STEELWORKERS, Photographed by Pittsburgh Survey

Courtesy of the Pennsylvania Historical and Museum Commission
THE PITTSBURGH SURVEY, 1907-1914: FORGING AN IDEOLOGY IN THE STEEL DISTRICT

BY JOHN F. McClymer

THE PITTSBURGH Survey1 is a storehouse of information concerning the impact of industrialization upon working and living conditions.2 It is also a record of the people who undertook this unprecedented investigation. As such, it was a representative undertaking of a new professional middle class3 created by industrial capitalism to calculate and manage the effects of social change. The survey drew its staff from settlement houses, charity organization societies, ethnic associations, and universities. Later they would be recruited into governmental investigative and regulatory commissions, private foundations, additional surveys, and professional social work agencies. Fundamental to such a pattern of career development was an emerging technology1 of measuring and mediating social change familiar to us as social engineering.

Social engineering, in the first instance, sought to identify the

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2The Pittsburgh Survey was published first in three special, monthly issues of Charities and the Commons beginning January 2, 1909, and then in Paul U. Kellogg, ed., The Pittsburgh Survey (six volumes, New York: Charities Publication Committee, then Survey Associates, Inc., 1910-1914).

3For an enlightening discussion of what passed for knowledge prior to the survey, see Robert Bremner’s From The Depths: The Discovery of Poverty in The United States (New York, 1956). The best of these early attempts, Robert Hunter’s Poverty (New York, 1904), was fragmentary and impressionistic. The survey has become a standard source in urban history. See, for example, Roy Lubove, Twentieth Century Pittsburgh: Government, Business, and Environmental Change (New York, 1969), 6-16, 19-60.


5This use of the concept of technology to refer to any organized, rationally directed procedure is based upon James D. Thompson, Organizations In Action: Social Science Bases of Administrative Theory (New York, 1967), 14-24.
nature of a new America that had suddenly become industrial, urban, and polyglot. Pittsburgh, with its mills and mines, its congested central city, and its enormous immigrant population, displayed these phenomena in their starkest forms. Similarly, the Pittsburgh Survey clearly exemplified the elements of the new social expertise, the sorts of institutions that supported the new experts, and the type of reform they espoused.

The roots of the survey movement in the United States lay in the organized charitable societies. In 1905 the Central Council of the New York Society established a national publication committee “to get at the facts of social conditions and to put those facts before the public in ways that will count.” Specifically, the committee was to initiate “important pieces of social investigation not undertaken by any existing organization.” The society’s journal, Charities and the Commons, later to become the Survey, would publicize its findings.5

Edward T. Devine, then the editor of Charities and the Commons and later one of the founders of professional social work, led a ten-month-long investigation of housing conditions in Washington, D.C. His report was sent to Congressmen, civic leagues, newspapers, and magazines and led to some concrete, if limited, reforms. Congress established a juvenile court, passed a bill for the condemnation of unsanitary housing, which had been pending for nine years, and President Roosevelt appointed a Homes Commission.

Encouraged by this success, the publication committee accepted the invitation of Mrs. Alice B. Montgomery, the chief probation officer of the Allegheny County juvenile court, to make a similar study of Pittsburgh. The committee solicited the aid of William H. Matthew, the head worker at Kingsley settlement; and he induced Mayor George W. Guthrie, H. D. W. English, president of the local Chamber of Commerce, and Justice Joseph Buffington of the circuit court to act as references. The Pittsburgh Survey began in the winter of 1907 with a $1,000 grant from the committee and some $350 in local contributions. The bulk of the financing, some $26,500, came from the newly founded Russell Sage Foundation.6

6 Ibid., 496-498.
The staff of the survey formed an assemblage of experts. Paul U. Kellogg, its director, was a journalist who subsequently edited the *Survey* for over thirty years. John R. Commons, a professor of political economy at the University of Wisconsin and an advisor to Robert LaFollette, donated his services and those of two of his graduate students to the study of labor conditions in Pittsburgh. The staff also included immigrant leaders like Alois B. Koukol, secretary of the Slavonic Immigration Society; public health officials like Ernst J. Lederle, twice Commissioner of Health for New York City; and settlement workers, such as Robert A. Woods of Boston's South End House and Allen T. Burns of The Commons in Chicago.

