

the individual workman of the necessary incentive to increase production. Both capital and labor are injuring themselves by squabbling over distribution instead of joining in production. The distribution struggle in Russia has ended in Bolshevism, which has reduced production as startlingly as Taylor's scientific management would increase it.

### The Social Meaning of Good Management<sup>1</sup>

I SHALL limit my remarks to an attempt to show the significance of the Taylor Society in my own experience. This I do, not as a means of enlightening any of you, but in the hope of stimulating each of you to evaluate once more the meaning of the Society.

I was keenly interested in the discussion at the morning session in which, as in previous meetings, several speakers talked about "the new recognition" of "the human element in industry." They seemed to think that this was lacking in the first formulation of the principles of scientific management.

I should like to turn the subject completely around. My own experience began with what is called the human element in industry, and I saw it at first outside the shop in the community. In the lives of wage-earners, particularly women in industry, I saw the effects of long hours of work, unemployment, and low wages. In the search for remedies, I was led back into the causes of these conditions in the shop itself, and nowhere did I find so many questions in process of being answered as in the Taylor Society. Not the final answer but the process of discovering the answers was for me the big contribution of this group.

Those answers did not relate merely to what is called the human element in industry, conceived as a separate problem in a different compartment of the manager's desk. My interest in the contribution of scientific management to the social problems in the lives of wage earners was not solely in its emphasis upon personnel relations, but in the technical organization of industry as it affects wage earners. The constructive imagination which can spend seventeen years studying the art of cutting metals is the imagination which can make industry and all its results

<sup>1</sup>Abstract of remarks by Mary Van Kleeck, of the Russell Sage Foundation, at the dinner of the annual business meeting of the Taylor Society, December 4, 1924.

in human lives harmonize with our ideals for the community. That kind of constructive imagination, though it may deal with one technical problem, will not fail to envisage the whole significance of industrial management. Nor will it be content merely to increase profits. The philosophy and the procedure which it represents will ultimately build a shop whose influence in the community will be social in the best sense, because the shop and all its human relations are built on sound principles.

Therefore, my interest in the Taylor Society is not directed toward challenging the technical engineer to give attention to problems of human relations. I am not worried about that, because if he is a good engineer he cannot fail to contribute to human relations. I am concerned rather with the other end of the story. I am eager to have those people who see in the community the present disastrous results of industrial organization realize how the art of management in the shop can fundamentally change those social conditions in the community. The Taylor Society can thus interpret management to the group who are seeking to construct a better community. Membership in the Taylor Society means an opportunity to share in that interpretation.

I can illustrate in another way what membership in the Taylor Society means. I have in my mind a picture of the Taylor Society in session. A valiant member rises with tilted spear to advance upon the rest of us. He has discovered a new idea which was lacking in Mr. Taylor's formulation of principles. He hurls his challenge. I see members of the old guard sitting on the front row, and I observe over the collar the tip of a smile. The smile means: "If this young man will think a little more deeply, he will find his idea already formulated in scientific management, but we won't tell him so." For this is what the Taylor Society is for. It makes just one claim upon its members—the claim to understanding by each member for himself. To the man who asks, "What shall I get out of membership in the Taylor Society?" the answer is simply "a challenge to think for yourself and to test your thinking in actual practice." Membership in the Taylor Society does not mean simply paying dues in order to receive a bulletin and to share in other attractive perquisites of an ordinary society. It means a readiness to accept a challenge presented in the discovery and formulation of principles of management which have a lasting value because they stimulate the conflict of ideas.

## What Industrial Psychology Asks of Management<sup>1</sup>

Patience, Discrimination, Research Opportunities, Reliable Criteria

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PSYCHOLOGISTS and management engineers are drawing together. They are becoming more aware of each others' problems and points of view. Increased cooperation has been proposed. If this is to be accomplished, psychologists have four things to ask of management—patience, discrimination, research opportunities and reliable criteria. Of these, the fourth is basic and implies more than may at first appear. But before examining these four requests in detail, let us get a fresh picture of the type of problem in which management and psychology are both interested.

What many a manager wants to know is why his workers do not produce more. He is aware that the answer is not always found in such things as defects of planning, routing, machine speeds, or in working conditions, or in insufficient financial rewards and incentives. The employees may, perhaps, be facing unrecognized difficulties in acquiring the high degree of skill needed to do the work in the best way or in any very rapid and accurate way—a problem on which the educational psychologist should be of help.<sup>3</sup> There may be obscure factors producing unnecessary fatigue with its accompaniments of irritation, dissatisfaction and outbursts of temper—a problem with psychological as well as physiological and engineering aspects. The British psychologists who in 1922 worked for seven months in coal mines to study the miner and his work were able to increase both the comfort of the miner and his output of coal by reducing the glare from his lamp; thus getting rid of troublesome visual after-images; by modifying the rhythm of the swing of his pick, and by getting him to strike harder and more slowly when working at the coal-face, and to use a quicker,

lighter stroke in digging the harder "dirt."<sup>4</sup> These investigators were primarily interested in the psychological aspects of the miner's work, but they did not hesitate to study that work as a whole, in the mine as well as in the dark-room of the psychological laboratory. When other British psychologists studied the causes of excessive breakage<sup>5</sup> of dishes in a catering firm, they found that in large part the costly accidents were traceable to worry, irritation and fatigue, and particularly to emotional tension of the workers at rush hours. This tension was not so often carried past the breaking point after the employees were forbidden to shout their orders to each other. Partitions were built to make some of this shouting impossible, and the personal element was eliminated by the use of a mechanical indicator. The savings in broken dishes and glassware—about 53 per cent on the average—effected by this combination of statistical analysis, psychology and common-sense management have already amounted to many times the cost of the investigation; and the terms "carelessness," "accident" and "poor material" have been stricken from the list of adequate explanations of the cause of many breakages.

Since the founding in London in 1921 of the National Institute of Industrial Psychology, our British colleagues have made studies in a wide variety of industries. These include a tin box factory, a cabinet factory, chocolate factories, a bakery, a catgut factory, a starch factory and a tobacco factory. They have made investigations for cotton mills, calico printers, and margarine makers. They have studied hand composition in a printing plant. They have done research

<sup>4</sup>"An Investigation in a Coal Mine," by E. Farmer, S. Adams and A. Stephanson, *Journal of the National Institute of Industrial Psychology*, Vol. I, No. 4, October, 1922, page 125; Vol. I, No. 5, January, 1923, page 178; Vol. I, No. 6, April, 1923, page 232.

<sup>5</sup>"An Investigation into Breakage Problems" by G. H. Miles, A. B. Eyrre and others, *Journal of the National Institute of Industrial Psychology*, Vol. I, No. 4, October, 1922.

<sup>1</sup>A paper presented at a meeting of the Taylor Society, New York, December 5, 1924.

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<sup>3</sup>See Chapter IV of "Skill in Work and Play" by T. H. Pear, London; Methuen & Co., 1924.