased the pressure for US energy self-sufficiency, and the newly democratized union had just elected a reform slate committed to rank and file accountability.

But the 1974 contract – especially in its implementation – was a disappointment to many miners. The expected surge in the demand for coal never materialized, and '[t]he

grievance procedure, although streamlined in the 1974 contract, and the mine committees [for consensus-based conflict resolution in the mines] proved totally unsatisfactory as companies cut corners and costs' (ibid., p. 24).

In the 3 years following the ratification of the contract, miners staged a record number of wildcat strikes as they attempted to enforce the health and safety and other provisions of the contract they had voted for, and *Business Week* began editorializing about taming the 'snarling wildcats' in coal. Increasing the efficiency and productivity of the coal mines was going to require a more passive union. But in the wake of the sacrifices that had been made to democratize the UMW, the rank and file were not about to be 'disciplined' by their leadership.

By 1977, the wildcat strikes had reached their peak, costing the coal industry 2.3 *million* lost work days, more than ten times the rate of wildcats in any other US industry (Turl 2010). Partly as a result, the 1970s was the only decade on record when, despite increasing mechanization, productivity per worker hour actually *declined* in US coal mines (Darmstadter 1997).

This productivity decline was undoubtedly exacerbated by the enforcement of increasingly stringent health and safety legislation in the mines (for example, the 1969 MSHA Act) and, perhaps, by increasing environmental regulation (ibid., pp. 24–26). However, '[w]hile the labor productivity declines in the 1970s had multiple causes … labor unrest was clearly a significant contributor – and probably not just for the two specific years in which the greatest labor strife took place. Recall that … coal mine labor productivity dropped at an average annual rate of almost two percent through the decade. In underground mining, where the labor unrest was principally centered, the productivity decline averaged out to 3½ percent yearly' (ibid., p. 27).

Said *Business Week:* 'High absenteeism and frequent wildcat strikes have denied the coal operators the stability they thought they had bargained for with the United Mine Workers. The UMW, poorly led and divided by years of political turmoil, failed to *deliver a disciplined workforce*' (Yarrow 1978, emphasis added.)

The strike of 1978 was, by all accounts, a turning point, both in the history of the UMW and in the history of the American labor movement. The BCOA brought two central demands to the table. First, to curb the 'snarling wildcats,' the BCOA demanded the right to fire any miner who instigated a wildcat – and the right to fire or discipline any miner who refused to cross a wildcat picket line. And second, rather than maintain the system of free health clinics for miners and their families and the generous union-controlled pension plan that had been established and maintained under Lewis, the BCOA wanted the right to turn responsibility for both health insurance and pensions to private insurance companies (Turl 2010).

The demand to fire the wildcats would violate the decades-long, unspoken agreement among miners never to cross a picket line, and both Miller and the BCOA knew it would never be accepted by the rank and file. In other words, the BCOA was provoking a strike – and, to back up their demands, they had stockpiled record amounts of coal (ibid.).

Said Dave Forms, a 29-year-old miner and president of UMW Local 1759: 'It's my feeling right now the operators are making an all-out attempt to break the strength of the United Mine Workers. And if they can break the strength of the United Mine Workers, they're going to break the strength of every other union in this country' (ibid.). The battle against neoliberal speed-up and management prerogatives in the workplace had been joined, and the mineworkers were on the front lines.

The 110-day strike was one of the most conflict-ridden in the postwar US – and one that captured the attention of not only the labor movement but of the nation. In Pike County,

Kentucky, 1000 miners were attacked by state troopers; many were hospitalized, but the mine did not open. In Indiana, 500 miners and their supporters stormed a loading dock delivering non-union coal; 200 were arrested but the dock remained closed. Miners in Pennsylvania prevented 34 000 tons of non-union coal from being delivered. Virginia governor John Dalton declared a state of emergency and ordered the state police to patrol mining areas and accompany 'replacement' miners into the mines. But Pennsylvania governor Milton Shapp and West Virginia governor Jay Rockefeller refused to call out the National Guard and coal production there was effectively halted (ibid.).

Despite the fact that, by now, only 50 percent of coal was now mined under UMW contract, the rank and file was able to halt coal production altogether not only at every union mine, but also at many non-union mines, eventually halting production at approximately 75 percent of all mines. Weekly output fell from approximately 14.7 million short tons to 5.4 million, and the stockpiled coal began to dwindle (ibid.). Clearly, the coal operators had underestimated the commitment of the rank and file to their 'poorly led and divided' but newly democratic union.

