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CONDITIONS OF SURVIVAL : THE MORAL BASIS OF CIVILIZATION

HE debate on the Atomic Energy Commission which was contacted by Mr. Blackburn on the armineth of the House of Commons on August 2 hto a more hopeful perspective the clash between Aussian and the American proposals, if not entirely dispelling the pessimism engendered by the forthright rejection by the Russians of the Baruch plan for the control of atomic energy. With some reason the insistence by the U.S.S.R. on the unlimited rights of national sovereignty has been regarded as the first step towards the dissolution of the United Nations, and if in fact the Russian attitude is as uncompromising as it first appeared to be, that grim possibility must be faced. No scientific worker doubts that the relinquishing of some degree of national sovereignty is the price that must be paid as an alternative to a scientific armaments race embracing not merely atomic energy but also the equally grim potentialities of biological warfare.

While it is necessary to insist that some abrogation of national sovereignty is essential if atomic energy is not to remain a great menace to our age, it does not seem that the disagreement on the panel of men of science attempting to formulate the question of control in terms of scientific possibilities is as wide as would appear from Mr. Gromyko's words. The Soviet delegate, Prof. Skobetsyn, has not made the same difficulties, and although the report which the chairman of the panel, Prof. Kramers, is drafting may prove extremely cautious, it is likely that the possibility of control-in the sense of assurance against secret misuse of atomic energy-at several stages in the development of atomic energy will be clearly indicated. The report will probably leave it to the politicians to resolve the problems involved in the adoption and administration of specific controls.

Mr. Blackburn's speech in the House of Commons suggested that the Russians had not rejected in any circumstances the idea of any form of inspection. Their point was that at the outset the nations of the world should abolish all recourse to atomic bombs by a formal act, and Mr. Blackburn urged that it was inconceivable that the working of any system for the control of atomic energy, once agreed upon by the Security Council, could remain dependent on any act of the Security Council itself. If we established a system of control which gave warning months in advance of the fact that a country which purports to be accepting the rules laid down is violating those rules, we could eliminate the political problem of the veto. Mr. Blackburn indicated his own belief that a careful study of the technical side of the problem showed that possible measures for the control of atomic energy were possible because they turned largely upon scientific considerations, and in spite of asserting that the wider political issues had been considered first, he appears to lean very much to the proposals of the Acheson-Lilienthal report itself.

There was little support for Mr. Blackburn's suggestions in the debate, although the point he made

about the effect of the proposals on the U.S.S.R. and the necessity for removing Russian suspicion if possible was appreciated." The importance of the distinction between disclosing full information regarding the technical aspects of the production of the atomic bomb itself to a super-national authority such as the Lilienthal Commission proposed, and imparting it to such a body as the United Nations Organisation was apparently appreciated, but the note of urgency which has been so firmly emphasized in almost every communication from the scientific side was lacking even in Mr. P. Noel-Baker's statement. Mr. Noel-Baker did not think that a solution would be quickly reached, but made the rather surprising statement that the Government believed that the American and the Russian plans required to be fused. The two proposals, he suggested, really dealt with different parts of the subject, and he did not think they were in conflict. The Russians proposed that the manufacture and use of atomic energy for war-like purposes should be outlawed and that every State should undertake neither to manufacture nor to use the atomic bomb. Mr. Noel-Baker said further that the American representative on the Commission had agreed with the Russian representative that there was no fundamental clash of principle between this and the American proposal.

Mr. Noel-Baker's chief observations, however, were on the question of control and inspection. The Government fully accepted the principle of control and believed that a practicable scheme could be devised which would give reasonable security. Agreeing that the start should be made from the technical side, Mr. Baker said that, in the Government's view, we should first aim at drawing up a practical plan in the form of a convention for the creation of an international authority, and that, having done this, we would come to the necessity for political decisions. Before the major decision was taken the governments should have time for reflexion, the benefit of a prolonged international debate and a concrete picture of the safeguards offered in return for the surrender of sovereignty which the plan would involve.

