BRUCE D. LARKIN

NUCLEAR DESIGNS

GREAT BRITAIN, FRANCE, & CHINA
IN THE GLOBAL GOVERNANCE
OF NUCLEAR ARMS

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Introduction

The Cold War has given way to new concerns for global security policy. Nationalism, authoritarianism, economic uncertainty, local wars, and puzzlement about collective action dominate the new agenda. Still, Cold War legacies persist. Among the most vexing are nuclear programs, stocks, and deployments.

We invoke here only as a memory the keen edge of fear associated with the nuclear Cold War. Nonetheless, the five declared nuclear weapon states—United States, Russia, Britain, France, and China—continue to modernize their forces and deploy them, ready for use. Others have followed suit, or aspire to do so. Few doubt that development continues in Israel, Pakistan, and India. The nuclear intentions of North Korea, Iraq, and Iran are subject to scrutiny.

There is, however, a new candor in US—Russian nuclear relations, which makes possible frank conversation about the utility and dangers of nuclear arms.

The Choices

At this unexpected juncture lies a choice among alternative nuclear futures. If the Cold War inoculated states against a return to runaway nuclear arming, the choices come down to three: the *status quo*, disengagement, or abolition. Measures of calculated disengagement—withdrawing tactical nuclear weapons, removing nuclear weapons from surface ships, shifting away from land-based strategic missiles with many warheads, force reductions—have already been carried out by Russia and the United States. More such measures are promised. These are welcome, but they take place in a context which confirms status quo nuclearism. Only if prompt use is rendered

impossible—a “radical disengagement” including non-deployment—could nuclear weapon states insulate themselves against risks of use inherent in deployed forces. Arguments along these lines might appeal to those who reject status quo nuclearism but hesitate to abandon a “trump card” playable in some uncertain future. They might also appeal to those who anticipated that proposing multilateral abolition would open them to charges of naiveté and treason. But advocates of abolition argue that the surest, clearest, and most enforceable security against nuclear war lies at zero, not in half measures. This text does not attempt to resolve the issue between “radical disengagement” and abolition. Instead, observing the contradiction between the weapons states’ nuclearism and the norm of non-proliferation, it argues that the claim that nuclear weapons in a few hands are safer than nuclear weapons in no hands should be subject to close and wide scrutiny. Stronger, it argues that nuclear weapon states have a compelling obligation to explore and consider alternatives to status quo nuclearism.

Our point of entrée into global nuclear issues lies through the nuclear weapons programs of Britain, France, and China. This text explores how their substantial capabilities and declared purposes bear on choices for a nuclear future, and shows how each of them justifies the status quo. Britain and France say their nuclear forces are key to their security in the present and in future worlds. China would not give up her force except as part of a comprehensive renunciation. The text introduces the arguments they offer for their weapons and sets out the nuclear establishments, political institutions, concerns, and public views which illuminate their belief that nuclear weapons serve their interests.

The conclusion we are compelled to draw is that the three “minipowers” not only reinforce nuclearism—in which nuclear war is held at bay by terror and uncertain self-restraint—but also by their example complicate the case against proliferation. If they should decide, instead, that abolition or agreed and safeguarded non-deployment would in fact enhance their security, they could make the case to Russia and the United States as no others could make it. It would become possible as a pragmatic matter to bring the two preeminent nuclear states into an abolition or non-deployment regime, and they

could make a compelling case that others should renounce nuclear deployment and nuclear aspiration.

Nuclearism and the Nuclearist State

We define “nuclearism” as the belief that the state achieves net advantage from holding nuclear weapons. The *nuclearist state* would choose to maintain a nuclear force even if all other states declared they would not.

But does that actually characterize the five self-acknowledged nuclear weapon states? The first difficulty is that declaratory policy has taken quite the other position. In some statements, at least, each of the five has said its “long-term” objective is global denuclearization—while stressing the obstacles and preconditions which must be met. The second difficulty is that all explain their programs primarily as programs to deter (or “dissuade”) other nuclear-armed states from nuclear threats or attack. As long as other states appear committed to keeping their forces deployed, nuclear weapon states have no need to explain clearly whether they are *nuclearists*—in our sense—or not.

Still, the five seem to be following a path in which the question of abandoning nuclear deployments is never posed. It is in this sense that we are on solid ground in describing them as servants of the status quo. Even their modest measures of disengagement protect their core strategic nuclear forces from political criticism. In this status quo world, some reductions in warheads would occur, especially as large forces obsolesce. Cuts could be recorded in agreements modeled on SALT and START and proliferation codified in adjustments to the NPT. Despite the appearance of “control” and “reduction,” however, over the years—more slowly than predicted thirty years ago, but inexorably nonetheless—more states would succeed in arming themselves with nuclear weapons.

