

## A MODEST PROPOSAL

Alan Lightman

Alan Lightman writes on science issues. Among his books are *Time Travel and Papa Joe's Pipe* (1984) and *A Modern Day Yankee in a Connecticut Court and Other Essays on Science* (1986). Both the title of this essay and Lightman's satiric method derive, of course, from Jonathan Swift's biting "Modest Proposal" (1729). (Swift's essay is reprinted in Appendix E.) Swift's subject—the widespread suffering caused by famine in Ireland—is very different from Lightman's; but both satirists attempt, through their outrageous proposals, to jar the ignorant and the uncaring out of their complacency and force them to contemplate a critical problem.



There are so many of my generation who have never felt a war. By and large, this is a good thing, of course, but as we postwar babies slowly climb into the seats of political power, I wonder about the consequences of today's terrible weapons coming into the hands of such innocents. Current leaders, whatever their politics, at least can recall the appalling death scenes at Hiroshima, Nagasaki, Hamburg, Tokyo, and Dresden.<sup>1</sup> I've seen only photographs. I've read books. I was riveted to the television set by *The Day After* and talked it over in horror for several days with my wife.<sup>2</sup> Then it wore off, like the memory of a nightmare.

Some of the scientists of my age, not waiting for any particular seniority, have already put their minds to designing the new generation of space-based weapons, spurred on by President Reagan's Star Wars speech last year. The team of fighter jocks immortalized in Tom Wolfe's *The Right Stuff* seem to have been curiously reincarnated in the dozen or so young physicists "pushing back the edge" in space weapons design in "O Group" of the Lawrence Livermore National Laboratory. These intellectual test pilots are mostly in their late twenties and all male. They inhabit a world of empty Coke bottles and

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<sup>1</sup>All these cities suffered near-total destruction by Allied aerial bombing during the latter part of World War II.

<sup>2</sup>In 1983, the TV movie, *The Day After*—dramatizing the effects of a thermonuclear bomb dropped on a typical, medium-sized city—became a media event weeks before it was even broadcast, inspiring intense and widespread discussions in schools, churches, homes, and public meeting places.

all-night bouts with top-secret research and share an admiring respect for each other's brain power. A "right stuff" ethic flourishes in all areas of science. But in O group at Livermore this is combined with the glamour of space, the thrill of inventing new kinds of nuclear weapons, and youthful idealism. O group physicist Lawrence West, age 28, told the *New York Times*, "We can try to negotiate treaties and things like that. But one thing I can do personally, without having to wait for arms control, is to develop the technology to eliminate them myself, to eliminate offensive nuclear weapons [with defensive ones]. . . . The number of new weapons designs is limited only by one's creativity." What more dangerous creature than the inexperienced macho, armed here with pencil and paper. Chuck Yeager, Gordon Cooper, and John Glenn all prided themselves in hanging their hides over the edge. How much hide hanging has been done, and can be done, by the fellows of O Group? None of them has seen a nuclear explosion. Since the 1963 Test Ban Treaty, there haven't been any in this country above ground.

On the technical side, there is increasing agreement among weapons experts that a space-based ballistic missile defense system is unworkable for the foreseeable future and, even if put into action, would be costly and dangerous. Technical issues aside, however, the glamour of *Star Wars* shimmers and beckons. Millions of us, children and grown-ups alike, saw the movie and were mesmerized by images of death-dealing laser rays, sleek crafts shooting it out in space, and handsome young men battling the forces of evil. These heady visions seep into the unconscious and resonate with the leftover daydreams of little boys.

What we seem to be concocting, in these vastly improved weapons now planned, is an increasingly volatile mixture of the concrete with the abstract: the weapons themselves, bristling with multiple warheads and computer chips and calculated accuracy, are there all right, occupying volume—but not of this world. Earthbound ICBMs, waiting silent and preprogrammed in their Midwest silos, are dreamlike enough. While weapons orbiting in space dissolve almost completely into a mist of make-believe.