Such a group had a dialectical relationship with the subject matter. They were to investigate just those phenomena which had made their careers possible while their occupations involved just such an investigation. As a result, what they found to be true of Pittsburgh was true, in some sense, for other places. Pittsburgh was a microcosm of the new industrial America. "We felt," said Kellogg, "that Pittsburgh bore somewhat the same relation industrially to the country at large that Washington did politically." Pittsburgh also symbolized the future, their future, since their profession consisted in identifying and controlling social forces which made Pittsburgh what it was. Thus both their descriptions and prescriptions have an ideological as well as an intellectual referent. This does not call into question the accuracy of their observations. Their professional lives depended upon accuracy. At issue is the question of how members of the new social professions learned to express their class interests rather than why certain members of the new middle class chose the new social professions. Thus this description of the development of the ideology of social engineering does not pass judgment upon the sincerity of the social engineers. Indeed, an ideology is, by definition, sincere in that it represents the categories through which social reality is perceived and comprehended.

Pittsburgh, they found, verged on chaos. John R. Commons, in an uncharacteristic burst of purple prose, declaimed, "First Prince, then Pauper; overwork, then underwork; high wages, no wages; millionaire, immigrant; militant unions, masterful employers; marvelous business organization, amazing social dis-

organization. Such are the contrasts of 'Pittsburgh the Powerful,' the 'Workshop of the World!' These contrasts became the principal data about industrial society, and accounting for them became the principal task of the survey.

The brute fact of the city fascinated and repelled them. America had been a predominantly agrarian society, and the virtues of the land had always figured prominently in American social thought. Now those virtues counted for naught, especially to the social engineer whose professional commitments were perforce to the city. Paul Kellogg was uttering a commonplace of the day when he observed that "in all history, cities have never reproduced themselves. They draw on the country districts to replace the stock they burn out." For him, it was a commonplace fraught with opportunity as well as danger. "The mere fact of aggregation" would make the old relationship impossible. A third and more of the population were coming to live in cities. Therefore, "it becomes vitally important that city people live well, else the race lapses." The opportunity resided in the implicit premise that it was the new professional who would teach the people to live well, for urban living in the twentieth century would differ from earlier patterns. "The life to which these people come," observed Kellogg, "is different from that known to any previous generation" while their work "is not the work of their fathers." For expert and non-expert alike, American society had reached a turning point in which the city and the homestead had exchanged roles: "the city is the frontier of today."

The lure of the city rested upon its new industries, and the combination of new populations and new factories created both great wealth and an unmanageable crush in the central city. This congestion, according to Robert A. Woods, "brings out, in a peculiarly acute way, the breakdown of many branches of the social administration of the city." It led to inadequate housing and roofing, to outbreaks of typhoid fever and tuberculosis, to the crowding of machinery so close as to cause accidents and disease. It implied, moreover, the need for housing and health

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experts. The alternative was suggested by Edward T. Devine, who noted that living in Pittsburgh, as it existed, was “very unfavorable, very disastrous.”

Complicating these conditions were the facts that a high percentage of the new Pittsburghers were also “new” immigrants and that the native American stock lacked precisely those qualities needed for successful urban living. Frederick Jackson Turner’s description of the American national character inspired doubt for the future. The city, after all, was the “frontier of today”; and its challenges could not be met by those qualities developed in conquering previous problems. “The physical conquest of the continent,” wrote Kellogg, “spread out our people, and made great draughts on individual initiative.” This had numerous beneficial results, “but we are beginning to find, in our scattered forces, in our inadequate social machinery and in our ineptness at team play, that we have paid a price for those qualities.” Yet for the expert this price was the justification of his own enterprise whose virtues were a mirror image of society’s failings. The staff of the survey was engaged in a joint project to appraise Pittsburgh’s social machinery and, for that purpose, had come from all over the country.

