

"ON THERMONUCLEAR WAR"

White Plains, N. Y.

Sir: William Lee Miller's discussion of my book, *On Thernonuclear War*, appearing in your April issue (which only recently came to my attention), impressed me quite favorably. I am grateful to Mr. Miller for expressing approval of some of my points and for defending me against what he terms the "absurd . . . naive reaction against writers . . . [that] blames them somehow for the world they discuss." Mr. Miller criticizes my book not for immorality but for amorality. Actually I am very sympathetic with his major thesis, and I would like to add a few words in order to clarify my position and, hopefully, some of the discussion.

Mr. Miller is emphatically right that "thermonuclear war is too important a subject to be left to the game-theorists." Although game theory can make some contribution to the understanding of certain problems that arise in the real world, the contribution is at best a very small part of what is necessary, and in fact I made no use of formal game theory in the book. I would conjecture that most of the animosity that critics of defense literature have directed against the use of game theory is really aimed at (as far as it is aimed at anything) what the critic considers to be an excessive use of rationality. I personally believe that the current discussion of these problems could only be improved by the judicious injection of rational arguments.

Mr. Miller says that "the technical-mathematical treatment of social problems . . . can yield important knowledge, but at the highest moral and philosophical level, of course, it is fatally defective." I agree, at least, that at the moral level a technical approach is not enough. My reason for using objective methodologies to study thernonuclear war was simply the hope that they would "yield important knowledge." Such knowledge is indispensable to moral and philosophical understanding if it is not to be founded on ignorance or error. Again, it is my belief that much of the current discussion suffers from misinformation as well as irrationality.

My book was specifically addressed to the technical side of the problem and to professional students of the subject. I have good reason to believe that it has had an important effect on many of those who were not enough aware of the dangers of the arms race and the serious and complex military, political and social problems of strategists that risk the use of nuclear weapons. While I agree that there is "a basic moral revulsion [to weapons of mass destruction] that should not be overcome," to weaken the discus-

sion in order to stress this consideration would not only have been inappropriate; it would have rendered my arguments less, rather than more, persuasive for my primary audience. On the other hand, many of those whose feeling of revulsion is well-developed could also profit from a technical discussion, while they are hardly likely to lose their moral feeling as a result of reading a book that expressly places this subject outside its focus of interest. The ultimate purpose of a treatise on say, cancer and surgery, is to save lives and reduce suffering; would anyone contend that if an author of such a book does not reiterate this fact continually his readers will become indifferent to pain and death?

Mr. Miller says, "A certain awe—to put it mildly—should surround our contemplation of such matters [of modern war]." Yes, if we are talking about a total view; but it is indispensable that some people at some time for some purposes suspend their awe long enough to find out just exactly what it is we are talking about. And then they must communicate their findings in a direct and objective manner. Even more important, awe is the worst possible frame of mind in which to investigate this problem, whether one is looking for new approaches or trying to improve the old. It is difficult, if not impossible, to do research in a cathedral atmosphere. As Mr. Miller states, even ecclesiastics, "by constantly handling holy things, become insensitive to holiness," i.e., they cannot do their work at a high intensity of awe.

In conclusion Mr. Miller writes that "Mr. Kahn, consequently, is surely right when he says that we need the thought of persons outside military strategy and mathematical calculation to deal with world politics in our strange era." May I add that we need *both* more dispassionate research *and* more humane concern for what seems to me, at least, our most dangerous social problem. I think Mr. Miller and I would agree that neither approach can help us very much without the other.

At the Hudson Institute we have moved to help meet this need by bringing together a group representing diverse backgrounds, skills, and viewpoints to work on problems of national security and international order. We believe that moral concern must be as well-informed and deeply thoughtful as we can make it in the time remaining, if it is to help us avert major catastrophe. Mr. Miller recommends "a human and humane rather than a mathematical language." These are not mutually exclusive; both are necessary; neither is sufficient.

HERMAN KAHN