

Frederick Winslow Taylor: Reflections on the Relevance of *The Principles of Scientific Management* 100 Years Later

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This Special Edition of the *Journal of Business and Management* was organized to celebrate the 100th anniversary of the publication of Frederick Winslow Taylor's *The Principles of Scientific Management*. The large response to our call for papers is indicative of the scholarly interest in Taylor, his work, and its relevance to management practitioners. The papers we received were broad in scope. While most were supportive of scientific management, some felt that Taylor should not be honored. The merits of Taylor's work can certainly be debated, but what cannot be argued is that Taylor changed the way people worked in the 20th century. This Special Issue focuses on the relevance of Taylor's work to managerial practice in the 21st century. The aim of this Special Issue is to encourage theoretical and empirical research on Taylor, *The Principles of Scientific Management*, and its implications for managerial practice in the 21st century.

Frederick W. Taylor, the father of Scientific Management, was an American mechanical engineer, efficiency expert, and management consultant. In 1911 he published his seminal work, *The Principles of Scientific Management*, in which he laid out the process of scientifically studying work to increase worker and organizational efficiency. The principles underlying his theory contributed to a wide array of management practices during the 20th century including task specialization, assembly line production practices, job analysis, work design, incentive schemes, person-job fit, and production quotas and control.

The impact of Taylor's work on the field of management has long been recognized by management scholars. Wren and Hay's (1977) study saw Taylor at the top of the list among contributors to American management thought and practice. Heames & Breland's (2010) study found Taylor to be at the top of their list thirty years later. *The Principles of Scientific Management*, not only tops Bedeian and Wren's (2001, p. 222) list of the 25 most influential management books of the 20th century, but they refer to it as "The most influential book on management ever published." The 100th anniversary of the publication of his book offers a unique opportunity to reflect on the relevance of Taylor's ideas in the 21st century.

This Special Issue has eight articles. The first paper, The Centennial of Frederick W. Taylor's *The Principles of Scientific Management: A Retrospective Commentary*, is by management scholar and historian Daniel A. Wren. Dr. Wren is the author of *The History of Management Thought*, now in its 5th edition, and *The Evolution of Management Thought*, with Arthur Bedeian, also in its 6th edition. Wren received the Distinguished Educator Award from the national Academy of Management for his contributions "as the foremost management historian of his generation." Wren's paper describes the events leading to the publication of *The Principles of Scientific Management*, the evolution from task management to scientific management, and the factors that contributed to scientific management becoming an international force. Wren addresses "the intriguing question of why Taylor and his ideas have a continuing grip on management literature and our current thinking" (Wren, 2011, p. 11). The *Journal of Business and Management* is honored to have this noted management historian offer a retrospective commentary on Taylor's *The Principles of Scientific Management*.

Riccardo Giorgio Zuffo explores one aspect of the controversy surrounding Taylor's ideas in "Taylor is Dead, Hurray Taylor!" Zuffo details the criticisms of theorists who argued that Taylor's experiments were not positivist science, but instead, merely common sense. He then documents the scientific basis of Taylor's experiments and how his use of experiments both in and out of the lab led to the formulation of *The Principles of Scientific Management*. This paper also delves into the political, social, and ethical aspects of Taylor's work, exploring how Taylor's intentions were to create a better society by eliminating conflict using science.

Jeremy C. Short offers a novel perspective on the Taylor - Sinclair editorial debates that appeared in *The American Magazine*. In "The Debate Goes On! A Graphical Portrayal of the Sinclair-Taylor Editorial Dialogue," Short discusses how issues argued in the 1911 Taylor - Sinclair debate are still relevant today. In the same year that *The Principles of Scientific Management* was published, Taylor engaged in an editorial debate with Upton Sinclair, author of *The Jungle*. Upton's novel detailing horrific health and safety working conditions in the meat packing industry led to the establishment of the Food and Drug Administration. Upton Sinclair was critical of Taylor's methods, believing that scientific management exploited workers. Taylor believed that the implementation of scientific management would lead to improved working conditions for the workers. Short's paper highlights the impact Taylor's work had on the working conditions of employees in the 20th century and reminds us that work and the conditions under which it is performed have long been topics of scholarly and societal interest.

