

PART I

BY WAY OF INTRODUCTION

Chapter I

The Nuclear Age, the United States, and the Test Ban Negotiations

I

The Moscow Treaty: A Turning Point?

In Moscow, on July 25, 1963, representatives of the Soviet Union, the United Kingdom, and the United States initialed the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space, and Under Water. Eleven days later, again in Moscow, the foreign ministers of the three states signed the Treaty, which became the first major formal arms control agreement between the two sides in the Cold War. Moreover, the Treaty dealt—although in a very limited fashion only—with the most awesome aspect of the competition between East and West, the nuclear-missile arms race.

Eighteen years earlier, almost to the day, on July 26, 1945, the first test detonation of a nuclear device occurred at Alamogordo, New Mexico, and the first detonation of a nuclear weapon in war devastated Hiroshima on August 6, 1945. These events had introduced a new phase into mankind's existence. The two events in Moscow in 1963, falling as they did, seemed to suggest, at the least, a punctuation of this phase. More generally, they offered hope that mankind had begun to take steps to control the destructive potential of modern technology, of which the development of nuclear weapons has been but one aspect. For the United States, which had first developed nuclear weapons and had created the largest stockpile, and probably for most of the world, the Moscow Treaty represented the first concrete step toward a goal that had been sought since the very outset of the nuclear age.

II

The United States and the Nuclear Age

The Changed International System

To begin to assess the significance of the Moscow Treaty, it is necessary to recall that the advent of nuclear weapons in 1945

fundamentally altered the international political system. Although the full dimensions of this revolution were then and still remain obscure, certain salient features were immediately apparent. Nuclear weapons increased the potential human and physical costs of war to such an extent that its traditional role as the *ultima ratio* in international politics was brought sharply into question and a search for new means for the peaceful adjustment of conflicts appeared particularly urgent. Again, because of the enormous destructive capacity of nuclear weapons and the cost and complexity of building a nuclear arsenal and appropriate delivery systems, the distinction between those states which possessed such weapons and those which did not seemed greater than any difference in the power position of states that had previously existed. As a consequence of these developments, many of the traditional modes and patterns of international politics appeared to be fundamentally altered. Alliances seemed not to mean the same thing that they had prior to the summer of 1945. The tasks and techniques of diplomacy seemed to acquire new dimensions. Concepts of international organization assumed new meanings. Some analysts even questioned whether or not the territorial state continued to have relevance.¹

The changes in the international system bore especially heavily on the United States as the state which had introduced nuclear weapons and which, at first at any rate, would have the greatest capacity to develop them. To compound the complexity, these changes occurred at precisely the same time that the United States was forced to abandon finally its isolationist stance and to accept seemingly permanent and deep involvement in international affairs. The balance of power in Europe which had helped to guarantee America's security in the nineteenth century probably ceased to exist during the First World War and certainly was no longer operative after the Second World War.² Instead of being able to rely on the exertion of others to protect its security, the United States now had to undertake that task itself. Moreover, it became increasingly apparent that the security of a large number of other

¹John H. Herz, for one. See his *International Politics in the Atomic Age* (1959), p. 22.

²For an excellent analysis of these developments and their implications for the United States see Hajo Holborn, *The Political Collapse of Europe* (1951).

states was dependent upon American efforts. Thus, in 1945, the problems of adjustment for the United States were piled one on top of the other. The United States faced a changed world and faced it from a new perspective.

Weapons Development versus Weapons Control: Two Conflicting Strains in American Policy

From the outset, American attitudes and policies toward nuclear weapons have been characterized by a deep ambivalence. On the one hand, the United States has felt that for reasons of its security it could not forego the development of nuclear weapons; yet at the same time, it has found the development of these weapons and dependence on them distasteful and has continually sought some means of controlling them. Prominent among the sources of this ambivalence has been the fact that nuclear weapons and other aspects of modern military technology have enormously increased the vulnerability of the United States. The relative predominance of one or the other of the two conflicting strains—and the resulting policy mixture—have, of course, varied with time, but both of these strains have been constant components of American thought and actions, causing important stresses and uncertainties in the policy-making process and in American negotiating postures.

