International Organization



https://doi.org/10.1017/S0020818300004033 Published online by Cambridge University Press

Sponsored by the World Peace Foundation Edited at Cornell University Published quarterly by the University of Wisconsin Press

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Nuclear proliferation: breaking the chain

a special issue of edited by George H. Quester International Organization volume 35, number 1, winter 1981

This volume collects a series of predictions on how the world's nuclear proliferation problem will unfold in the 1980s and 1990s. These predictions are meant to go beyond the conventional wisdom, or to contradict it, in a look across the horizon. The collection was commissioned with the expectation that 1980, an election year, would be a good time to take stock of U.S. policy in this area, but also more broadly to review whether greater pessimism or greater optimism might be in order on the prevention of further nuclear weapons spread. Early outlines and preliminary drafts of the papers were presented at a conference in Cambridge, Massachusetts in May of 1980.

The papers benefited importantly from comments each author drew from all the other authors. The review committee drawn from the International Organization board of editors—Stanley Hoffmann, Harold Jacobson, and Henry Nau, joined by Peter Katzenstein as incoming editor of the journal—also provided very valuable critical assistance. Wallis Ammerman deserves a great deal of credit for her editorial work in making all of the papers more readable. Important thanks must also be extended to the World Peace Foundation and its Director, Alfred Hero, for financial support and substantive suggestions throughout the project.

https://doi.org/10.1017/50020818300004033 Published online by Cambridge University Press

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Introduction: in defense of some optimism by George H. Ouester

The spread of nuclear weapons would make the world a much less stable place, and such a spread may be difficult to stop. Yet proliferation is not as yet inevitable.

Several viewpoints are implicitly rejected in this collection. One is that nuclear proliferation would actually be desirable for the world. Another is that such weapons spread is inevitable. Other rejected viewpoints are that such spread can be halted only by a crash program, by a brutal exercise of American national power, or by a substantial surrender of such power.

The international system may indeed hamper a nonproliferation effort in various ways—for example, in a drastic worsening of Soviet-American relations or a major disruption of world oil production.

Yet the most important counter to pessimism about containing profiteration comes from the world's awareness of how bad actual proliferation would be. States which pretend to be indifferent or resigned to such nuclear weapons spread will quietly be making contributions to halting it.

Maintaining a nonproliferation regime by Joseph S. Nye

Three-and-a-half decades have passed since the energy of the atom was used in warfare. Yet rather than nuclear doom, the world has seen a surprising nuclear stability thus far. Equally remarkable is the fact that over the same period nuclear technology has spread to more than two score nations, yet only a small fraction have chosen to develop nuclear weaponry. A third notable point has been the development of an international nonproliferation regime—a set of rules, norms, and institutions, which haltingly and albeit imperfectly, has discouraged the proliferation of nuclear weapons capability.

The wrong policies in the 1980s—i.e., policies that put the United States in an overly rigid position on the nuclear fuel cycle or which lower the priority the United States gives to the issue in security terms—could still sacrifice the current modest success in regime maintenance. Unfortunately, there is no simple solution to the political problem of proliferation. But given the difficulty of constructing international institutions in a world of sovereign states, and the risks attendant upon their collapse, political wisdom begins with efforts to maintain the existing regime with its presumption against proliferation.

Breaking the rules without quite stopping the bomb: European views by Pierre Lellouche

While nonproliferation is no longer in the focus of international attention in the aftermath of the Afghanistan crisis, the problem of checking the spread of nuclear weapons was the subject of an intense controversy between the United States and Europe throughout the 1970s.

Beginning with the Ford administration policy and continuing with the new Carter nonproliferation policy, a major nuclear controversy opposed the American and European nuclear suppliers.

The first area of controversy was the question of technological transfers to the Third World and the conditions for such transfers (embargoes on sensitive technology, IAEA safeguards). The controversy also spread into the area of the plutonium economy—i.e., breeders and reprocessing. On both of these questions, most of the problems raised in the 1970s are still open despite some rapprochement between European and American positions. Major points of disagreement remain in the aftermath of the INFCE: full scope safeguards, the question of breeder reactors, and plutonium economy. The major uncertainty for the future will be whether nuclear energy as a whole will remain in the present state of depression or whether nuclear programs throughout the world will grow again.

