## The forgotten menace

Nuclear weapons stockpiles still represent the biggest threat to civilization.

## **Paul Doty**

he passage from one millennium to the next is a powerful stimulus to reflect on our most vital problems. Top of the list must be the legacy that this century bequeaths to the next and to the millennium beyond — the risk that the tens of thousands of nuclear weapons left over from the Cold War will bring an end to civilization.

While many informed people felt this threat during the Cold War, a sense of relief from imminent danger has been the hallmark of the first post-Cold War decade. As the concern over a global apocalypse has subsided it has been replaced by the threat of the use of one or a few weapons by accident, by terrorists or by 'rogue' nations. This refocusing is understandable: it follows from the natural human concern with the immediate and the difficulty in dealing with events that are unlikely but much more catastrophic.

Lost in this shift of focus is the tremendous change of scale that it brings about. The use of a few weapons could mean the destruction of a few cities. This is alarming against the background of no similar violence for decades. Clearly its prevention deserves attention. But the loss would be far below that suffered in the Second World War. Despite the anguish in affected regions, the physical damage could be repaired, the fabric of civilization would remain. How strikingly different would be the consequences of war among nuclear powers escalating to the use of most of their stockpiles of weapons.

For comparison, the damage caused in the Second World War is comparable to that of roughly 100 nuclear weapons if used to maximum effect. What, then, if the destruction were hundreds of times greater? Nuclear devastation would be delivered within a brief time rather than cushioned over several years, leaving great regions permanently contaminated with radioactivity, the world's electric circuitry destroyed, along with most life-sustaining infrastructure, and the schools, hospitals, libraries, museums and monuments of the world's cultures obliterated.

Some people would survive initially. How many in the long term would depend on the extent of radioactive contamination, the ability to reorganize life in isolated, less affected regions and the will of the survivors to start over.

The many major wars of this millennium offer little hope that the next one will not provide the triggers that would lead to large-scale nuclear war if today's weaponry remains or is replaced. To prevent this outcome — and avoid losing our civilization in the next millennium (or century) — two deep and radical changes must occur.

First, the world's stockpile of nuclear weapons must be rolled back to the level of 100, thereby limiting the damage, should they be used, to an amount from which recovery is possible. Second, the nuclear nations, and those that seek such status, must come to see how irresponsible the risk of excessive nuclear weapons is, and appreci-

ate how such excesses diminish, rather than enhance, their military security.

Why aim for 100 weapons, and not zero? The reason lies in the enormity of the problems that this would bring into play, diluting the effort to reach the 100 level. The consensus needed to reach a nuclear-free world may remain politically unattainable. To attain it would require an inspection system that would be enormously complex, intrusive and expensive. And it would be fundamentally unstable, because of its vulnerability to hidden or quickly assembled weapons.

The reduction of nuclear weaponry is difficult and expensive. But few people know that nearly half of the world's deployed nuclear weapons have been dismantled in the past decade. To go beyond dismantlement, and ensure that the removed fissile material cannot be recycled into new weapons, involves complex disposal processes that are now beginning. The dismantling of nearly 20,000 nuclear weapons might suggest that the process could simply be continued. But that cannot be the case, for several reasons.

Dismantling so far has largely been undertaken by Russia and the United States because, with the end of the Cold War, their arsenals were seen as excessive by any standards and because it was more costly to maintain them than to eliminate them. Importantly, the reduction left so many active weapons that it was not necessary to verify the numbers. Further reductions will require reliable verification and an assessment of the remaining inventory. Moreover, the nuclear powers other than Russia and the United States will have to join the effort. This presents a very ambitious agenda in nuclear arms control.

But reducing numbers only gives an index of whether politics in the nuclear nations is evolving in a way that justifies decreasing reliance on nuclear weapons as an instrument of policy. There is little evidence that policy in Russia and the United States is evolving in this direction. Therefore, the threat of keeping our civilization a hostage to an irresponsible and outmoded view of the role of nuclear weapons must be met by an informed public. Although now somnolent, it is here that the awakening must occur. To quote from the preface to the Unesco charter: "Wars begin in the minds of men and it is there that the defences of peace must be built."

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Fingers off the button? Leaders of nuclear powers, such as US President Bill Clinton and Chinese President Jiang Zemin, must realize that their weapons diminish, rather than enhance, their security.