Why Consider Only Britain, China and France?

In addition to the five declared nuclear weapon states whose nuclear programs are known and formally acknowledged, other states have more ambiguous nuclear programs. India acknowledged testing a nuclear device; it has not admitted making nuclear weapons, but has

a visible missile program, and analysts attribute to India a complementary weapons program as well. Israel declines to declare its nuclear weapons, despite widespread belief that it has an inventory of perhaps 200 warheads. Pakistan denies having nuclear weapons but “acknowledges” that others believe it has weapons ready-to-assemble; there seems no doubt that there is an active weapons program. Belarus, Kazakhstan, and Ukraine inherited Soviet weapons on their territory when the Soviet Union broke up, but do not have national nuclear programs. South Africa made a few nuclear weapons and then, by its account, disassembled them and abandoned the program. Iraq was cut short, its physical facilities destroyed, but its expertise intact. Four states which were positioned to pursue nuclear weapons have decided, in early stages, not to do so: Canada, Sweden, Brazil, and Argentina. The intentions of North Korea and Iran remain unclear. Several industrial states certainly have the technical capacity to move promptly into a nuclear weapons program if they chose to do so (including Switzerland, Germany, and Japan).

Why confine this study, for the most part, to Britain, France, and China, rather than some other choice of states?

Russian and US arms control measures are negotiated against a backdrop of British, French, and Chinese nuclear inventories. In asking whether cuts beyond START II would enhance their security, Russia and the United States would first, of course, query the bilateral stability of their own resultant force postures. But the next question—and more pressing as US and Russian warheads numbers declined—would be whether the resultant forces took adequate regard of British, French, and Chinese holdings. Could Russian or US “secure second-strike capability” be put at risk simply because launchers were fewer? Could strategic stability be suddenly upset by covert procurement and “breakout”? Could Britain, France, or China abandon their present commitment to non-proliferation?¹ And would stability withstand pooling weapons, or transfers among allies?²

1. Any nuclear weapon state could supply prospective proliferators with equipment, materials and expertise useful for a nuclear program and for nuclear delivery systems. The United States charges that Chinese and Russian assistance and sales to non-nuclear nations undermine non-proliferation. They reply that they are engaged only in permissible commercial transfers. France, now a committed advocate of non-proliferation, assisted nuclear research programs in

Of course, US and Russian weapons threaten second-tier states, as well. Second-tier *uncertainty* about Russian and US intentions can translate into stubborn resistance to any arms control concessions which Russia and the United States might seek from Britain, France, and China. Can China be confident that its deterrent remains viable, even after Washington and Moscow accept cuts, if Russian and US abilities to locate Chinese systems become increasingly acute? Because the United States and Russia have better satellite surveillance capabilities and the attack submarines to follow and threaten Chinese SSBNs, China could well insist on retaining greater numbers to offset the vulnerability of its forces.

Each of the Three identifies strongly as a “nuclear weapon state.” It has, after all, spent heavily to acquire the industrial and military capabilities which constitute its nuclear status. Within government, and among those active in political affairs, the arguments on behalf of nuclear weapons have been vigorously made and repeatedly certified. Political capital invested in nuclearism may be even more significant than its economic cost. The momentum to retain both weapons in hand and the productive capability to fabricate new ones, therefore, runs deep and strong.

It follows that the Three—like the United States and Russia—must be significant players in moves to non-proliferation, management, reduction, or abolition of nuclear weapons, if such moves are to take place. Nuclear disengagement and disarmament can be achieved only by consent.

Given, then, that lesser nuclear weapon states have a significant role to play in the arms control debate, why have we chosen to focus only on Britain, France, and China? We used three criteria to select the states of interest.

First, the state had to have enough weapons and delivery capabilities to matter. Second, there had to be enough documentary material on the record to make analysis possible; in effect this required that the state have a *declared* program. Third, the program should have

Iraq and Israel; and the British government, like that of many other industrial states, permitted non-nuclear but weapons-related and systems-related transactions with Iraq in the 1980s while denying publicly that it was doing so.

2. Britain's Trident II (D-5) missiles are in fact pooled with US missiles.

been deliberate, from the decision to begin nuclear research to the decision to deploy nuclear weapons and delivery systems.

