# **Business & Society**

http://bas.sagepub.com

# **Book Reviews**

William Smith Business Society 1998; 37; 346 DOI: 10.1177/000765039803700307

The online version of this article can be found at: http://bas.sagepub.com

> Published by: SAGE Publications http://www.sagepublications.com

> > On behalf of:

<u> 1403</u>

International Association for Business and Society

Additional services and information for Business & Society can be found at:

Email Alerts: http://bas.sagepub.com/cgi/alerts

Subscriptions: http://bas.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

variable. This book is a "must read" for those in our field concerned with ways in which institutional contexts can shape the ethical dimensions of organizational interactions and the role of ethical dialogue in collaborative governance of networks, social learning and problem solving, and stakeholder theory.

### REFERENCE

Ring, P. S. 1996. "Fragile and Resilient Trust and Their Roles in Economic Exchange." Business & Society 35 (2): 148-75.

> -JERRY M. CALTON University of Hawaii at Hilo

Robert Kanigel, One Best Way: Frederick Winslow Taylor and the Enigma of Efficiency, New York: Penguin Books, 1997. 675 pages (including notes, bibliography, and index).

It's Saturday afternoon, July 19. My friend and I have just taken our seats in the center-right field bleachers at Oriole Park at Camden Yards. It's a sunny afternoon, almost too sunny. The temperature will hit the low 90s today. As we settle down, squinting from the sunlight, I can't help but notice the beer vendor coming up the aisle. He is carrying four cases of beer, which sure seem like a lot. Soon someone yells for a couple of beers. he places the four cases on the steps. That's when I notice there is a strange tube running up the back of the vendor's arm, along with a strange mechanical device in the palm of his hand. The rationale for the apparatus quickly becomes apparent. Whenever someone orders a beer, his hand grabs the can, the device quickly removes the top of the can (much as an automatic can opener would), and he cleanly pours the can's contents into a cup. In fact, his device and motions easily accommodate two cans at once (probably the most common type of order). In a crude tribute to time-motion study, I count time elapsed to grab two beer cans, to align them with his device, to cut, to grab two cups, to pour, and to hand them to the customer. Just a bit under 10 seconds. As the day goes along, I overhear him field several questions on his method. He invented the device himself. Even possesses a patent for it, although there are no plans

to mass-produce or market it. He also sells "about" 20 cases of beer in a day. Of course I can't help but do the math. His device is put into operation 480 times over the course of about 2 hours (seven innings). That equals \$1,800 in sales. I'm not sure what percentage of this total sales figure will be his.

Of course it is precisely this sort of approach to doing a task more efficiently, in fact, wanting to do things more efficiently in the first place, which characterizes the "Taylor" approach to management. And after some consideration I realized that whether the task before us is handling pig iron, opening and pouring beers, suturing a wound, or processing bank transactions (or even, dare I say, teaching students?), the quest for more efficiency is deeply embedded in modern industrial life.

The legacy of Frederick Taylor is all too familiar to most management professors. "The father of scientific management" commands a central role in our discipline. Not only do we associate "time study," "piece rate," and "efficiency" with Taylor's works; we also accord scientific management as a critical point in the evolution of management thought. From our introductory textbooks to more advanced sense making, Taylor and scientific management are typically accorded preeminent status as a starting point for modern management theory and practice. In a 1977 survey, management scholars and business historians both ranked Taylor as the leading pioneer in management theory (Wren and Hay, 1977).

Given Taylor's centrality in the overall "scheme of things," I was quite intrigued by a new book that thoroughly examines his life. "One Best Way" by Robert Kanigel is an exceedingly thorough look into not only the life and methods of Frederick Taylor but also the pervasive influence they have had on contemporary life. The book's prologue begins by revisiting tense moments from Taylor's congressional testimony. From these strained and defining moments, scientific management was poised to make its deep and lasting contribution on American life. In the book's final section, several chapters assess Taylor's practical and academic contributions (and interestingly are set in a different font type, as if to it signal a change into a more evaluative tone). In between these boundary sections is a detailed account of the life of one of management's most significant figures.

Taylor's early years were by most standards fairly privileged. His father, Franklin, was a lawyer whose wealth from landholdings enabled him to practice little law. His mother, Emily, was the daughter of an affluent whaling family. She was also prominent Quaker and abolitionist in mid-19th-century Philadelphia. (Although the Taylors were hardly devout Quakers, they usually attended Unitarian meetings on Sundays.)

