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THE *EXISTENCE* OF NUCLEAR WEAPONS: A PRIME ENVIRONMENTAL THREAT

By John W. Gofman*

We hear a great deal about environmental awareness today and about the critical need to do something about our deteriorating environment. Strange indeed, therefore, how rare it is to hear environmentalists concern themselves about a major environmental hazard, one that has obviously been with us for a quarter of a century, growing steadily during every year of that period. I refer, of course, to the *existence* of nuclear weapons and other strategic armaments. It should require no documentation to assert that the *use* of strategic nuclear arms will undo in a great hurry all the efforts to eliminate some environmental pollutants; and in fact make further efforts of this sort of little consequence. Why, then, are nuclear weapons hardly even mentioned as one of the environmental issues?

I am not referring to the *testing* of nuclear weapons, concerning which some environmental issues have been raised from time to time, but rather to the *existence* of these weapons. The standard answer to this question would be, in effect, that nuclear weapons are not a threat to the environment; they exist merely for the purpose of deterring nuclear war. As this myth goes, an adequate arsenal of nuclear armaments represents man's greatest contribution to a livable environment, for, by deterring nuclear war, these arms prevent the worst conceivable environmental destruction. Probably a fair share of those active in the "environmental movement" buy this mythology—hook, line, and sinker. Indeed, conservation groups and ecology groups can surely boast among their active members scientists whose vocation is the construction and development of nuclear arms.

There may be some who will say, "Why bring up nuclear arms in relation to environmental problems; they are separate issues."

I should like to take exception to that view. They are *not* separate issues. More than that, it appears to me that so long as the *existence* of nuclear or other strategic arms is countenanced, nothing of consequence is ever going to be accomplished in the so-called environmental movement. There is a fundamental inconsistency in the position that nuclear armaments are necessary and that one is also endeavoring to preserve a livable environment.

WHY NUCLEAR WEAPONS EXIST

It was stated above that it is a myth that nuclear weapons exist to deter nuclear war. If such weapons were truly a deterrent, we would not have witnessed a steadily escalating nuclear arms-missile buildup in the past two decades, even at an accelerating rate in the past few years. Of course none of the participants in the nuclear arms race will admit to its populace that it has anything *but deterrence* in mind. This is obvious perfidy. If deterrence really were the objective, the arms race participants could long ago have agreed to limit nuclear stockpiles to fewer than 50 nuclear missiles each, with total openness for reassurance purposes. There is no doubt that 50 deliverable nuclear missiles would deter any rational power group. Nothing would deter an irrational power group, by definition. For anyone to claim that a sincere effort has been made to eliminate nuclear arms or to deescalate the nuclear arms race is to be naive in the extreme. *Governments* will, of course, insist, for public consumption purposes, that there is nothing dearer to their hearts than total nuclear disarmament, but, alas, well-intentioned as "we" are, "they" leave us no choice but to continue the nuclear arms race—only for deterrence of "them."

The US of course insists on being the "we" who are threatened by nuclear blackmail and/or nuclear obliteration by "them" (the USSR up to now, with other possible burgeoning candidates in the future).

The USSR agrees with this assessment, except that it is the USSR which represents the "we".

It would be an exercise in futility to attempt to decide which "side" is less truthful. What is of far greater relevance is that *both* the US and USSR are quite willing to continue this game of roulette in which the populace of both countries (and possibly

many other countries) are hostages; at stake are their lives and the lives of their descendants.

The way this "game" is played, and it takes *at least two* to play it, is for each side to start with the premise that the "other" side is seeking an opportunity to develop a first-strike capability (meaning serious retaliation is impossible). Once that "other" side *has* such a first-strike capability, either it will be used in a "final solution" or it will be exhibited with a demand for total surrender, i.e. nuclear blackmail. Having adopted this premise, the next step is to assume that the appropriate response is a massive *technical* effort to develop a nuclear arsenal which prevents the "other side" from achieving such a first-strike capability. This, of course, means an arsenal capable of assuring massive destruction (so-called "assured" destruction) of the other side if "they" should ever contemplate launching a nuclear war. Now, espionage of various forms, including the sophisticated reconnaissance satellites, improves steadily, but it is always short of perfection. Therefore, it is difficult at any moment for the technical establishment of one side to know with complete reassurance just how advanced the "other" side is toward development of a first-strike capability. The inevitable answer, so long as technical solutions are sought, is to develop a good "cushion"—that is a good deal more than just what might be anticipated to guarantee "assured" destruction. So a step upward in escalation of the arms race occurs.

