The Anthracite Miner: An Occupational Analysis

It is quite easy to paint the anthracite miner in the quasi-medieval hue of servileness. Land ownership gave the operator an almost feudal power over his employees. As tenant-at-will as well as employee, a recalcitrant miner could be punished by both banishment and loss of his job. Proprietary rights permitted the employer to dictate which leisure activities would be made available within the community. Eckley B. Coxe, a miner operator near Hazleton, forbade the sale of alcoholic beverages on his lands. A livery force of Coal and Iron Police enforced the operator's will throughout his realm. "Everything in the region belongs to the operators," complained a local editor, "and must be subject to their autocratic domination." Under these circumstances it is difficult to envision the miner as a free man; indeed, the popular conception of the mine operator as a "Coal Baron" implies the serfdom of his employees.

If operator control over land as well as employment did not sink the miner into serfdom, a near total system of paternalism kept him in peonage. Payroll deductions for bills at the company store, rent for company housing, the cost of tools and supplies, company doctors, and, in some cases, contributions to the church often drove the miner into debt which obligated him and his children to work for the landowner-industrialist.

Although plausible, the servile portrait of the anthracite miner suffers from a lack of detail. It does not reflect, for example, the subtleties in the status differences between the various occupations.

1 Company leases usually included a waiver of the tenant's legal rights concerning eviction.
2 *The Sentinel* (Hazleton), Feb. 1, 1888.
4 *The Plain Speaker* (Hazleton), Jan. 28, 1888.
5 Select Committee, 43, 479.
Within the hard coal industry. The lack of detail can be attributed to the perspective from which it was drawn. The focus upon class distinctions permits an adequate view of the gap between rich and poor. But the vantage point precludes seeing differences among the exploited; of necessity, they can be seen only as an amorphous mass. Class provides the essential background, but the miner can be depicted in bold relief only when drawn from the perspective of occupation.

Occupation is best described as a social role that yields status and financial consequences while providing a focal point in the life of an individual. The term role, however, should not be construed as describing the actions of a particular individual. Rather, role refers to the "set of prescriptions defining what the behavior of a position member should be." It is the structural component or position of the occupation of anthracite coal miner that will be the primary focus of this paper.

Mining anthracite remained a stable occupation during its entire history. Technological innovations tended to improve the efficiency of the miner without altering the basic pattern of his work. Hand-thrown drills were exchanged for augers and, later, for air-driven drills. Dynamite replaced black powder while the squib gave way to the blasting cap and the electric detonator. Carbide lamps replaced the open flame oil lamps only to be succeeded by the electric lamp. By the 1920s mechanical loading devices were replacing shovels in some of the mines.

The introduction of such technological innovations, however, did not cause sweeping changes in the basic pattern of the miner's work. The pillar and breast system of mining remained dominant in the industry until the late 1940s. Rectangular working compartments, breasts, usually five to twelve yards wide and from four to six hundred yards long opened from the gangway. A pillar of coal

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8 The industry began in the early nineteenth century and peaked in 1917. Production slowly declined until the 1950s when deep mining was virtually replaced by strip mining.
9 Although strip mining began in the late nineteenth century, it was not until the 1940s that production from surface mines surpassed that of the deep mines.
separated each breast and supported the overburden. If the coal seam pitched less than twelve degrees the miner laid rails into the breast and loaded the coal into wagons or "buggies" as it was freed.10

Most anthracite veins, however, pitched more than twelve degrees from the gangway and required the "shute breast" method of working. The miner left a pillar of coal, cut by three small openings between the gangway and his workroom. As he advanced away from the gangway he constructed airtight wooden walls within the breast leaving a small clearing at each side for the passage of men and air. The resulting boxlike structure held the freed coal which served as the platform from which he worked. Excess coal was drawn off by gravity flow through a shute located at the base of the breast. In seams pitching between twelve and twenty-eight degrees the miner had to lay sheet iron on the floor of his breast to facilitate the flow of the coal.11

