When Will We Ever Learn: The Lesson of Steel

By David Houston

And the Wolf Finally Came: The Decline of American Steel
By John Hoerr

The Decline of American Steel
By Paul A. Tiffany

PITTSBURGH, the iron city, the steel city, the smoky city, and more recently the “No. 1 City” has epitomized during the last century the capitalist processes of expansion, transition, and decline. A leader in industrial expansion in the late nineteenth century, and now tops in industrial decline, it reveals most vividly the explosive and erratic development of capitalist accumulation in a regional setting.

Once the greatest steel producing center on earth, the area now is a graveyard of great steel works at Homestead, Duquesne, McKeesport, Monessen, Aliquippa, and in the city itself. True, a lot of steel, as much as 10 million tons, is still produced here, but to the hundreds of thousands of people who depended on steel

directly or indirectly, this is little consolation. Indeed the cup is two-thirds empty, and it will never runneth over again.

Historians, journalists, politicians, social scientists, and engineers are all intent on explaining this phenomenon at international, national and regional levels. What happened may be a “matter of fact,” but each explanation marshals only a subset of those facts and operates at a particular level of abstraction. Each analysis brings along its special framework or paradigm: 1) it is simply the result of the operation of competitive market forces; 2) it is the result of unavoidable mistakes made by institutional actors; 3) such convolutions are inevitable because of the contradictions contained in the way society is organized. There are many more. Thus an explanation is not so much a scientific undertaking as an essay in persuasion. The books reviewed here are just that, and this review itself elaborates a different perspective.

The Decline of American Steel
Tiffany’s book grew out of his doctoral dissertation at the University of California, Berkeley. He says the decline results from the intractable positions and behavior of the three great actors: industry, especially U.S. Steel (later USX); government; and labor, represented by the United Steel Workers. Although he briefly discusses the formation of U.S. Steel in 1901 and the industry’s history through World War II, the core of his analysis is post-war, to 1960.

In Tiffany’s view, both history and ideology form the basis for the actors’ differing and conflicting views and goals. Industry expected to make all its own decisions such as price setting, relations with foreign producers, determination of capacity and investment, and relations with labor. Because of the special problems of high fixed investment and cyclical demand, industry had to set, and government condone, the system for setting stable prices. Excess capacity, especially in cyclical downturns, was a serious problem.

The experience of the Great Depression made the industry cautious toward expansion. Government intervention to help the industry, such as increased tax write-offs and reduction of foreign competition, was necessary and proper, whereas interference in labor relations or price determination was evidence of creeping socialism. The industry’s position reflected both an arrogance based on its size, power and history, paranoia stemming from remembrances of over-capacity and low profits, and the increasing nationalization of steel industries in other industrialized countries.

In contrast was the federal government’s perception and agenda. Anti-monopoly sentiment saw U.S. Steel as a source of excess power and profits and as a ready candidate for Sherman anti-trust action. Increased capacity was necessary for both World War II and Korea and, according to government studies, for increased consumer demand. Throughout

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this period both monopoly and capacity were questioned in government hearings. Price controls during WW II and fear of inflation after the war formed the basis for the government's opposition to steel price increases. Since prices were not set competitively it seemed appropriate for the government to influence their determination. The government's general policy of loosening trade restrictions did nothing to impede the growth of steel imports. Indeed, foreign aid to industry in friendly nations to halt or oppose the spread of "communism" often went to steel companies whose expanded markets included the United States.

Though theoretically Tiffany treats business, government, and labor as equal participants in the steel drama, labor plays a secondary and reactive role in his analysis. The relatively young steelworkers' union pushed for and usually got higher wages. Their bargaining pattern reflected the structure of the industry, bargaining first with U.S. Steel and extending wage agreements to other firms. Industry-wide bargaining was formally adopted after 1956. The union had little power outside its confrontations over compensation, work rules and the usual bread-and-butter issues. Its main weapon was the strike or threat thereof, and but even these displays of power occurred in a circumscribed domain. It had no real or consistent policy on such issues as inflation, over-capacity and foreign steel.

