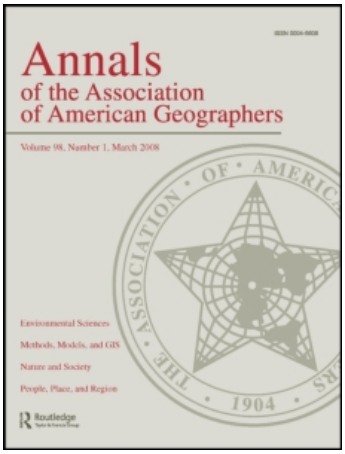

Annals of the Association of American Geographers
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t788352614

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Ben Marsh [a]
[a] Department of Geography, Bucknell University, Lewisburg, PA

Online publication date: 15 March 2010

To cite this Article Marsh, Ben(1987) 'Continuity and Decline in the Anthracite Towns of Pennsylvania', Annals of the Association of American Geographers, 77: 3, 337 — 352
To link to this Article: DOI: 10.1111/j.1467-8306.1987.tb00163.x
URL: http://dx.doi.org/10.1111/j.1467-8306.1987.tb00163.x

Continuity and Decline in the Anthracite Towns of Pennsylvania

Ben Marsh

Department of Geography, Bucknell University, Lewisburg, PA 17837

Abstract. The residents of the anthracite towns of northeastern Pennsylvania show a considerable loyalty to a landscape that provides them with little of material value. This should remind the observer that any broad concept of place must address two different aspects of a landscape: the physical support it provides (means) and the intangible rewards it offers (meaning). The two parts are related to each other through time, however. Most simply, the meaning in the landscape is provided from the past and the means are provision for the future; more complexly, the previous means—the economic history—are a significant part of the meaning, and individuals' judgment of whether the landscape's means are sufficient or insufficient to maintain its residents into the future depends on the strength of its meaning. Place is not separable from its past or its promise. The strength the anthracite towns show in the face of their decline is a product of their history. Difficult times in the early coal towns created communities so strong as to discourage people from leaving the unproductive landscape even now that the hard coal industry is essentially dead.

Key Words: depressed regions, social geography, anthracite miners, eastern Pennsylvania.

THE anthracite valleys of northeastern Pennsylvania are dominated by the relics of a century-long frenzy of coal mining. Five billion tons of hard coal have been removed from this land, most of it cut and loaded by hand by immigrants and their sons working deep in the ground.[1] The coal was shipped south and east (Fig. 1) to power the nation through the Industrial Revolution. The wealth produced by mining left with coal, going mostly to New York and Philadelphia. Much of the population of the region is gone, too, now that the industry lies crippled.

The land remains, and people remain with it. Dozens of neat grey towns sit separated by piles of broken black rock—abandoned mine dumps and strip mines. The unstable mounds and brushy fields of this lunar landscape seem useless except to be mined again for the coal still deeper in the ground. The towns are damaged, too, with downtowns too big and employment opportunities too limited for the current population.

Yet the people remaining in these towns — half or one-third the 1920 number — have a powerful sense of belonging just where they are, with such ties to these tired old places that they are reluctant to move under any circumstances. Even when faced with an active mine fire, like the one beneath the town of Centralia, the people move slowly, resentfully, and not very far.

There is a paradox to these valleys. By the measure of their inhabitants, and even of their former inhabitants, these are fine and distinctive places to live; and yet by conventional economic or demographic measures, and by the normal standards of landscape esthetics, this is the least attractive part of Pennsylvania. The land means much, but gives little.

In this article I explore the evolution of the split between what this place means to its residents and what it provides to them. Expectations have almost always exceeded realities in these towns, like most immigrant communities. Residents of the anthracite valleys have long hoped themselves into a world somewhat more productive than northeastern Pennsylvania would prove to be, but the nature of that overestimation has changed in a significant way during the history of these towns: in the nineteenth century the tension between people's desires and the reality drew them toward the future they hoped for; in the second half of the twentieth century that tension has drawn them toward the past they knew. How did that change happen?

Place is, in part, the story a town tells itself,

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Figure 1. The anthracite fields of eastern Pennsylvania.

the town's autogeography: What is this town? How did we get here? Why do we stay? Of course, place is also a group of facilities and resources, the physical property that connects the people to the economy. Those factories and mines are easier to see on the land, but the shape of a region is formed by both aspects. Because meaning must come from the past and provision is for the future, a place always exists in its particular time — a fact obscured by the more obvious point that a place always exists in its particular space. Place is Janus-like in time, both product of the past and producer of the future, and it is therefore a part of the inertia within society whereby the past forms the future. Place is, to borrow terms from Shotter (1983), partly the *means* an area provides for its own continuation but also the *meaning* derived from its past for its continuation.

This argument about place is broadly reliant on Pred's geographical version of structuration (Pred 1984, Giddens 1984). A central theme of structuration is the inescapable continuity through time of the world and its parts — "By acting we create the conditions for future action" (Shotter 1983, 19). Pred suggests that use of the landscape continuously molds the users *and* the landscape in ways that constrain subsequent use.

I choose to analyze these processes at a less immediate level than Pred (1986) would: a time period longer than a human life span and a region larger than a community.[2] The term "local history" gives the right sense of area and time for the scale of this work, and its suggestion of the conventionally trivial interests of local historical societies is a reminder of the crucial role that the past has, in all its mundanity, in defining a place to its residents. But approaching place through local history is not a trivialization at all; it is the only way to do it. It is a functional approach to place, relating the place as a psychological and social entity to the place as a piece of the physical landscape.

This study focuses on Shamokin, Mt. Carmel, and several other towns in or near Northumberland County in the anthracite region of northeastern Pennsylvania (Fig. 2). These towns are excellent examples of the historical continuity of place: their tumultuous past left a clear print on their character and on the earth itself, and their uncertain future will be shaped by the conflict between a wasted land and the strong attachment of the residents to their towns.

Here is the brief story of the anthracite region: This is a landscape that has gone through two periods of asymmetry as a place — first an early industrializing stage, when the landscape provided a means (i.e., jobs) but relatively little specific meaning to the new inhabitants, and now a declining stage, when the landscape is rich with meaning from that past but deficient in means. The period of growth made these into anthracite towns — close, proud, hardworking, and ethnically diverse. When the industry failed, the community that had defended individuals from the problems of mining continued to protect them from the problems of no mining. Between the period of growth and the period of decline were several decades of stability, a short time whose influence is very strong on the towns of today, both in physical form and in people's visions of their position in the world.