In brief, summarized Kellogg, the city was overburdened “with the impractical task of serving one of these new, sudden, over-toppling aggregations of people which modern factories gather about them.” Making matters worse were a “native stock” strong in the frontier virtues and an immigration which added “differences of race, tradition, and religion.” All in all, “our lack of habits and media for collective action is a serious handicap.”

While the difficulties encountered by native Americans in adapting to the demands of urban life seemed great, they were dwarfed by those met by the immigrant.

According to Alois B. Koukol, the alien had left the old world seeking to escape from a surplus of labor. He came to the United States believing “tales of wealth gained by some bold pioneer and of the great opportunities in this country, confirmed and

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13 Ibid., 4-5.
exaggerated by the crafty agents of transportation companies.”14 Once in Pittsburgh, the immigrant found himself on an economic treadmill. Woods argued that the “great and continuous” flow of unskilled, foreign labor “has made it comparatively easy for industrial captains to control industrial administration” and to eliminate the opportunity of “workingmen to organize in their own behalf.”15 The immigrant was an intractable obstacle to the rational ordering of society; the unions’ experience in organizing him offered a case in point.

Sheer force of numbers, according to Commons and one of his graduate students, William M. Leiserson, forced the miners’ union to take up the difficult task of organizing the immigrants. The mine workers had to translate their constitution and other literature into Polish and Italian, to employ organizers who spoke those languages, and to lower initiation fees and dues. Even with all this, the task was never ending for “when he [the immigrant] has learned his lesson, he hears of better conditions in other districts, goes west, and becomes a strong union man.”16 Meanwhile the union remained chronically weakened. Immigrant labor endangered the native stock in another respect. John A. Fitch, another of Commons’s students, argued that there was a direct link between the alien’s unfamiliarity with industrial conditions and the frequency of accidents. He described the Slav workman as likely to throw “the lives of all his fellows into jeopardy” because he knew nothing of machinery and little English. Guided only by “an exasperated boss shouting unintelligible orders,” he would run into danger as often as out of it.17

So far as the survey’s staff was concerned, the immigrant was a “primitive” who, according to Elizabeth Beardsley Butler, the assistant secretary of the Rand School, had “served apprenticeship neither to the life of the city nor to the standards of industrial work.”18 They saw him as a tragic figure, but also, and for the same reasons, a menace to himself and the native stock. He was a man with no industrial skills and no knowledge of trade unions,

18 Elizabeth Beardsley Butler, Women And The Trades (New York, 1909), 129.
a man without even the ability to express himself coherently in the language of his new country. He was grist for the industrial mill. By necessity he lived in overcrowded tenements and became the unwitting victim and carrier of disease. His lack of familiarity with urban conditions made him easy prey for unscrupulous employers, landlords, saloon keepers, and petty grafters. On occasion he would stumble into crime. Some few of his number found their way into organized crime; but, for the most part, according to James Forbes, the secretary and director of the National Association for Prevention of Mendicancy, the immigrants became the prostitutes, vagrants, drunks, and disturbers of the peace. They were the "inarticulate rank and file, whose burdens, being the heaviest, are naturally held to strictest accounting."10

The staff of the survey did not see the immigrant as a contributor to the industrial plenty but as a competitor who retarded the wages and working conditions of the native. In his capacity as citizen, he seemed to advance the interests of machine politicians alone. And as one who met the minimum social demands of order and livelihood with difficulty, and frequently with failure, he seemed to default entirely on his civic responsibilities. This view of the alien as an irrational and wasteful force suggested to Kellogg and others the need for a program of Americanization. As Kellogg posed the problem, "the community has a claim on the vigor and intelligence of its people, on their activity in civic affairs. . . ." At any time a serious claim, the rising international tensions produced a nationalistic fervor that made it seem vital. "Social excellence" required "a great body of Americans" trim of muscle and vigorous of mind for they had to match the labor forces of the world "in leisure, health, and stability, in creative imagination, and joy of the game."20 The task was only too clear. "Pittsburgh must build up an active, native citizenship or be merely an industrial department."21

