

fallacies. These fallacies form the basis of a nuclear scholasticism in which they are taken as true suppositions for the purposes of everything else. Privately, almost no one really believes in them, but both sides carry on with them, perhaps because without them there would be no rationale for nuclear weapons. The chaos arising from having no suppositions would be infinitely more fearful than what emerges from a common consensus around a set of false suppositions. What holds the myth together is the same thing that holds up the price of gold: a determination to go on believing so long as others, particularly the adversaries, do.

The following are a few of the most notorious fallacies:

Fallacy: Deterrence can be stable, hence reliable.

A stable system is one in which any deviation from a steady-state equilibrium sets in motion forces in the opposite direction to return the system to its original condition. This has never happened in the arms race. The arms race is a dynamic, ever moving system in which every deviation from equilibrium has been in the direction of more weapons, resulting in yet further deviations in the same direction from the other side in response. Every such deviation produces uncertainty, every uncertainty is a new danger. In the absence of measures to freeze the arms race, the application of new technology to the arsenals of deterrence guarantees deterrence can never be stable.

Fallacy: The other side may develop a first-strike potential.

The possibility of either side ever achieving a credible first-strike capability is ruled out on two counts. First, since submarines are acknowledged to be undetectable, each side is at all times assured of having a sufficient survivable arsenal of sea-launched nuclear missiles for a devastating reply to a first-strike. Secondly, studies of the nuclear winter phenomenon indicate that a first-strike involving several hundred nuclear explosions would produce global atmospheric changes that would destroy the attacker, even if the country attacked did nothing in reply.

Fallacy: More nuclear warheads mean more deterrence, security, etc.

There is a theoretical upper limit to the number of nuclear weapons useful to deterrence. It is the number necessary to convince a would-be attacker that after an attempted first-strike enough weapons would survive to deliver a devastating retaliation. The Pentagon once estimated 400 warheads would do it, less than the number on a single Trident submarine. As submarines are virtually impossible to locate and hence to destroy during a first-strike, reason suggests that a few Tridents could provide all the useful deterrent capacity required. Reason further suggests that this number would remain unchanged regardless of how many weapons might be possessed by the adversary. But while more warheads do not add anything meaningful to deterrence, they do add to the atmosphere of hostility in superpower relations, and hence to the likelihood of a war actually starting. The logical conclusion is that more warheads than the minimum necessary do not add to, but rather subtract from, security.

Fallacy: A nuclear war can be fought and won.

This is an ominous new supposition recently expounded on the U.S. side, along with claims that the Soviets believe it too. Leaks from a U.S. top-secret 1981 document "National Security Decision Document 13" revealed for the first time a U.S. policy to develop a nuclear war-fighting capability in order to be able to "prevail in a protracted