Last Sunday afternoon, my wife was out gardening and my daughter upstairs napping. Antsy from one of the more cerebral new books on nuclear weapons, I got up from my chair, paced around the house, and hit upon a plan of action, which I hope will not be liable to the least objection. All in all, it's a modest proposal. A small country, safely distant from the superpowers, should be destroyed with nuclear weapons as the world looks on. This can be done periodically, say every 20 years, so that the carnage of nuclear destruction stays fresh in our minds. Evidently, the hundred thousand or so people

killed in Hiroshima and Nagasaki were not nearly enough, so I recommend selection of a sacrificial country of about 10 million souls. As an added bonus, we could choose an economically troubled nation, now straining the world's monetary balance.

Not wanting my proposal to be taken as half-baked, I have given some attention to the necessary figures. I reckon that 10 million people, living mostly in cities, could be killed handily with no more than 30 warheads, at 300 kilotons of TNT per warhead. (This is roughly the yield of the W78 nuclear warhead, a favorite of the United States Minuteman force and about 25 times more powerful than the bomb dropped on Hiroshima.) As Soviet bombs typically have a somewhat higher yield, a lesser number of them could accomplish the very same work.

No sensible individual can fail to see the economy of this proposal. The total population of the world is over four and a half billion persons. My plan requests the sacrifice of about one-quarter of one percent of this number. The total world supply of nuclear warheads is about 50,000. My plan requires only  $\frac{1}{16}$  of one percent.

An essential part of the scheme, of course, is that the destruction be well documented and attended by the appropriate parties. In the last use of nuclear bombs, 40 years ago, we simply did not have the interest or the equipment for adequate coverage. To this end, I would recommend, as a minimum, that the leaders of the U.S. and the U.S.S.R. and the nuclear weapons scientists concerned be bused in, to personally inspect the damage, as soon as the radiation level has slipped to a tolerable level. As to recording the event live, a very knowledgeable acquaintance of mine assures me that the United States' "Big Bird" satellites have the impressive ability to pick out details as small as one foot in size from an orbit of a few hundred miles above the Earth. At that height the satellites would be out of harm's way and yet could photograph single charred bodies in the rubble below. The men, women, and children on the outskirts of each of the bomb blasts, not immediately killed by the explosion, could be photographed in time sequence as they develop burns, vomit with radiation sickness, and writhe on the ground for several hours or days. Shortly thereafter, the satellites would relay these pictures to newspapers, magazines, and television studios around the world. We are well accustomed in our society to viewing such mass-media spectacles, and this one should have greater redeeming social value than most others.

The strong points of my plan, I humbly believe, are obvious and many. First and foremost, it would provide every person in the world with a personal and graphic understanding of the outcome of nuclear weapons. If people witnessed a sample of the destruction, then more

citizens of the sacrificed countries would themselves benefit. Their economic difficulties would instantly be solved, and they could go to their deaths proudly, knowing that in their dying they were doing the rest of the world a good turn. Third, the idea is thrifty, requiring only a small portion of the world's population and nuclear resources. Fourth, the scheme should easily receive the cooperation of the superpowers, who would have little to lose and much to gain. And finally, owing to the efficiency of the weapons involved, the entire business excepting the publicity could be finished in a tidy few days.

We live in a new Age of Reason. It is time we acted accordingly. What could be more reasonable than the expense of a few million lives, to gain a practical education in nuclear weapons?

### Discussion Questions

1. Read Jonathan Swift's "A Modest Proposal" (reprinted in Appendix E of this book). How faithfully does Lightman follow Swift's satiric method, his language, and the development of his argument?
2. Why does Lightman feel that the present generation—and particularly the present generation of scientists and technicians—needs an object lesson in the horrors of nuclear war?
3. Do you think Lightman is being fair in charging that many people today are insensitive to or insufficiently aware of what nuclear war actually entails?
4. Is Lightman's "A Modest Proposal" offensive to you? Why or why not?
5. Since Lightman's proposal seems logical on the surface, for what reason(s) should we not adopt it?
6. What do you think Lightman means when he concludes, "We live in a new Age of Reason. It is time we acted accordingly"?
7. What is Lightman's serious purpose in writing this piece? Why do you think he didn't adopt a straightforward approach in trying to achieve this purpose?