Ethnic associations and national churches seemed to be the chief barriers to assimilation, for a native citizenship was to be made not born. The Reverend Peter Roberts of the Industrial Department of the International Young Men's Christian Associa-

tion even feared "that the home governments of these peoples foster the formation of organizations along racial lines." This suspicion was not common, but Roberts's other fears were. He thought that the immigrants' "racial consciousness" would either "thrust its own concepts and ideals into the social elements around it and modify them" or "it will build around itself a wall which the customs and habits of the country will find difficulty in penetrating." Either of these eventualities would have a disturbingly centrifugal impact upon the community. Both would dispense with the services of the social expert, for both offered alternative methods of adjustment that bypassed rationally controlled Americanization. As Robert A. Woods expressed it, "The city's population, instead of finding an increasing social unity, has been increasingly sectionalized by the overwhelming influx of every type of immigrant." Woods took shelter behind a benign Darwinism, believing "a sort of natural selection" insured that America would receive only the "enterprising spirits of every European nation and tribe" and that an exposure to the American way of life would fully assimilate these hardy souls. They would become "Americanized not by a tradition or other educational process than that of having the typical American experience in what still remains the heart of the country."

Not everyone could share this facile optimism. For one thing, there was a troubling intimation that natural selection could only work itself out over geological time. But the very pace of industrialization precluded such a luxury. As Kellogg summarized the situation, when "each new peasantry leaves the soil, the history of the industrial revolution is repeated, but processes are accelerated and the experience of a generation is taken at a jump." The crucial task was to gain time. With this in mind, Kellogg proposed to the National Conference of Charities and Corrections that immigrants be kept out of the industrial labor market for their first five years in this country. This would require a law prohibiting any immigrant, for this period of time, earning less than $2.50 or $3.00 a day, should he choose to work in heavy

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industry. Under this proposal the alien, rather than the employer, would be responsible; and "the immigrant knowing he could not command such a wage would enter agriculture or some other nonindustrial occupation." This would establish an equilibrium, first over the labor market, and then over immigration itself.\footnote{Paul U. Kellogg, "The Minimum Wage And Immigrant Labor," Proceedings of the National Conference of Charities and Corrections, 1911 (Fort Wayne, 1911), 165.}

This curious solution which would restrict immigrants but not immigration reflected the ambiguous attitudes the social engineer had toward the alien. "My own feeling," said Kellogg, "is that immigrants bring us ideals, cultures, red blood—which are an asset for America or would be if we gave them a chance." The new immigrant was a problem, not because of "a cultural deficit, but because he brings to America a potential economic surplus above his wants which is exploited." Yet his feelings went deeper than this. Implicit in his rhetoric is an image of the immigrant as a destructive force, a "tyranny which holds the common labor market in the hallow of its great, untrained, earth-bred hand."\footnote{Ibid., 166, 171-172.}

A similar ambiguity characterized the staff's reaction to the city and the new industry—and for the same reasons. They were the first generation to have grown up in an industrial society and the first to build their careers upon correcting its excesses. They could not reject the basic phenomena of the future while at the same time they could not but criticize them. Consequently, they accepted the city but not the tenement, the alien but not the immigrant laborer, the industrial revolution but not \textit{laissez-faire} capitalism. As for the last, there was not an "invisible hand" but only blind forces operating in the market place. As Professor Edward A. Ross of the University of Wisconsin and a founder of the American Sociological Society observed, "The papers presenting the findings of the Pittsburgh Survey showed how an industry like steel making projects conditions which the working population cannot in the least alter and to which the family structure must conform." He described the sociological society's convention which heard these findings as feeling "that if industry in obedience to its gravitation towards maximum profits, thus blindly dominates and deforms men and their most cherished
institutions, it is high time industry be brought under the control of the social will.” A will, be it said, informed and guided by investigations like the Pittsburgh Survey.