These towns now show the peculiar ecology of a traditional working-class industrial society stranded in a postindustrial world. The same history that so degraded this countryside has solidified this society: what remains is a curious twinning of strong communities amid a destroyed physical and economic landscape, products of the same historic circumstances. There are lessons in this region about the poor and the powerless in other places that the world has passed by, lessons that are important not because the conditions in the anthracite region are unique, but rather because they are so familiar. What is special about this region is only that the course of events has been so clear: a single resource supported a single in-

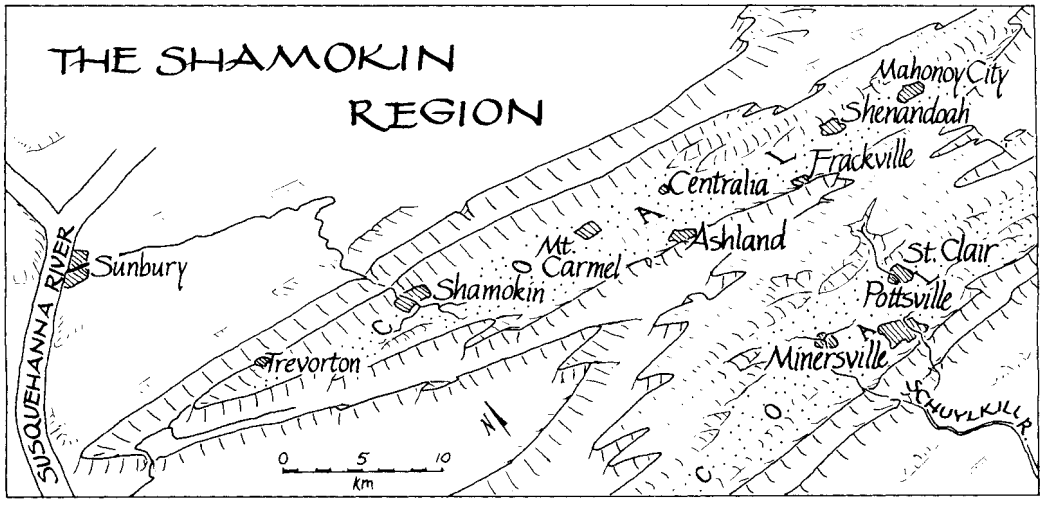

Figure 2. The Shamokin region.

dustry that enjoyed a single boom and has been declining ever since.

The sections that follow examine the elastic link through time between the meaning of a place and the means it provides. Moment by moment, the two parts to place may look unrelated. But if the means and the meaning of a place become too divergent, the tension between them must draw one toward the other; residents' beliefs and actions will come to limit the development of the landscape, or the realities of the world will alter the residents' perception of the existing landscape. Such a tension is apparent today in the anthracite towns, as their economies become increasingly unable to support their self-images. But this is only a stage in a process that began long ago and will continue into the future.

Growth of the Industry

Anthracite is coal that has been metamorphosed by deep burial in the geologic past (Edmunds and Koppe 1968). In Pennsylvania this coal occurs in the more deformed geology of the ridge-and-valley region; bituminous coal is found in the western part of the state within the flat-lying rocks in the Appalachian Plateau. That tectonic history turned the anthracite into glassy black coal, a clean fuel to burn and to handle but a difficult resource to extract from the folded and faulted beds.

Small-scale mining of anthracite began in the late eighteenth century, but two problems hindered the early development of an industry. The first difficulty was a poor market for this fuel that burned so differently from wood or soft coal. Anthracite's high ignition temperature made many doubt whether this coal was a usable fuel. The Philadelphia city water works graveled its walkways with its first purchase of anthracite in 1803 because it would not run their steam engines (Binder 1974). But the rapid deforestation of the Northeast was pushing up the price of firewood, which encouraged improvements in stoves and furnaces to permit use of anthracite. Cooking and heating were the first common use because the price of new domestic equipment was low; then in the 1830s anthracite was used to power industry, where the consumption of wood had been high. After 1840 the coal was used to smelt iron. This iron was tainted with sulfur, which made it too brittle for blacksmiths, but again the time was right: the national market for iron was shifting away from rural users of forged iron and toward mass production of cast rail, plate, and engines, where malleability did not matter, but fuel costs did. A growing market for this abundant fuel found so close to the eastern cities became assured.

The increasing demand for hard coal revealed the second problem: the technical difficulties of moving a heavy product out of a mountainous region. The mining of the coal from its shallow beds was simple, like quarrying limestone or building rock, but the primitive transport to market, by wagon or by wooden ark riding the spring flood, could add $18 to the price of a ton of coal that cost $2 to mine. The efficient transportation necessary for the takeoff of the anthracite industry arrived with the hectic decade of canal building that swept the Northeast after 1825. Navigation was improved on the three major rivers that drain the anthracite region: the Susquehanna, the Schuylkill, and the Lehigh. But even before some of the elaborate canals were finished, the railroads had arrived, offering more rapid delivery and year-round service. By the eve of the Civil War, Schuylkill County was producing half the anthracite and almost 30 percent of all coal in the U.S., and the Reading Railroad was the major carrier.

The success of the railroads was of enormous significance to the anthracite region. The pattern has since become so familiar in resource development: a few big companies wrested control away from the multitude of small operators that had grown up during early boom times. Railroads were able to become the major actors in the economic life of the region for half a century because they could draw on international financing, because they had a base of assured profit from their shipping operations, and because they squeezed out the competition by withholding transportation. In time they integrated themselves into the business from top to bottom — from owning and developing coal land to making retail deliveries to homes in the coastal cities (Roberts 1901). By 1900, five rail companies controlled 90 percent of the anthracite production and had been conspiring openly for 27 years to elevate prices by limiting production (Jones 1914). This attempted cartel kept failing as individual greed overwhelmed the spirit of cooperative greed, but it established the principle of the rail companies having near-total economic power within their regions, through control of landownership, production, transportation, employment, and even housing. This domination of the region by the coal monopolies lasted into the Depression.