Once inside the breast the miner, with his laborer, drilled holes in the coal at places determined to yield the most advantageous results from blasting; filled the hole with explosives; tamped it with dirt and coal; and fired the shot. Besides freeing the coal, the miner maintained the safety of his work place. He "sounded" the roof with a bar and removed loose materials and, when necessary, propped the overburden. In shute breasts he extended the walls along the manways and placed sheet iron on the floor, if required. In short the anthracite miner was a machine user rather than a machine tender. He utilized mechanical devices to facilitate his work; he was not merely operating or guiding a machine through the various stages of its work. It was this important difference between miner and his machines which established the perimeters of the occupation.

The perimeters of the position or occupation of mining anthracite coal resemble those of the professions. Both rest upon the command of an esoteric but practical body of knowledge and specialized skills.12

11 Ibid.
12 George Ritzer, *Man and His Work: Conflict and Change* (New York, 1972), 56. Miners, of course, were not true professionals in that their knowledge was not based upon a theory.
The miner's task was to remove as much coal as possible with a minimum outlay in time and risk. To accomplish this goal, he had to know something of geology and develop a sensitivity to the movement in the overburden as well as proficiency in propping, drilling, and blasting.

An informal educational system conveyed the necessary knowledge and skills to the prospective miner. He began his education at an early age as a slate picker, quickly learning to distinguish between coal and waste material. Between the ages of twelve and fourteen he became a "nipper," or an errand boy in and around the mines—a task which acquainted him with the physical layout of the plant. At fourteen he became a door boy and sat alone in the mine tending the ventilation doors as cars passed in or out. As he sat in the darkness, the youth became accustomed to and learned to identify the noises accompanying the various movements in the overburden. From door boy he progressed to mule driver, a position which thoroughly familiarized him with the underground maze of gangways. Mule drivers, in turn, became miners' laborers, in which role he developed a proficiency in propping, drilling, and blasting by both observation and participation.

After completing a minimum of two years training as a miner's laborer, the candidate could aspire to become a miner. But the passage was not automatic; before he could gain acceptance into the occupation, he had to pass an examination. Appearing before an examining board of three miners he demonstrated his competence by answering such questions as:

1. What constitutes a good safety lamp?
2. How should a safety lamp be used to detect the presence of firedamp?
3. What are the dangers usually encountered on entering a mine after an explosion, and how would you proceed to overcome them?
4. Mention the several explosives commonly used in the mines; describe their properties and peculiar characteristics; show their adaptation for certain results in blasting operations, and explain the danger attending the use of each.
5. Describe the various methods of timbering slopes and gangways.

13 Chance, passim.
14 Examination Questions for Certificates of Competency As Mine Inspector, Mine Foreman, Mine Manager, Fire Boss, Hoisting Engineer, Etc. As Given by The State Examining Boards (Scranton, 1914), 90, 106, 133, 144, 366.
If the candidate passed the examination he received a Miner’s Certificate and was registered in the books of the examining district. Only those so registered could be employed as a miner.\textsuperscript{15}

The occupation’s educational system did more than provide the candidate with the body of knowledge necessary to successfully pass an entrance examination. It also instilled a sense of identity. It was a system resembling the formal training of a professional in that it utilized a punishment centered socialization process. At each step the candidate was given a set of tasks that, in theory, was more demanding than those required at the former level. Success at each position was achieved by most, but not all. In this manner the system developed proficiency while contributing to a group identity by the sharing of suffering and the developing of an internalized sense of achievement.\textsuperscript{16}

The informal educational system also conveyed the appropriate rules of conduct for a miner to the candidate.\textsuperscript{17} Each level in the system brought him physically closer to the miner where he could better observe his role model. Often the process entailed verbal instruction as well as personal observation. “Here’s the boss. Don’t work,” a miner instructed his laborer in etiquette as the foreman approached. “Always sit down when the boss is around.”\textsuperscript{18}

