

become better informed and prepared to deal realistically with the Russians of today through reading these books than in any other expeditious way I know of. Parenthetically, I wish there were even a single book about America in Russian bookstores that compared in quality and integrity with any one of these five books so conveniently available to us.

LEON WIESELTIER. *Nuclear War, Nuclear Peace*. New York: Holt, Rinehart and Winston, 1983. xii; 109 pp. \$2.95.

FREEMAN DYSON. *Weapons and Hope*. New York: Harper and Row, 1984. 340 pp. \$17.95 hardback. New York: Harper Colophon Books, 1984. 340 pp. \$6.95 paperback.

Reviewed by William E. Evenson, associate academic vice-president and professor of physics at Brigham Young University.

Leon Wieseltier's little book, *Nuclear War, Nuclear Peace*, "is an expanded and slightly altered version of an essay published in *The New Republic* magazine" (publisher's note) in January 1983. A historian of medieval Jewish history, Wieseltier has tried to understand the nuclear debate and to argue for a reasonable nuclear policy. His very thoughtful essay combines a realistic view of the Soviet threat with a profound sense of our moral responsibility to avoid nuclear destruction. He follows no ideology but tries to make sense of the arguments from both the right and the left to find a middle ground consistent with careful thought and a high sense of ethics. He argues that "there is no contradiction between anti-communism rightly considered and arms control rightly considered." He attempts to discuss what such "right considerations" must be, dealing with the "relationship of national security policy to foreign policy, of the military strategy of the United States to its moral and political ends" (x).

Wieseltier begins, after a short introduction, by discussing the peace movement in the United States and Europe. His exposition of the philosophical weaknesses of its extreme positions is especially lucid and cogent. He argues that "the hatred of all things military is finally a sign that you do not believe in what you are, that you do not believe that you have something to lose" (27). "To be antinuclear, then, is not to be antimilitary. Nor is it to be anti-American" (28).

He continues with a chapter entitled "The Party of War," in which he discusses Soviet and American military doctrines. He argues that there is no such thing as nuclear superiority "because the losses on either side will be too much to bear if only a single missile gets through, and more than a single missile will" (38). Wieseltier goes on to argue that the "hawks" have come to admire a great deal of Soviet strategic thinking to the extent that over the last few years there has been a "Sovietization of American strategy" (39); that is, U.S. policy-makers have been moving ever closer to Soviet positions on civil defense, counterforce as a nuclear strategy, and the possibility of prolonged nuclear war. This shift began well before President Reagan took office. Wieseltier contends that one of the serious problems of the defense community is its attention to winning a nuclear war, or "prevailing," as they choose to say, rather than to ending it, and ending it as quickly as possible. He argues strongly against the notion of counterforce, which has crept into our current nuclear policy and corrupted the concept of deterrence. Counterforce is especially dangerous because, in practice, there is no way to aim nuclear weapons at purely military targets without killing large numbers of civilians. Counterforce as a policy simply becomes a way of ignoring the terrible impact of a nuclear strike on civilian populations.

Wieseltier next discusses Europe and the nuclear weapons policy of NATO. He gives much attention to the current argument of whether the U.S. should renounce first use of nuclear weapons. (Dyson, in the other book discussed in this review, distinguishes between the concepts of "first use" and "first strike" quite clearly. "First use" refers to the introduction of tactical nuclear weapons in an ongoing conventional war. "First strike" refers to the use of strategic nuclear weapons in a direct attack.) A policy of no first use of nuclear weapons by the United States or the NATO alliance would require increased defense spending in Western Europe. This would strengthen Europe's conventional forces sufficiently to provide security against conventional warfare with the Warsaw Pact nations. Unfortunately, Europeans have seriously resisted this extra spending for defense. As Wieseltier puts it, "They prefer the nuclear peril to higher taxes" (69). He concludes, nevertheless, that a policy of "no first use" would undermine the U.S. commitment to Europe and, hence, undermine deterrence of nuclear war. He argues finally that "nuclear weapons can be put out of play in only two ways—deterrence and disarmament. No first use cripples deterrence but offers nothing in the way of disarmament. And it encourages the delusion that words will do away with the nuclear danger, when only deeds will" (71).

