

As essential to a sound result, in my judgment, analysing and planning should be done, not in open conference with the howling world at these men's elbows, but behind closed doors. It should not be done in a hurry; that is, there should be time not only for fact-finding but for digesting and relating facts, digging out a program.

That is, if we are to have this collective leadership we should choose the best of our business leaders, give them a chance to work unimpeded, let them place their program before the country and then not drop it, as the Wickersham Committee, for instance, was obliged to do, but go out as expounders, educators, and fight for it.

Of course nothing so sensible as this can or will be done. For one reason we do not have patience in troubled times, or any time, to give a leader leisure to work out a considered program. We insist on knowing what he is going to do before his situation has crystallized sufficiently for him to know himself. We seize eagerly on rumors that have come down through a succession of mouths and condemn or support, as if we knew what we were talking about.

This impatience would hamper Dr. Person's collective leadership.

Against its success, too, would be the weakness of what he speaks of as our "capacity for followship." By nature and training under this Government we arrogate leadership to ourselves. We are poor followers.

I once heard the present President of the United States say in a dinner-table conversation, where the question of leadership was raised, that there was not a town of ten thousand people in these United States that could not furnish a man who would make a good President. I am not so sure he was right, but I am sure that there is not a town of ten thousand people in these United States but has in it at least one who feels the power to be President. The nature of our institutions, of our training, of our history, makes this inevitable.

Dr. Person enumerates various hinderances to leaders emerging in a crisis. Our "new industrialism" is one, but that new industrialism has developed in the last fifty years a series of extraordinarily powerful men. What we are today is built on what they did. Hill, Rockefeller, Harriman, Morgan, Garry, in industry, and in politics, Cleveland, Theodore Roosevelt, as well as Wilson, were all powerful leaders born of more or less crisis conditions.

Dr. Person's second reason is interesting—the complacency which our prosperity spreads, easy living. However, that easy living has never reached any great number of our population. If something like 25,000,000 families are living, even in prosperous times, on \$2,000 a year or less, as the figures seem to indicate, there is not much chance for luxury. It keeps you on your toes to live at all. But it is interesting to note how large a percentage of our powerful leaders have come from families where there was anything but "easy living."

If we grant that there are men of power throughout the country who feel the capacity to be anything and everything, why is it, when they reach Congress, the Cabinet, a high place in a great corporation, that they rarely do more than arouse the hope that here is what we are seeking? One reason at this time is that on trial they show so little knowledge of economic and social principles. If they played with electricity as they do with fundamental things they would all shortly be dead. Economic, social and ethical laws may work slowly but they have the last word. These fundamental principles of things many a possible and would-be leader seems not to grasp at all. He has an easy faith in his ability to get by; this the public slowly realizes and gradually gives him up.

What are the tests of a leader, single or collective? Certainly he must have a clear idea of what he wants to do at a given moment. Lincoln is a good example. He always knew what he was after and subordinated all less essential matters to what he regarded as essential.

This knowing what he wants has been largely responsible for Mussolini's continued dictatorship. He knew what he meant to do when he was called to power and apparently he has never wavered. What he regards as his destiny, his call to power, is a more real thing to him than it was to Napoleon, for instance. Napoleon felt it, but he had his cynical moments and he enormously abused his power for personal family ends. Mussolini so far has escaped that pitfall.

The aim must be clear and there must be patience in attempting to realize it. Nothing so hinders the progress of sound undertakings as hurry. Progress does not come in one year or in one decade. It is a matter of fifty-, hundred-year periods. It is built on what has gone before and the relation to that thing that has gone before must be understood.

I heard Dr. Person complaining one night at a dinner-table discussion because the Taylor system had not yet re-organized society. But Taylor ideas seem to me to have made enormous progress. As a matter of fact, in fifty years they have gone practically around the world. I am always interested and surprised when I open my list of applications for membership in the Taylor Society to see from what distant places they come.

