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Problems of Social Biology

ONE of the prime needs at the present time is the development of research in the social and biological sciences on a scale commensurate with the prosecution of research in the physical sciences in the past. This would replace our ignorance of social change by the precise knowledge upon which effective control depends, and would also assist in dispelling the misunderstandings or misinterpretations of social and economic history which lie at the root of many prejudices and other influences opposed to rational change.

The plea for a wider orientation of research and especially for investigations on the biological side has been reiterated by industry itself, notably by Sir Harry McGowan in the Messel Memorial Lecture to the Society of Chemical Industry, and was eloquently expounded by Prof. J. S. Huxley in his recent book "Science and Social Needs" (London: Watts and Co., 1934). The prosecution of research in these fields is undoubtedly likely to throw light on the true causes of many perplexing social phenomena observed both in industry and society. More, however, is required if we are to check and overcome the tendency for man's capacity for collaboration in work, his belief in his social functions and sense of group solidarity, to be destroyed by rapid scientific and technical advance.

The demands made on management by the magnitude and complexity of industrial operations at the present time have been one of the many factors forcing attention on training for management and the supply of industrial leaders of the requisite capacity. The demands made on leadership are, however, equally great whether administration is concerned primarily with problems of industry or with those of government or society.

It is here indeed that we touch on one of the most acute dangers of all. So long ago as 1913, Brook Adams ("The Theory of Social Revolutions", London: Macmillan and Co., Ltd.), pointing out the tendency for civilisations to break down through administrative difficulties or defects, suggested that even then the possibility of maintaining administrative quality and consequently stability of social equilibrium was gravely in doubt. Many indeed of the problems with which we are surrounded and the ills from which society is suffering to-day bear unmistakeable witness that governments and administrations have been unable intellectually as well as morally to meet the

demands made upon them, and have failed to effect the adjustments to rapidly recurring changes in environment produced by scientific and technical advance. On this point Bavink has commented pertinently, observing that until now, no civilisation has had the knowledge we possess, which alone enables a complete insight into the deeper causes of cultural processes, and in particular into the decline of peoples. The first people to resolve to eliminate those causes, he asserts, will, unless every sign is misleading, rule the world.

The peril of the backward or belated mind in administration is one of the greatest dangers to the continuance of civilisation. No political form of government, from dictatorship to democracy, will avert the disaster if its leaders are incapable of assessing the various factors and acting with sufficient vision, vigour and courage to effect the necessary adjustments to changed social conditions. No feature of the lopsidedness of our development is more serious than the discrepancy between the way in which we have developed scientific research and the training of scientific workers, and the comparative neglect or failure of our attempts directed to the discovery and training of administrators of exceptional capacity. The country that first solves the problem of discovering the administrative élite and of maintaining working *moral* will infallibly outstrip the rest in the quest for stability, security and development. The universities of the world have scarcely begun, however, to think about the training of the new administrator.

These who, confronted by the problems presented by the rationalisation of industry, have lightly asserted that the human mind is incompetent ever to handle efficiently the problems of administration presented thereby, have overlooked the fact that no attempt has been made to discover and train the right type of administrator or even to eliminate factors or conditions which definitely hinder his discovery and training. They overlooked, too, the fact that national administration presents problems equally complex, demanding equally a knowledge of technical, biological and social facts for their solution, and that civilisation must produce administrators of the requisite capacity and knowledge, or perish.

There could, therefore, be no more opportune time than the present for the discussion of the relation between science and social problems. If the discussions at the Aberdeen meeting of the British Association have done no more than

encourage co-operation between the scientific worker and the community, and foster a sense of social solidarity, if they have given a definite impulse to the education of society and its leaders as to the contribution which science can make to the general welfare and the importance of the scientific and technical factors involved in many of our national and social problems, if they can initiate a determined effort to face the problem of discovering and training leaders for industry and society of the calibre and capacity required, they will have done much to justify the vision of the Prince Consort displayed in his presidential address when the Association first visited Aberdeen in 1859. "We may be justified in hoping that, by the gradual diffusion of science and its increasing recognition as a principal part of our national education, the public in general, no less than the Legislature and the State, will more and more recognise the claims of science to their attention; so that . . . the State will recognise in science one of its elements of strength and prosperity, to foster which the clearest dictates of self-interest demand."

History and Medicine

- (1) *The Rise of Preventive Medicine*. By Sir George Newman. (University of London: Heath Clark Lectures, 1931, delivered at the London School of Hygiene and Tropical Medicine.) Pp. ix+270+8 plates. (London: Oxford University Press, 1932.) 10s. 6d. net.
- (2) *Great Doctors: a Biographical History of Medicine*. By Dr. Henry E. Sigerist. Translated by Eden and Cedar Paul. Pp. 436+60 plates. (London: George Allen and Unwin, Ltd., 1933.) 15s. net.
- (3) *The Physician: as Man of Letters, Science and Action*. By Prof. Thomas Kirkpatrick Monro. Pp. viii+212. (Glasgow: Jackson, Wylie and Co., 1933.) 10s. 6d. net.
- (4) *The Life of Edward Jenner, M.D., F.R.S., Naturalist and Discoverer of Vaccination*. By Dr. F. Dawtrey Drewitt. Second edition (enlarged). Pp. xi+151+6 plates. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1933.) 6s. net.

(1) SIR GEORGE NEWMAN'S book represents the first series of lectures founded in the University of London by Mr. Charles Heath Clark, who died in 1926. The general scope of these lectures as decided by the Senate of the University was to include the educational, cultural