Tiffany suggests the inability of these three major actors from 1945 to 1960 to reach harmonious and cooperative agreements permitted the relative ascendancy of foreign producers and decline of American producers. Several elements entered into these conflicts and failures. Central was the struggle over wages in a strike or strike-threatened environment and the concomitant struggle between industry and government over prices. Often in the name of national emergency the government intervened to declare a cooling-off period under Taft-Hartley, to conciliate or arbitrate, or in some cases even to try to take over the mills. This dynamic led to the "wage-price spiral" in which wage increases were often followed by even larger steel price increases. This short-run solution achieved through hard and aggressive bargaining and conflict did little to address the long-run problems of steel: costs, productivity, technological change and increasing world competition.

Government and industry were almost always at odds over capacity. To get companies to expand capacity for WW II the government contributed $1.1 billion to build plants, and after the war sold them to private companies at greatly reduced values. Steel capacity rose from 80 million tons in 1940 to 150 million in 1960. (Today it is slightly more than 100 million tons.) Thus the major expansion was in the 1950s, but it was not especially well conceived or carried out. The add-on or rounding out of existing facilities in the 1950s was a cheaper approach to expansion but did not lower unit costs as much as would have a new plant or "greenfield." Also the added capacity was in open hearths rather than more efficient basic oxygen furnaces used by European and Japanese producers. Foreign producers also had lower labor costs.

A final element, the impact of foreign steel production on the American market, was not clearly perceived. None of the actors realized how rapidly and competitively foreign steel would develop. Labor's short-run bread-and-butter unionism added to the problem. The industry could not conceive of a competitive pricing strategy and basically wanted only protection. The government actually helped foreign steel through its aid programs. All of the failures and frustrations were realized in 1959 with the longest strike in history, government intervention which did not attack underlying problems, and imports of steel exceeding exports for the first time.

Tiffany offers his book and analysis as a lesson of history. The contentious relations and the unwillingness to form an organizational structure in which the parties could discuss and examine their different views and needs make all three responsible for the decline.

And the Wolf Finally Came

John Hoerr's book ranges over so many topics that it is hard to follow. It is in fact several histories running concurrently: of the steel industry; of the Mon Valley; of labor relations in the industry; and of labor participation in general and in steel. The time frame also is varied, but the critical period is 1982-87. Hoerr is a journalist and the book's style reflects it. The work is meticulously researched, including interviews, phone conversations, union and government documents, and a great range of secondary sources. The book is also a labor of love about labor, steel, and the Mon Valley, especially McKeesport, where Hoerr grew up.

The book is excessively detailed. Specifics of conversations, notes taken, phone calls, with times of day as remembered by many parties to a meeting or negotiation will intrigue the avid reader, but they often obscure the main points. Still, it is all there, packed into a 620-page volume (not including 54 pages of fine print notes).

What is Hoerr's main theme? Steel's decline was the result of the lack of trust and the adversarial relations between labor (USW) and industry (primarily USX) which had evolved from the beginning of their relationship. When cooperation became imperative, in the 1980s, it was not possible. A fail-
ure of industrial relations yielded the industry’s demise, and it could have been avoided through labor-management participation starting on the shop floor. (Unfortunately Hoerr’s thesis is limited by his failure to discuss more fully the history of steelmaking prior to U. S. Steel. As I discuss below, cooperation and worker shop floor control did exist in the late nineteenth century but were abolished under the pressures of increasing capital accumulation.)

Although the historical chapters are a small part of the book, they provide a basis for understanding this failure of industrial relations. Ultimately competitive pressures in steel required new relations, but it was also true that the old relations contributed to the weakening competitive position of American producers. For a long time management viewed labor as just another "input," and management "rights" had to be protected. This vision restricted the acceptable range of negotiation. Introduction of scientific management early this century had further rationalized and reduced workers’ shop floor decisions. Labor, once organized, had little chance or inclination to contest this view. Indeed, in an effort to eliminate inequities, the union agreed with management on the classification of all production and maintenance jobs. Both sides jealously guarded their "rights," and so worker initiative was neither offered nor rewarded. Labor negotiations took on the oligopolistic shape of the steel industry with industry-wide bargaining. The union itself became hierarchical, bureaucratic, occasionally corrupt, and certainly removed from the rank and file. The main form of interaction between workers and management was struggle and confrontation, either physical in the form or strikes, or verbal in the form of negotiation. From 1946 to 1959 there were five strikes and negotiations in 10 of 11 years. The effect of this structure and behavior on steel productivity was inevitably limiting.