This indictment of laissez faire rested on the idea that “its gravitation toward maximum profit,” of necessity made it inimical to the public good. In fact, the achievement of maximum profits became prima facie evidence that the employer was acting against the interests of society. Phrases such as “the interests of society” have to be interpreted as ideological signatures. Like every class contending for its interests, the new professionals sought to speak for the whole of society. For example, John Fitch argued that “a proper economic policy from the standpoint of the individual may be absolutely uneconomic from the standpoint of society.” An obvious example was the lumber industry which had lain waste the American forests, and “if the man who wastes and destroys natural resources is a public enemy, what of the corporations that exploit human resources?”

The new social engineer necessarily rejected both laissez faire and individualism. This process can be traced both intellectually and organizationally. As an interim report of the survey phrased it, philanthropy had been limited to individuals, the sick, aged, homeless, and poverty-stricken. The beginnings of the charity organization movement coincided with the first attempts to work with entire families. Settlement houses widened this concern to include whole neighborhoods while the new profession of social work defined its responsibilities in terms of the entire community.

The evils that came with industrialization, then, were not those of one individual oppressing another. John Fitch argued that a man “might consider himself recompensed by high wages for long hours and lack of touch with the world or for extreme danger,” but “society is not thereby recompensed.”

28 Fitch, The Steel Workers, 206.
was a social act. Miss Crystal Eastman, the secretary of the New York State branch of the American Association for Labor Legislation, claimed that "work however individually managed and controlled, however competitively bargained for, is a part of a great undertaking in which society as a whole shares and by which it profits." Unrestrained capitalism imperiled society on two counts: first, it deprived the polity of good citizens; and second, it controlled the terms of production exclusively in management's interests. The blame fell on manufacturers only to the extent of recognizing their role as the efficient causes of the situation. Fundamentally, of course, the fault belonged to society.

Industrialism posed a problem of responsibility—a problem which individualistic ethical systems could neither comprehend nor resolve. What was needed was a social ethic or ideology, an ideology that could conceive of individuals acting in terms of their social roles. Its basis was a distinction between man, as an individual, and man, as a member of society. Paul Kellogg spoke about this in his introduction to a report on the "company homes" of the United States Steel Company. He wished to explain why U. S. Steel houses had been investigated. Denying any special animosity toward the corporation, he insisted that "if industrial chairmen, presidents and superintendents become landlords, they must bear the responsibility of landlords..." In assuming a social role, they became accountable for fulfilling its obligations. And it was society they were accountable to: "only as the public holds them up to these responsibilities as stiffly as their shareholders hold them up to dividends, will they be in a position to devise and carry out policies which, as individuals, we may assume they would act upon." The pivotal phrase in the above is "as individuals." Clearly, appeals to the consciences of the steel company officials were misplaced.

An ethic of social responsibility was easier to proclaim than to define. American thought had been triumphantly individualistic, and the popularity of Spencerian notions had accentuated this emphasis. Spencer, in fact, had no idea of society at all; rather he had thought in terms of a collection of individuals engaged in

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"Editor's note to F. Elizabeth Crowell, "Painter's Row: The United States Steel Corporation As A Pittsburgh Landlord," *Charities and the Commons*, XXI (February 9, 1909), 899."
a competition for the necessities of life. In this competition those who most successfully adapted to the demands of their environment would win out, i.e., survive. The environment, moreover, could not be so manipulated or controlled as to permit all to survive. Since there was no such entity as society, but only an aggregation of individuals, there was nothing capable of pronouncing upon the desirability of this competition. Instead the recognition of its inevitability granted a certain sanction to it. The emerging ideology of the survey's staff, in effect, had to repudiate "Social Darwinism." However, on an intellectual level they did not so much refute Spencerianism as they permitted it to play havoc with their thought.