The policy strain which caused the United States to develop nuclear weapons—and which motivated the development of its nuclear arsenal—was based upon the consideration that in the mid-twentieth-century world of sovereign and often sharply clashing states, American security depended first and foremost upon American power, particularly the national military establishment based broadly upon the immense American industrial capacity and steadily evolving technology. The initial decisions to develop nuclear weapons were made with the knowledge that Nazi Germany was also pursuing this goal and at least partly because of the fear that it might succeed.⁸ In addition, nuclear weapons were viewed as a possible means of shortening the Second World War, and the President's decision to employ them in Japan was basically motivated by this

⁸See Louis Morton, "The Decision to Use the Atomic Bomb," in U.S. Department of the Army, Office of the Chief of Military History, *Command Decisions* (Washington, D.C.: Government Printing Office, 1960), pp. 493-518, at 494.

purpose. These decisions were made in wartime secrecy, and despite the wartime emergency, not without soul searching on the part of those who made them. It is thus not surprising that American plans for the control of nuclear weapons—reflecting the second policy strain—began to evolve almost simultaneously with the initial use of these weapons. But for a variety of reasons, negotiations to establish international control foundered.⁴ As the failure of these negotiations emerged, so did the deep Soviet-American clash about the nature of the post-war world. The United States came to perceive the Soviet Union as an expansionist power with virtually unlimited objectives, the achievement of most of which would seriously jeopardize fundamental American interests. In this situation, the build-up of the nuclear arsenal again seemed to offer an important means of gaining security, particularly in view of Soviet superiority in manpower and conventional weapons. Beyond that, there was always the fear that the Soviet Union might make a technological breakthrough which it would then exploit for its purposes, a fear which became particularly acute after the USSR's first detonation of a nuclear device in 1949, several years ahead of American expectations.⁵ As during the Nazi period, therefore, it was not even necessary to face the issue of the value of nuclear weapons on its merits in order to advocate their development; one could simply argue the inexorable necessity of keeping ahead of the other side.

Although the tempo of the nuclear arms race quickened as the years went by, the United States never completely abandoned the quest for the control of these weapons. Moreover, several new factors emerged bearing upon this issue. First and foremost was the increase in Soviet nuclear power. As the USSR's nuclear stockpile grew, and it became apparent that the Soviet Union could devastate the United States just about as easily as the United States could wreck the Soviet Union, the role that nuclear weapons could and should play in American strategies was increasingly called into

⁴For accounts of the negotiations see Bernhard G. Bechhoefer, *Postwar Negotiations for Arms Control* (1961), and Joseph L. Nogee, *Soviet Policy Towards International Control of Atomic Energy* (1961).

⁵How the Soviet detonation spurred the United States to develop its nuclear capacity still further is shown in Warner R. Schilling, "The H-Bomb Decision: How to Decide Without Actually Choosing," *Political Science Quarterly*, Vol. LXXVI, No. 1. (March 1961), pp. 24-46.

question. And if a world in which two states had large numbers of nuclear weapons and ample means to deliver them seemed frightening, the prospect of a world in which this capacity was dispersed among additional states was even more horrendous. Even if the majority of Americans active in foreign policy did not see increased prospects for the control of nuclear weapons, they certainly saw increased need for such control.

Linking the Control of Nuclear Weapons with Improved World Order: Another Source of Ambivalence

Another complicating element in the evolution of American policy arose from the fact that the search for means of controlling nuclear weapons inevitably became linked with one of the themes which had characterized American foreign policy since the beginning of the twentieth century, the search for institutional means of regulating the conduct of world politics.⁶ One reason was that in the American view, it was precisely the absence of effective international institutions that compelled the United States to rely primarily on national military power for its security and to develop nuclear weapons as an essential component of that power. Another reason was that it seemed to be difficult to seek control arrangements for one of the most crucial elements in the relations among states without considering other relevant elements and the problem of world order in general. The existence of the United Nations and the tasks that it assumed in the field of regulation of armaments was a further reason for the linkage.

Like the American attitude toward nuclear weapons, that toward the problem of creating a more effective world order was also characterized by a fundamental ambiguity. On the one hand the United States envisaged the image of a future world in which international institutions would have significant powers with a corresponding reduction in the powers of states; on the other, it was very reluctant to see any derogation of its own sovereignty. From the early days of the twentieth century, American policies concerning

⁶For a critical analysis of this strain see Roland N. Stromberg, *Collective Security and American Foreign Policy: From the League of Nations to NATO* (1963). How it affects contemporary American policy can be seen in former Deputy Assistant Secretary of State Richard N. Gardner's *In Pursuit of World Order: U.S. Foreign Policy and International Organizations* (1964).

these matters were characterized by a series of compromises and followed a zig-zag path. This was dramatized by the American pressure for and subsequent rejection of the League of Nations. Although the scale of oscillation appears to have narrowed after the Second World War, the ambiguity has remained clearly discernible, for instance in the American posture toward the United Nations. Thus the linking of this strain of American foreign policy with developing American attitudes and policies toward the control of nuclear weapons tied the latter to a fairly well developed, yet complicated and sometimes conflicting, set of concepts.