In reply to a question as to whether the technical commission which is to work out this scheme would also deal with scientific subjects and the interchange of information, Mr. Noel-Baker said that members of the Atomic Energy Commission were not primarily men of science, but on the scientific and technical committee there were some of the most eminent men of science in the world. Besides this there was a sub-committee, mainly political, dealing with the system of control. He thought it possible that there might be agreement on exchange of scientific information before any final convention was made, but he emphasized that while men of science as such had rendered great assistance for pooling and publishing information, directing attention to the main problems to be solved and suggesting lines on which a solution might be found, they could not assume the political responsibility which must remain with the Government. Finally, Mr. Noel-Baker agreed that the atomic bomb might be neither the last nor the worst weapon which science might produce. We had to deal with

armaments of all kinds and should make it our object of policy to stop all wars, as well as to remove the causes of war.

Much of Mr. Noel-Baker's statement is most reasonable and in accord with scientific opinion. His recognition that the surrender of national sovereignty is involved is clear enough, though it might well have been emphasized more strongly that without such surrender there can be no control and no alternative to atomic warfare. The fate of the Kellogg Pact alone indicates the futility of relying simply on the renunciation of a particular type of warfare. But while it is reasonable and important that the governments should have ample time for reflexion before they make their decision, it should also be recognized that time is an essential element in reaching a real solution. The problem may well become more intractable, if not insoluble, by delay, as the Lilienthal Board have urged. There is grave danger that dilatoriness may allow an international atomic armament race to attain such momentum that it cannot be stopped.

Mr. Noel-Baker's statement did nothing, therefore, really to dispel the fear that the question of atomic energy and its control is not regarded by the Powers with the sense of overriding urgency that is imperative, and this fear will not be diminished by a like failure of the Powers to face the issues involved by the termination of the United Nations Relief and Rehabilitation Administration on December 31. Despite the proved and known need, despite the fact that the World Health Organisation will not meet until January and that the transfer to the Food and Agricultural Organisation of the functions of relief and agricultural rehabilitation, as recommended by the Director-General of U.N.R.R.A., will take a long time, liquidation of the headquarters staff of U.N.R.R.A. has already begun. The World Health Organisation will meet to find that the body of experts uniquely qualified to serve its high purposes of mitigating disease has just been finally dissolved, and the Committee to which the Food and Agricultural Organisation has referred the practical difficulties of finance and organisation and of principle involved in the transfer, is apparently not to report until the existing organisation has been wound up, and no plans can be approved to operate in time to meet European needs in the closing months of the present harvest year.

This melancholy picture of failure to face facts and to make adequate transitional arrangements to meet needs which are ultimately to be provided by organisations still in their birth throes encourages no easy optimism regarding the willingness or ability of governments to deal with the problem of atomic energy. It is indeed a picture of moral dereliction as well as ineptitude, and however right Mr. Noel-Baker may be in emphasizing the responsibility of the Government for the political and administrative action required, it is equally right that men of science, having discharged the technical responsibilities that lie on their own shoulders, should leave their fellow citizens in no doubt as to the dereliction of duty for which the Powers can justly be arraigned. That dereliction of duty is not one in which the British Government stands alone. We may gladly recognize that in regard to atomic energy the Government of Great Britain has taken a lead, and especially in insisting on the limitations of national sovereignty that are involved in any effective plan for control. But it is not sufficient merely to indicate acceptance of those implied limits on national sovereignty. That of itself will not place the responsibility for failure solely on the shoulders of those who primarily reject any such limits, unless every step has been taken to engender the confidence which would encourage the surrender by other nations of the necessary degree of national sovereignty.

