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VOLUNTARY SERVICES IN THE MODERN STATE 781

To his earlier reports on social insurance and full employment, Lord Beveridge has now added a third, entitled "Voluntary Action"*. In the first of these reports ford Beveridge emphasized that social security must be appleved by co-operation between the State and the individual, and that in organising security for service and contribution, the State should not stifle incentive, opportunity or responsibility. In establishing a national minimum, he urged, the State should leave room and provide encouragement for voluntary action by each individual to provide more than that minimum for himself and his family. A scheme run by the State, in other words, is not enough.

This third report is something more than a corollary or complement to the first two. Indeed, it could well be argued that, both logically and historically, it should have preceded both the report on social security and that on full employment. Like its predecessors, its main emphasis is on duty, either of the community, that is to say, its leaders, or of the individual. "Emphasis on duty rather than assertion of rights," writes Lord Beveridge, "presents itself to-day as the condition on which alone humanity can resume the progress in civilization which has been interrupted by two world wars and remains halted by their consequences."

These words give the clue to the essence of the third report. Far more than a call to action, it is a challenge to thought. Its implications run far beyond the activities of the institutions immediately surveyed into the whole web of social and cultural activity that makes up the pattern of Western civilization as we know it to-day. "Voluntary Action" is both an outspoken defence of human freedom and a plea for the creative thought, out of which alone can emerge the new institutions we need to-day to safeguard our heritage and ensure the free expression of human personality. Lord Beveridge's inquiry was conducted primarily at the instigation of a leading 'friendly society'; and although the first part of his book is concerned essentially with the work of such societies, he did not limit his inquiry to that field. Even in that section of the book, there are comments that are relevant in a much wider context; and in the main the recommendations for action and the eightpoint programme for the State with which he concludes, apart from the suggested Friendly Societies Act and the rectifying of the position of the housing societies-which, as he observes, at present receive from the Government warm words and cold comforthave implications affecting the whole field of voluntary action.

The making of a good society, Lord Beveridge reminds us, depends not on the State but on the citizens, acting individually or in free association with one another, acting on motives of various kinds —some selfish, others unselfish, some narrow and material, others inspired by love of man and love of

* Voluntary Action: a Report on Methods of Social Advance. By Lord Beveridge. Pp. 420. (London: George Allen and Unwin, Ltd. 1948.) 16s. net. God. The happiness or unhappiness of the society in which we live depends upon ourselves as citizens, not on the instrument of political power which we call the State. This present report is designed especially to show some of the tasks which must be undertaken, if prosperity, when it comes, is to mean the chance of happiness for all. It is a challenge to the men and women of a free society to make, and keep, something other than the pursuit of gain as the dominant force in society.

Lord Beveridge recognizes frankly that, with the passage from class rule to representative democracy, little can be done except by influencing directly, not a few leaders, but the mass of the people. He believes that the spirit of service is in the people of Britain, but that only in the few is it a driving force which makes them pioneers, not to be stayed by difficulties. There is always need for the few—for dynamic individuals wholly possessed by this spirit. In one brilliant chapter Lord Beveridge displays vividly the way in which such pioneers call forth the same spirit in others, leading by example and creating the institutions and societies through which it acts.

Two main points on which we do well to reflect to-day emerge from this survey. The first is that while knowledge and reason applied to social conditions by voluntary action have led to a great development of action by the State, this does not end voluntary action or the philanthropic motive; rather it sets them free for new objectives. The State should, in fact, encourage voluntary action of all kinds for social advance, and in every field of its growing activity enlist the services of the voluntary agencies, born of social conscience and philanthropy.

But if this is one of the marks of a free society, Lord Beveridge emphasizes as his second point that the greatest danger of the present situation is not that voluntary action will be abused, but that it may not be able to exist. He asks whether the State will be able to create a machine capable of doing what the numerous affiliated 'friendly societies' did in the most difficult forms of social insurance, of combining soundness with sympathy in the administration of cash benefits to the sick, and whether also it will be able to avoid the evil alternatives of extravagance and harshness. Few who reflect on the extension of State control and responsibility in Great Britain into wide fields of industrial as well as social activity will not admit that there is at present evidence of lack of understanding of the nature of many of the tasks so lightheartedly undertaken.

