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The Insidiousness of Efficiency

Efficiency is almost always viewed and portrayed as a positive thing… The concepts of efficiency and information accumulation are often normalized and celebrated as forces for good, and are often supported with supposedly scientific and objective ideas. However, this normalization enables a common story of economic exploitation of laborers and other marginalized communities to occur; whether the people in power are plantation owners, corporations, or governments, they are able to wield efficiency and information gathering as tools for control.

The writings of Frederick Winslow Taylor serve as an important foundation for understanding how the concept of efficiency gets implemented to exploit labor, and how efficiency and information gathering are often normalized by relating them to scientific principles. In *The Principles of Scientific Management*, he argues that “the greatest prosperity can exist only when that individual has reached his highest state of efficiency,” and defines efficiency as “turning out his largest daily output” (8). One example he gives for how efficiency can create maximum prosperity for both employers and employees is that of a shoe business. The feedback loop he lays out is as follows: being more productive (making more shoes) means more shoes are sold, and more money is made. With more money, net profit will be greater and laborers can be paid higher wages (8-9). This logic seems to be sensible, and Taylor himself is convinced of the flawlessness of his argument, stating that “No one can be found who will deny that…the greatest prosperity can exist only when that individual has reached his highest state of efficiency” (8). However, his reasoning collapses if his fundamental assumptions are questioned – for instance, why would people benefit from having more shoes or products? In other words, his theory depends on the belief that greater consumption leads to an increased quality of life for everyone, from the buyer to the employer to the worker. Taylor generally privileges the motives of business owners and employers; he confidently states that maximum prosperity for employees is having “higher wages,” seemingly without consulting actual laborers or considering that they might have other desires, such as safe labor conditions and a fair workweek (7). He also assumes that business owners would have the generosity to fairly distribute profits, and that efficiency would naturally and automatically benefit everyone involved. History has often shown this not to be the case, with the management of slavery as an obvious and prominent example – masters forced slaves to work more efficiently under the threat of violence, not under any guise of mutual beneficence (Rosenthal 63).

One of the ways in which efficiency and information collection become normalized and celebrated is by relating them to scientific ideas. Science throughout the ages has been elevated to such a high status that its validity, biases, and underlying motives are not questioned. As such, it is often a convenient mechanism people use to promote their ideologies. Again, this is very well illustrated by Taylor. The very title of his book contains the adjective of “scientific” in it. One of his aims is to convince readers that solutions to inefficiency can be found in “systematic management” (Taylor 6). The key adjective in his argument is “systematic,” implying that there is a regimented and universal method to achieve efficiency. He follows this aim with the argument that “the best management is a true science” (Taylor 6). Taylor himself was a mechanical engineer, and created this paper to present to the American Society of Mechanical Engineers. His career gave his arguments legitimacy, and the way in which he frames his case makes him sound knowledgeable and authoritative. He himself argues that he (and people like him) have the background needed to lead an efficiency revolution, writing that “As engineers and managers, we…are therefore best fitted to lead in a movement” (14). The movement he refers to is one to convince laborers that low wages are their own fault because they do not work hard enough, and that efficiency will solve everyone’s problems. Again, this is evidence that he prioritizes and respects the opinions of the elite and privileged more.

His matter-of-fact tone throughout the paper can also lead readers to believe that his conclusions are obvious ones. For instance, he reasons through the example of a “more complicated manufacturing establishment” and how prosperity can be achieved, presenting that it can only be done when “the work of the establishment is done with the smallest combined expenditure of human effort, plus nature’s resources, plus the cost for the use of capital in the shape of machines, buildings, etc.” (Taylor 9). His wording makes it sound like the solution is a simple mathematical calculation of total cost, human, natural, and capital. He follow this paragraph with the transition “if the above reasoning is correct” and the statement, “These principles appear to be so self-evident that many men may think it almost childish to state them” (Taylor 9-10). These evoke language often found in mathematical proofs and scientific hypotheses, and also make the explicit assertion that his logic is foolproof. People who question him would be considered childish or unscientific.

The relationship between systematization, science, and efficiency can be traced back even earlier than Taylor to slavery. Plantation management is a key example for examining who has the power to define efficiency, what information they collect to achieve their motives, and how they use scientific ideas to strengthen their actions. In this system, plantation owners developed “sophisticated accounting techniques” to maximize output, providing a basis for “the rise of scientific management in the 1880s and beyond” (Rosenthal 62-63). For masters, the most important measures of productivity were variables like the amount of cotton picked per day and the projected value of their slaves (Rosenthal 65). What they cared most about was their profitability, and they sought to extract as much wealth as possible from their slaves, who they viewed as property and machines, as “inputs of production” (Rosenthal 78). Plantation accounting books allowed masters to easily measure the their slaves’ output; this demonstrates a perverse positive feedback cycle in which these ledgers made masters more efficient accountants, and masters then forced their slaves to be more efficient workers due to the newfound information the masters were able to collect. In the case of slavery, the concepts of efficiency and the resulting methods of information collection were greatly dehumanizing and used to enact intense violence.