Industry made a series of bad decisions or judgments: 1) large investments to control ore which later proved to be redundant; 2) overly optimistic forecasts of future demand; 3) organizational rigidity about abandoning vertical integration, which limited flexibility, and price setting, which limited competitiveness; 4) perhaps most importantly, increases in capacity in the 1950s with the wrong technology (see above); and 5) failure to foresee the rise of mini-mills which today account for up to 20 percent of U.S. production and for the increased use of steel substitutes.

The nail in the coffin, Hoerr concludes, was the experimental negotiating agreement (ENA) adopted in 1974 giving workers at least a 3 percent wage increase annually, plus a cost-of-living adjustment (COLA). From 1972 to 1982 hourly wage rates rose 180 percent while inflation rose only 130 percent. The industry, trying to avoid costly strikes and especially the loss of markets to imports during strikes, bargained for wage costs that far outstrip productivity gains.

According to Hoerr, by 1980 the competitive position of the U.S. industry on costs and productivity was weak, and only a dramatic shift in relations between labor and management could change it. He sees the potential for labor-management cooperation to significantly increase productivity and competitiveness, but the 1982-83 negotiations and the 1986 lockout reveal that such potential was indeed limited. Hoerr’s discussion of recent worker participation schemes is extensive and well-documented, describing experiments in steel and other industries here and abroad, including various USW proposals in its early years from 1937 to 1946. However, in the face of a turbulent management, these efforts bore little fruit, and the union was obliged to turn to bread-and-butter issues. It was not until the 1980s that these ideas were revived in steel and then often by companies near bankruptcy.

Worker-management cooperation can occur on the shop floor; in the plant or firm; industry-wide; or at the national level. Hoerr emphasizes the shop floor model. To prevent participation from simply being a disguised form of speed-up, workers must: 1) share gains from increased productivity; 2) not lose jobs because of the participation scheme; 3) be involved in every level of the planning and process. But few people in the steel industry shared Hoerr’s enthusiasm for the idea: the union and management simply could not transcend their historic differences and behavior.

With the potential to resolve conflicting positions only marginal in the 1982-83 and 1986-87 negotiations, addressing real problems was impossible, and so the parties only haggled over the size of the give-backs. In 1982, the year of the last industry-wide bargaining contract, the local presidents (the rank and file does not vote on the contracts in the steel industry) twice defeated proposed contracts, including one supported by the USW leadership. The union eventually took significant wage cuts but less than half of what management originally demanded.

Industry-wide bargaining had already begun to break down with the call in 1981 from smaller steel producers for separate concessions. This occurred again in the late stages of the 1983 contract, over cost reductions, participation schemes, rules about contracting out, and profit-sharing. By mid 1986 USX remained the only major producer without a new contract, with the size of the wage cut and contracting out the key issues. The dispute was finally resolved in
late January 1987 with neither side feeling victorious. Then USX announced further plant closings as a final blow, leaving company-union relations at a historic low.

Hoerr’s descriptions of the Mon Valley, and his affectionate detail about its history, people, industry, terrain, towns, football, etc., show steelmaking’s impact on the valley and the effect of its loss. A continuing theme is the strong sense of community and the loyalty people felt for each other and their institutions. Many activities are described: shopping, picnicking, striking, drinking, loitering, family life, and more. These chapters provide solid insights but are more a backdrop to the major theme and analyses of the book, and consequently do not provide a thorough and coherent history of the region. He bases his version of life in the late 1930s and 1940s on his experience of the strengths and unity of that life, but that romanticized view must be reconciled with other descriptions and studies with less charitable conclusions.

To avoid repetition of failures like those in steel, Hoerr concludes, worker participation and reformed industrial relations are necessary. Further, an independent labor movement is important in realizing these changes in a free, democratic, competitive society.