The disdain for authority, a major behavioral attribute of the miner, reflected the economic realities of his position. The miner took a raw material, coal in the seam, and converted it into a finished product, freed coal. Once assigned a work place, he stayed with it until all recoverable coal was freed. He owned his own tools and provided his own supplies. He worked for an individually negotiated price rather than a wage.\textsuperscript{19}

Whether measured by the linear yard, ton, or wagon, the unit of compensation acknowledged that the miner was selling a product, not his labor, to the operator. Indeed, the traditional specifications of “company coal” or “miner’s coal” in tunneling contracts implied

\textsuperscript{15} Pennsylvania Laws, 1889.
\textsuperscript{16} Wilbert E. Moore, The Professions: Roles and Rules (New York, 1970), 76.
\textsuperscript{17} Ibid., 75.
\textsuperscript{19} Chance, 90; Goodrich, 41.
a recognition that the coal freed by the miner was his until the company accepted shipment or unless he specifically waived his rights to the coal in a "company coal" contract.\textsuperscript{20} In theory, "dockage" or the practice of deducting an amount of each payable unit to compensate the company for any slate and dirt that may have been included in the unit was a protective device for the consignee. "Dockage," therefore, represented part of the ritual of accepting shipment of a product rather than a determination of wages or payment of labor.\textsuperscript{21} In a very real sense the anthracite miner was an independent businessman supplying a commodity to a processor or jobber.

The miner’s work habits exemplified his independent status. Not only did he refuse to work in the presence of the foreman, he determined the length of his working day. It was customary for the miner to leave his work place whenever he felt he had freed enough coal for that day. Nor did the miner burden himself with the menial tasks associated with his work. He performed only the skilled operations of drilling, blasting, and setting props. Breaking and shoveling the coal as well piling the gob or waste products on the side of the breast were relegated to a laborer whom the miner hired and usually paid one third of his gross income.\textsuperscript{22}

Relationships between the miner and his laborer were not always cordial. Economics contributed to the conflict between the two positions with laborers complaining that the miners underpaid them. In 1875, for example, "A Laborer" rhetorically asked, "We often hear of the injustice of the coal operators toward the miners. But when have the operators treated the miners so bad as the miners have treated the laborers' [sic] at Ashley [sic]."\textsuperscript{23}

Status deprivation, however, was the major cause of the role conflict. Laborers resented the fact that miners left the work place early while they stayed behind to do the dirty, hard work. Many laborers

\textsuperscript{20} Chance, 93–94.
\textsuperscript{21} Mine operators took advantage of the system, but such exploitation should not detract from the symbolism of "dockage."
\textsuperscript{23} \textit{Record of the Times} (Wilkes-Barre), Aug. 16, 1875.
complained that the miners were contemptuous toward them. Miners were the first to climb up the manway to the coal face and, in so doing, kicked dirt or stones back onto their laborers. “The damn miners,” a respondent grumbled, “didn’t care if they kicked mud in your face or not. They didn’t give a damn about the laborer.”

The industrial union provided a matrix within which the miners could resolve the conflict with their laborers to their own advantage. Miners did not require a craft union to protect their position from technological encroachment. As noted, the innovations introduced in the hard coal mines tended to facilitate the miner’s work without threatening to replace him. The sole purpose of organization was economic concerns, not occupational protection.

Craft organization could provide a basis for addressing economic questions, but it would create a dangerous precedent. Laborers or mule drivers or even the slate pickers might follow the miners’ example and organize their own unions. Since the anthracite industry’s labor force was functionally integrated, such organizations would diminish the miners’ independence and place them in an economically vulnerable position. A strike of slate pickers, for example, would curtail all activity in the mines.