Obviously, slaves did not have agency in their daily lives and disagreed with the priorities and tactics of their masters, leading to attempts for rebellion. One notable way slaves resisted was by “sogering,” the practice of “pretending to work, and accomplishing as little as possible” (Olmsted qtd. in Rosenthal 73). Interestingly, this term seems to directly relate to what Taylor calls “soldiering,” which Taylor describes as “under working” and a major impediment to what he envisions as the proper functioning of society (Taylor 10). Thus, the issues that Taylor discusses in his paper can be traced back to slavery’s scientific management in ways beyond the tactics of managers; the methods of resistance employed by slaves and wage laborers also have commonalities, and illustrate a markedly ignored story within the conventional narrative of efficiency.

As Taylor advocated for, notions of efficiency were also often expanded to social issues, such as family and reproductive management and the eugenics movement. While Lovett does not describe the positive eugenics efforts of the early 20th century in terms of efficiency, the advocacy of the “rural family as an ideal social and reproductive unit” (Lovett 8) can easily be tied to the idea of efficiency being used to accomplish an ulterior motive. At this time, pronatalism was being widely promoted in American society due to fears of race suicide and increasing immigration and urbanization (Lovett 7-8). One of the issues with increasing urbanization was that urban families had fewer children; with the declining birthrate of white children, pronatalism advocates like President Theodore Roosevelt began to vociferously promote the image of the rural, white family as ideal (Lovett 7-8). If pronatalism advocates wanted to prevent race suicide, they had to motivate white families to reproduce as much as possible – thus, they tapped into idealistic images of rural white families as being “the most vigorous, the most independent, the most virtuous citizens” (Jefferson qtd. in Lovett 8).

Better baby and fitter family contests became indirect means of enacting social control and identifying which families were the best to pass on their genes (137-140). With the desire to efficiently create ideal families (ideal as defined by white eugenicists and pronatalists), information needed to be collected about their physical fitness, mental health, etc. Data was also collected on those the government did not want to reproduce, such as racial minorities, prisoners, and people with mental illness, leading to forced sterilization campaigns (Lecture 2/14/19). In order to most efficiently fight race suicide, officials attempted both positive and negative eugenics campaigns based on information they gathered about people’s genetics. The basis for this all was the scientific study of heredity. For instance, Sherbon and Watts described their goal for the contests as causing families to “conceive of [themselves] as a genetic unit with a definite obligation to study its heredity” (Sherbon and Watts qtd. in Lovett 140). They essentialize families to a biological “genetic unit.” From the negative eugenics perspective, people like Charles Davenport, who had a doctorate in biology, believed firmly that deviance was purely genetic (Lecture 2/14/19). The information-gathering projects of eugenics have certain similarities to that conducted by slave-owners, who would estimate the value of their slaves based on measures of health and productivity (Rosenthal 75-77); both eugenicists and masters wanted to know who was the fittest and who had less worth. The American eugenics movement illustrates two common stories: the role of information collection in establishing efficient practices for control, and the justification for these practices through science.

Beyond managerial and eugenics practices, the logic of efficiency and information sharing extended to the development of modern imperial logic. Telegraphy practices built off the foundations of 19th-century industrialism, set by people like Taylor. The managerial capitalism that characterized this time separated capital even further from laborers by creating more levels in a hierarchy that placed capitalists at the top, managers in the middle, and workers at the bottom (Muller and Tworek). More specifically, in the example of telegraphs, there were only a few business conglomerates controlling the world’s major lines – beliefs that greater efficiency could be achieved if power was concentrated in a single firm led to the creation of global communication monopolies. Under the guise and justification of efficiency, the telegraph market was an oligopoly by the turn of the 20th century. This meant that the spread of information through telegraphs was controlled by a limited number of elites, who restricted the usage of telegrams to business purposes through high prices. The logic of commercial liberalism proposed that free trade and international markets would automatically lead to world peace and improvement of life for all people. Again, much like Taylor, those at the top believed in prioritizing business concerns, and that prosperity would automatically trickle down or spread to the masses even if the majority of people were not included.

The creation of plantation accounting books helped owners construct an accessible and easy-to-use scientific method for tracking

The combination of scientific ideas with the concept of efficiency are well illustrated by Babbage’s chapter, “On the Division of Mental Labour.” Start with Babbage maybe and how he combined math with concepts of efficiency?

Efficiency was often discussed both implicitly and explicitly within the early modern context of factory, corporation, and business development.