The linkage had consequences for both components. On the one hand, American thinking on the framework for the control of nuclear weapons tended to be cast into predetermined molds. Universal international organizations, such as the United Nations and the specialized agencies, were used as models, without much thought being given to the relationship between the specific weapons control functions to be performed and the nature of the organization required. On the other hand, as the United States began to grapple with the problem of controlling nuclear weapons, it was forced to reappraise certain of its views concerning international organization. For example, the question immediately arose as to whether or not it would be possible to control nuclear weapons completely without at the same time controlling all uses of nuclear energy. If the answer was negative, what would be the impact on the traditional doctrine of domestic jurisdiction?

In the years after 1945 both the changes in the international system wrought by the advent of nuclear weapons and the new status of the United States within that system compelled a broader reevaluation of American concepts of world order. Old concepts generally were questioned and reformulated. What did security mean in the new age? Under the circumstances, what would an organized and orderly system for the conduct of international politics be like? What was the relationship between the reconciliation of the conflicting aims and ambitions of states and the control of violence?

Since these concepts originated within the international political system, their development was inevitably and profoundly affected by the conduct of other actors within this system and especially of the state that the United States perceived as the principal threat, the USSR. This interaction was characterized by a process of bargain-

ing which went on formally and informally, explicitly and implicitly, all of the time.⁷ In the American view, the need for nuclear weapons, the need for their control, and the requirements for that control were all intimately related to Soviet behavior.

New Actors in the Security Policy Process, the Scientists

Just as the new age required a new conceptual understanding of the changed world on the part of American policy-makers, opinion leaders, and the informed segments of the public, it also required adjustments in the processes for formulating and implementing security policy. One crucial new requirement was to bring scientists into the policy process.⁸ In the first place, they alone could provide the knowledge which would be essential for rational policy formulation with respect to many key issues. Again, many of those scientists who had participated in unlocking the secret of the atom, felt that they had a special responsibility concerning the use to which their discoveries were put, and demanded a voice in policy-making. In an open society, and with a base of new-found prestige, they were in a good position to realize their demands. Finally, scientists became involved in yet another role: the implementation of certain policies, once formulated, also required the services of scientists, including their participation in international negotiations.

The integration of scientists into the policy process had to take account of the decentralization in the process of making security policy within the United States which stems originally from the constitutional division of power between the legislative and executive branches. The multiplication of executive agencies with responsibilities in security affairs after the Second World War further fragmented the process. Given their nature as loose coalitions, in which local interests tend to predominate except during Presidential election years, American political parties have been able to make

⁷The best theoretical analysis of this process is: Thomas C. Schelling, *The Strategy of Conflict* (1960). For an excellent real world application of this theoretical framework see Fred Charles Iklé, *How Nations Negotiate* (1964).

⁸For general analyses of the introduction of scientists into the process of formulating and implementing security policy see Robert Gilpin, *American Scientists and Nuclear Weapons Policy* (1962) and Robert Gilpin and Christopher Wright (eds.), *Scientists and National Policy Making* (1964).

at most a modest contribution as unifying forces. The fact that different parties can control legislative and executive branches of the federal government, as they did from 1946 through 1948 and again from 1954 through 1960, adds to the fragmentation. As a consequence of all of these factors, the formulation of security policy within the United States is characterized by a process of bargaining which is not totally unlike that which occurs among sovereign states. To formulate a policy requires building a consensus adequate to secure its adoption.⁹ Depending on the nature of the policy (for example, whether or not it requires funds for its implementation and the magnitude of the funds needed), the process of building a consensus might be confined to an executive department or even to a bureau within it, or it might extend far wider and include several executive agencies, the legislative branch, and segments of the general public. Because of the nature of this process, scientists could and would have to enter at a variety of points; and they did.