Leadership must keep its head, not be thrown into panic, run after bugaboos and panaceas. At the present moment, there seems to be a real danger of making out of the changes that the advances in technology have brought on industry a bugbear too monstrous and fierce for men in such a government as ours even to attempt to control. We must turn ourselves over to an oligarchy of engineers.

There is no question of the part the machine has played in present-day under-distribution and unemployment. But a study of the development of the machine shows how again and again men have risen against the machine as a cause of unemployment and depression and how again and again they have been able to put the monster in its place. The real question is controlling the machine, or perhaps controlling those who make and run it, so that mankind is served rather than enslaved by it. In so far as the technocrats can help on that job they should be welcome, but to date they seem to me to be planning rather to increase man's subjugation, though I must confess that I do not see too clearly their aim or technique. This may be due to my unfamiliarity with their pure scientific calculations or it may be partly due to their own unfinished thinking.

At all events Dr. Person's collective business leadership, if he gets it, must not allow itself to seize technocracy as a way out because frightened by the showing of its advocates. If his leaders are worth their salt, however, they will sift the thing to the bottom and tell us exactly what is proposed.

Whatever the plan Dr. Person's leaders put before us, it must be free from partisan and doctrinaire influences, and must accommodate itself to those who follow. Followship in this country is jealous of its power, insistent on its interest and its own views, slow to be convinced, though it can be convinced as it has been proved many and many a time. If we can get a leadership as wise in handling human forces as the man who makes an engine is in handling physical forces there will be hope of finally mastering the crisis.

Addresses delivered before a meeting of the Taylor Society, New York, December 7, 1932.

Reviews

INDUSTRIAL PSYCHOLOGY. By Morris S. Viteles, W. W. Norton & Company, Inc., New York, 1932, pages xviii, 652.

At last a definitive work is written on American accomplishment in the field of psychology as it relates to the activity of the individual worker in economic life. Within the limits set, Professor Viteles' work supplies a new standard of scholarly, exhaustive and scientific attainment. If any possible criticism is to be offered it is that the very extensiveness of the study will limit its appeal to executives and give it primarily the audience of a textbook. Perhaps the author can later be persuaded to give us a two-hundred page book in simple operating vocabulary which will appeal to adventurous managers who are anxious to utilize psychological techniques. Meanwhile the present volume represents the source-book of contemporary scholarship.

If one who has always been interested to encourage the broadening of managers' thinking along the lines considered in this treatise may offer two further comments, they would be these. All possible applications of psychology—as, for example, in the fields of morale building and conference techniques—are not necessarily subject to laboratory validation; yet for that reason they are not less the subject for scientific study. And, second, the effects good and bad of group participation as we see it manifested in all forms of organization are a proper subject of psychological inquiry and experiment. Professor Viteles does not ignore these two lines of thought but his treatment of them is relatively lacking in emphasis and constructive handling. Here, if anywhere, the proportions of his excellent study may to some appear questionable. For while it is true that the methods of effective work by the individual are vastly important as a subject of inquiry, it is equally true that in the future the problem of the total relationship of the individual to the corporate group promises to require far greater attention.

It is, finally, interesting to observe that this volume is significant in showing what psychology has not succeeded in doing, no less than in recording definite achievements. A fine, trained, candid mind with broad sympathies, has here been at pains to indicate where the promise has not been performed as well as where it has. The economic world owes the author a profound debt of gratitude.—By *Ordway Tead*, Editor of economic and business books, Harper & Brothers, and lecturer on personnel subjects, Columbia University, New York, N. Y.

ECONOMIC TENDENCIES IN THE UNITED STATES. By Frederick C. Mills, National Bureau of Economic Research, New York, 1932, pages 639, tables 213, charts 108, (\$5.00)

This volume, No. 21 of the National Bureau of Economic Research studies, is a compilation of data concerning two distinct periods in the recent past: the pre-war period from 1901-13 and the years from 1922-29. For each there are chapters on changes in the volume and character of production, in commodity prices, in the relation of price to cost, and on miscellaneous changes in factors such as the distribution of income and foreign trade.