Anthracite was expensive to mine. Today it is dug at the surface by giant shovels, but in 1900

the standard method was deep-mining — sending men into kilometers-long tunnels into the earth to blast and load the coal (Poliniak 1970).The investment of a coal producer could total half a million dollars for the mine and the engines to run its fans and lifts and pumps, for the rail lines to the mainline and to the rock dumps, and for the massive wooden structure (called a breaker) where the coal was crushed, washed, sorted, and loaded for shipment.

Development of Place

When judged by the evidence the region provides today, the growth of the built landscape and the development of place seem as though they had been different processes in this first period of the history of the anthracite towns. The landscape here has always been brutal, yet such a delicate place has emerged. The landscape was constructed according to the interests of the coal companies, but the places on that landscape were created, as they always must be, by people living on the land. Landscape is an arrangement of space, which can be planned from afar; place includes the adoption of a history, which must happen through the experience of people who care (Tuan 1977, Lukacs 1968). To understand what the coal towns have become it is necessary to see that history, to see what life in these towns used to be.

Landscape

The early landscape of the anthracite region reflected the interests of the coal companies more than the interests of the coal miners. Having built the breaker, the company built a town — the stores and streets and houses and outhouses of the community in which the miners and their families lived. A village was built at the mouth of each isolated mine, a row of shoddy company housing called a mine patch. Patches grew by the hundreds as small mines were opened, and then faded into remote poverty when the local seams were depleted. Some rushed through growth and decline, abandoned by 1850. Permanent towns grew at railheads, water gaps, or thicker seams. Most coal towns were drab rows of drafty barn-red double houses (Fig. 3), built along grids of muddy roads that extended up steep hills or through narrow gaps to avoid tying up the company's valuable coal land.

The peopling of the landscape was done almost as crassly as its construction and by the same parties, the coal companies. Deep-mining operations required many workers to do the tedious jobs on the surface of moving and sorting coal and the brute labor underground of drilling and shoveling rock and carrying timbers. Most anthracite miners came to Pennsylvania for the task at hand, most of them fresh from Europe (Fig. 4). There had been little local supply of labor on the thin soils and steep land of the anthracite valleys, and the inducements were not enough to draw many farmers' sons off the rich soils outside the valleys. Unlike the bituminous coal fields of Appalachia where the imprint of a distinctively American culture is so strong (Caudill 1963), the anthracite fields had little premining settlement: scattered farms, some small trading centers, and a few river towns.

In the early stages of deep-mining, the companies hired skilled European miners, particularly Welshmen and Germans. The Welsh had had experience mining anthracite at home, and Germans were the best mining engineers. As the scale of the operations increased and as the experience of the American miners grew, the need was no longer for skill but for mere muscle. First came the Irish, in the 1840s and 1850s, and then unskilled workers of dozens of other nationalities followed. Demand for labor grew steadily between 1850 and 1910, at the same time as the home ports for the "Great Deluge" of immigration moved east and south across Europe. A succession of ethnic groups moved in, each taking over the lowest of jobs and each pushing their predecessors one rung up the ladder. "At the present time" wrote the U.S. Immigration Commission, describing the employment structure that had evolved by 1911, "the general occupations and the race employed therein may be briefly stated, as follows: Managers and superintendents, Welsh; foremen and bosses, Irish; contract miners, Poles and Lithuanians; inside laborers, Slovaks, and more recent Poles and Lithuanians, and outside laborers, Slovaks, Lithuanians, and Italians" (U.S. Immigration Commission 1911, 592).

The coal business was industrial feudalism. Through the ignorance or collusion of the state legislature, the rail companies and their private police exercised nearly uncontested power to hire, fire, or banish. Skilled miners were paid less than $8 a week, and from that the company would deduct rent, tools, and the tab at the company store (Roberts 1901). By one report (Leighton 1937), miners went as long as 17 years without drawing cash wages, because of the pinch between low pay

Figure 3. Anthracite miners' housing, c. 1920. (From the Ralph E. DeWitt collection.)

and inflated prices. Chronic low wages required every able member of the family to help out. Women did not then have jobs outside the home but worked by boarding single miners. Boys between the ages of 10 and 14 worked in the breakers as "slate pickers," earning about 10¢ a day for pulling pieces of shale out of the coal as it slid by on a ramp, often working amid noise that drowned speech and dust that hid the boy on the next bench. Many of these boys would eventually become miners like their fathers, so through the years they rose to less menial, better paid, and more dangerous jobs in the mines, such as driving mules.

Accidents were a cost of producing coal borne solely by the miner, and mining was exceedingly dangerous. At the turn of the century, 7 men died for each million tons of coal produced and about 20 others were maimed. Half the accidents involved rock dropping from the ceilings of mines, with other deaths caused by poisonous and explosive gases, by coal cars, and by blasting powder. Statistics suggest the grimness of the industry: 30,000 men have died mining anthracite in Pennsylvania, including 4,500 teenagers, 179 men in a day, and 6,200 men in a single decade (Pennsylvania Department of Environmental Resources 1984; Roberts 1901). A given miner had one chance in ten of dying underground during his career. Any reckoning of the cost of anthracite must include those 30,000 men, plus their 15,000 widows and 45,000 orphans, plus 50,000 cripples, plus the hundreds of thousands of men who lived and died with miner's emphysema, "black lung," from breathing coal dust for half a lifetime.

Place

The residents of the anthracite towns were dramatically successful in establishing emotional ownership of the land and defining its character in their own terms, even though they came from another continent and even though they were settled into a landscape that belonged to a rail company and that had been designed specifically to be

Figure 4. Anthracite mine crew, 1917. (From the Ralph E. DeWitt collection.)

cheap and sparse. One reason why they could succeed was that there was no pre-existing social landscape at all, although the economic and physical landscapes in the valleys were well defined. More importantly, these people needed the benefits that place can give, and they started immediately to accumulate the components with which to construct a place.

Constrained for generations in their rural Old World lives through their own powerlessness, these immigrants came to America and found themselves powerless once more — now in a lethal, meager, and unpredictable industrial landscape. From the raw material of an Old World culture, a provincial view of the world, and a renewed class system based on exaggerated differences in wealth, the residents of the hard-coal communities built a stable world to support themselves in the face of the physical danger and the economic hardships of coal mining. Miller and Sharpless (1985), among others, have documented well the evolution of ethnic communities in anthracite towns.