Both authors see the decline of steel as an avoidable mistake which could have been resolved if only the major parties had cooperated amicably. They see the behavior and perspectives of business, labor, and government as malleable and changing. This analytic view is certainly popular. It emphasizes the flexibility and choice of agents within the social system. It displays a certain nostalgia for “roads not taken” and “chances missed.” It often sees the “mistakes” in history and offers fewer in the future if we just examine the latest example. Such a paradigm often must operate at the empirical level, the “level of appearances,” in order to maintain the correctability and progressiveness of the system. The need to affirm the positive aspects of society, to avoid concluding that something is fundamentally wrong, as well as powerful forces for positive socialization, all encourage analyses of this kind.

But this is not the only view. Many historians believe that social outcomes are conditioned and restricted by the way society is organized. While this is not to argue that a particular outcome is impossible, it suggests that a given class of outcomes is very unlikely given a particular set of social relations. A specific version of this perspective emphasizes class relations as critical: relations of property; economic decision-making and control; and distribution. Or more colloquially: Who owns? Who decides? and Who gets? An analysis of class relations reveals who directly produces economic value and who appropriates that value. The steel industry provides a good example of such relations.

In capitalism, workers produce value and capitalists appropriate part of it, sometimes called surplus value. The relations of production specify generally that capitalists have a right to own the means of production, to dispose of them as they please, to control the process of production, and to appropriate surplus value to the extent possible. Workers have a right to own
their labor power which they may sell to any capitalist, and to own the “value of their labor power,” which is on the average over time the value necessary to reproduce them as a class. However, they are always eager to inflate the value of their labor power and thereby deflate surplus value.

Two further characteristics of these relations should be specified. First, capitalists must ensure that they actually get work out of the worker. They have purchased the potential for work, but they must extract labor, actual work. There are of course a variety of incentives — some harsh, some benign — which they may use. Second, capitalists must add surplus value to their capital and recommit it to production. This is not an individual psychological need among business owners but rather a systemic requirement if capitalism as it has historically developed is to continue.

This simple description of capitalism has certain implications. Perhaps the most important apparent is struggle and antagonism resulting from direct conflicts over the division of surplus value and indirect ones over the extraction of labor from labor power. The drive to accumulate has several critical effects. The first is the continual revolution in the forces of production: raw materials; human labor skills; mechanical means of production; technical knowledge; and administration of work. These undergo constant change at what seems an increasing rate. A second factor is competition, with each capitalist entity trying to eliminate or absorb the other. Finally this accumulation produces crises, ruptures in the process itself. Expansion is not a regular advancing process but a contradictory one in which the very expansions lead to future contractions. Some are large, some small, some sectoral, some regional.

This model is admirably suited to understanding the history of the steel industry in the Pittsburgh region. What follows is a sketch of certain features of that history which seem relevant.2

The history of steel is marked by the process of accumulation, competition leading to a revolution in the forces of production, concentration and centralization of money and power, and finally a shift from competitive capitalism to monopoly capitalism. In 1863, Andrew Carnegie started with a modest investment in an iron forge. By 1901, when the Carnegie Company was sold to form the centerpiece of U.S. Steel, it was worth $500 million. In this period

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Carnegie reorganized production, adopted new technology and labor processes; developed elaborate vertical integration including ore, coke, transportation, iron, steel, and finishing mills; bought out competitors; and finally forced the formation of U.S. Steel itself by threatening to enter the wire and tube business and thus set off a competitive price war. U.S. Steel’s formation represented the restructuring of steel into a monopoly form, one which has led to many of the problems Tiffany and Hoerr discuss. Competition, though “natural” to the system, is too destructive and must be contained. Eighty years later we see that this form has reached its limits of expansion: the transformation of USS to USX; the rise of the mini-mill and other more flexible, less integrated production forms; price competition; and individually negotiated contracts.

This evolution was paralleled by the development of labor. All productive developments attributed to powerful nineteenth century entrepreneurs are in reality the result of the social productivity of coordinated labor power. The steel, the mills, the mill towns, the life led by the vast majority of people were not produced simply by wealthy industrialists’ money but rather by the labor power of millions of skilled and unskilled workers. Without this vast supply of workers, transforming America into an industrialized country would not have been possible. Yet, it is an achievement popularly attributed solely to capitalists. And it is vital to understanding our political economy that we see the role each class played.