Necessary though this development was, it brought with it complicated problems. What would be the best formal arrangements within the structure of government to insure that technical data and scientific advice would be available when needed and that scientists would be heard and their voice would be accorded neither too little nor too much weight alongside and in combination with those of other expert and interested groups? On a different level, would problems of communication arise between scientists and non-scientists; and, if they did, how could they be overcome, keeping in mind that it would not always be easy or even possible to be aware of communication difficulties as they occur? Often only some later event would make such difficulties apparent. The problem of communication obviously would affect the nature of the arrangements made for the scientists in government. Finally, the way and the extent to which scientists were brought into the process of formulating and implementing security policy were important not only from

⁹This concept was first articulated and developed by Roger Hilsman. See his excellent articles: "Congressional-Executive Relations and the Foreign Policy Consensus," *The American Political Science Review*, Vol. LII, No. 3 (September 1958), pp. 725-44; and, "The Foreign Policy Consensus: An Interim Research Report," *The Journal of Conflict Resolution*, Vol. III, No. 4 (December 1959), pp. 361-82.

the viewpoint of insuring that decisions were made as rationally and efficiently as possible, but also from that of insuring that the elected civilian leaders actually remained in control of the policy processes and their output, since civilian control is one of the most fundamental values embodied in the American constitutional system. Thus, at the same time that the United States grappled with basic problems concerning its position in the international political system, it also struggled with important organizational problems concerning its own political system.

III

The Nuclear Test Ban Negotiations as a Case Study

The negotiations which culminated in the signature of the Moscow Treaty extended over a period of five years, from the summer of 1958 through the summer of 1963. They were conducted principally between the Soviet Union on one side and the United Kingdom and the United States on the other, although almost all states participated in one form or another. These negotiations provide case study material which is both engrossing and instructive. They illustrate—perhaps better than any other international negotiations which have been conducted since the end of the Second World War—how the United States has attempted to resolve the complicated issues relating to the formulation, implementation, and substance of security policy stemming from the emergence of nuclear weapons. They also offer sharp insights into the functioning of the international political system in the nuclear era and possible future developments.

First, with respect to *the process of formulating and implementing American security policy*, the negotiations provide another opportunity to test the consensus-building model and to gain further insights into the operation of this process. The negotiations also demonstrate in a concrete fashion the practical arrangements which have been made for bringing scientific data and scientists into the policy process. They show how scientists have exercised their roles within this process and the way in which they have interacted with nonscientists. They contain evidence concerning the ease or difficulty with which the two groups have been able to communicate. The record, therefore, provides a suitable basis for evaluating the

arrangements that have progressively evolved with respect to these matters thus far and for suggesting possible alternatives.

Second, with respect to the *substance of American security policy*, the nuclear test ban negotiations provide a focal point for examining the development of American attitudes and policies toward the problem of obtaining security in a nuclear-missile age. They reveal the extent to which the United States was prepared for serious negotiations concerning arms control or disarmament and provide a basis for assessing the appropriateness of certain widely held American concepts concerning the most effective means of creating a less dangerous world.

Third, with respect to *the working of the international political system*, the test ban negotiations illustrate in a graphic manner the interaction between domestic events, national policies, and international occurrences. They offer a striking picture of diplomatic intercourse between a totalitarian state with tightly sealed policy-making and close controls over its mass media on the one hand, and two relatively open, pluralistic states on the other. The negotiations show the extent to which states which do not possess nuclear weapons can influence the policies of the nuclear states, even concerning nuclear weapons, and the modalities through which this influence can be exercised. In this connection, they provide a number of insights into the role of the United Nations in the contemporary international political system. They also provide a wealth of data relevant to describing accurately the current state of the conflict between East and West and possibly suggest the contours of the future course of this struggle, which has been such an important and pervasive feature of the present period. Finally, the negotiations show how far mankind has gone in its efforts to harness the atom and illustrate clearly the difficulties which it faces in attempting to control the uses to which modern technology is put. Hopefully, a study of the record may lead to suggestions which could be useful in surmounting some of these difficulties.

Whether or not the Moscow Treaty will truly stand as a turning point in the nuclear age and more generally in the age of modern technology is dependent in varying degrees upon all of these factors. Admittedly American policy is only one variable in the equation, yet it is a crucially important variable. The substance of American policy cannot help but have a profound influence on the

course of the future, and the substance of that policy will be shaped in important ways by the manner in which it is formulated and implemented. Obviously American security policy can only be conducted within the framework of the international system, and its effectiveness will partly depend upon how appropriate it is for this environment. For all these reasons, then, a detailed case study of United States policy in the nuclear test ban negotiations should help to determine if the Moscow Treaty should be regarded as, and can be made, a genuine turning point.