

Management

Frederick W. Taylor and the Rise of Scien-

tific Management. By Daniel Nelson. Madison: University of Wisconsin Press, 1980. xii, 259 pp. N.p.

Frederick Winslow Taylor (1856–1915) is best remembered as the father of scientific management who, in his experiments at the Midvale Steel Company in the 1880s and later at Bethlehem Steel, sought to modernize and rationalize industrial production. Neither in his time nor since, however, have Taylor's efforts been greeted solely with acclaim. In his recent book, *Labor and Monopoly Capital*, Harry Braverman sharply etched one persistent critique of Taylorism when he argued that scientific management's ultimate purpose was a division of labor so precise that workers became but minute ciphers manipulated at will by an army of white-collar management experts. Toward the end of his life, Taylor himself established the basis for this analysis. In his 1911 essay, *The Principles of Scientific Management*, Taylor explained his system largely through a discussion of his reorganization of the work routines of common laborers at Bethlehem Steel between 1898 and 1901. To drive the point home, Taylor offered a detailed analysis of one Bethlehem worker, the famous "Schmidt." This man was a brute, "stupid and phlegmatic," Taylor wrote, more ox-like than human and thus the best example for Taylor of the relevance of scientific management. If his system could produce greater productivity at lower unit costs and slightly higher wages with the Schmidts of the world, Taylor inferred, then there existed no rational barrier to the introduction of his techniques on a wider scale. Predictably, Taylor's account of his success with Schmidt produced an outcry from workers and union officials, who depicted Taylor as an inhumane, driving brute.

It is precisely this image of the man and his ideas that Daniel Nelson seeks to revise. While he recognizes Taylor's "reactionary views" toward workers, especially those organized in unions, Nelson argues that workers actually occupied a very small place in Taylor's total system. From the earliest experiments at Midvale, Taylor was concerned with increasing production and revamping an antiquated industrial system and had little interest in or sympathy with other industrial engineers who stressed the labor problem. Indeed, Nelson states that of the five essential components of scientific management that Taylor identified by 1901, those that directly affected workers (time studies and incentive wage plans) consistently received less emphasis than the three that affected management (reorganization of the toolroom, purchasing and accounting methods; creation of a plantwide planning

department; and the introduction of the functional foreman with specific, limited tasks). Throughout, Nelson emphasizes that the most persistent resistance to Taylor's system came less from workers than from top management and the assistants and foremen below them, who opposed the demand that they alter their methods. Not surprisingly, Nelson finds that *The Principles of Scientific Management* has "little to commend it" as an introduction to Taylor's thought. Basing his analysis on manuscript drafts, the published text, and Taylor's lengthy correspondence concerning the work, Nelson argues that Taylor misrepresented his experiments in an effort to make them popular with a wider audience.

Nelson's Taylor is a more complex and intriguing individual than the one in the traditional account. The evolution of his ideas over the twenty-year period between the Midvale and Bethlehem experiments is explained in detail, and his attempts to ride herd on what often proved to be a fractious group of disciples acting in his name after 1901 is as interesting for what it suggests of Taylor's personality as for what it implies about the scientific method that supposedly structured Taylor's system.

Yet the book is not without problems. Nelson's avoidance of a psycho-historical approach is commendable but leads him to underplay aspects of Taylor's personal life. The son of a well-to-do Philadelphia family, Frederick Taylor was exposed from youth to his mother's Quaker religion, her active feminist sentiments, and her strong public stance in favor of the abolition of slavery. Beyond mentioning these facts, however, Nelson refrains from discussing their influence, either way, on Taylor. A similar wooden tone marks the treatment of Taylor's marriage. Of greater importance is Nelson's analysis of Taylor as "an unlikely revolutionary" who played a central "role in the transformation of American industry." Essentially Nelson argues that Taylor was part of the Progressive reform movement that perceived in the scientific method administered by "the politically neutral expert" a way to eliminate "the evils of American society without fundamentally altering institutions and values." This adaptation of Robert Wiebe's view (*The Search for Order*) is provocative but ultimately inadequate. Nelson's scope is neither as broad nor as comprehensive as Wiebe's, and Taylor's "progressive impulse" remains isolated and unexamined in relation to others in that diverse movement. Thus what Nelson presents as the central paradox in Taylor's life—a lifelong commitment to the "fraternity of mechanics" and the small competitive enterprise" even as his efforts promoted scientific methods and "the large bureau-

cratic organization"—is neither as stark nor unique if considered in a larger context. As the work of Wiebe and others has demonstrated, Taylor was but one of numerous reformers during this era who, in their devotion to science, order, and routine as solutions to society's problems, knew not what they helped to create.

This dilemma is most evident in the treatment of Taylor's attitude toward working people. A major concern of the author's is to rescue Taylor's historical reputation from the critical hands of Braverman and others—and to a limited extent Nelson is successful. Throughout the book Taylor's emphasis on reforming management practice is stressed and Nelson's discussion of the changing role of foremen in Taylor's system is instructive. Yet Nelson's Taylor can never comprehend why workers, especially skilled union men, consistently opposed such innovations as the differential piece rate and the task and bonus system. Repeatedly Taylor complained that worker resistance was caused by management's precipitous introduction of his system, worker ignorance, or combinations of both. For Taylor believed that workers' wages would rise under his plan and since the only object of work was money, the work force, properly educated, would respond favorably to scientific management. The labor problem, he argued, was simply "an engineering problem, a facet of the larger challenge of systematic production management." Taylor believed in economic causation as the key determinant to human behavior and thus was ill-prepared to understand worker resistance. Unfortunately, Nelson does not extend the discussion beyond Taylor's narrow framework and this hinders his rescue of Taylor's reputation. For the skilled workers who protested Taylorism were concerned with wages but they were also men of craft and tradition who were equally concerned with the pace of their daily work routine and the opportunity to express their ingenuity in the process of production. As one leader of the 1911 strike at the Watertown arsenal commented to a Taylor associate: "'Our concern is not for the present. As things go now, nothing could be nicer; our concern is for the future.'"

Daniel Nelson has written an informative book that helps to explain important aspects of Taylor's life. But the analysis of the man, his influence, and the opposition both engendered is too narrowly cast to serve as a final rebuttal to Taylor's critics. By 1923, Nelson writes toward the end of his book, Taylor's reputation was secure and worker opposition to his approach was low: "The unionists had mellowed," Nelson comments. Yet the reader is never informed that this "mellowing" occurred in the midst of the most severe and pervasive anti-union campaign to that date in American history. This omis-

sion suggests the limits of Nelson's analysis.

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