maintained as a full time, paid official devoted solely to his council duties. The representatives of this type that I met impressed me as earnest, serious men, conscious of the responsibility devolving upon them. But of co-operation in production there is hardly a sign. It is generally felt that the workers are not ready for it, nor are the employers at all willing to experiment with it. The law may require representation of the council on boards of directors; but in reality they are usually mute members.

Confronted by this problem, the unions have adopted a policy that appears very long sighted. It is based upon a frank recognition that the workers are not yet ready for any widespread, effective participation in managmeent, and that before they can be ready they will have to be specially trained. Consequently courses of study have been prepared for works council members designed to acquaint them with the intricacies of business administration, finance and management. They are well attended and seriously pursued.

This acceptance of the necessity of training is closely related to a second characteristic of industrial relations in Germany, namely, the extent to which research and fact finding is used by both employers and trade unions. It is really striking. Hardly a union or an employers' organization exists but which either has its own research department or avails itself of the services of some research bureau. This aspect of administration is developed on a much larger scale in Germany than either in Britain or in this country.

I have spoken of the wide acceptance "Rationalization" has won from both employers and trade unions in Germany. It is undoubtedly one of the main elements that has helped Germany get her industrial wheels ahum once more. For while Britain still is unable to provide work for one million of her workers, Germany has reduced her unemployed from a peak of over 2,500,000 to some 500,000. But one gets the feeling that so far rationalization in Germany has meant a disproportionate emphasis on technical improvements with too little appreciation of the importance of the human factor. However, we must remember that the trade union movement is powerful and strongly intrenched both in industry and the state. It is biding its time. At present it is anxious to see industry stabilized and prosperous. It is constantly pressing for a larger share of the gains from rationalization, and, when in its opinion, the proper time has arrived, it will make an insistent demand for what it considers a just share to the workers.

This, then, is the most recent trend in industrial relations in Great Britain and in Germany—a mere tendency, perhaps, a promise of a new relationship in industry. Labor has expressed itself as willing to accept the scientific management and rationalization of industry, provided, of course, proper safeguards are assured the workers. In Great Britain this development has emerged as the most recent stage in a long development of collective dealings; in Germany it appears as a central scheme of industrial dealing and co-operation formulated in the fundamental law of the land. The promise is here. What its outcome will be depends in large measure upon the lead of the employing group. If employers accept this new proffer of co-operation, if they share with the workers all facts in the state of the industry, if they work out jointly with them measures for safeguarding even the immediate interests of the workers, if they put through necessary reorganizations rather than resort to wage reductions in times of stress—in a word, if they are willing to make scientific management a community process carried out by the parties to industry for the good of the community as a whole, there is really hope for a new kind of future. But if, on the other hand, they turn their backs on this new tendency or give it only a half trial, they must face the possibility that the leadership of labor may again fall into the hands of a militant group. For in both of these countries strong minorities exist which condemn the new policy of labor as "class collaboration." They will naturally seize on any failure of it as a means for wresting control of labor from those who now hold it. With such a turn of events, conflict rather than co-operation may again become the key in which human relations in industry will be set.

Industrial Psychology[1]

Its Progress in the United States — Psychology as Science, as Point of View and as Method

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IN WHAT directions and to what extent has the science of psychology influenced industrial thought and practice in the United States? What influences have operated to bring industrial problems to the attention of psychologists, and to bring psychological doctrines to bear on the thinking and practice of business executives, industrial engineers, labor managers, trade union leaders, and students of social science whose primary interest centers in industrial relations? How keenly are the masters of American industry aware of the problems of individual and social psychology that have been brought into the spotlight of inquiry as a result of mass production and minute division of labor, with the resulting tendencies toward repetitive processes, shorter hours, better wages, modification of many skilled trades, demand for highly specialized, non-transferable skills, and decreased need of mere physical strength in the worker? What help have the practitioners of scientific management or the administrators of personnel policies received from the science of psychology?

No damage will be done through frank admission at the outset that the significant and constructive contributions of industrial psychology in America have been meagre. Psychology is a rapidly growing but still youthful science. It has been absorbed in the task of putting its own house in order. Within the past generation it has had to win the cooperation and respect of its elder sisters, the biological sciences. New techniques of research have had to be devised, new hypotheses formulated and put to the acid test of controlled experiment. Efforts in these directions have met with such success that there has been a wholly unprecedented and disproportionate demand for the services of psychologists as instructors in university and college courses in psychology. Then, too, the applications of psychology to problems of elementary and secondary education have absorbed a large share of the energies of the most brilliant of American psychologists. One need only mention the names of such leaders of psychological research as Thorndike, Terman, Judd, and G. Stanley Hall, to illustrate the fact that careers in educational psychology have attracted some of our ablest men. And today, if industry is to bring it to pass that the attention of eminent psychologists shall be focussed on the problems of human relations and conditions in factories and offices, it must be prepared to compete not only with the instructional budgets of the universities and the considerable financial rewards that accrue, through publication, to those who greatly improve techniques of public education; it must compete as well with enticing research opportunities now opening up to psychologists on problems arising in the fields of political science, law, criminology, child guidance and social betterment.

Not only have psychologists been under pressure to bend their efforts toward non-industrial problems; they have been content to see large areas of psychological inquiry in industry pre-empted by capable investigators whose training has been primarily other than that of the psychological laboratory. Many of the best contributions to the study of industrial fatigue, accidents, illumination, and simplification of work, have been made not by psychologists but by industrial engineers and specialists in scientific management. A canvass of the contributions of Frederick W. Taylor and his associates, for example, reveals numerous studies in the subject matter of industrial psychology. Hence an unwarranted tradition has prevailed, to the effect that questions of time and motion study, incentives, factory training, and the design of tools, machines, benches and chairs to fit the require-

[1]Part of an American report on Fundamental Relations in Industry presented at the First Triennial Congress of the International Industrial Relations Association, held at Cambridge, England, July, 1928.