In the case of steel workers, lives, customs, communities, indeed whole societies had to be uprooted and alienated. Gathering great masses of labor power to work in the mills in the Pittsburgh river valleys meant scouring the rest of the country and Europe for footloose workers willing to endure grim living and working conditions. Overcrowding, disease, separated families, unsafe factories, low wages, little job security, social isolation, and negligible public services were all part of the worker’s life in this turbulent era. It is important not to romanticize the making of steel and the steel worker.

A brief examination of the early history of the labor process in steel helps to illuminate the worker participation which Hoerr sees as a desirable and necessary part of modern capitalism. In the late nineteenth century steel was made through the cooperation of owner and laborer.3 Plant owners provided the means of production and steel was made by teams consisting of skilled workers assisted by helpers. The team was paid on a price per ton basis and the work-
ers agreed on how to share the earnings. The skilled workers generally were members of the Amalgamated Association of the Iron, Steel, and Tin Workers and through their union controlled the entire process including the pace of work. There was even profit sharing in that payments were made to the team on a sliding scale which varied with the market price of the metal. This cooperation carried with it a different definition of workers’ rights. A large part of today’s “managerial prerogatives” were firmly in the control of workers.

By 1890 this cooperation was more than most owners could bear. Increased demand and competitive pressures required greater productivity and output. From the steel capitalists’ point of view this required a speed-up and a firmer hand on the production process. But the control of the work process by the skilled workers, with their concerns for safety and the quality of work life, impeded this. The solution was obvious: eliminate the contracting system under their control, and their union as well. This was the central issue in the Homestead Lockout of 1892. Carnegie and steel owners were victorious, and in the next two decades the process of steelmaking was radically changed and the treatment of workers became a model for other industries. Machines were freely substituted for human labor. Skilled laborers and their wages were reduced and their work was simplified. The gap between skilled and unskilled labor was narrowed. Job ladders were introduced. Piece work and bonuses became common. All of these had the effect of alienating and homogenizing labor. In steel, both carrots and sticks were used, but the purpose was to put control firmly in management’s hands.

The intervening years have not significantly altered this relationship. The steelworkers’ union, though it organized millions of formerly unrepresented workers, could and did do little more than validate the companies’ practices. Job ladders and classifications keep workers competing with each other. The notion that an industry — and this is true of capitalistic industry in general — which spent so much time and effort de-skilling workers and taking control of work and the knowledge of work, will now turn to cooperation and an honest sharing of knowledge and power is, in my view, naive. Cast adrift in a sea of bankruptcy or its threat, firms may grasp for any life preserver, but the ultimate solutions to competitive pressures are much more likely to be lower wages and unemployment — in short, David Roderick’s “economic hammer” held no doubt by the invisible hand.

Hoerr’s thesis would have us believe that overcoming the alienation of labor and a worker’s inability to realize herself through productive activity — is possible under capitalism. But the contradictions within the system do not make one optimistic. The system’s basic tenet requires owners to accumulate capital, and not simply a “fair share,” but as much as possible. American workers more and more compete with third world workers and their standards of living. Billions of Asians, Latin Americans, and Africans are a sizable reserve army of labor likely to increase pressure on the American worker. In the face of such competition, owners are less likely to see the need for cooperating with workers.

Hoerr’s suggestion that cooperation on the shop floor could have altered the course of the steel industry’s decline flies in the face of the evidence he presents. The historical antagonism between the two great forces in steel was no “mistake.” It was and is the result of both pursuing their reasonable goals within the system. Nor was it “shared responsibility.” Within the confines of modern capitalism, workers and their groups can only respond to whatever opening management provides. The decline of the American steel industry is the responsibility of those who own and run it.