The amount of ethnic diversity in any town was enormous — 25 languages were spoken in a single school system at the turn of the century, for example (Roberts 1904) — and powerful forces pushed members of each ethnic group in on themselves: the barrier of language, the bigotry of others, and a shared need for company, solace, and support in this brutal, dangerous new life. Ethnicity thoroughly pervaded the communities, both in the conspicuously ethnic churches, newspapers, and social clubs, and in the less obviously national butchers, bars, barbers, and eventually bankers and politicians (Zimolzak 1979). The national church provided both the actors and the stage for each scene in a life: the christening, a parochial education, a marriage partner, and then the festivals and saints' days every year on the way to burial in the appropriate cemetery above town. Churches were the physical and social centers of neighborhoods and communities, and a small town might have had a dozen different congregations. Shenandoah, never larger than 20,000 people, supported 11 Catholic cemeteries, including, for example, one for the Lithuanian Orthodox Church and another for the Lithuanian Roman Catholic Church. A sizable percentage of the scarce local

capital was given to the churches. The buildings themselves, with gold-leaf crosses or sky-blue onion domes, are still the finest architecture in many of the towns, while the rectories are as close to mansions as anything is in these towns from which so much wealth has been taken.

Ethnicity was a source of both pride and animosity in the earliest coal towns. But over time the need to defend ethnicity disappeared, and it came to be valued. There were no great moments in this transition, only a continuum. Two fundamental forces — love and labor — illustrate how the sense of commonality between the anthracite people came to exceed the differences between the various groups. First, as soon as the ethnic barriers were lowered, intermarriage was inevitable. This was particularly true among the various Roman Catholic groups, who were not, as a whole, a minority, and who went to church and to school together. Intermarriage blended culture, blended genes, even blended language to create the region's various distinctive accents, like the Irish-Polish-German mix common west of the Shamokin area.

Second, labor was another powerful equalizer, emphasizing to the various miners their shared physical predicament and their common economic needs (Miller and Sharpless 1985). Miners of different nationalities worked together and needed to judge each other as individuals: they cared how hard other miners worked, and they needed to know if they could trust their coworkers. The mutual vulnerability of two men working together in a mine for months and years left little room for stereotypic attitudes. In time this carried over to the whole community.

Miners needed to act in concert to protect their livelihoods, too. Unions grew out of the ethnic communities, but unions also helped to break them down (Barendse 1981). The earliest labor actions were initiated by national societies, including the famous Molly Maguires, an Irish group that murdered several of the more disliked English managers and burned a few breakers. Some of the early labor organizations worked against other ethnic groups, protecting jobs from underbidding by newer immigrants. Strike breaking by Eastern Europeans was regarded as a chronic hindrance to organization and was a source of considerable animosity. However, it became clear to union members that their enemies were not other miners. Labor actions, like labor itself, drew people together. In organizing the United Mine Workers, John Mitchell attacked the problem of divisiveness directly, pointing out that "The coal you dig isn't Slavish or Polish or Irish coal. It is just coal" (Finley 1972, 24). Mitchell organized the anthracite fields for the U.M.W., and the Great Strike of 1902 was successful (for a while) because of the support of the Eastern Europeans, to the surprise of most observers.

Maturity

The period between 1910 and 1930 represented the apogee of anthracite. The landscape was thoroughly developed, with the deep mines, the railroads, and the towns in place. The many peoples within those towns were as close to an equilibrium as they would ever be, balancing variety against community, competition against cooperation. Life was hard, but it was also vigorous and diverse. By 1920, the region entered this second period; it had become a "mature" place. These places had found a balance between the means and the meaning that the land provided: the communities had settled on a set of needs, and the industrialized landscape could provide the resources to satisfy them. This had been the goal toward which the towns had been striving, in an unintentional manner as each individual sought ways to live his or her life. And this was the success that has shaped lives in those towns in the years since the industry that had supported this world collapsed.

It is not surprising that much of the economic landscape of the coal towns dates from this period; there has not been enough wealth in the region since to print another landscape over it. It is harder to understand the stability of residents' conceptions of their world since then (since before they were born in most cases) in light of how little of the economic strength of the 1920s remains.

Decline

Anthracite production topped 90 million tons per year for the first time in 1917, and it held near that level for a decade. Then the industry failed. It was disabled abruptly in the early 1930s, but its decline has been gradual. During World War II the industry revived briefly, topping 50 million tons for the last time in 1948. It has been in a geometric decline since then, with production halving each decade. In 1984, 3.5 million tons were mined, up from the previous year for only the second time since 1962. Three factors have

been the main causes of the decline of anthracite. The most immediate was the Depression. The most permanent has been competition from cheaper fuels as the cost of the labor in the anthracite fields increased and the cost of transporting oil and bituminous coal decreased. A lesser cause is the uncompetitive pricing policies of the coal companies, which still inhibit sales.

Employment in mining dropped catastrophically with the decrease in production. Two percent of the work force in the coal towns of Northumberland County are involved in mining today, totaling one-fiftieth of the number employed in the industry in 1925. The population of the mining towns peaked in the 1920s, the same decade that production and employment peaked, although the subsequent decline in population has been slower than the decline of mining. Many towns showed no population change (i.e., their out-migration only offset the sizable natural increase) from 1910 through the Depression but then dropped nearly 20 percent in population by 1950. World War II caused the biggest drop during that period, taking men away to the armed forces and drawing both men and women to factory jobs in the industrial cities of the East. The national economic growth of the 1950s lured away another 20 percent of the population, and the decline has continued at about 10 percent per decade since then.

The period of out-migration since 1920 has been nearly as important an influence on the anthracite region as the far more colorful period of in-migration before 1920. For every inhabitant of the valley today, two people who used to live there now reside elsewhere — probably in eastern Pennsylvania or the South and West. The effects of five decades of steady exodus are clear, and the region leads the state in demographic troubles.[3] Many of the young are gone, and more continue to leave — each exporting with him or herself the tens of thousands of dollars invested in upbringing and education. For example, half of the Class of 1966 of the Mt. Carmel High School reported addresses outside of the anthracite fields at their 15-year reunion, and three-quarters of the Mt. Carmel High School students responding to a 1981 survey planned to settle elsewhere (Gebhart 1981). There are towns, like Shenandoah, where the median age is over 50, and many towns have more deaths than births.

