

P.M.S.Blackett: A loud, clear and persuasive voice

FEAR, WAR, AND THE BOMB: Military and Political Consequences of Atomic Energy by P.M.S.Blackett

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Reviewed by William A. Fowler Professor of Physics

IN Fear, War, and the Bomb, P. M. S. Blackett, officer in the Royal Navy in World War I, director of the largest school of cosmic ray research in Europe, pioneer in operational research in World War II, holder of the American Medal of Merit, and winner of the Nobel Prize in physics for 1948, strides into the no man's land of the present cold war between Russia and the United States. From there his voice is loud, clear and persuasive—but it is destined to fall on ears already skeptical of the words and advice of scientists in general, and atomic scientists in particular.

This is unfortunate. Fear, War, and the Bomb (prosaically, but more accurately, published in England as Military and Political Consequences of Atomic Energy) is the first statement by a scientist of note which differs from the post-Hiroshima apologia of the great majority of articulate physicists—and which has any chance of reaching a large and widespread audience. The unanimity of American scientists on the subject, coupled with the paucity of facts and figures available to the American public, has led (for better or worse) from Hiroshima, through the Acheson-Lilienthal Report, through the Baruch Plan, to the present impasse in Soviet-American relations on atomic energy—which is not only characteristic, but perhaps the most intransigent of all these relations.

Blackett's book is an attempt to answer the question: "Why has the Soviet Union objected to the generous and idealistic proposal for the control of atomic energy made by the American delegation to the United Nations Atomic

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Energy Commission?" There is no doubt that Blackett's answer is sympathetic to the position of the Soviet Union. It will be unfortunate if, for this reason, it is not given the impartial attention which it deserves, as a treatment of a difficult subject from a point of view which—though not held by the majority of those well-versed in one fundamental aspect of the subject; the scientific—is still a thoughtful and thought-provoking one. It will be especially unfortunate if we find no other defense of our own position than to accuse Blackett of following the Soviet line, and hence dismiss his analysis forthwith.

Blackett begins with an analysis of the problem of how the invention of the atomic bomb affects warfare. He draws his answer from the broad lesson of the second World War—that the aerial bombing offensive against Germany involved the dropping of over one million tons of ordinary bombs without leading to a decisive failure of either civilian morale or production. The documentary evidence advanced in support of this thesis, taken mainly from the official reports of the United States Strategic Bombing Survey, may come as a surprise to many Americans. He concludes that any future war in which America and Russia are the chief contestants would certainly not be decided by atomic bombing alone—in spite of the equivalence of one atomic bomb to two thousand tons of ordinary explosive.

Blackett maintains that atomic bombs were dropped on Hiroshima and Nagasaki not for military reasons—Japan was already defeated—but for real and compelling diplomatic reasons, occasioned in large measure by the knowledge that Stalin had assured Roosevelt at Yalta that Russia would declare war on Japan three months after V-E day. The European war ended on May 8. The Soviet offensive was due, and did start, on August 8. The bomb was dropped on Hiroshima on August 6. Blackett comments: "So we may conclude that the dropping of atomic bombs was not so much the last military act of the second World War, as the first major operation of the cold diplomatic war with Russia now in progress."

Control vs. stalemate

From here the argument runs that the United States approached the problem of international atomic energy control, not only ashamed to have been the first to use atomic weapons, but completely over-impressed by the part these weapons would play in future warfare. As a consequence, in the Baruch Plan the United States insisted on special treatment of atomic energy problems by the United Nations from the beginning; the creation of an International Atomic Development Authority not subject to veto in the Security Council; the separation of atomic bomb disarmament from all other forms; the control of all atomic energy developments by the Authority; the establishment of special penalties for violations of any ultimate agreements; and the location of atomic energy plants for strategic reasons primarily

based on the needs of the Authority, rather than on the industrial needs of the individual countries involved.

On the other hand, Russia, unwilling to accept any impediment to her own progress toward equality with America in the atomic energy field, insisted on the establishment of an Authority with limited inspection rights, and only on condition that a general disarmament convention concerning all types of weapons—including biological as well as atomic—be ratified and implemented; that the veto in the Security Council be applicable; and that the stages by which operations in atomic energy development permitted to individual nations could come into effect be decided beforehand rather than left to the discretion of the Authority.

With this Blackett concludes that "the deadlock remained to the end much as it was in the beginning. For sound objective reasons, Russia and America put forward proposals appropriate to their own interests. Owing to the great difference between the strategic situations of the two Powers and between the levels of their atomic energy developments, these proposals were completely antagonistic, and each completely unacceptable to the other."

Blackett offers little in the way of a solution of the problem. Only four pages constitute his final chapter on "A Way Out?" He argues essentially that the Soviet proposal be adopted at present, with provisions for the eventual adoption of many aspects of the Baruch Plan as Russia advances, without outside interference, through the many stages of atomic energy development necessary to bring her abreast of the United States.

This reviewer finds it difficult to believe with Blackett that atomic bombing will not be incredibly more effective than the aerial bombing of World War II—that the first atomic bomb was dropped on August 6, 1945 for any other reason than that the first product of a planned and large-scale American war effort was ready at the

time—and that America's seemingly generous plan for the control of atomic warfare is actually a plan to control the development of atomic processes for use as industrial sources of energy in other countries.

On the other hand, there is much to be said—in retrospect, to be sure—in criticism of our conduct of atomic energy negotiations in the United Nations. Our stubbornness, as well as Russia's, necessarily led to the present stalemate. Our insistence, beginning with Baruch's first speech to the Commission, that no essential deviation from the American Plan would be acceptable, was a fundamental error if we expected to reach a mutual agreement with the other contracting parties.

Our refusal to accede to the Soviet requirement for a prior agreement on disarmament was in keeping, it is true, with our lack of faith in a time-worn method which failed so miserably to prevent World War II, but was nevertheless in error in that we did not make it the first step in a real program of mutual give and take. Last but not least, our insistence on retaining the so-called "secrets" until such time as adequate safeguards, in our opinion, had been established, was in error not only in regard to scientific tradition, but also in regard to our own past tradition in the development of many technical aspects of current civilized life.

Blackett's book is a controversial one. It will anger and further bewilder many well-meaning people. If it brings to the American public the realization that there can be an honest difference of opinion on the scientific aspects of the present Soviet-American impasse, it may lead to their insistence that the facts—and all the facts—about atomic energy and atomic weapons be made available immediately. Our dilemma arises today for one and only one reason—our scientists, our military men, our statesmen, our President have attempted to answer a difficult problem without an appeal to the bulwark of democracy: enlightened public opinion.

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