Nowhere in this report does Lord Beveridge go outside the sphere of social activity; but what he says of the present danger to voluntary or individual action in that sphere can be applied equally well to what is happening in the industrial sphere also. Whatever the merits or demerits of proposals for nationalization of particular industries, they have one consequence that has as yet attracted little attention. The passing of increasingly large areas of industrial activity under State control has repercussions on the freedom of the individual, and the indirect consequences are sufficiently serious to warrant the most careful consideration before, and

not after, nationalization has been implemented. A free society ought at least to ask itself whether the surrender of such liberties is too high a price to pay even for proved, as distinct from hypothetical, advantages to the nation in other ways. A recent incident in regard to the dismissal of miners has directed attention to the consequence to the individual of nationalization in a sphere for which there was in principle almost universal approval.

Some considerations of this kind have undoubtedly been in the minds of medical men in their misgivings about participation in the National Health Service on the terms originally proposed to the profession; but the general question has received nothing like the attention it deserves from professional associations, many of which must be at least indirectly affected by many nationalization proposals. There is a further reason why they should give closer attention to this question, brought out more clearly by Lord Beveridge in connexion with his first point regarding the importance of retaining voluntary associations. Such associations-and professional bodies should obviously be included when we no longer limit them to social service in its narrow sense-provide the growing points of society. The essential reason for State encouragement of voluntary action is its value in exploring new ways of social advance, and equally of advance in other fields.

In one of the most significant passages in this report, Lord Beveridge remarks: "In a totalitarian state or in a field already made into a State monopoly, those dissatisfied with the institutions that they find can seek a remedy only by seeking to change the Government of the country. In a free society and in a free field they have a different remedy : discontented individuals with new ideas can make a new institution to meet their needs. The field is open to experiment and success or failure; secession is the midwife of invention. The new institution may fail or may remain limited. It may grow according to the life that is in it, and growing may change the world."

That sentiment Lord Beveridge supports by numerous examples; London owes its 'lungs' to voluntary action, for example. Social survey itselfthe impartial study of social conditions and informed criticism of public measures-must always be one of the subjects of voluntary action, for although the State can play a part in this field and is increasingly doing so, the State should never attempt to absorb the whole field. Again, the last stage in totalitarianism would be reached if the use of his leisure were being arranged for each citizen by the State. The main attack on wasteful or harmful use of leisure cannot in a free society be made by direct action of the It must depend on the development of State. alternative interests and free pursuits; it depends on education, in the widest sense of the term, at all stages of life, but above all in adolescence and after.

Here we see a limitless field for voluntary action, assisted where necessary, but not controlled by, the State. In making the first call on the increased leisure of the democracy to fit them for the responsibilities of democracy in choosing leaders and deciding on public issues, we might well demonstrate afresh what has been one of the most striking contributions of British political sense to world affairs—the ability of public bodies to utilize the services of voluntary institutions. Time after time we have seen philanthropy breaking in on official routine, finding fresh channels for service, getting things done that would not be done for payment.

Voluntary action, however, should not depend on endowments from the past, any more than it should depend on favours from the State. It needs not only money but also service, and here we come back to the danger already noted. There are not so many people to-day with leisure for full-time service as there were in the Victorian age. There are, indeed, many more people with some leisure, and as Lord Beveridge points out, the voluntary services must adapt themselves to use such leisure. Only in that way can we hope to supply, through the efforts of individual citizens, those services needed to make a good society which the State itself cannot supply.

The danger is that the voluntary effort which is the spearhead of advance may not be forthcoming. Opportunity for independent earning and the compelling force of a vital religion are less present than they were, and it is important in one way or another to ensure in future the continuance of the conditions which led to progress in the past. There must be opportunity for independence, and there must be either a revival of the religious motive or an alternative compelling moral or spiritual force to do what religion formerly did in the minds and hearts of men.