Dr. Mills writes clearly and dispassionately; his explanations of the origin and significance of his statistical data are definite and readable. There are charts, tables and index numbers that bring out the relationships between various factors otherwise obscure. The book is particularly useful as a source of information on the various secular trends that have changed, either in direction or intensity, during the past thirty years.

Dr. Mills' figures show the population growing at an average rate of 2 per cent from 1901-13 and of 1 per cent from 1922-29. The latter curve shows distinctly the tendency, commented upon by many writers, toward downward convexity.

The actual figures for the change from debtor to creditor nation as given by Dr. Mills show an average of fifty-three millions of net capital borrowing from abroad in the pre-war period; of 451 millions of net lending in the post-war years—another important secular change.

The trend toward large-scale production shows as a decrease in the number of establishments during the post-war period as contrasted with an increase in the early years of the century. From 1919-29 the number of establishments declined 18 per cent; output per establishment increased 68 per cent. These figures are relevant to the possibly increasing tendency toward centralized control of production and prices and the consequent instability of business in general.

The physical volume of production per wage earner is shown as rising at an increasing rate; 1 per cent from 1899-1914; 3.3 per cent from 1923-29; 4.8 per cent from 1928-29. The total number of wage earners is shown as rising at an average rate of 2.2 per cent per year before the war and as falling off 1.3 per cent per year from 1923-29. The coincident shifting of labor from production of physical commodities to services is shown. In 1920 the former used 65 per cent of all the gainfully employed, other than clerical workers, while the service industries employed 35 per cent. In 1930 the percentages were 58 and 42 respectively. These data are of interest in connection with the problem of technological unemployment and the antidote effect of service industries, as well as in regard to the secular increase in the violence of the business cycle due to the elasticity of the private service market.

Another interesting secular change has been the relative growth of the market for durable and semi-durable goods. This has been increasing at an increasing rate. The author points to the trend toward increased violence of the business cycle attendant on the rising proportion of goods that need not be bought at frequent intervals.

Dr. Mills' tables show the interesting trend toward allocation of a larger share of the national income to capital equipment production. They are of interest in connection with the possible secular trend toward increased violence of the cycle, not only on the financial end but also in relation to the growing instability of employment as industry becomes more and more mechanized.

The various secular trends that seem to have become established between 1900-29 may have been altered or accentuated during the past three years. In regard to that possibility this book naturally gives no definite information. It is of great interest, however, as a background for discussion now going on concerning the nature of the determining factors of the present situation.—By *David Cushman Coyle*, Industrial Engineer, New York.

COMMON SENSE APPLIED TO MOTION AND TIME STUDY. By Allan H. Mogensen, The McGraw-Hill Book Company, Inc., New York and London, 1932, pages 228.

Unfortunately much of the great potential value of a book of this sort is doomed to be lost because of a lack of knowledge and understanding on the part of executives and many of those classed as "time-study" men, of the spirit, principles, technique and mechanisms of Scientific Management as a whole.

Mr. Mogensen has in the opinion of this reviewer made a decidedly useful contribution to the literature on this important albeit somewhat disproportionately emphasized and widely misapplied feature of Scientific Management. The book deals mainly with the methods of motion and time study, designated as "micro-motion study," evolved and developed by the late Frank B. Gilbreth and his able co-worker Dr. Lillian M. Gilbreth. The cases used for illustration are not, however, confined to the use of the motion picture camera, or even strictly to the Gilbreth technique.

The reviewer is gratified that Mr. Mogensen has supplemented his own effort to dispell the popular misconception that there is any fundamental difference between what Taylor so inadequately designated by the term "time study" and what Gilbreth called "micro-motion study."

Gilbreth's contribution to Scientific Management, and it was a great one, lay in improvement of the technique of method and time study and in the development of means for the more accurate measuring and recording of true elementary movements and the time of their execution. Even more important than