The actual growth and probable future of the worldwide nuclear industry by Irvin C. Bupp

Worldwide nuclear power reactor manufacturing capacity will exceed worldwide demand by a factor of two or more during the 1980s. Only in France and the Soviet bloc countries is it likely that the ambitious nuclear power programs formulated in the mid-1970s will be implemented. In all other developed countries and in most developing countries, further delays and cancellations of previously announced programs are all but certain.

The stalemate over the future of nuclear power is particularly deep in America. Administrative and personnel problems in the Nuclear Regulatory Commission, slow progress on radioactive waste disposal by the Department of Energy, severe financial problems for most electric utilities, and drastic reductions in the rate of electricity demand growth combine to make continuation of the five-year-old moratorium on reactor orders inevitable. Many of the ninety plants under construction may never operate and some of the seventy in operation may shut down before the end of their economic life.

Contrary to widespread belief, further oil price increases may not speed up world-wide reactor sales. It is possible that the world is heading for a "worst" of all possible outcomes: a large number of small nuclear power programs that do little to meet real energy needs but substantially complicate the problem of nuclear weapons proliferation.

Multinational alternatives and nuclear nonproliferation by Lawrence Scheinman

The use of multinational institutional arrangements to control sensitive nuclear fuel cycle activities has interested policymakers since the dawn of the nuclear age. Several such ventures have been tried during the past several decades, largely for economic, commercial, or technical reasons, and they have enjoyed varying degrees of success. More recently, with the spread of sensitive nuclear technologies, multinational arrangements have received increasing attention as a means of reinforcing international safeguards which, together with political commitments on peaceful use, have been the principal components of the nonproliferation regime.

The political acceptability and efficacy of multinational arrangements is related to the historic experience with multinational ventures, the changed political circumstances of the 1970s, and the probable requirements for constructive future cooperation. As part of a comprehensive regime covering the development of sensitive nuclear activities, multinational arrangements can reinforce the regime in a manner that is widely acceptable. A political effort to win support for such arrangements is thus worthwhile.

The Tlatelolco regime and nonproliferation in Latin America by John R. Redick

The regime established by the Treaty of Tlatelolco is supportive of peace and security in the Latin American region and global nonproliferation efforts. Circumstances leading to the creation of the nuclear-weapon-free zone include careful preparations and negotiations, individual leadership, existence of certain shared cultural and legal traditions of Latin American countries, and the temporary stimulus of the Cuban missile crisis. Lack of overt superpower pressure on Latin America, compared with more turbulent regions, has permitted continued progress toward full realization of the zone. Tlatelolco's negotiating process, as well as the substance of the Treaty, deserve careful consideration relative to other areas.

The Treaty enjoys wide international approval, but full support by certain Latin American States (Argentina, Brazil, Chile, Cuba) has been negatively affected by the failure of the U.S. Senate to ratify Tlatelolco's Protocol I. Nuclear programs of Argentina, Brazil, and Mexico are expanding rapidly and these nations are forming linkages with West European countries, rather than the United States. The May 1980 Argentine-Brazilian nuclear agreement foresees significant cooperation between the two nation's nuclear energy commissions and more coordinated resistance to the nuclear supplier countries. Argentine-Brazilian nuclear convergence—and the response accorded to it by the United States will have significant implications for the future of the Tlatelolco regime and nonproliferation in Latin America.

Pariah states and nuclear proliferation by Robert E. Harkavy

In recent years, a new international actor—the pariah state—has mounted the global stage. Although rough historical precedents may be discerned, the present international system appears to have produced a novel phenomenon, whereby some isolated small states, lacking assured and credible outside security support, find themselves unable to take advantage of traditional balance-of-power mechanisms. Taiwan, South Africa, and Israel fit this description best, South Korea less so; Pakistan and Chile are also candidates.

