onry will always be with us, ready to be converted into warheads at any time. There will always be the possibility that weapons of mass destruction *could* be used. This is no theory; it is simply a fact of life. As the military correspondent of the New York Times observed in 1947. "The awful weapons man has created are now forever with us; we shall walk henceforth with their shadow across the sun."15 Since science cannot be erased, we shall have to find ways of managing it intelligently and of not letting it get the better of us. This is the new and irreversible political state of nature in which we now find ourselves. At this elemental level, we will henceforth always be deterred simply because of our new-found capacity, as a species, for selfannihilation.

REASONS FOR REFLECTION

If deterrence is (as so often is claimed) the basis for our security, it is a policy which, whatever its alleged accomplishments, creates problems. This is because deterrence, in its usual military-strategic guise, is overwhelmingly negative. It highlights threats and punitive sanctions and ignores or deprecates the possibilities of positive inducements. This emphatic negativism undermines the search for other paths to security, notably those approaches that stress the value of diplomacy, negotiated agreements, and collaboration based on mutual interests. The preoccupation with deterrent threats tends to downgrade or exclude from consideration other options for dealing with Moscow. Moreover, deterrence, with its emphasis on displays of resolve, can easily be converted into intransigence and bellicosity, which are too often confused with firmness and standing tall. Tough posturing by one side, in the name of deterrence, usually elicits similar resolute posturing from the other side, with a consequent increase in tensions between them. Deterrence doctrine also tends to be excessively fixated on the prospect of Soviet aggression to the exclusion of other potential causes of war, including regional crises that suck the great powers in against their will and the destabilizing impact of nuclear threats themselves.16

The central point is this: While deterrence may be in certain respects inescapable, it is not sufficient in itself. Threats are not enough. They must be combined with other, more positive levers and with less frightening modes of political exchange. McGeorge Bundy, former national security advisor to Presidents Kennedy and Johnson, has put this case well: "I propose that deterrence, however it works, should always be considered in the context of two

other interconnected objectives—reassurance of friends and detente with adversaries. Deterrence is part, but only part, of the politics of nations."17 It can only be a part for an obvious reason: fear and terror, the essence of deterrent threats, cannot serve on their own as the foundation for a promising, long-term policy for avoiding nuclear catastrophe. Frightened adversaries are certain to be, when a crisis erupts, very dangerous adversaries. Fervent proponents of deterrence are inattentive to the cor-

rosive—and explosive—power of fear.

Fear is the principal ingredient in any preemptive attack, and pre-emption is a much more plausible possibility than is usually admitted. It is virtually certain that neither superpower is seriously planning a bolt-out-of-the-blue nuclear attack. However, each side thinks that the other side is deploying new weapons with first-strike implications-weapons which, it is feared, might undermine the "survivability" of its retaliatory deterrent. Each entertains fears that the other is pursuing a counterforce dominance: that is, a superior capacity to knock out the nuclear assets—missiles, bombers, control centres, communications systems, and the like—of the rival power. Each is not only trying to prevent this from happening by "modernizing" its own threatening weaponry. Each also has plans, in circumstances where war is thought to be imminent and inevitable, to attack pre-emptively. Whatever public talk we might hear about nuclear war being unwinnable, in the eyes of many military planners in both Washington and Moscow striking first is seen as preferable to striking second.18 In the United States pressures to adopt pre-emptive postures have been increasing, in the Navy as well as in the Air Force. 19 First-strike options are taken seriously and SDI will make them seem more plausible to anxious Soviet planners. As one well-informed observer of nuclear strategy, Thomas Powers, has concluded, "With glacial inexorability, the fear of war is being pushed aside by the fear of being caught on the ground."20

All of this serves to remind us of how destabilizing is the relentless emphasis on deterrent threats. The supposed stability of deterrence is repeatedly challenged by the dynamism of unrestrained technology, for this technological momentum is continually producing weapons of enhanced lethality. In pursuing such weaponry, each side sees itself as acting defensively, to discourage attack, but the other side is more likely to interpret these deployments as signs of aggressive intentions. Thus we recall that the Soviet Union, in emulating Washington's earlier development of multi-warhead missiles (MIRVs), placed these warheads on much larger rockets. thereby giving rise to American fears of a first strike against its land-based missiles (the so-called "win-