These two conditions take precedence over the third, that of a surplus of money available for social experiment. It is the encroachment on these conditions that constitutes the gravest threat to creative work and to the freedom of the human spirit in any sphere of life to-day. In Great Britain, such encroachments are seldom deliberate or direct. The threat to academic freedom, for example, lies less in direct action by the Government than in the consequences of policy in other fields tending to restrict the leisure for thought or research by overloading the teacher or investigator with administrative duties and diverting him from his proper job. The same thought was clearly in the mind of Sir Robert Robinson when he referred in his recent presidential address to the Royal Society to the possibility that current depreciation of fundamental research relative to technological applications might endanger the freedom of science, and insisted on the vital role which the highest kind of disinterested investigation must take in the life of the community.

As regards the social sciences, Lord Beveridge has elsewhere written of the need for a never-ending line of successors to the Webbs. Their output, he pointed out, "was made possible by their being able to put before all other purposes, for most of fifty years, the free conduct of research in fields chosen by themselves. This they were able to do because at the time of their setting up their partnership, they could count on an assured unconditional income of $\pounds1,000$ a year inherited by Beatrice Potter. By what device will the society of the future be able to ensure that the spiritual successors of the Webbs will have their material resources for research, untrammelled by other duties, by orthodoxy or by prescription of topics? This condition of reasoned progress is not part of the 'new' civilization of Soviet Russia. It must be secured in one way or another in the changing civilization of the Western world."

This third Beveridge report, from the point of view of the man of science, is essentially an exposition of that text. It pleads that the road should always be open for gifted individuals to blaze new trails, and that there should remain the liberty of simple men to associate for action in new forms, for new purposes, free of prohibition either by the State or by associations already established. The philanthropic motive, like the scientific motive, drives men to service by specialized interest. It must be free to experiment and it cannot live under orders. It needs material resources to make its service possible. The dictum of John Stuart Mill, which Lord Beveridge quotes with approval, that "what the improvement of mankind of all their works most imperatively demands is variety, not uniformity", was never truer than to-day and is as valid in the scientific and industrial world as in that of social service.

This book, because it is primarily a challenge to thought, is one that should be read and weighed by all who are concerned for the future of science or of human freedom. There are, indeed, certain general principles indicated which could, and should, be applied far outside the field of social service in its narrower sense. Indeed, some of the suggestions Lord Beveridge makes for action in this sphere have themselves wider applications. He holds, for example, that it is important that there should be command of resources for social purposes in the hands of some living body other than the Government or the State. Thus, in his eight-point programme, he suggests that the Lord President of the Council, who is already minister-guardian of voluntary action in the academic and scientific fields, should be likewise responsible for that surveyed in this report, and he casts something more than a passing glance at the University Grants Committee. He recognizes that the analogy cannot be pressed too far, and that there are serious practical difficulties in entrusting to a similar Voluntary Services Grants Committee the allotment of resources to such an infinitely varied mass of philanthropic agencies. Instead, he suggests rather placing alongside the great charitable foundations, such as the London Parochial, the Carnegie, the Pilgrim and the Nuffield Trusts, an independent corporation endowed by the State for social advance by voluntary action, where departmental interest is unlikely.

Nevertheless, the parallel has implications which should be carefully examined, especially for the longterm issues involved in university expansion. The Nuffield Foundation has provided a sufficient example of the way in which the problem of social advance and social service is related to the needs of the universities and their place in the society of to-day. In their third report the Trustees of that Foundation recorded a belief in the continuing value of private venture as emphatic as that of Lord Beveridge in "Voluntary Action"; and they add that the increase of State support for learning and research does not lessen the need for voluntary enterprise. Neither does it decrease the importance of alternative sources of support if the principle—fundamental to a free and democratic society—is to be upheld that "there should be room for more than one opinion and for more than one means of putting that opinion to the test". Lord Beveridge's latest report might well be described as an exposition of that text, and a convincing warning of the irreparable damage that can be done to a free society, as well as to learning and culture, should conditions arise, through inertia or neglect, in which voluntary action, enterprise and initiative are starved and atrophied.

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GROWTH AND THE GENETICS OF PARTICLES

Growth in Relation to Differentiation and Morphogenesis

(Symposia of the Society for Experimental Biology, No. 2: Published for the Company of Biologists.) Pp. vii+365. (Cambridge: At the University Press, 1948.) 35s. no.

THERE could seem to be dozens of different ways of getting at the roots of biology. Each of them promises well at the outset. Experience has shown, however, that the promise is often totally misleading. Of the diverse approaches to the theory of heredity made in the nineteenth century, Mendel's, in fact, seemed the most unpromising. Yet it alone disclosed foundations that could be soundly built upon.