Insecurities about conventional arms sources and big-power support in crises involving national survival have driven pariahs to consideration of nuclear "equalizers," notwithstanding dilemmas involving the viability of applicable nuclear strategic doctrines. There are also some indications of nascent interpariah security ties, perhaps nuclear ones. Although there are some prospects for amelioration of the situations of some pariahs—in part because of threats to go nuclear—serious impasses remain for U.S. and other major powers' policies.

India and Pakistan: nuclear rivals in South Asia by Onkar Marwah

The new international nuclear regime requires accession to fullscope safeguards and an acceptance of the formal restraints imposed by the London Nuclear Suppliers Group on the worldwide availability of sensitive nuclear technology, materials, and equipment. The underside of the nuclear market, however, consists of surreptitious transfers by suppliers to special recipient states. Pakistan has capitalized on the existence of such a market to acquire the means to make nuclear weapons. Though South Asia is likely to be the first region outside of the central strategic system to harbor nuclear-armed national rivals, the situation is manageable through the imposition of innovative institutionalized constraints on the region. Neutrally conceived, these constraints can be adapted for other regions facing nuclearization. In the long run, the imbalance of capabilities between India and Pakistan will manifest itself in the nuclear field as it has in others.

Some reflections on the "dove's dilemma" by Lewis A. Dunn

A new generation of advanced conventional arms developed during the late 1960s and 1970s, ranging from antitank guided missiles to scatterable land mines, promises to buttress the defensive capabilities of their possessors. Selective transfer of such new weapons in certain cases may be a useful nonproliferation tactic. However, the fungibility of selective arms transfers with other security related nonproliferation measures, and particularly with security guarantees, appears limited. Moreover, not only would that tactic have little impact on other compelling proliferation incentives, but it would incur important risks. Nonetheless, those risks may be less than the risks

and costs of nuclear proliferation in conflict-prone regions. And they may be minimized by suitable policies. The dilemma of having to choose between so using arms transfers for nonproliferation purposes and continued pursuit of global conventional arms sales restraint has been overdrawn. In contrast with recent efforts to restrain the spread of nuclear weapons, efforts to foster multilateral conventional arms restraint have proved unavailing. Various factors explain that pattern of success and failure, not least of all the different international norms in the respective areas.

The future unlike the past: nuclear proliferation and American security policy by Michael Nacht

An examination of the past relationships between nuclear proliferation and American security policy substantiates several propositions. First, the political relationship between the United States and each new nuclear weapon state was not fundamentally transformed as a result of nuclear proliferation. Second, with the exception of the Soviet Union, no new nuclear state significantly affected U.S. defense programs or policies. Third, American interest in bilateral nuclear arms control negotiations has been confined to the Soviet Union. Fourth, a conventional conflict involving a non-nuclear ally prompted the United States to intervene in ways it otherwise might not have in order to forestall the use of nuclear weapons.

In all respects, however, the relationship between nuclear proliferation and American security policy is changing. The intensification of the superpower rivalry and specific developments in their nuclear weapons and doctrines, the decline of American power more generally, and the characteristics of nuclear threshold states all serve to stimulate nuclear proliferation. It will be increasingly difficult in the future for American security policy to be as insulated from this process as it has been in the past.

Preventing proliferation: the impact on international politics by George H. Quester

Nine predictions are advanced on the impact on the international system of a successful effort to contain nuclear proliferation.

The world will see a modest dilution of the prerogatives of sovereignty, very much tailored to the halting of nuclear weapons spread. Some breakthroughs will be achieved in the multinational management of nuclear industry. Current "pariah states" may escape such status, simply through the latent possibility of nuclear proliferation. Nuclear weapons will continue to go unused in combat, just as they have since 1945. Soviet-American cooperation on the nuclear proliferation front will continue. The traffic in conventional arms may by contrast go relatively unchecked, as most countries conclude that this kind of weapons spread is less bad than nuclear proliferation. All of this will be carried through by statements distorted by the normal deceptions of diplomacy. The world will nonetheless generally become more sophisticated in discounting any glamor or political clout in nuclear weapons programs. Most of the barrier to proliferation will come through normal political and economic exchange, rather than through any violent or military interventions.