This kind of information about the anthracite towns is important, but only at the abstract level that distance gives an observer. The numerical description, however dire the predictions it contains, does not speak to the condition of life in the anthracite towns. That must be seen from the ground.

The Region Today

The Trailways bus from Shamokin to Philadelphia starts at Sunbury, where the two branches of the Susquehanna meet well north of the coal fields. Although now in serious decline, Sunbury shows by its faded elegance — the roomy houses on the bluff and the cut-stone facade of the Edison Hotel — the wealth it once had, accrued as railhead, county seat, and wholesaler to the anthracite towns up Shamokin Creek. The bus heads toward the coal country along Route 61, through the fertile farmland of northern Northumberland County.

Everything changes at Shamokin Gap, where Shamokin Creek has cut through the pair of ridges surrounding the anthracite. The first sight of the coal region is a volcanic cinder cone, or so it appears, looming ahead at a curve, with a few dozen stunted birch trees clinging to its oversteepened sides. It is actually, as people tell with a certain pride, the world's largest pile of anthracite mine waste, called *culm*, its Welsh name (Fig. 5). Around the bend, the gap itself is half-filled by the grimy tin-covered Glen Burn Breaker, rusting beneath the broken incline up which the culm had been hauled and beside the headworks of the defunct Glen Burn Mine on the outskirts of the town of Shamokin. Closer now, one sees that the largest culm bank in the world is on fire, in eight places.

Shamokin looks to be a city, not a town, although its population is just 10,000. The housing is uniform row houses and duplexes, often with a single exuberant ornament — a curved dormer or a small domed spire — repeated block after block. Many houses are for sale or boarded up, but those that are occupied are in good repair, with neat yards and fresh white paint or siding. Shamokin is a poor town, yet the business district is healthy and attractive. Independence Avenue, the main street, supports five banks, two department stores, an ornate movie theater, furniture stores, travel agencies, restaurants and bars, and professional offices. The bus stops briefly at a newsstand, then passes five fraternal organizations on its way out of town.

Towns end abruptly in these valleys, for they are bounded on all sides by unreclaimed strip mines. All shallow coal had been deep-mined, but the coal that was left in the ground to support the roofs of the tunnels justifies stripping the same areas

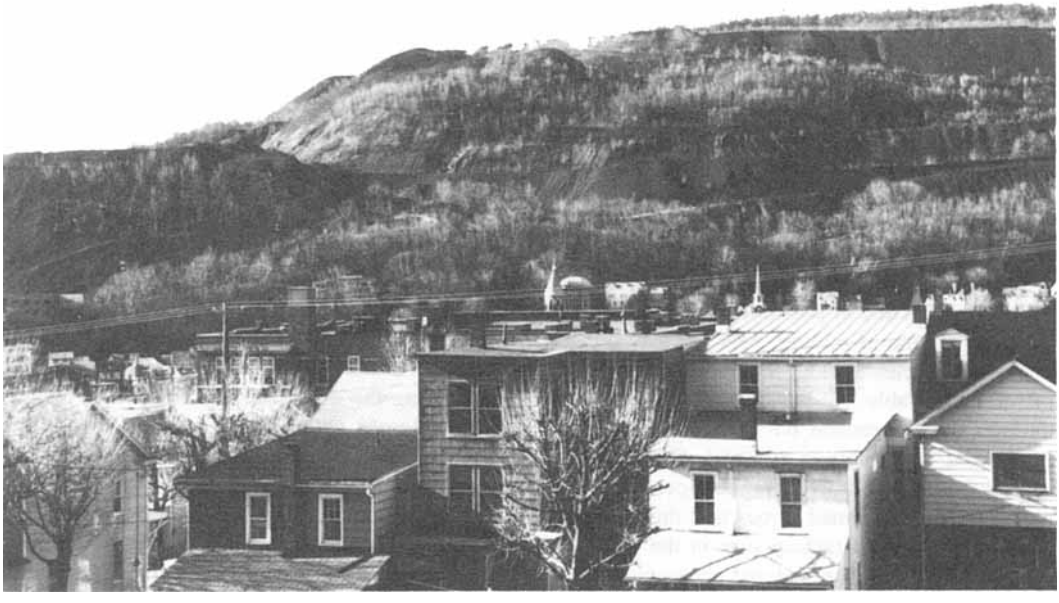

Figure 5. Shamokin and its culm bank.

and then restripping through the years as larger shovels arrive to remove more overburden for deeper coal. The rubble-strewn countryside looks chaotic from the lowlands, but pattern can be seen from a ridge. About five of the dipping coal beds are thick enough to strip, and the thickest ones are followed furthest into the ground. Each vein has been excavated along its outcrop in a V-shaped trench bounded by linear heaps of black backdirt. The land is now etched, like a raked rock garden, by the parallel grooves of the abandoned strippings as they follow the coal veins around the bends of the folded strata.

This is the most disturbed rural landscape in Pennsylvania. The backdirt from the strippings, like the culm around the old breakers, is unstable, acidic, droughty black shale that is colonized very slowly — first by lichens, wirey clump grass, and goldenrod, then by birch and locust. Black birch grows best on this churned land, but it grows in patches and loses its leaves quickly in the fall, giving the land a mangy, unkempt look for most of the year. The undermined ground is so unstable that usable building sites are scarce, and the road is fractured by subsidence. Structures slowly settle and pitch, and frame buildings lean precariously toward the road, waiting for their owners to adjust the house jacks to this month's topography. The most serious environmental problem is largely hidden: the groundwater, which has leached out iron and sulfate from the old shafts and tunnels that honeycomb the valley floor. There is little usable water in the valleys, and the orange mine water, often more acidic than vinegar, drains out through the gaps to pollute the major rivers of eastern Pennsylvania, dissolving bridge abutments on its way. Municipal water must come from a scatter of dams on the ridges around the valleys.