The "other" side, already convinced that its implacable enemy was seeking a first-strike in any event, views this step-up in escalation with grave forebodings. They consider it folly in the extreme to believe that all that is being sought is assured destruction. So they mount an even greater effort of their own to offset the recent escalation, all the time reassuring their own populace that it is only an effort on their part to avoid becoming the victims of nuclear blackmail or a first-strike attack.

This see-saw has been going on for a couple of decades between the US and the USSR. That nuclear war has not occurred in two decades is hardly to be taken as re-assurance, for two major reasons.

First, with every step in escalation there has occurred a shortening in the response-time available. Decision-making has been steadily passing out of the hands of humans and into the ma-

chinery of radars, satellites, and computers. Indeed, we commonly hear now that one side may not, in a "crisis," even be able to wait for proof that attack has been launched; rather, pre-emptive attack will be required if it *appears* that nuclear war is "inevitable." It would be hard to stretch one's imagination to say that any human reason or judgment countenances any part of this "game." If that stretch is possible, one can say, with the existing and increasing hair-trigger features, that no residual human reasoning or decision-making will be left.

Second, we may regard the "technicians" who conduct this whole affair on both sides, as hard-working individuals, dedicated to their work. Imagine the strain on their psyche and emotional structure of always wondering if that next technical breakthrough may be made by the "other" side, not by them. Many sleepless nights, no doubt. Mr. Joseph Alsop, the newspaper columnist, appears to be a prominent liaison between the US technical establishment and the public. He states explicitly that he has many sleepless nights over this issue. One might conjecture that for every hole in the ground dug by the Soviet Union, Mr. Alsop loses one or two full nights of sleep. And in his column in the *San Francisco Chronicle* (Oct. 27, 1971) he estimates that the Russians had dug more than 95 holes between January and September of this year.

What does this lead up to? Simply this—the longer this game is played, the greater is the likelihood that the technical establishment on either side will hope for a technical breakthrough that will permit a final solution to the problem, namely liquidation of the other side. And one side may achieve such a technical breakthrough, or *think* it has, and put it into effect, which means nuclear attack. One must note here that it does not really matter whether those on one side really have achieved this technical breakthrough, only that they *think* they have.

Thus, the outlook for avoiding nuclear war seems very poor with an escalating, increasingly machine-controlled nuclear arms race—and it is becoming poorer all the time.

WHO WANTS ALL THIS

The nuclear arms race is said to have a momentum all its own. Momentum it has, but *not* all its own. Some humans are very definitely behind it all. The history of the human species thus far

has been that some humans have sought privilege, and more importantly, once having achieved privilege, they have sought diligently to increase it at the expense of other humans. The proper role of the bulk of the human species has been to be servile before the privilege-extendors, to thank them for the "opportunity" to work for them, and to be grateful for the glorious opportunity to die for them. The irony of the situation is that the privilege-extendors are so effective with the alternate use of carrot and stick that the bulk of the species is not only servile but also *eager* to outdo the lemmings. And this is no different in so-called capitalist or communist countries, and no different no matter what the songs, the catechisms, or the many brilliant colors of the flag.

The current nuclear arms race goes on because privilege extendors in the US or USSR (only the currency of privilege differs between these two) see no difference in their current efforts to extend privilege from those which have gone on for centuries or millennia. It must be regarded as axiomatic that the privilege-extendors of *both* sides *believe* they can achieve their usual goals by nuclear blackmail and/or nuclear war. On each side there is a ready and willing technical establishment, both military and scientific, which carefully nurtures the view that this can be accomplished. To be sure, on each side there are profuse explanations that "we" would love nothing better than to end the arms race, since peace is "our" sole objective. The insincerity of the privilege-extendors on both sides is self-evident. If there were a shred of sincerity on *either* side, they would long ago have taken many steps to stop the entire affair. For example, they would have *acted* on nuclear disarmament, instead of talking about it while torpedoing any possibility of success in such efforts. And one side or the other would have assigned at least 10% of their "defense" dollars (or rubles) to put the finest talent to work to develop an effective method for coexistence and for total nuclear disarmament. It is not possible to believe that such talent would fail to work out a suitable operational plan for defusing all the armaments. Further, they would have initiated the broadest possible dialogue in both countries, with extensive interchange, concerning the hazard, the criminality and the nonsense of continuing the nuclear arms race. Instead they continue the arms escalation, pay lip service to arms limitation, and continue the