The potential power of craft organizations among the other occupational groups to influence the miners suggested that cooperation was a better strategy than confrontation in the resolution of role conflict. In an industrial union the miners could depend upon both their high status and economic control over their laborers to defeat opposition to their own best interests. In a very real sense the industrial union provided the miners with a vehicle for controlling the other occupations while pursuing their own goals. The direction of the industrial union by the miners is best demonstrated by the

24 A.T. (pseudonym) taped interview; tape at Hazleton Campus of The Pennsylvania State University.
26 In 1871, for example, the laborers in the Scranton area organized their own union. Daily Miners' Journal (Pottsville), May 12, 1871.
27 Charles Miesse, Points on Coal and the Coal Business (Myerstown, Pa., 1887), 136–137.
union's concern over the price of powder—a supply that only miners purchased.\textsuperscript{28}

The miners did not surrender occupational exclusiveness to obtain the industrial union. Nor did they use their economic power as the fulcrum of leverage for maintaining the boundaries of the occupation. Rather they sought state-mandated minimum entrance requirements based upon a command of a specialized body of knowledge to maintain the perimeters of the occupation.\textsuperscript{29} They were successful in this effort in 1889 when the Pennsylvania Legislature passed a law requiring that miners in the anthracite industry be certified. To receive the certificate the candidate had to demonstrate that he had been employed as a miner's laborer for at least two years and pass an examination such as the one described above.\textsuperscript{30}

Although the miners turned to the state to establish and enforce minimum entrance norms, they were careful to retain control of judgment.\textsuperscript{31} The certification act required that the examination board be composed of miners who had a minimum of five years' experience in the hard coal mines of Pennsylvania.

State certification with the miners controlling judgment was an impregnable barrier against efforts to lower the occupation's admission standards. But it was less than an effective instrument for addressing the occupation's problem with the thousands of immigrants from eastern and southern Europe who flocked into the hard coal regions during the last quarter of the nineteenth century. Although the "new immigrants" accepted lower wages upon arrival, they did not represent an economic threat to the miners. Even before the passage of the certification act in 1889 few of the "new immigrants" possessed the necessary skills and knowledge to enter the industry as a miner. After 1889, of course, they had to serve at least two years in the mines as a miner's laborer regardless of their abilities. In short, the competition for jobs between the "new

\textsuperscript{28} Miners were the only ones who did blasting. In 1872, for example, the Wyoming-Lackawanna branches of the Workingmen's Benevolent Association accepted a 10 percent reduction in wages for a decrease in the price of powder. \textit{Daily Miners' Journal}, Jan. 13, 1872.

\textsuperscript{29} Moore, 59.

\textsuperscript{30} Pennsylvania Laws, 1889. It is interesting to note that in North America only Pennsylvania (anthracite), Indiana, British Columbia, and Nova Scotia required the certification of coal miners.

\textsuperscript{31} Moore, 60.
immigrants” and the older ethnic groups existed only at the lower occupational levels within the industry. The competition presented the miners with an opportunity to increase their own income by paying their laborers less. During the time lag between their arrival in the region and their entrance into the occupation of miner the “new immigrants” learned American standards and were unwilling to accept lower prices for mining coal.

Ridiculed and denounced as “cattle,” however, the Slavs and Italians posed a status threat to the occupation. A large presence of these ethnic groups within the position would cause coal mining to become regarded as “foreigner work,” opening all of its members to derision. Such a degradation of the occupation had to be prevented.

Certification provided, at best, only a temporary relief from the threatened diminution in status for the occupation. It must be remembered that the lower occupational levels, such as laborer, represented gradations in the miners’ educational system which approved most candidates. Only the total exclusion of the southern and eastern Europeans from the industry could, therefore, remove them as a threat to the prestige of the occupation of coal miner.

In 1897 the miners, aided by the lobbying efforts of the United Mine Workers of America, secured the passage of anti-immigrant labor legislation. The act taxed anthracite mine operators three cents per day for each adult alien employed by them. Unfortunately for the miners the law did not result in the exclusion of the “new immigrants” from the industry. The coal companies did not attempt to escape the tax by wholesale firing of their Slavic and Italian employees. Rather they placed the burden of the tax upon the immigrant by deducting it from his wages. Finally, the courts overturned the act as unconstitutional.