The next town beyond Shamokin on Route 61 is Kulpmont, with 3,000 inhabitants, two Catholic elementary schools, and 70 houses for sale; then comes the town of Strong; then Atlas; then Mt. Carmel, laid out exactly one mile square, with six big churches in a row on the way into town and three more on the way out; then Centralia, where vent pipes in the main street clear gases from the permanent mine fire beneath the town; then Ashland, with its broad, straight main street; then Girardville; then Frackville; then another 45 kilometers of the same pattern of moribund little rectilinear

mine town separated by five kilometers of strippings from the next moribund little rectilinear mine town; and then finally out of the anthracite region and back into the rich Pennsylvania German farm country through another gap in the ridges, this one cut below the town of Jim Thorpe by the Lehigh River on its way to Easton.

Postanthracite Communities

Why are the anthracite towns outliving anthracite? The towns have shrunken, but not nearly so fast as employment in mining. For all their troubles — an unattractive and unproductive physical environment and a crippled economy — these towns are far healthier than the industry that created them. In one quality, the adamant loyalty of the residents to their towns, the places are much richer than many towns more vigorous than they.

The apparent mismatch of the strength of the community in these towns with the inability of the landscape to support them is a simple result of the history: the stresses of the early mine towns created a community strong enough to resist any threat to itself, change for the worse or change for the better. That past has constrained people's repertoire of responses to the world, limiting them to those that conserve community. This third era in the history of the anthracite towns, the period of decline, has been a time when the landscape is again asymmetrical: the place is now rich with meaning — identification with the land and reasons to stay here — but impoverished of the means to support that way of life. But for the anthracite towns to exist, they still must yield both of the two parts that constitute a place: the meaning to the landscape, which establishes the reasons for people to live in these towns, and the means whereby people are able to go on about the business of living.

Meaning

It is, finally, society in its many guises that keeps residents loyal to this overtly inhospitable landscape. Society provides the two major strengths of the anthracite region: a shared, positive vision of the landscape and direct emotional support to its members.

Perception. The people of the anthracite communities have a strong and unusual image of the world that helps them justify their decisions to remain where they are. This positive vision of the landscape uses a highly selective viewing of the land, based more on its historical significance than on its present form. The anthracite towns are not old, by Pennsylvania standards, but they are deeply rooted to the land. The geography of eastern Pennsylvania, as seen from towns like Shamokin or Mt. Carmel, is sharply divided by the ridges surrounding the coal land.Beyond the ridges is another world, known only in vague form. From it comes wealth, education, and government, but it cannot be compared with the special land between the ridges. Here the visiting geographer is always made welcome — partly out of respect for education, partly because everybody is made welcome, but partly from a natural affinity: the residents know that geography is important, they know their land is interesting, and they are pleased when another recognizes it. Passersby are ready with historic or geographic hyperbole about the importance of this spot, this town, this valley. Every town has its amateur historian but everyone is a historian anyway, pointing into the hillside where an uncle worked, or confusing the traveler with directions past a breaker that burned in 1932.

Feelings of the uniqueness of the anthracite landscape are supported by an exaggerated belief in the beauty of parts of the local country. The delights of a nearby mountain valley — indistinguishable from 10,000 hectares of Pennsylvania State Forest land — are legendary in the area, for example, and an impromptu guide suggests a detour to appreciate the grassy slopes of a reclaimed strip mine. Like so much behavior in the anthracite region, this makes sense when one accepts that the visual horizon, the pair of ridges, bounds a world of meaningful experience and that it is appropriate only to make comparisons *within* that world. Compared to the mine waste and orange water, the reclaimed strip mine does look stunning. Even the ravaged coal lands themselves are appreciated: "Shamokin lies beside an ebony mountain frosted by the morning dew," wrote a college student about the vista of the world's largest culm bank smoldering above his home town. And a geologist's appreciation for a particular outcrop in an abandoned strip mine excited a nearby community to try to get the whole rocky pit made into a state park.

The same selective viewing of the world has encouraged some widely known, if not widely believed, rosy visions of the future. There are several scenarios whereby the towns will be reborn.

One recurrent vision of a future for the anthracite region, while not widely professed, has a certain charm to it: perhaps it will be possible to lure the metropolitan tourist trade into the region to appreciate the historic landscape and traditional ways of life here, as the nearby Pennsylvania Dutch towns have done so successfully. The heavily sandblasted coal region town of Jim Thorpe has begun to benefit from the Philadelphia carriage trade in this regard, and elsewhere several anthracite museums and a mine tour are drawing enough patronage to survive. But the successful commercialization of a derelict industrial landscape will depend on a finer, and rarer, esthetic than that which draws bus loads of New Yorkers to the gaudy bucolicism of Lancaster County.

Homes are controllable parts of the landscape that show clearly the meaning the people would impose upon the land. Much money and time are spent on the esthetics of houses, and most occupied buildings are well kept, although an empty six-room house may sell for $5,000. Surprising amounts of construction are going on, despite the overall poverty of the region. New houses, whatever their size, will be solid and stylish in their way, with ornamental touches of iron, stone, siding, and indoor-outdoor carpet. Space within houses is highly formalized, showing a clear distinction between public spaces (e.g., living rooms) and private spaces (e.g., kitchens). Most visibly, the yards of houses are works of art, although they may be only six meters wide; they are fenced, hedged, edged, clipped, and landscaped with flowers, bushes, and figurines. The striking contrast between an enclosed, manicured little yard and the rubbly coal lands beyond the end of town reflects the structure of this world — a division between a controllable home and the unruly rest of the universe, to which one need not attend.

Society. The attribute of anthracite towns that residents most commonly say they admire is a sense of "home," a sense of belonging which is fostered by membership in various formal and informal groups — at scales from two men leaning against a building to the entire town. Anthracite towns have a very large number of such groups. A town of 8,000 has every plausible service, fraternal, and veterans' club, four volunteer fire companies ("subsidized drinking clubs," says the city manager), church auxiliaries, ethnic brotherhoods, sports booster clubs, and civic associations, in addition to two dozen neighborhood bars. A town's calendar is partitioned, week by week through the summer, according to which church has a block party, which fire company has a carnival. Each group is exclusive on some basis, but such a large number of groups in a small town mixes almost everybody. It is organizations like these that give people — most obviously men — a sense of belonging to the community. The entire town also shares a sense of community through intertown sports rivalries, particularly scholastic wrestling and football, which can dominate conversation for days each year. The isolation of suburban life is regarded with refined contempt.