The present symposium on growth (which took place at Oxford and not at Cambridge as the preface states) reveals the same diversity of approach to development that arose at an earlier period in the study of heredity. We find chemical, geometrical, morphological, embryological, cytological and genetical methods expounded by different workers for plants, animals and micro-organisms. A wide field of experiment is covered, and many workers have realized, in spite of Woodger's contrary warning (p. 361), that the most valuable hypotheses are often those which do not appear to be testable to the man who propounds them.

The contrast between workers who are getting to the root of the matter and those who are not is more striking than in any previous discussion of a limited theme in biology. Perhaps all the more so because in their order in this book the papers have been so ruthlessly randomized. One extreme is represented by certain of the botanical papers. "Let us suppose," writes Wardlaw in summing up, "that a greater fund of more precise information stood to our credit." In view of the methods used, this supposition seems to be, par excellence, an untestable hypothesis. At the other extreme, the information is available, and it is of the right kind. We can tell that it is of the right kind because workers in entirely different fields find it possible to make use of the same information and the same assumptions. This group is converging on a common point of view, the principle that selfpropagating particles variously located are responsible for both growth and differentiation. The problem, as they see it, is to determine the relationships of these particles to one another, in position, in multiplication

and in government. The field of operations is the cell and its nucleus. The technique often includes chemistry. The concepts are always in part genetic. It is not surprising that such an enterprise should be most readily developed and applied in unicellular organisms and at the unicellular stage of higher organisms.

Spiegelman's contribution, based on experiments with yeast, is one of the most concentrated and compelling in effect. Spiegelman makes use of the notion of a plasmagene, which he defines (p. 314) as "a more or less complete gene replica which possesses to a varying extent the capacity to self-duplicate". Applying this principle especially from the point of view of the unicellular organism, Spiegelman holds that the permanence or decay of the self-duplicating capacity is not of primary interest. From the point of view of the multicellular organism, however, it is perhaps of primary interest, for does not duration constitute the difference between development and heredity, between differentiation and variation ?

Perhaps at the opposite pole to Spiegelman within the genetic field is Hadorn, who looks more directly to the nucleus. As ontogeny progresses, he argues, more genes have to take part in the increasing complexity of the differentiating organism. This would be so, we might suppose, if genes acted for short and specific periods, releasing plasmagenes to accumulate in the cytoplasm during development; and, indeed, Hadorn has shown that the time of action of particular lethal genes (such as are fundamental for development) is different in different tissues. Spiegelman, on the other hand, looks on differentiation as a result of competition between complete populations of plasmagenes, already present in the egg, which thereby become sorted out or unpacked.

A central place in this discussion is taken by Mather, who has brought together a great array of genetic and cytological facts to show their hitherto unrealized importance for the theory of differentia-Mather's theory, for which he provides a tion. detailed model, is the only one which makes effective use of the evidence of plant embryology. Indeed, this hitherto barren study of the embryo-sac and the pollen grain can obviously provide one of the most fruitful fields in the estate. Other flashes of light are in Holtfreter's attempt to relate the results of experimental embryology to the new genetic notions, and to introduce parthenogenesis and carcinogenesis into the discussion, and in Wigglesworth's comparison (suggested by Gregory's studies) between the diapause of insects and the resting stage of the plant seed.

If we look back over the developments which are now leading to synthesis, we can trace them to unexpected sources not of classical embryology so much as to Mendel, Miescher and Weismann through a long line which includes Boveri and Morgan, and recently Brachet and Caspersson. An important debt is also owed to those who have laboriously sorted out the actions of the nucleus and the cytoplasm in the cell, especially to Baur and Renner. This is the only work in which plants made the crucial contribution, one the importance of which was so generally overlooked until Sonneborn had made his beautiful analysis of the Kappa action in Paramecium. We may say in brief that these great advances, these great entrances, have rarely been made by those who knocked at the front door and stood and waited for an answer, but largely by those who have been sharp enough to see a side window left carelessly ajar and to climb in by it.

It might seem in this way that the method of discovery was accidental, informal—even illegitimate.