Steel owners started the century breaking the union and eliminating cooperation on the shop floor. The industry fought unionization for almost four decades, and then when it came, it jealously guarded “managerial prerogatives.” Worker participation would have threatened management’s decision-making domain. Programs of “scientific management” had so de-skilled workers that it was doubted they would have anything of value to contribute. After the war big business agents encouraged an anti-socialist and anti-communist crusade which eliminated many progressive labor leaders who favored greater shop floor democracy. Many companies attempted to dominate the political life of mill towns and the region, particularly influencing the educational system wherein the schools prepared one to work in or be married to the mills. The response of USX to the industrial decline it orchestrated has been a hard and brutal reorganization of the mill valleys and the region. The failure to cooperate was no “mistake” but rather a highly probable outcome of our social system.

Cooperation may be more
imperative in modern production, but it also may be more difficult and less feasible as competition accelerates changes in technology and work processes. The relationship between socialization, education, and work is a critical one, and cooperation in work would require a radically different educational process, one certainly lacking in steel mill towns. It is questionable whether democracy on the shop floor can develop without social democracy at the societal level, and certainly the United States is a long way from that. A final and most threatening implication of work participation may be worker ownership. The more power workers gain in the process of production, the more obvious it becomes that ownership per se should not confer any special entitlement to part of that production. It is not a lesson that many powerful institutions are anxious for workers to learn.

If Hoerr’s story focuses on the shop floor — the micro-level — Tiffany looks to the large business, labor, and government institutions — the macro-level — for explanations. His theoretical framework is eclectic and unclear. Tiffany is circumspect in claiming that things might have been different, but, lacking a class analysis, he is more optimistic about alternatives and learning from history, especially in steel.

What we might learn is the need for a broad industrial policy and industrial advisory boards representing all the major players. At this time, however, Tiffany does not see such a policy as likely. One avenue for insight is how capitalism has resolved conflicts between owners and workers: some societies have turned to authoritarian or fascist tactics including the army and secret police (commonly used in Latin American and other developing countries, and occasionally in advanced capitalist countries); social democracies, popular in Europe, have attempted to establish an agreement or social contract between the most powerful elements of capital and labor; the United States relies mostly on substantial unemployment for enforcement and has never veered far into social democracy or fascism. Regardless of one’s evaluation of these methods, they are not simply there for the choosing. Historical conditioning affects a myriad of factors that make a particular form more or less possible at any given time.

The steel industry is an excellent case in point. While one might imagine a social democratic solution that would have been more efficient and more humane, it is, as Tiffany realizes, quite ahistorical to suggest it as an imminent alternative. The final resolution of the steel crisis followed the more traditional U.S. pattern: plant closings, layoffs, unemployment, with limited protection for workers from the vicissitudes of management’s choices.

One final topic should be discussed: the development of capital accumulation both temporally and spatially. There is always the desire and tendency to look at the period of growth both generally and regionally as the normal, happy time. But decline and stagnation, too, are major partners in the process. It is possible to argue that the roots of the decline of Pittsburgh steel date from the formation of U.S. Steel in 1901 or shortly thereafter, and that the decline of America’s steel industry in general was rooted in the internationalization of capital after WW II.

Industries and regions rise and fall. The history of capitalism since the middle of the sixteenth century has produced triumphs and tragedies too numerous to recount. The working people of Pittsburgh and the Mon Valley have seen their share of both, but they have never controlled the process of change. They were always hostage to uncertainties of accumulation in steel. Now the curtain may descend on the drama of steel in Pittsburgh, but how will the next act be different? Different costumes, different sets, but what else will change?

1 The proportional decline of the steel industry in Pittsburgh can be measured in many ways. Today’s output is roughly one-third of Pittsburgh’s maximum historic level. The region’s share of U.S. output also was once close to one-third, while today it hovers around 10 percent. Employment has declined most sharply from 120,000 in the late 1940s to 82,000 in 1978, to less than 20,000 today.
2 A more complete discussion can be found in my article, “A History of the Process of Capital Accumulation in Pittsburgh,” Review of Regional Studies 9 and 10, 1979-80.
5 Houston, op. cit. 9, No. 3, 81-82.

By Margaret Albert

FROM its foreword to its finale, the 50-year history of the Blue Cross of Western Pennsylvania describes the exemplary role played by a voluntary