Formal social organizations include more men than women, but the bonds of family are stronger for women. Much of the society is functionally matrilocal, with men traveling far to work, from a home near his wife's family. Weddings, graduations, and funerals are times when ties of kinship are renewed within and beyond the towns. Weddings are particularly large and lavish.

The pleasure of society is the subtext to all discussions of the coal towns, because it is, at some level, the rationalization for almost everything that happens. People remaining in these towns must be, in most cases, those for whom the strengths of family and community outweigh the meagerness with which the region provides for their support.

The Centralia Mine Fire. The power of the forces that keep people in the anthracite region is shown well by Centralia, a little town beneath which a mine fire has been spreading for two decades. It is risky to write about Centralia; the rapid course of events here compounds the normal distaste that people involved in a tragedy have for curious outsiders. But Centralia demonstrates how difficult it is for an anthracite community to react to a dangerous situation until the threat is obvious and immediate, because of the powerful tendency to see only the positive parts of the environment.

In 1962 a rubbish fire in a strip mine ignited the underground mine workings near this town of 1,100. By 1980 the fire had spread through tunnels beneath more than a square kilometer of land just beyond town and showed signs of moving under the main street, despite several million dollars' worth of state and federal efforts to halt it (Robins and Associates 1980). Since that time it has become clear that the fire had broken through the barriers intended to stop it. The government has been implementing a $40 million project which is relocating nearly the entire town, in order to protect those residents threatened by the carbon

monoxide that leaks up into basements and by the subsiding ground above the burnt-out veins.

It is the conditions in 1981, before the danger was certain, that are the most revealing. At that time the underground fire was largely a potential threat, obviously present but with no clear form or direction.[4] In these regards the fire resembled the rest of the problems that people in a slowly declining region have, and the responses were very similar. Centralians' response to the mine fire was commonly to discount the danger or to restructure the problem—much like residents of a floodplain. The steaming earth prevented anyone from denying that there actually was a fire, but popular theories held the fire to be far more benign than the scientists said. Some residents described fortuitous subterranean breezes that pushed the fire east, away from town; some said mine fires were common and of little concern and that if this one were given a vent it would burn itself out in two weeks like a camp fire. Many sought to blame the government for the problem. The Bureau of Mines, long in disfavor with anthracite miners, became a "bunch of lying bastards," to be blamed for not stopping the fire and blamed again for aggravating it when they tried. Any official activity was suspect, and the government began sending three geologists to the municipal meetings of this small town.

When people did move, usually because they were sickened by the fumes, the particular value of place in the anthracite region became apparent. The money value of the houses was very low (and would have been even without steaming cracks in the front yard) but the human value was high. Most of the houses that were abandoned as the government bought out the threatened part of the town a block or so at a time had been somebody's home for a lifetime. Decades of activity had grown around the structures—the kitchen table, the chairs on the porch, the irises by the back fence—and suddenly they were gone, bulldozed into the street.

Most people who were going to leave the valley had done so long ago. Almost everybody who left Centralia moved less than four kilometers, to the next town in either direction, so they can return for church or visit the spot where home once stood. Some have even chosen to remain in Centralia as the town is torn down around them, to live out their lives in solitary houses on streets of empty lots and memories. But whatever the people do, the sense of community, which preserved such towns for so long, has been destroyed for much of Centralia, and the disruption of people's lives is permanent— even fatal to some old people. The ultimate loss in Centralia is not the housing—there are plenty of empty houses in the area—but the community that lived in those houses.[5]

The main lesson from Centralia is not in the story of a fire; it is in the story of a coal town. Until the danger was obvious to everyone, Centralia was just like 50 other anthracite towns—old houses, a flabby economy, a broken landscape, and an aging population. The fire was just one more problem, getting in line with all the others, and the response was the same: convince yourself that the town is worth staying in and prove to yourself that you can stay.

Means

How can people stay in these towns? Most of them must make considerable and continuous economic sacrifices to remain in this region which is so sparse in means, so reluctant to yield the resources of life. The residents pay a subsidy to the coal communities by accepting low wages or by traveling beyond the valley to work. The meaning of the land, the motivation to remain, is necessary for its continuation as a place, but it is not sufficient. Whatever the pleasures of a place, people must eat.

Any job is a good job in a region this poor. Managers from outside the region are surprised at the loyalty that people here exhibit toward companies paying minimum wage. The counter man at a small coffee shop told me he had quit a factory job in Trenton, where he had wept each night from his loneliness, for his current job that he has had for 17 years now. It is important that one should work; the kind of work is less important. There are other ways to underemploy oneself. One way is to run a marginal business, and the towns are full of these. Mt. Carmel's downtown is a fossil from when it served three times as many people; it has a carpet store, furniture stores, music stores, and dozens of restraurants and bars, although the town is only 8,000 people, has no rural hinterland, and is six kilometers from a similar town in each direction. Many stores stay in business because the elderly merchants own the buildings for which there is no other use, and they subsidize the stores with their labor because they, too, have little else to do. These family stores support the comparatively healthy, walkable, and safe downtowns which discourage strip development near most of these towns.

A significant piece of the economics of the anthracite towns is the transfer of money from elsewhere. The elderly population collects Social Security, of course, and federal black lung disability payments have been very good to the region; one adult male in three collects in some small towns, by a tax collector's estimate. Children from the region, now grown and moved away, also favor hometown businesses with their patronage and leave their savings in hometown banks. Savings have an important role in local economies. "Money is to be saved, not to be spent," explains a Shamokin banker. With Old World parsimony and little room or reason to grow, the poorest town in Pennsylvania has an ample supply of capital.

Some people do move into the towns of this region. Most of these are former residents returning, retirees who had left during the 1940s or professionals choosing to practice in their home towns. Despite the low incomes, the anthracite communities are well supplied with doctors and lawyers and teachers. A 35 year old is as likely to be a college graduate as a high school dropout. Because there are jobs for the unskilled and jobs for the professional and little in between, those with low aspirations can stay, those with high aspirations can return, and a middle cut is gone for good.