This effect can be clearly traced in the work of John A. Fitch. He wrote a book-length study of the skilled and semi-skilled steel workers, whom he described as a "picked body of men." In other words, "through a course of natural selection the unfit have been eliminated and the survivors are exceptionally capable and alert of mind, their wits sharpened by meeting and solving difficulties." The difficulties in question, the selective environment, were the relatively limited number of skilled positions in the mills and the increasing demands upon the endurance and dexterity of those who held them. Fitch noted that "the standard of efficiency required and maintained in the mill has grown along with the growth in tonnage. The steel mills today offer an excellent demonstration of the theory of the survival of the fittest." He knew, however, that there was nothing "natural" about mill conditions. The employers created the standard of efficiency; and, as Fitch pointed out, "by methods both direct and indirect, the workmen are stimulated or 'speeded up' to as rapid a pace as is possible." He had blundered into a vicious cycle as he alternatively excoriated the capitalists for exploiting the workers and explained wages and working conditions as a result of the natural competition between workers. He resolved this dilemma by a leap into the rhetoric of democracy and social responsibility. They, he claimed, were the basic issues, and "with them in mind, the facts presented become a question and a challenge."34

34 Fitch, The Steel Workers, 6, 20, 183, 184.
Along with natural selection, there survived a variety of racial and ethnic inferiority explanations. Elizabeth Beardsley Butler described Polish women as limited in the range of their industrial activity “by trade indifference, as well as by the stolid physical poise that cannot be speeded at the high pressure to which an American girl will respond.”35 And John R. Commons and William M. Leiserson contended that “. . . it is among the teamsters that the Negro finds his congenial job. The factory is too confined, the work too monotonous; but following his horses, he can see the sights and get paid for riding.”36

Most of the staff of the survey could not accept such explanations. They had a vested, professional interest in demonstrating the feasibility of intelligently directed social change. Racial and ethnic theories all implied a fatalism about the social structure and, as such, were as antagonistic to their purposes as Spencerianism. The use of these types of rhetoric represented, in the first instance, a lag between their interests and the development of a vocabulary suitable for expressing them. A classic example of this phenomenon lies in their borrowings from the language of the Social Gospel.

Frederic Almy, secretary of the Buffalo Charity Organization Society and the director of a subsequent survey of the conditions in that city, touched upon a common theme when he argued that “in the past the church has concerned itself more with individual than with social sins.”37 This meant, according to John A. Fitch, “that the minsters sometimes deliver their heaviest blows against secondary evils while the prime wrongs, the ones that dry up the roots of the community life, may escape their wrath.”38

Typical of industrial life, Pittsburgh was also typical of the national moral sense. The city suffered from what Robert A. Woods described as a “double standard of civic morality,” which was the joint product of its Calvinist background and its too rapid growth as an industrial center. He claimed there was “no city in the country, and probably none in the world, where a

38 Fitch, The Steel Workers, 223.
strict Sabbath and liquor legislation is more strenuously enforced.” As a consequence, “unusually genial to those who do well, the citizens of Pittsburgh are summary and even relentless with those who would lower the outward moral decorum of the city.” Furthermore, Pittsburgers assumed the “sanctity” of business operations even when they nullified “the precepts of religion.” Thus they accepted the seven-day work week in the steel mills which “eventuated, in great sections of the population, in the gradual destruction of the religious sense.” Pittsburgers were moral enough, but their morality was “too intense and therefore too restricted.” The city was going through a kind of “moral adolescence.”

Moral maturity involved, above all, an acceptance of the ideal of social responsibility. Judged from this point of view, social engineering could be seen as a practical extension of the Social Gospel. As Frederic Almy told the National Conference of Charities and Corrections, “modern social work is . . . also vitally religious. . . .” To succeed, it had to “reach the hearts as well as the heads of the American people”; it had to “make its essential religion recognized”; it had to “get itself adopted by the church in every hamlet and crossroads.” Nevertheless, the “essential religion” of social engineering differed markedly from that of the Social Gospel. For the ultimate ethical mode of the former was efficiency—not salvation; and efficiency meant business efficiency. The correspondence with the new doctrines of scientific management was deep and significant.