cold war psychology in both countries. One can only conclude that the privilege-extendors see nuclear armaments and nuclear war as a viable method of seeking privilege extension.

WHERE WILL IT END

It is possible that the privilege extendors may come to realize that the game they play is more of a hazard to their privilege than they wish to accept. They may come to realize that even *they* might be vaporized, or if they survive nuclear war, that their privilege domain might become indistinguishable from rocks and miscellaneous debris. Having for centuries felt that privilege confers immunity from the vicissitudes which plague ordinary humans, the privilege-extendors are not likely to change their behavior, but it *is* possible they might.

There is a separate, very cogent dynamic which operates against the privilege-extendors' being willing to give up the cherished "foreign enemy." The "evil capitalists" are terribly useful to the Soviet privilege elite; the "implacable Godless Communists" are similarly useful to the US privilege elite. The real danger is that, with the elimination of the threat of foreign devils, the internal relationship between privilege extension and environmental deterioration, between privilege extension and consumerist production, and between privilege extension and pollution will become too evident. This would be highly undesirable, indeed perhaps more dangerous than risking nuclear war.

It is interesting to observe the inability of the environmental movement to perceive the dominant threat represented by nuclear armaments and the escalating arms race. Part of this is, of course, that the environmental movement, in its early phases, represented a highly co-opted affair, useful as a diversion from such serious problems as Indo-China. The phase of picking up beer cans, recycling bottles was delightful and was generously applauded, even sponsored by the corporate polluters. But as the environmental awareness grew, the sources of environmental deterioration and pollution became more evident—and more evidently related to privilege extension. And this accounts for the end of the honeymoon recently. The privilege-extendors are not pleased that an environmentally aware public: is beginning to question growth of senseless, useless production; raising serious objections to being made guinea pigs for a totally unproved

nuclear electricity technology; and beginning to expect something more than shabbiness or poison in their consumer products. So we hear more and more of the backlash to the ecology-environmental movement. Perhaps it is favorable that the lines are being drawn more sharply now. Maybe the picture of the relationship of environmental deterioration, nuclear and other militarism, and privilege extension will sharpen up considerably and lead to the requisite steps beyond the beer can crusade.

SOME SPECIFIC COMMENTS ON THE RECENT AMCHITKA TEST

A great deal of public interest in nuclear weapons development was sparked by the Cannikin test which took place in the Aleutian Islands on November 6, 1971. It is fortunate that no immediate major adverse environmental effects were noted. It will be a long time, if ever, before we know the true environmental consequences of that test.

It may come as a surprise to have the statement made that, *whatever* the environmental consequences are of this test, they are *minor* compared with the meaning of the test itself. This test represents a *major* step in the escalation of the arms race. As is known, this test is part of the ABM development program, a program which by itself means a large dangerous inflammatory step in the nuclear arms race. And this, in turn, means that major nuclear war is a large step closer. This is the *real* reason people should have been disturbed about Amchitka. Whatever fine words are issued about deterring nuclear war or about "bargaining chips," there is only one interpretation of the development of an ABM system and that is as part of a program of development of a first strike capability, either for use in a nuclear attack or for nuclear blackmail. Even if one were to accept as sincere the idea that the U.S. is *not* seeking a first strike capability, the USSR has no choice but to interpret this as a step toward a first strike by the United States. One has only to be peripherally familiar with innumerable statements by US officials and newspaper columnists to the effect that the Soviet Union is seeking a first strike capability everytime a new hole is dug in the ground there to see how the US interprets their actions.