Commuting is a central fact of life in the anthracite region. Some commute away from wife and family for four and a half days a week to work in a city and some who have moved away commute back most weekends to visit friends and relatives. Many drive to Harrisburg and beyond (a hundred kilometers and more each day) to work for the state, in mills, or for utility companies. And returning retirees think of themselves as people who commuted away for three decades, showing the lasting fondness that many have for the anthracite region. A former plant manager from Reading told me how his employees from the anthracite fields would form "Coal Cracker Clubs," and after 15 years would still differentiate "going to the house" after work from "going home" (back to the coal fields) for the holidays.

What is distinctive about the anthracite communities is the combination of the residents' will to stay in this disturbed landscape and their willingness to pay the price which that is now costing them. This land is wounded by its history to an extent that few places in America are, yet the inhabitants are exceedingly fond of the region—or at least of the parts they can see. People get by, maybe too well, because they are so good at getting by. That skill is their heritage from the miners and the miners' wives in their lineage.

The Future of the Anthracite Towns

Towns are not static in means or in meaning. Although anthracite towns are also depressed towns, awareness of this second meaning has been sorted out and exported with the region's emigrants for 50 years. But year by year more people must weigh the negative aspects of the region above the positive, and year by year the overall meaning of the region is changing. The means change, too. The prognosis for the region's economy is poor, despite the guarded optimism that many express. More coal remains in the ground than was ever mined, but if the industry grows again the towns will be worse off, not better, from the renewed stripping. Coal will never again be a big employer, and one proposal shows the western end of the Shamokin basin excavated to sea level in an open pit, like a copper mine, with a gigawatt mine-mouth power plant sitting in Shamokin's suburbs (Stefanko 1981).

The biggest enemy of the coal towns is their own demography: they are running out of people. The current rate of shrinkage of 10 percent per decade is deceptive. The 1940s emigrants returning to retire serve to mask the ongoing hemorrhage of out-migration, although that too will soon slow as the supply of 18 year olds dwindles. The revealing statistic is median age, which is increasing rapidly, at seven months each year in some towns. As many as one-fourth of the people will be past their three score years and ten by the end of this decade, and populations will start to crash. Death will sap the towns as fast as emigration ever did, but with a difference. Seventy year olds hold more wealth than 20 year olds, wealth that will leave as they die: inheritances will drain away cash, and the already-sad real estate market will be glutted as homes are sold off. A graceful ending is unlikely. Most towns are already oversized for their functions; many do not now have the critical mass of consumers to continue doing business, surviving only on the old shopkeepers' time. Few new businesses will move in as this generation passes, and the downtowns will empty (Fig. 6).

Many of the towns face a break point in the near future, a change in kind from the decline of the past decades. At some point there will not be enough stores to supply goods, there will not be enough taxpayers to support schools, there will

Figure 6. The slow decline of the Mt. Carmel business district.

not be enough parishioners to maintain churches. At some point the cost of remaining in the anthracite region will become high indeed, at the same time that the rewards are diminishing. Then the exodus will accelerate; the decline will be even faster. Except for the great pain Centralia's fire caused its residents, that town may be lucky in its way, to have fallen to acute failure and been spared the slow wasting that is consuming its neighbors. In Centralia the government will pay to haul away the abandoned houses; elsewhere they stand empty, monuments to the end of a way of life.

Conclusion

The anthracite region shows clearly the duality of place, but also the link between the two aspects. The parts—the meaning of place from its history and the means within the place for its future—have different origins and can have entirely separate manifestations, and yet they draw each other along. It is the lag between the two kinds of changes that can be most destructive. In the anthracite region, the meaning of the landscape seems a bad habit left from other days, a cruel memory now that the means to support life are nearly gone.

Other places in the U.S. are undergoing irreversible decline as well, and many other people—perhaps most of us—linger on landscapes now beyond control. The farm towns of the Great Plains, the mill towns of the Ohio Valley, and the centers of our big cities are changing permanently, while residents try to live as they have before. In each of these places, as in the anthracite region, one witnesses the demise of a landscape that had nurtured families for generations, being destroyed by distant and abstract changes in economics. The declining towns of the anthracite valleys differ from those other dying places primarily in the clarity of the process; little else is happening here except decline. That clarity should help us understand decline in general.

And what we see in the hard-coal valleys is that it is far harder to end a landscape than to start or despoil one. There is much cost in the decline of a town, and it is borne by the inhabitants, probably already old and poor, who have stuck with the place. The history of a landscape—rise and fall—cannot ever be symmetrical. Emigration is far more traumatic than immigration; reasons to leave, however good they may be, are less immediate than reasons to stay. Land retains its meaning long after the means are exhausted.

And life goes on. People build new houses in Mt. Carmel, ranch houses right downtown. It has never been stylish to look too hard at the future here, and the quitters have already quit. The paradox underwriting the slow fall of the anthracite towns is this: the harder a town's past has been, the stronger its roots are. "The environment exacts a price for the survival of the fittest" writes Jacob Bronowski (quoted in Schmidt 1983), "it captures them."

Acknowledgments

I am grateful for advice, editorial assistance, and help with the figures from several of my friends.

Notes

1. Coal production and employment statistics come from the Pennsylvania Department of Environmental Resources (1984). Population and income statistics are from the U.S. Census of the appropriate year or from 1980 when no year is given.
2. But the change of scale costs this analysis the concreteness of Pred's time-geography work. Place is an individual's property, and yet a work at this scale must generalize. The unsatisfactory result is a synthetic aggregate: a place belonging to no single individual and therefore a place belonging to no one.
3. Lewis (1972) presents a detailed picture of the changes that affect a small town in Pennsylvania as it loses population.
4. The information in this section is drawn from numerous newspaper accounts and from interviews with Centralia residents.
5. Erikson (1976) reports a similar dependence by the people in a West Virginia coal town upon the invisible ties of community in his sensitive portrayal of the aftermath of the much more rapid tragedy of the Buffalo Creek Flood. Kroll-Smith and Garula's social history of the Centralia mine fire (1985) report the assaults from this event on Centralia's sense of community. DeKok (1986) has written a book-length history of the fire from his perspective as a local journalist.

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