Quoting Kim Moody and Jim Woodward (1978, p. 39):

> Had the BCOA looked past Arnold Miller they would have understood that they were still in for a fight. The strike was solid. Not only had the miners shut down all of the coal mines controlled by the UMW, but they had shut down a good deal of the non-union coal mines as well. Car caravans, sometimes numbering by the hundreds, roamed the eastern coal fields shutting down non-union mines. Some non-union companies, like Mapco in West Virginia, hired gun-thugs to keep the strikers away. It didn't work. Shots were exchanged but the mines stayed closed.

In the midst of this implacable rank and file effort, Miller, a 'tower of indecision,' brought back numerous suggested compromises that exchanged accepted disciplinary actions against wildcats in return for significant pay increases (for example, a February 6 proposal offered a 37 percent pay raise in exchange for increased 'labor stability' and 'discipline'). But the union Bargaining Council – which Miller had created – rejected his compromise by a vote of 30 to 6 and the strike continued. A second similar agreement was rejected by the rank and file by a margin of 2 to 1 in early March (Clark 1981, p. 128).

On March 6, President Carter, invoking Taft–Hartley, issued a temporary injunction against the strike and ordered the miners back to work (ibid., p. 129). The attitude of the rank and file to the injunction can best be summed up in the words of one miner, 'Taft can mine it, Hartley can haul it, and Carter can shove it!' The strike continued.

By mid-March, the strike had been going on for over 3 months. And, despite the support efforts by community members and fellow unionists, strikers were feeling the pinch. (For one thing, the companies cut access to the health clinics for not only miners but for retirees, including those with black lung, during the strike.[24])

On March 19, under great pressure not only from the BCOA but also from the Miller administration (who hired a PR firm to sell the contract to the rank and file!), and from the US government, the miners narrowly voted to accept a 'compromise' agreement. The March 19 agreement allowed companies to discipline or fire 'instigators' of wildcat strikes ('anyone who complains about a safety violation,' as

24. Other unions sent significant relief money to the miners: $2m from the UAW, and $1m each from the United Steelworkers and the Communication Workers of America (Cole et al. 1981, p. 55). But, in an effort to force the rank and file to accept his proposed contracts, Miller never distributed the funds. Instead, miners were forced to rely on hastily constructed strike kitchens and food donations, for the duration of the strike (Turl 2010).

one disgruntled miner put it) but not to discipline those who refused to cross picket lines. And although miners were to receive a 37 percent wage increase over 3 years, the cost-of-living adjustments were eliminated, and their health care would now be consigned to private insurance companies – for which they would have to pay significant copays, deductibles, and medication costs (Turl 2010). Said Ken Wagnild of Local 1810, 'The men voted with their stomachs, not their heads.'

'Without a clear victory, the militancy of the miners eventually started to wane. As early as the summer of 1978, the coal operators saw that they had put a dent in the combativeness of the rank and file' (Turl 2010). And, in the wake of the contract, *Business Week* (July 31, 1978) ran an editorial entitled 'The Coal Wildcats Have Stopped Snarling':

> Miners always work more regularly after an industry strike to make up their losses, but this time the improvement is extraordinary. During April, May, and June, coal companies lost only 35 000 man days of work because of wildcat strikes, down from 317 202 man days in the 90-day period after a one-month strike in 1974. The current rates translates into a loss of 140 000 man days annually, compared with 1.9 million lost days in 1976 and 2.4 million last year.

The 1981 contract, concluded after a 72-day strike 'that lacked the spirit of 1977' (Simon 1983) brought more bad news for miners, including 'a more restrictive absentee policy [for wildcat control], the virtual elimination of UMW jurisdiction over coal miner operations and against the sale of mines under UMW contract to non-UMW companies…' (Simon, p. 26; and Ghilarducci 1988).