One can criticize the US Atomic Energy Commission, the Department of Defense, or the President for having gone ahead with this inflammatory, escalatory step toward nuclear oblivion. But that misses the real problem. And that problem is that the

US public has been thoroughly brainwashed by our privileged elite into believing that nuclear arms are needed for national security, for deterring nuclear war. And recent polls show that more than 75% of US citizens consider nuclear weapons as essential for national security. The US Congress perceives this as the dominant view, and they are therefore in no way constrained from voting ever-increasing funds for an acceleration in the march to doomsday. It is totally *inconsistent* to be *opposed* to the Amchitka test and to be in *favor* of nuclear weapons for so-called defense purposes.

Unless the realization spreads that technical answers to security do *not* exist, there is little hope. This means worldwide realization by a large majority of the population that technical strategic weapons development can only lead to utilization of such weapons.

So long as the privilege-extendors believe their goals can be achieved by military means, the nuclear (and other strategic) arms race will escalate further. There is little point in believing that diplomats or governments are going to do anything other than what the privilege-extendors prescribe. So, disarmament talks by diplomats and militarists can be expected to accomplish precisely what they have accomplished in the past—*nothing*. Let us review those ostensible *diplomatic* achievements for “peace in our time.”

Before 1963, increasing world-wide concern about the biological hazard of radioactive fallout from atmospheric nuclear weapons tests led the diplomats to the realization that some way of lulling the public to sleep was essential. Thus, once the superpowers had assured themselves that they could learn everything they wished to by *underground* testing of nuclear weapons, they magnanimously signed a treaty banning nuclear weapons tests in the atmosphere. And, in that treaty, they specifically agreed to take steps toward total nuclear disarmament. The public broadly assumed the nuclear threat was receding. Public concern vanished, to all intents and purposes. Yet, nuclear weapons testing by the US and USSR increased steadily thereafter, underground (out of sight). Both superpowers accelerated their deployment of nuclear arms and missiles in an astronomical manner. This was hardly consistent with their promise to seek total nuclear disarmament.

Before 1968, increasing concern was voiced about the spread

of nuclear weapons to more and more countries. So, with fanfare, a Nuclear Non-Proliferation Treaty was signed. Again, the signatories agreed to take serious steps toward nuclear disarmament. What actually happened was a major escalation in the nuclear arms race, with the superpowers going ahead to develop and deploy ABM and MIRV systems at a feverish pace. These two systems are widely regarded as the most dangerous inflammatory steps in the nuclear arms race.

And most recently we have the SALT talks and the "spirit of detente and negotiation." At the same time the US speeds forward with ABM development and MIRV deployment. The argument given is that we must escalate in order to have something worthwhile to agree to give up at SALT—the "bargaining chip" concept. The USSR simultaneously continues its own escalation, with acceleration of nuclear submarine construction and increased installation of large, land-based nuclear missiles. Presumably this represents their "bargaining chips." So much for all the diplomatic efforts. But there can be no doubt of one major success of all these diplomatic maneuvers: the public was no longer totally deceived as to the hazard of nuclear confrontation.

Right now three-quarters of people in the US appear to favor maintenance of a strong nuclear arsenal and to keep up the technological effort to develop an even stronger strategic arsenal. The public has, without doubt, bought the myth of *technical* deterrence to nuclear war. What needs to occur is a major reversal in this belief, on the part of people in the US, the USSR, and elsewhere in the world. Obviously, the majority of people, at least in the US, can see no way for peaceful co-existence without a massive nuclear bludgeon at the ready. Somehow, they hope, the bludgeon *will* deter, even if the evidence suggests otherwise. What is surprising is that there is no insistence that a major allocation of funds and talents be made to a serious persistent worldwide effort to develop alternative solutions. What a sad evaluation of human ability it is to assume it is not more worthwhile to spend as much on a rational alternative as on nuclear escalation. There is, of course, every reason to expect that privilege-extendors in all the super-powers will *not* assist in such an effort, so long as they continue to believe nuclear arms can achieve their goals.

The recent Amchitka test had the effect of at least a little

rekindling of public concern about the escalating arms race. Unfortunately the public energy went into concern over possible environmental hazards of the *test*, rather than into concern over the meaning of Amchitka in arms escalation. Unless this changes, the Amchitka blast will be one of the recorded (*if* records persist) milestones on the road to nuclear oblivion.



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