Wieseltier concludes by strongly defending deterrence. Acknowledging the weaknesses of deterrence, he nevertheless argues that it is essential to disarmament and to progress in the current nuclear dilemma. However, he determines from the shortcomings of deterrence "that deterrence is not enough" (76). Rather, there is a symmetry between deterrence and disarmament, each supporting the other. Deterrence needs disarmament since the huge weapons supplies acquired in the name of deterrence increase our danger and demand controls. Only mutual disarmament, that is, symmetrical disarmament between the superpowers and symmetrical verification of disarmament, reduces our danger. But Wieseltier also argues that disarmament needs deterrence to regulate arms control and maintain the strategic balance so that stability is preserved in the course of arms reduction. Disarmament may therefore be pursued only within a doctrine of deterrence.

The relationship between deterrence and disarmament suggests that nuclear weaponry is not needed beyond the requirements of mutual assured destruction. Wieseltier concludes that minimal deterrence, while we are striving for mutual arms reduction, is our best hope.

The clarity and openness of Wieseltier's thinking are refreshing. While trying to make sense of some very complicated issues, he doesn't side with either the "hawks" or "doves." The only significant weakness of his approach is that he sometimes represents a position by its most extreme proponent and hence argues against an easy target. Nevertheless, this method helps elucidate the weaknesses of the arguments of both "hawks" and "doves" and shows the logical conclusions of such arguments. One may not agree with all of Wieseltier's conclusions, but the essay is well worth reading; it will cause any serious reader to reevaluate some of his own assumptions about the realities and the ideals of nuclear policy in today's world.

Freeman Dyson's book, *Weapons and Hope*, is much longer and more comprehensive than Wieseltier's. While not requiring technical background of its readers, it nevertheless deals with more of the technical aspects of nuclear weapons problems. Beginning in World War II, Dyson has made important contributions to physics and to technical military questions. He has consulted with the U.S. Arms Control and Disarmament Agency and has become very familiar with arms control issues. He has firsthand acquaintance with Soviet scientists and is widely read in Soviet, Western European, and American literature dealing with defense and nuclear weapons.

Dyson's book is also characterized by very deep moral concerns. The analysis of the ethical features of various approaches to disarmament

looms large in his writing and in his judgment. Having worked closely with both the military personnel and those in the peace movement, he has tried to write a book which speaks to both groups to help them see the other's arguments. He fears that much of the debate has seen these two groups talking past one another.

Weapons and Hope is written in four parts—"Questions," "Tools," "People," and "Concepts." "Questions" discusses the basic issues. Dyson relies a great deal on historical analogy in his book, especially reaching back to World Wars I and II. As he explains at the beginning of the book, "central to my approach is a belief that human cultural patterns are more durable than either the technology of weapons or the political arrangements in which weapons have become embedded" (3).

In Dyson's view, the nuclear arms race between the U.S. and the Soviet Union is partly a result of their different assumptions about nuclear war. The U.S. assumes that nuclear war can be prevented only by "deterrence," that is, nuclear threats, while the Soviet Union is obsessed, after a long history of invasion and slaughter in her own homeland, with the concept of sheer survival. This leads to incompatible nuclear policies: The U.S. insists that whatever else happens in a nuclear war, Russia will be destroyed, while the Soviet Union insists that, come what may, Russia will survive. This difference in point of view has made it difficult for the two sides to reach arms agreements.

