

Why is no one afraid of the dark?

N RECENT months we have named that nuclear war, even on limited scale, would bring a lengthy spell of extreme darkness and cold. The phenomenon of a nuclear winter could well cause, through freezing and starvation, as many ultimate casualties as the immediate war itself, while the long-term environmental injury, especially in terms of our capacity to feed ourselves, could readily prove equally critical. Moreover, while the war and its direct destruction would probably be confined to northern mid-latitudes, the road-scale repercussions could likely extend much further, afflicting most if not all nations of the global community.

What hope, then, that the threat of a nuclear winter will persuade us to achieve at least a nuclear freeze? Surely a good prospect, say some observers. No chance, say proponents of deterrent theory.

The deterrent-niks assert that the threat of a nuclear winter merely confirms how terrible a nuclear outbreak would be. Ergo, we must never allow it to happen; ergo, we must beef up our deterrent as the soundest means to avoid apocalypses. Yet this argument should now give us more pause than ever, to the extent that the nuclear winter introduces a new dimension to the nuclear debate. The threat of a nuclear winter demonstrates, primarily and beyond doubt that a nuclear war cannot be won — or even survived in any

significant sense. Scientists at a Washington conference last November asserted — and their conclusion has been confirmed by several independent studies — that a nuclear winter would mean an end to civilisation in the northern hemisphere, if not throughout the world (Futures, November 3, 1983). Equally to the point, the prospect of a nuclear winter means that if one side were to launch a pre-emptive strike against an adversary, with such success that all capacity for retaliation were eliminated, the climatic and environmental disasters would quickly overtake the so-called victor as much as the vanquished. In short, a nuclear solution is no solution of any sort.

In spite of this, we still hear rumblings from the Pentagon to the effect that the United States believes it must be able to "prevail" in a protracted nuclear war. Ditto from military strategists in Moscow.

As for Britain, the government considers that nuclear war, while an appalling affair for these crowded islands, would be less than a terminal catastrophe for the British people. Civil defence planners talk about several million survivors starting to rebuild their shattered society within a matter of weeks.

The nuclear winter scenario, by contrast, postulates that those who come through an attack could hardly survive the environmental aftermath. Furthermore, those remnant communities that may emerge

from the nuclear winter would look out on landscapes that would scarcely permit even rudimentary agriculture for several growing seasons at best. Which of us would want to try his hand at a hunter-gatherer lifestyle — supposing there were anything to be hunted and gathered beyond insects and acorns?

Under certain circumstances, moreover, a conflict entailing a mere 100 megatons, out of roughly 13,000 available in nuclear inventories, could well prove enough to bring on a nuclear winter. So a tiny fraction of nuclear arsenals imposes a "threshold of risk." Britain's nuclear capacity already amounts to several hundred megatons.

Just as a nuclear winter in the northern hemisphere would affect bystander nations as well as combatant parties, so its environmental impact could readily and rapidly spread to the tropics, before reaching deep into the southern hemisphere. Thus it could ultimately affect many distant nations, which seek to remain neutral in the political confrontation between Nato and the Warsaw Pact.

If the community of nations is to suffer profoundly, does this not cast fresh light on ideological differences between the super power blocs, comprising a minority of nations? Involving a broader perspective still, a nuclear winter looks capable of destroying much of the planetary ecosystem as we now know it, and as it has evolved since the first flickerings of

life 3.6 billion years ago. Whole biomes, such as the tropical forests with their extreme ecological complexity and biological richness, could all too quickly become degraded beyond recovery — with all that that entails for long-term recovery of the planet as a habitat for humankind. Do these considerations, of the remote past and the indefinite future, not postulate a further significant context within which we should view the relatively transient disputes of a minority of humankind?

Of course the deterrent advocates can still insist that "a nuclear balance of terror" has proven a stable situation, insofar as we have not yet seen missiles falling out of the sky. Their stance would be more acceptable if there were not a continued escalation of nuclear stockpiles, with ever-more sophisticated weaponry and their potentially destabilising influence. Political leaders assert they are doing their best to negotiate reductions, yet the record shows a virtually unbroken buildup. To the extent that deterrence is a valid concept, it can be accomplished through just a handful of megatons: even before the early 1960s, i.e. before the United States and the Soviet Union had expanded their nuclear stockpiles above what we now realise was the nuclear winter threshold, each proclaimed its capacity to destroy the other beyond recovery.

If, moreover, a nuclear capacity is to be strictly nuclear, a nuclear circle promoted by both sides, to the effect that "A break out of the vicious, we may find a way. In our this scenario fosters this in the nuclear winter cooperative endeavour.

If the nuclear winter scenario fosters this in the nuclear winter cooperative endeavour, is to achieve — however hard — advance — however hard — national argument, and later an end to confrontational national security. This postulates national security from inter-invaluable, then to divert all nations. It is increasing winners or losers together (vice-versa.) We shall all gain you must lose" (at least where the rule-sum game security can no longer be perceived as zero-sum game). Nuclear war and national security of the community. Since a nuclear strike must now be deemed suicidal, an increase in nuclear weapons does not necessarily enhance a nation's overall long-term security; rather, it can serve to diminish it. The same applies, only more so, to the security of the community.

we are consigning the future of our global civilisation, indeed of our planetary habitat.

In short, do the risks of nuclear winter not exceed the risks of a fresh approach to nuclear disarmament? Let us take a quick look at some scope for initiatives. Of untested options available, the one with most immediate prospect is a nuclear freeze, halting the ever-growing deployment of new weapon systems with their destabilising influence. But a nuclear freeze should not serve to eliminate the threat of a nuclear winter, whether triggered through planned conflict or mere miscalculation, unless it were followed by massive reductions of stockpiles.

So what about another proposal, known as "build down," being a systematic curtailment of nuclear inventories at a rate of perhaps five per cent per year? Yet even this advance as presently envisaged would not bring inventories below the threshold level until the year 2020. A third proposal, "deep cuts," anticipates an opening reduction of arsenals by half, followed by further phased cutbacks. But this prospect is not considered capable, according to the more optimistic negotiation prognoses, of bringing us below the threshold level until at least the end of the century.

In short, we need a radical reorientation of nuclear negotiations. The risk of nuclear winter surely reinforces the urgency of asking basic questions about the meaning of security.

Last year scientists demonstrated that even a limited nuclear exchange could cancel the summer sun and darken the skies. Norman Myers, the message has not got through the politicians.

Dr Norman Myers, environmental consultant based in Oxford, was one of 20 scientists who contributed to a study of the long-term biological consequences of nuclear war, published in US magazine Science on December 23, 1983. Other contributors included Carl Sagan, Paul Ehrlich, Edward Aynem, Thomas Eisner, Stephen Gould and Robert M. May.

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