#### 348 BUSINESS & SOCIETY / September 1998

There is particular attention given to Taylor's boyhood years, especially those from 12 to 15 spent traveling through Europe. On one occasion, the family carriage encounters a washed-out bridge in the Austrian mountains, which threatens to delay the family's vacation. After receiving pessimistic estimates about the length of time to repair the bridge, Franklin Taylor informs their coachman that if the bridge cannot be crossed by the next day, he will have no recourse but to dismiss him. Once properly "motivated," the coachman sees to it that the Taylors cross by early the following afternoon. This story carries obvious symbolic value in Frederick Taylor's life: Results can be obtained through the administration of proper incentives.

Once back in America. Taylor enrolls in the prestigious Exeter Academy with plans on eventually enrolling in Harvard and, ultimately, a career in law. Chronic headaches related to what would later be determined as a correctable vision problem forced Taylor to abandon these plans. He returned to Philadelphia. Shortly thereafter (late 1874) he began an apprenticeship as a machinist at Enterprise Pump Works, also known as "Ferrel and Jones." There are indications that these early work experiences had a profound influence on young Taylor. Perhaps for the very first time in his life he saw the working class up close; he worked with them, and he cultivated a deep respect for their abilities and aims in life. (However, Taylor's sincerity in this regard remains a matter of considerable controversy.) Enabled by his abilities in French and German, he left Enterprise in 1876 to take a job at the Philadelphia Centennial Exhibition. Following the exhibition. Taylor's career took him to Midvale Steel. At Midvale, Taylor conducted a vast series of experiments into metal-cutting and machine shop design. His efforts at Midvale also formed the early beginnings of time-motion study. Taylor would observe, and time, the necessary motions or elements involved in different types of machine work. Once determined, these elements could be combined to decide an overall standard for the job. This carefully established standard would then become the basis for another well-known feature of scientific management, the differential pay system.

Taylor left Midvale and the steel industry in 1891 to take a job at Imperial Paper Co. in Madison, Maine. Investors had bought the rights to an innovative pulp-processing method developed in Europe. It was hoped that Taylor's Midvale accomplishments could be replicated in this new venture. It was by most accounts a complete failure. The new technology never fully performed as promised. In addition, Taylor found the labor pool in rural Maine to be less suitable to his style and methods. He left after a few years to return to Pennsylvania. Ultimately, his considerable connections and reputation landed him a job at Bethlehem Steel Company.

Taylor's time at Bethlehem is perhaps most notable for his pig iron study and his famous subject Henry Noll (a.k.a. "Schmidt"). Kanigel recounts the exchange where Taylor, sounding much like the clever salesperson, asks Noll if he is a "high-priced man." Noll claims not to understand what Taylor means and Taylor taunts him back. For example,

Taylor: I want to know if you are really a high-priced man, or one of those cheap workers satisfied with \$1.15 a day. I am looking for fellows I can pay \$1.85 to.

Schmidt: I will take \$1.85 a day any time.

- *Taylor:* You are making a joke out of this thing. You are not treating this matter seriously. I want to know if you are a high-priced man. You know what I mean.
- Schmidt: I don't know what you mean. I will take \$1.85/day.
- Taylor: You seem to be very stupid. There is something wrong with you. I want to find out whether you are a high-priced man. If you are, see that pile of pig iron. See that Car. If you are a high-priced man, you can load that iron on that for \$1.85 a day. (pp. 392-93)

Kanigel acknowledges that this exchange has been labeled "completely fictional" by Taylor scholars Charles Wrege and Morris Greenwood, and it is based on Taylor's retelling much later (after 1909). Whether based in fact or just the product of Taylor's recollection, the exchange certainly appears as somewhat mean-spirited. Is it any wonder that critics, then and now, would question scientific management's effect on worker interests?

Another, and arguably far more significant contribution during the Bethlehem years, was Taylor's role in the development of a high-speed steel-cutting tool. During the late 1800s, steel for a wide range of products was cut by using tool bits that tended to wear out rather quickly when used at a given speed. Of course, tool life could be extended if management was willing to slow down the cutting process. Taylor enrolled the cooperation of other engineers at Bethlehem to forge a new tool bit (basically by experimenting with different temperature and "recipe" combinations) that could cut steel at speeds four to six times faster that anything previously known. This quantum-leap innovation was introduced at the 1900 Paris industrial exhibition.