Mr. Blackburn was right to indicate the responsibility which in this matter lies especially on the United States if Russian co-operation and confidence are to be secured, but nothing in the debate touched on a more fundamental responsibility of both Great Britain and the United States which is brought out even more clearly in relation to the dissolution of U.N.R.R.A. and the work of the Control Commission in Germany. The dominant factor in the present unsatisfactory position is the absence of a firm longterm policy for the whole of Germany. The most emphatic and important conclusion which the Select Committee on Estimates reached in its report on the Control Office for Germany was the need for the economic re-integration of the zones of occupation and the formulation of such a firm long-term policy; if not, in default of re-integration of the zones, for the whole of Germany then for the British zone and for such other zones as may be brought within the framework of a single economy. Fairly and squarely there was thus placed on the shoulders of the British Government the responsibility for formulating such a policy for the zone which it controls, and no refusal by the American Government or by the U.S.S.R. to face those facts and accept those responsibilities can excuse British refusal to honour the moral obligations implicit in the Atlantic Charter.

What has to be faced is that in deference to the U.S.S.R., Great Britain and America have abandoned the principles involved in the Atlantic Charter and have left themselves without any consistent peace aims. Abandoning the ideals and values of Western civilization, they have failed to practise them; and each successive challenge in Europe, whether of famine, of health, of economic reconstruction, no less than of the control of atomic energy, has found them with nothing positive to oppose to the aims and values of Soviet Russia. The first need for Britain and for the Western democracies is a positive policy based on those principles and ideals which are the highest expression of our Western civilization and which we professed only five years ago. If those values and principles are practised we may recapture the moral purpose and formulate the policies which can give them adequate expression.

Nothing is gained by concealing the fact that the aims and values of Soviet Russia are not those of Western Europe, or that what is needed to restore unity is a revival or a re-assertion of the religious standards and way of living from which Western civilization has derived much of its greatness. Respect for human personality, freedom of thought and utterance, freedom of worship, freedom of investigation—these freedoms from want and from fear in the spiritual realm are exactly what are denied by communism and cherished by the Christian ethic. They are also the conditions of scientific investigation and are implicitly asserted in the resolutions recently adopted unanimously by the General Assembly of the International Council of Scientific Unions.

These resolutions point to the supreme opportunity and occasion for a new international unity, to develop the benefit latent in nuclear energy and to avoid its misuse and no less to avert the potential menace of biological and biochemical warfare and to bring to mankind the full benefits of the discoveries on which such warfare depends. The resolutions recognize clearly that attainment of an agreement on the application of nuclear energy would represent an example of the international co-operation in economic and political matters which is essential to promote the welfare of mankind, the judicious use of natural resources, the removal of causes of dispute and the settling of difficulties arising from the continuous change of world conditions in consequence of scientific and technical advances. They recognize also that military secrecy cannot be allowed to dominate scientific discovery in any country or to prevent frank discussion and open publication of scientific results : international control and co-operation presuppose an international community of knowledge.

EARLY MAN AND APES IN THE

Apes, Giants and Man By Franz Weidenreich, Pp. vii+122. (Chicago: University of Chicago Press; London: Cambridge University Press, 4946.)

ORE than fifty years ago there were discovered ORE thankfifty years ago there were discovered in Deistocene deposits in central Java the fragmentary remains of a large primate which in several respects appeared to be intermediate between manual ape. It was therefore named *Pithecanthropus*. Bu, because the remains were so fragmentary, they led to a considerable amount of controversy which, on the whole, was rather inconclusive. Then, in 1929, the skull cap of a Pleistocene primate similar to Pithecanthropus was found in China near Pekin. It was described by the late Dr. Davidson Black and named by him Sinanthropus. Finally, during the few years preceding the Second World War, many more skeletal remains of these fossil forms came to light both in China and Java. Indeed, at present there are records of five skulls of Pithecanthropus (including that of an infant) from Java and no less than fifteen skulls of the Pekin fossil, as well as jaws and teeth and some limb bones. Thus we are now in a position to speak with some confidence on the morphological characters of these ancient forms.

One of the anatomists who have been most active in the accumulation of this new evidence is Dr. F. Weidenreich, who succeeded Davidson Black in 1934 as professor of anatomy in the Pekin Union Medical

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