"Citing Taylor: Tracing Taylorism's Technical and Sociotechnical Duality through

Latent Semantic Analysis” by Nicholas Evangelopoulos offers further evidence that work performance is the subject of much scholarly interest. Evangelopoulos applies Latent Semantic Analysis to assess the intellectual territory that has been influenced by Taylor’s ideas. His analysis found that research on Taylor fell into two streams: technical and sociotechnical. Evangelopoulos suggests that it is this inherent duality that assures Scientific Management of its continuing relevance in the 21st century.

John Paxton’s paper focuses on a lesser known aspect of Taylor’s contribution to manufacturing. “Taylor’s Unsung Contribution: Making Interchangeable Parts Practical” details Taylor’s work to produce interchangeable parts that were durable, reliable, and cost-efficient. Paxton explains how interchangeable parts were the foundation which allowed mass production to become a practical manufacturing reality. Paxton’s paper reminds us that Taylor’s training and experience as an industrial engineer influenced his interest in solving the problem of production machinery breakdowns. Taylor’s role in making interchangeable parts economically feasible and the impact of this on manufacturing is thoroughly described in this paper.

Majula Salimath and Raymond Jones III discuss the scientific management of entrepreneurship. Their paper, “Scientific Entrepreneurial Management: Bricolage, Bootstrapping, and the Question for Efficiencies,” argues that Taylor’s principles of efficiency can be successfully applied in entrepreneurial firms and small businesses. Salimath and Jones describe the emerging field of scientific entrepreneurial management. The paper presents bricolage (making do with what is available) and bootstrapping (continuing operations without external finances or aid) as two techniques for managing resources. Salimath and Jones discuss the similarity of bricolage and bootstrapping to the resource management principles inherent in Scientific Management.

Marie Kulesza, Sheldon Friedman, and Pamela Weaver’s paper, “Frederick Taylor’s Presence in 21st Century Management Accounting Systems and Work Process Theories,” examines the influence of Taylor’s work on modern accounting systems. Their paper also examines Taylor’s experiences working to design accounting systems suited to his clients’ needs. Taylor’s development of cost accounting systems closely paralleled the development of his ideas regarding worker efficiency. This paper offers strong evidence that Taylor’s ideas are not limited to the field of Management, but are applicable across multiple functional areas of business (e.g. Accounting) in the 21st century.

The final paper in this Special Issue is by Linda Brennan. In “The Scientific Management of Information Overload,” Brennan focuses on the applicability of Taylor’s ideas to today’s information workers. The paper considers how knowledge workers are faced with ever-increasing issues of information overload. Brennan offers a unique and thought-provoking analysis of the inefficiencies surrounding the management of information in the work place. Brennan argues that information, like other organizational resources, should not be wasted, and she offers several prescriptions for increasing efficiency in the office environment.

The papers included in this Special Issue of the *Journal of Business and Management* shed new light on Taylor’s contributions to work and the conditions under which it is performed. The authors have provided strong arguments that the principles inherent in Scientific Management have continued relevance for the world of work in the 21st century. These papers also remind us of the importance of Santayana’s quote: “Those

who do not learn from history are doomed to repeat it.” There is a continuous need for management theorists to remind us of the history behind our actions. Theories are applicable beyond the historical context they are created in. Just as Taylor’s ideas of 100 years ago are germane to new contexts such as knowledge management, other historic theories can be applied to new and emerging contexts. Today’s scholars may find that ideas once deemed obsolete present new ways to conceptualize modern managerial dilemmas. Because of the enormity of this Special Issue, it will be the *Journal of Business and Management’s* only issue for 2011. We hope that the ideas presented here will allow Management scholars to reflect on Taylor’s work in the next 100 years and we call for continued research on Frederick W. Taylor and *The Principles of Scientific Management*.

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