



BOOKS

The Amoral Atom

MUST WE HIDE? By R. E. Lapp. 182 pp. Addison-Wesley Press, Inc., Cambridge, Mass., 1949. \$3.00.

There is no doubt that despite periodic, earnest attempts to educate the American people about the atom bomb, misconceptions concerning it stubbornly persist. Nor is this new folklore limited to the folk. Even members of Congress (or so one gathers from the newspapers) are as confused, as disturbed, and as misled as any of their constituents. The consequences of such widespread ignorance can be tragic, as Mr. Lapp foresees. His little book is an attempt to translate the truth about the bomb into terms which anyone who can read can understand. Stripping a technical subject of technical phraseology is no light task, and Lapp is to be congratulated on the job he has done.

"Must We Hide?" considers the atomic bomb as a military weapon from every angle—with perhaps one significant exception. Lapp appraises the casualties in Japan and carefully explains just how the bombs exploded there killed the people that they did. He was at Bikini and describes the underwater test and its implications for future warfare. He tells how people die from radiation sickness and what defenses against this unpleasant death exist. The latter part of the book is devoted to considerations of the future use of the bomb in warfare. Can it be used as a definitive weapon in a super-blitz? Lapp doubts it, and documents his reservations. What should we be doing to defend ourselves against atomic attack? A detailed discussion of the proper dispersal of population and essential industry ensues. It is a thorough book, indeed.

Since to see the bomb steadily and see it whole was Lapp's primary objective, he has written his book in as pedestrian a manner as possible. He has gone to excessive lengths to combat sensationalism and hysteria. After a discussion of the hideous effects of radiation upon the human body, one finds this tempered statement: "Actually all modern war puts a severe strain on the participants and who can say that the victim of an atomic attack suffers more than the victim of a flamethrower or a person who has broken down mentally under the stress of combat? Much of the revulsion against the use of atomic weapons arises because the very newness makes it seem more horrible. A careful cataloguing of the injuries resulting from the use of the automobile would also be impressive but any proposal to outlaw the automobile would be considered ridiculous." Later in the book the author, who seems to have a grudge against America's favorite method of transportation, reminds us that: "... as a killer, the automobile must be placed high on the list, claiming as it does over thirty thousand lives a year in the United States alone. This is about three times the number of deaths from radiation at Hiroshima."

Now, one doesn't have to be a Chevrolet dealer to take exception to the emphasis of these remarks. In fact, the significant omission from "Must We Hide?" is a consideration of the moral implications of atomic bombing or, indeed, of any strategic bombing.

This reader, at any rate, finished reading the book with a considerable sense of uneasiness and depression. For all the author's matter of factness, it is impossible to regard the atom bomb as just another hazard of modern living. To accept atomic bombing as a routine technique of warfare seems to emphasize a profound loss in our national morality. The skeletal structure to which Lapp introduces us, stripped of its sensational fleshiness, is still hideous and deformed—just as would remain the infamous medical experiments of Buchenwald, no matter how prosaic or antisceptically scientific the language describing them might be. The type of pessimism reflected in the book itself tends to diminish possibilities of happier alternatives. It should be said however that although the author takes strategic bombing (the uglier word is genocide) for granted, he carefully shows that it is questionably effective in winning a war and an obstacle to winning a peace. He sketches the grim and grey outlines of future conflicts (the plural is his) omitting only the significant detail of war aim. He indicates, too, the direction the nation must go to wage these wars:

"Our individualistic population must be made to realize that some regimentation and obedience to competent authority will be required if bad situations are not to be made worse."

"Must We Hide?" has value in that it contributes greatly to the popular understanding of the problems of the atomic bomb. However, the answer to these problems will not be found in raising defenses—defenses which will inevitably be ineffective. Rather it can—and it must—be found in wise statesmanship based upon that deep regard for humanity which has always motivated us as people and as a nation.

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Pulsating Stars

THE PULSATION THEORY OF VARIABLE STARS. By Svein Rosseland. 152 pp. Oxford University Press, London, 1949. \$5.00.

Cepheid variable stars (whose light varies regularly with a period between a few hours and a hundred days) have played a unique role in astrophysics. Because the period of light variation is a unique function of total luminosity, the distance to one of these stars can be determined accurately once the period and apparent brightness have been measured. Just why the periods of these stars should be correlated so exactly with their total luminosities, and, in fact, why these stars should pulsate at all has naturally been one of the great problems of theoretical astrophysics. Professor Rosseland, director of the Institute of Theoretical Astrophysics at Oslo, has brought together in a systematic and elegant volume the extensive work in this field.

The first and last chapters outline the development and basic concepts of the pulsation hypothesis, together