Again and again, the survey staff turned to the contrast between, in John R. Commons’s phrase, Pittsburgh’s “marvelous business organization” and its “amazing social disorganization.” The city’s prosperity was the result of the first while the second was the price she had paid for it. Industrial organization had eliminated any “dependence on personality in the masses” and had given rise to a system which gave “large rewards for brains— to overseers, managers, foremen, bosses, ‘pushers,’ and gang leaders” while applying “heavy pressure toward equality of wages among the restless, changing, competitive rank and file.”

Almy, “The Value of the Church to Social Workers,” 255.
This narrow-sighted efficiency contributed to the larger social disorder. Industry could use and discard workers without fear of the consequences because of certain temporary favorable conditions. As enumerated by Robert A. Woods, the combination of a steady stream of fresh labor from southeastern Europe, an unlimited supply of natural resources, and an “insatiable demand of the world market” enabled industrial capitalism to reduce the bulk of its laboring forces to the “masses.”

Freed from having to develop and conserve a labor force, management took better care of its machinery than it did of its workers. H. F. J. Porter, a consulting industrial engineer and a former executive of Bethlehem Steel and Westinghouse-Nerst, as well as the founder of the Efficiency Society, Inc., reported for the survey that “in view of the care which is taken of machinery, the lack of care of the ‘human parts’ of the plant as a going concern stand out prominently in the Pittsburgh situation.” The effect of this neglect upon the individual worker was disastrous. Pittsburgh was well on its way toward becoming a city of invalids. In addition to those actually killed or crippled in work accidents, there were large numbers broken by the long hours and the relentless increasing pace of the work. Porter compared human to metal fatigue. For both there was “a certain point” beyond which fatigue was cumulative and “the natural processes cannot restore the injury which has been produced. . . .” Industry exploited labor by extorting from it the maximum short-term advantage. John A. Fitch laconically remarked that “the steel workers are men of strong, sturdy constitutions; they must be, for when they begin to fail they cease to be steel workers.”

Most damning was the fact that this system was unnecessary, i.e., wasteful. Porter protested that it should have been obvious to everyone “that more and better work can be done in the light than in the dark” and “that when people are comfortable they can give more and efficient service than when they feel hot or cold or stupid from bad air.” Nevertheless, “few industrial managers with whom I talked in Pittsburgh in 1910 had grasped

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42 Woods, “Pittsburgh: An Interpretation of its Growth,” Charities and the Commons, XXI, 530.
44 Fitch, The Steel Workers, 183.
these self-evident facts." No matter how much in the long-term interests of industry the principles of scientific management might be, it was the interests of society, ideologically conceived, which were uppermost in the minds of the survey’s staff. Industry, by virtue of its favored circumstances, might avoid the consequences of its own folly, but society had no such immunity. It could not replace its members as easily as industry recruited new workers. Paul Kellogg argued that the community had a stake in the question. He asked: “How much citizenship does Pittsburgh get out of a man who works twelve hours a day?” What kind of father could he be?

According to Elizabeth Beardsley Butler, the real threat was to “racial vitality by the nervous exhaustion of the girl workers.” She emphasized that “where there is such nervous loss its cost is not borne by the industry.” These girls began work in their early teens, and “most of the girls marry at twenty or twenty-one, just at the time when their [working] speed breaks.” The result is “some of the cost is borne by the homes into which they go.” The homes are “unfit,” and the children of these women are “undervitalized.”

Victimized by laissez-faire capitalism, Pittsburgh was further penalized by its inadequate social machinery. As Paul Kellogg saw it, the basic contrast between “Pittsburgh, the industrial center, and Pittsburgh, the community,” lay “in the progressiveness and invention which have gone into the details of the one and not of the other.” Cases in point were the “children’s institutions which fail to respond to modern movements in education, hygiene and child-placing.” Another was the system of alderman’s courts which “unsupervised and unshorn of their powers of petty persecution in city and mill town” compared with the modern municipal court system of Chicago “about as the open forges of King John’s time compare with a Bessemer converter.”