Both certification and the abortive effort to exclude immigrants from the industry illustrate an important dimension of the occupation of coal miner. Miners perceived their occupation as a status-

32 The “new immigrants” led the strike of 1897 demanding the same pay as Americans. Pottsville Republican, Sept. 8, 11, 1897; The Daily Standard (Hazleton), Aug. 30, 1897.


conferring as well as an income-producing position. In the first case they sought to enhance their occupation by securing formal recognition of its uniqueness and its demanding attributes in the form of a state-mandated licensing procedure. At the same time, certification served as a quality control which precluded any attempts to reduce its stature by the diminution of skills. The campaign against the immigrants was an effort to preserve the prestige of occupation against those who met its entrance qualifications, but whose ethnicity threatened to expose the position to derision.

The miners' attempts to protect their occupation's boundaries and prestige from anticipated threats from below did not divert their attention from possible encroachment from above. Two occupations in the industry, mine foreman and mine inspector, posed serious threats to the autonomy of the coal miner's position. The mine foreman supervised the hiring of company employees and the assignment of the miners' work places. He was also charged with the enforcement of the state's safety laws. In addition, mine foremen were usually tapped for intermediate managerial positions within the industry. 35

Given its authority and capacity for managerial advancement, it was conceivable that the occupation of mine foreman would attract formally-educated groups. Nor was it improbable that once the formally-educated groups entered the occupation they would attempt to establish standards of admission, such as academic degrees, which would effectively exclude miners from the position. 36

Such a scenario, if developed, would have been disastrous for the occupation of coal miner. It would deny miners hope for self-aggrandizement as their position would become a deadend. 37 It would also translate into an outside interference with work which would reduce the autonomy of the occupation.

The Mine Safety Act of 1885, which was supported by the miners, precluded the threat by requiring state certification of mine foremen.

36 In Pennsylvania's bituminous regions a candidate for certification as mine foreman had to have five years experience as either a miner or a mining engineer. Examinations Questions . . . , 550.
The qualifications for certification were a minimum of five years' experience as a miner in the anthracite mines and the successful completion of an examination by a miner, a mine operator, and a mine inspector.

The occupation of mine inspector also had the potential for interference into the work activities of the coal miners. Mine inspectors enforced the state safety laws and had the power to enter the mines at all "reasonable times by day and night." Coal miners, however, controlled entrance into this occupation. Mine inspectors were required by law to have worked as a miner in the anthracite mines for at least five years and to have passed an examination administered by a board of three miners and two mining engineers. Furthermore, an inspector could be removed upon petition from fifteen "reputable coal operators or miners or both."

Control over admission to the occupations of mine foreman and mine inspector secured not only advancement opportunities for the miners. It effectively precluded mining engineers—the only group capable of challenging the miners' command of specialized knowledge on the basis of its formal education—from interfering with the day-to-day activities of the occupation. In a very real sense it enabled the occupation of coal miner to retain control over its work.

When drawn from the perspective of occupation, the anthracite miner emerges as neither serf nor peon. Although poor and often exploited, he can only be depicted as a labor aristocrat. Indeed, the anthracite miner resembles a quasi-professional. His position was based upon the command of specialized knowledge and the occupation's informal education system bore a striking resemblance to the formal educational system of professionals. He was licensed by the state. He enjoyed a state-mandated monopoly over admission into immediate supervisory positions which gave the occupation the semblance of a career.

On the job the miner retained control over his work. He sold the product of his skill and knowledge, not his muscle power, and was compensated by the unit of production rather than by the day or

38 Pennsylvania Laws, 1869.
39 Ibid. In Montana the Inspector of Coal Mines had to be a graduate of a recognized school of mines or mining engineering, Examinations Questions . . . , 539.
the hour. He hired and directed his own assistant. Indeed, he was often cavalier in his treatment of those in lower occupational levels within the industry. He resolved the role conflict between himself and other industry employees by co-opting them in an industrial union which he hoped to control on the basis of his status and economic power. Aware that his status emanated from the prestige of his occupation, he was careful to maintain its reputation.

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