More recent UMW administrations, including current AFL-CIO President Richard Trumka (1982–1995) attempted both to 'rein in' some of the decentralization of the Miller era and to negotiate stronger contracts. And Trumka has made real and admirable efforts to forge transnational bonds among coal miners, serving on the executive boards of the International Miners' Federation and the ICFTU and playing a key role in organizing miners' unions in five countries (OECD, no date). But the damage had already been done. As opposed to the militant energy and unwavering commitment shown in 1978, there is now widespread demoralization and hopelessness among rank and file coal miners. If the union is to deal constructively with the enormous technological, geographical, and political challenges it is facing, if it is to regain its ability to organize and recapture its centrality to the coal industry, it will require unyielding commitment on the part of the rank and file, commitment that was largely squandered by the well-intentioned but timid leadership in the 1970s.

We have come a long way from the 1940s when over 90 percent of US coal was mined under UMW contract and workers enjoyed a middle-class lifestyle for their families in exchange for hard, dangerous, and dirty work. Cecil Roberts, current president of the UMW, is trying valiantly to 'put the movement back into the labor movement' and to encourage the membership to engage with the challenges faced by the union in an increasingly concentrated industry in an increasingly neoliberal political environment. But he faces an uphill battle; it will take some time before miners are once again willing to risk their lives and livelihoods for the UMW.

7 CONCLUSION

As we have seen, the story of the deunionization of the US coal industry is a complex one. The conventional wisdom asserts that firms in more concentrated industries face both lesser profit pressures and increased 'economies of scale' for organizers, both of which are said to facilitate unionization. But coal deunionized *while* it became

increasingly concentrated. Thus, while the restructuring of the ownership of coal certainly impacted labor relations as well as many other aspects of the industry, it is highly unlikely that increasing concentration is responsible for coal's deunionization.

Similarly, the adoption of capital-intensive technologies (such as longwall mining) is often thought to undermine organizing drives and to pose a threat to pre-existing unions. But the switch from room and pillar to longwall techniques in underground mining, while it changed the nature of miners' work and significantly increased their health and safety risks, occurred in the US in the late 1980s and 1990s – long after the bulk of coal's deunionization.

More significant for deunionization were the geographic and technological shifts from eastern, underground mining to western surface mining. But these geographic and technological shifts, as we have seen, were not the consequence of market forces or changing cost pressures in the industry. Rather, they were the result of changing government policies in the energy and transportation sectors.

Other changes in government policy, especially the passage and enforcement of Taft–Hartley and related legislation, created an increasingly hostile legal/political environment for the UMW and for the entire the US labor movement. The prohibition against secondary boycotts and sympathy strikes, in particular, undercut longstanding traditions of solidarity within the UMW and between the UMW and other unions, forcing changes in tactics and strategies and exposing the union to hefty fines and protracted legal battles.

Finally, in the midst of these prodigious technological, geographic, and policy challenges, the UMW was waging its own internal battles over democratization, decentralization, and rank and file control. In the crucial strike of 1978, this pitted well-intentioned but inexperienced leadership against not only some of the country's most powerful corporations, but against a national administration increasingly willing to use the tools of Taft–Hartley to crush labor's power. The results were tragic, not only for the mine workers who provide over 40 percent of our country's energy, but for the entire US labor movement.

Technological change and government policy may establish the playing field on which class struggle occurs. But the outcome of these struggles is also determined by the political/legal context and by human agency – by the presence or absence of strong union leadership, by the political environment in which labor operates, and by the commitment of the rank and file to challenge both corporate and government policies. Organizing to change the current neoliberal economic and political regimes, in coal and elsewhere, will require attention to all of these factors.

Fire in the Hole by Hazel Dickens (June 1, 1935 – April 22, 2011)

You can tell them in the country, tell them in the town
Miners down in Mingo laid their shovels down.
We won't pull another pillar, load another ton,
Won't lift another finger 'till the union we have won.
Stand up, boys, let the bosses know!
Turn your buckets over, turn your lanterns low.
There's fire in our hearts, there's fire in our souls
But there ain't going to be no fire in the hole.

My daddy died a miner; grandpa he did too.
I'll bet this coal will kill me 'fore my working days are through.

In a hole that's dark and dirty, to an early grave confined.
I plan to make a union for the ones I leave behind.
Stand up, boys, let the bosses know!
Turn your buckets over, turn your lanterns low.
There's fire in our hearts, there's fire in our souls
But there ain't going to be no fire in the hole.
There ain't going to be no fire in the hole.

http://www.youtube.com/watch?v=CiGPbHnpQks

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