Taylor's successes at Bethlehem aside, he had his detractors. Taylor's methods were complex and arduous, his personal style often abrasive. In April 1901, Bethlehem's President Robert Linderman finally stepped in

and terminated Taylor's employment effective May 1st. Bethlehem was sold 1 month later and although many of his protégés (Henry Gantt among them) were also ousted, a subculture of scientific management supporters remained in the company.

In the years following his departure from Bethlehem, Taylor focused on his consulting and writing. He developed and refined his ideas on shop management. He nurtured a growing legion of protégés who would come to "Boxly," Taylor's estate outside of Philadelphia. The Boxly talks ultimately became the focal point of Taylor's work at the time. As a steady stream of engineers and managers from around the world came to Boxly, Taylor's ideas remained at the forefront of industrial practices. Of course, the controversy surrounding these idea also continued, until finally in 1912, based, in part, on the proposition that the "Taylor system appears to be of such a character and nature as to be detrimental to the best interests of American workingmen," Congress began hearings on scientific management. The hearings were a tortuous process and ultimately produced a report of tepid recommendations. Taylor's final years were spent writing, speaking, and looking after his ailing wife, Lou. Taylor died of respiratory pneumonia on March 21, 1915, the day after his 59th birthday.

## TAYLOR'S RELEVANCE TO BUSINESS AND SOCIETY

Naturally, Taylor is perhaps one of the most "micro" of management scholars. His quest was to find ever more efficient ways of doing work. Business and society is perhaps one of our most "macro" of management fields. Our quest, broadly put, is to harmonize the goals, decisions, and behaviors between commercial and societal systems. Has Taylor's life any relevance to our field?

Let's begin by considering the implications of a business and society that become virtually intoxicated in the desire for greater efficiencies. Imagine, for example, a restaurant where kitchen and service procedures are geared toward maximum output with the least expenditure of resources. Under such a system customers may be viewed as inputs to be "processed." Customer interests must be defined into a limited number of categories. In fact, once customers have been "processed" (as defined by the system), they should leave. Lingering after the meal, whether in conversation, with a book or newspaper, wrecks havoc with critical table-turnover ratios. Scientific management with its emphasis on predictability and control has a difficult time accommodating diverse and changing customer interests. Or consider the recent controversy in health care where patients (such as mothers and newborn infants) are pushed to leave hospitals as soon as possible (perhaps even sooner). The obsession with efficiency, on completing the *necessary* work as soon as possible, results in ignoring *desirable* work.

Employees, of course, are the stakeholder group likely to face the strongest effects of scientific management. Taylor and scientific management are typically accused, then and now, of antilabor practices. Speeding up the production process, especially with little regard for the psychological and longer term effects of workers, is one of the more common accusations. Furthermore, scientific management sought to remove the mental elements of many jobs, replacing worker judgment with predetermined methods and procedures. The result, of course, is to "deskill" many jobs to a point that may be profitable to the firm but publicly undesirable (Ritzer, 1993).

Clearly these broad criticisms are at the heart of our field. Are some firm actions focused so much on narrow measures of efficiency or profitability that they ignore broader quality of life issues? To be sure, costs and prices may decrease when scientific management's stern eye falls on work in organizations, but do we lose something more precious in the bargain? Is a society, or an organization, following the strict edicts of rationality and objectively necessarily the best one?

As I read Kanigel's book, I found myself fascinated not only by his thorough accounting of one of our field's most notable pioneers but also with a deeper appreciation of how we got to where we are. And although I cannot say I admired everything Taylor did or stood for, it seems a bit of a stretch to conclude, as Morgan (1986) did, that scientific management was the product of a "disturbed and neurotic personality." Love him or hate him, Frederick Taylor's life and work are of central importance in business *and* society.

## REFERENCES

Morgan, Gareth. 1986. Images of Organizations. Beverly Hills, CA: Sage. Ritzer, George. 1993. McDonaldization of Society. Thousand Oaks, CA: Pine Forge Press.

Wren, Daniel, and Robert Hay. 1977. "Management Historians and Business Historians:

Differing Perceptions of Pioneer Contributions." Academy of Management Journal 20 (3): 470-75.

---WILLIAM SMITH Towson University