"Tools" deals with the technologies both of nuclear weapons and defense against them. Dyson discusses the evolution to large and then to smaller nuclear weapons, the change in emphasis from more explosive warheads to more accurate delivery systems, and the possibility of nonnuclear precision-guided munitions (PGM). He argues that the political will to nuclear disarmament might be "powerfully helped by a technological development deliberately aimed toward making nuclear weapons unattractive" (49). He hopes that precision-guided munitions might provide that incentive. In addition, he hopes that precision-guided munitions and computers might favor defensive rather than offensive weapons. "The fundamental reason why the computer revolution favors defense is that in a battle of information, the defenders fighting in their own territory can see what is happening better than the attackers fighting in exposed vehicles" (52).

Dyson discusses the problems of weapons production in a chapter entitled "Technical Follies." He makes a strong argument against the MX missile program, based in part on historical analogy to a "technical folly" pursued during World War II.

Dyson takes a fresh look at many issues, trying to see all sides. With the insight he brings, he elucidates difficult questions in an unusual way. In his chapter on "Star Wars," he considers three possible futures: The "arms controllers' future," which would ban weapons from both earth and space; the "technical-follies future," "which makes space a battleground and does nothing to help resolve problems on earth"; and the "defense-dominated future," in which nuclear weapons are banned from earth and space and nonnuclear technology is used both on earth and in space to help make the ban effective (69-71). Dyson concludes that we would best keep space disarmed as far as possible, as long as we maintain such overkill in our weaponry on earth. Nevertheless, he qualifies that by saying, "But if we can ever achieve such drastic disarmament on earth, a deployment of appropriately designed space weaponry may help us to push the negotiated reduction of nuclear arsenals all the way to zero" (71). This passage is typical of the open mind Dyson keeps on weapons questions and of his sincere attempts to explore alternatives which will reduce dangers to the world at large.

"People" is full of insight about the relationship of people to weaponry and war and about the role of individual points of view in determining policy. One chapter, "Amateurs at War," compellingly describes the World War I experiences of Dyson's father and uncle. Particularly interesting is its portrayal of the excitement of the war and the way the challenges it presented gave meaning and purpose to some lives. The chapter "Education of a Warrior," about Dyson himself in World War II, is an equally insightful and compelling portrayal of the way the momentum of day-to-day events can catch one up, making it nearly impossible to deal with and react to the moral questions.

The other chapters on "People" are also of significant interest and insight. The chapter on "Russians" is especially helpful in elucidating the Russian response to nuclear threat. Here again, Dyson uses anecdotes and personal experiences, as well as making significant references to Russian history. He tries to understand the Soviet Union, without accepting or sympathizing with the totalitarian Soviet government.

The last part of the book, entitled "Concepts," deals with alternative nuclear doctrines. Both in this section and in the earlier chapter on the "Russians," Dyson draws heavily on George Kennan, his colleague at the Institute for Advanced Study. Dyson considers seven strategic concepts—assured destruction, limited nuclear war, counter-force, nonviolent resistance, nonnuclear resistance, defense unlimited,

and live-and-let-live. He analyzes arguments for and against each of these concepts, giving particular weight to moral arguments. He concludes that there is one concept that might "satisfy simultaneously the demands of military realism and human decency" (272). Citing Donald Brennan, he terms this "live-and-let-live": "We maintain the ability to damage you as badly as you can damage us, but we prefer our own protection to your destruction" (274). Dyson believes, as does Wieseltier, that our weapons may allow disarmament by negotiation instead of unilaterally, preserving symmetry of disarmament and of verification.

Dyson is an original and penetrating thinker who explores a wide range of issues in his book, seeking practical ways to make our world more secure, more stable, more decent.

Both Dyson's and Wieseltier's books are well worth reading. Wieseltier's is a relatively short essay, Dyson's a book of many dimensions. I hope they will be read widely and contribute significantly to the nuclear debate as both combine political realism with a strong sense of moral responsibility. Neither is caught in a straitjacket of ideology. These two books provide a clear-sighted view of a very difficult problem—the most serious problem our world faces today.