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A MENTAL REVOLUTION

Scientific Management since Taylor

EDITED BY Daniel Nelson

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Scientific management is not any efficiency device. . . . It is not a new system of figuring costs; it is not a new system of paying men . . . it is not holding a stop watch on a man and writing things down about him . . . it is not motion study nor an analysis of the movements of men. . . . It is not divided foremanship . . . it is not any of the devices which the average man calls to mind when scientific management is spoken of. . . . In this sense, scientific management involves a complete mental revolution.

Frederick W. Taylor, 1912

It is still necessary to go back to Taylor for definitions and fundamental principles. But scientific management is a dynamic thing; its principles are the principles of growth and change and it is for that reason that its progress since the war has been sure and swift.

Edward Eyre Hunt, 1924
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A MENTAL REVOLUTION
INTRODUCTION

Scientific management has attracted surprisingly little attention in the United States in recent years. The handful of books and essays that have appeared since the 1950s have focused on Frederick W. Taylor (1856–1915), the engineer, inventor, and publicist who became the first American management theorist to reach a large, nontechnical audience. They assume or imply that Taylor’s influence did not die with him in 1915 but provide only the most general indication of the character of that influence. As a result, Edward Eyre Hunt’s Scientific Management Since Taylor (1924) remains the last, best word on American scientific management in the post-Taylor era. In the meantime, historians and social scientists specializing in European affairs have discovered or rediscovered indigenous scientific management movements that drew inspiration from the American pioneers but soon developed identities of their own. The results of the new scholarship are most striking in the case of France, which had the most ambitious management movement outside the United States, but impressive studies in German, British, Russian, Italian, and Japanese history have documented the spread of ideas and techniques once assumed to be peculiarly American. While it may be premature to speak of an international history of scientific management, it is clear that Taylor found enthusiastic disciples everywhere and that scientific management measurably affected the performance of institutions in many countries.

In recent years there has been a reawakening of interest in the United States as well, particularly among younger scholars. Their
research promises to close the gap between European and American scholarship and to permit authoritative generalizations about the impact of scientific management on managerial theory and practice. This volume is a preliminary report of their work. It makes no pretense of covering every aspect of the post-1915 scientific management movement, of treating every subject or decade equally, or of providing an unmistakable trail for those who follow. The authors have tried, as the saying goes, to do a few things well.

Although the authors have worked as individuals, with varying perspectives and values, they share several assumptions. First, scientific management did not begin or end with Taylor. The starting point for organized, self-conscious activity was his synthesis and extension of systematic management, the late nineteenth century effort to bring order and system to manufacturing. But Taylor was one creative individual among many; he cast a long shadow because he told people what they were ready to hear. The movement associated with him and his work evolved during his lifetime and continued to evolve after his death.

Second, though it drew on a rich intellectual and administrative heritage, scientific management in practice was highly disruptive. This characteristic accounted for the controversies that often accompanied its introduction, for the popularity of short cuts designed to preserve the benefits and minimize the trauma of scientific management, and for Taylor’s attempt to explain his objective in nontechnical language. The latter effort led him to identify his work with “a complete mental revolution,” suggesting the transcendent possibilities of improved management on the shop floor and in society.

Third, scientific management cannot be discussed solely in terms of manufacturing operations or work or business administration. From the beginning it had wider potential applications. Taylor and his followers emphasized ideas and activities—research, planning, communications, standards, incentives, feedback—that were applicable to any institution. Their ideal factory was a metaphor for a better society. They also spoke the language of anti-establishment rebels. Their scorn for the income statement and the marketplace as yardsticks of economic success gave them a common bond with progressives, socialists, and revolutionaries on both sides of the Atlantic.
The essays in this volume are a step toward a new understanding of the role of scientific management in America, but many gaps remain. There is still little information about the operation of industrial enterprises under scientific management and even less about the service organizations, large and small, that embraced the engineers' ideas and methods. Equally notable is the comparative neglect of American mobilization in World War II, the ultimate triumph of scientific management and mass production. In the political realm, the link with Herbert Hoover and his associates is well documented, but the role of scientific management in the New Deal remains to be explored, despite the fact that most nonacademic leaders of scientific management in the 1930s had become federal government officials by the end of the decade. Nor is there any study of the intellectual impact of scientific management on government comparable to accounts of the rise of Keynesian theory. Most important, perhaps, there is little information on the apparent exhaustion of scientific management in the 1950s and after, as planning, standardization, and other fundamentals of scientific management became clichés and marketing and finance increasingly overshadowed production. The list could be extended almost indefinitely.

A final note on terminology. Before 1910, Taylor and his followers used various labels to describe their work. At the instigation of Louis Brandeis, they agreed to employ the term scientific management, one of the phrases they had used informally. For the next twenty years scientific management meant the ideas and techniques of Taylor, his disciples, and those who followed in their footsteps. After World War II, when American social scientists rediscovered Taylor's work, they often substituted the word Taylorism, which had been widely used in Europe and which enabled them to avoid disputes over what was and what was not genuinely scientific. In this volume the terms are considered synonymous.