The comparison is revealing. If Pittsburgh suffered from this comparison with Chicago, “our severest criticism” came from contrasting “the haphazard development” of Pittsburgh’s social institutions to “the organic development of its business enter-

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47 Butler, Women and the Trades, 95.
prises.” The way to solve community problems, then, was not to copy the institutions developed in other urban areas. Instead “a responsible citizenship” would find “some of its most suggestive clues” in the “methods and scope of progressive industrial organizations.” Problems associated with the municipal services offered in Pittsburgh were those of “a piece of governmental machinery built for a small town,—a new fly-wheel rigged up here, and a misfit set of gears clamped on there,”—suddenly having to function for a community of hundreds of thousands.49

Social engineering is a literally exact designation for this ideology. The survey’s staff conceived of society as a machine and of themselves as mechanics. All social mechanisms were to be subjected to measurement in much the same fashion as scientific managers administered the machinery of business—by a system of cost accounting. Government departments, for example, should issue reports; for as Florence Kelley, the secretary of the National Consumer’s League, former Hull House worker, and former chief of factory inspection in Illinois, argued, “official reports are in themselves tests of efficiency.”50 The reports were to be of a particular type. Citing the pioneer studies of the Bureau of Municipal Research of New York City, Paul Kellogg claimed that hospitals, schools, and municipal departments could measure their “units of labor and product” as exactly as steel workers weighed their tonnage or bankers counted their dollars and cents. This kind of “social accounting” would make government more businesslike and would protect the taxpayer.

Even more protection, however, was needed. City services might be made more efficient “while wage-earners and house holders generally” continued to suffer “from another and irreparable form of taxation.” These taxes included outbreaks of typhoid fever and tuberculosis, long lists of those killed or injured in manufacturing plants, children deprived of education by child labor, and the row upon row of overcrowded tenements. For these, an accounting had also to be made. Crystal Eastman’s study of work accidents and Peter Roberts’s of immigrants were “methods of social bookkeeping as would show something of the larger waste of human life and private means.”51

49 Ibid., 4-5, 7.
51 Kellogg, “Community and Workshop,” 16.
Pittsburgh, then, was what America was to become, and social accounting was what the survey’s staff was to do. The Reverend Peter Roberts’s study of immigrant groups became the basis for a series of similar ones undertaken, with him as supervisor, by the International Young Men’s Christian Association. Lawrence Veiller’s housing investigations developed into the National Housing Association while Crystal Eastman became the secretary of the Employer’s Liability Commission of New York. Under a grant from the Cabot Fund, John A. Fitch was able to extend his study of the steel industry to include conditions in Birmingham, Lackawanna, and Gary. Edward T. Devine became the chairman of the committee which lobbied for the creation of the Federal Industrial Relations Commission, and John R. Commons became one of its initial members. Shelby M. Harrison, who supervised the graphic and statistical aspects of the survey, became director of a Department of Surveys which was created by the Russell Sage Foundation. Finally, Charities and the Commons, by then The Survey under the editorial control of Paul Kellogg, and the Sage Foundation undertook a series of similar surveys of Topeka, Kansas; Springfield, Illinois; Syracuse, New York; and Birmingham, Alabama.52

Social engineering was more than a profession. It was also a perspective on the new industrial society and a vision of a more efficient and better future. This vision formed the apologia of a portion of a new professional middle class whose careers were premised upon the manageability of social change. Their interests were frequently enough urged with the fervor and universality of the Social Gospel; but they owed their existence, their model of the ideal society, and their technology of social accounting to industrial capitalism. Thus they represented a certain strain of reform in the Progressive Era that was to become more familiar in later periods. Reflecting their class position, this style of reform was essentially moderate, a spectrum of opinion ranging from “left-wing” capitalism to Fabian socialism.