The first criterion excluded small and candidate programs, except as instances in a general discussion of proliferation dangers. The second criterion excluded India, Israel, and Pakistan, and the third Belarus, Kazakhstan, and Ukraine. The Israeli program, according to revelations by Mordechai Vanunu, may have achieved 200 nuclear weapons, deliverable by aircraft and missile—a substantial force which creates issues not only for the Middle East but for nuclear weapons control more generally. A case could have been made for Israel's inclusion in this study, but the rather slender public record tilted against doing so.

In the end, only Britain, France, and China maintain sufficient warhead inventories and production capabilities to have strong effects on how Russia and the United States view the adequacy of their own strategic capabilities. This could change. Israeli, Indian, or Pakistani capabilities could grow. Ukraine might seize and command the systems on her territory. But for now Britain, France, and China stand apart.

A Note on Methodology

The approach used here to identify significance and sift for reliability is that customary in narrative historical and political studies. At some junctures the reader may also notice three more deliberate methods. One is familiar *capabilities analysis*, the second *scriptic analysis*. The third is *focused comparison*.

Capabilities analysis establishes what weapons systems the state has procured and deployed, and its underlying productive capabilities. Merely knowing a state's capabilities does not permit conclusions about what that state's leaders actually plan to do. However, there is a compelling logic in the other direction: the state cannot perform acts for which it does not have the means, and its ability to create means (in some specified period of time) is limited if the precursors are not in place. Military and political analysts do, in fact, infer intentions from

capabilities. Students of two countries' relations will therefore be alert to how each reads capabilities to discern intentions.

Under the rubric *scriptic analysis* we bring together several familiar questions asked by students of political decisions: How does the leadership interpret the world in which it must act? What strategic practices does it consider appropriate to this situation? What positive examples from its past political history does it draw upon as analogs to the present? And what negative examples is the leadership bound and determined to avoid in the future? What stories do they tell about prospective foes?

Political leaders, acting under uncertainty, compensate for incomplete knowledge by interpreting their historical experience as a carrier of "lessons." A leadership need not be iron-bound to an "operational code" to draw repeatedly on experience its members believe revelatory. The future is foreseen in stories of the past. Decision-makers employ accounts and *scripts*—generalized accounts centered on appropriate steps to take in a situation of a certain kind—when they debate just what kind of situation they confront, and then make key choices to procure, deploy, abandon, or brandish nuclear weapons.

Focused comparison turns on close study of likeness and dissimilarity between cases, highlighting characteristics associated with differences in salient outcomes. George and Smoke applied "focused comparison" to foreign relations episodes in which an opponent challenged US objectives in a "third area" and policy-makers responded by endeavoring to deter.³

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3. Theirs is the classic work employing this technique in security studies: Alexander George and Richard Smoke, *Deterrence in American Foreign Policy. Theory and Practice* (New York: Columbia University Press, 1974), pp. 95-97. The method has some kinship to "statistical-correlational" approaches, they write, in that it "proceeds by asking a limited number of questions or testing a limited number of hypotheses," but is also kindred to the intensive case-study method, in that cases are examined in some depth. The method employs "a standardized set of questions or hypotheses" to ensure "comparability of results":
 "By specifying the differing circumstances or causes that led to different results in the various cases, the investigator can illuminate in an explicit, orderly fashion the complexity of deterrence phenomena and the variation in outcomes. Comparison of cases can thus lead to what might be termed 'contingent general-

Here, for example, we will note that in both Britain and France, tight budgets gave added reason to strip down the nuclear weapons program and commit to a minimum deterrent. However, the French stress on an autonomous program required maintaining missile-frame and missile engine capabilities which remained outside British consideration.

For the most part our use of these methods is implicit. Methods are sometimes used in conjunction with one another. The reader will recognize them in what we choose to treat and the arguments we make. In the concluding chapter, however, we will take up each approach in turn, identifying how it has shaped our analysis, and then discuss why these methods are well-suited to a study of nuclear futures.

The Path

The first and last chapters aside, this work is in three sections. The first is chapter 2, an overview of British, French, and Chinese nuclear programs. It sets out present inventories and statements of policy.

The second section—consisting of chapters 3 through 6—develops the arms control positions of Britain, France, and China, and explores subjects central to global nuclear arms control. Chapter 3, on proliferation, takes as its fulcrum the Non-Proliferation Treaty and the proposed Comprehensive Test Ban. Chapter 4 addresses the somewhat different issue of reductions by nuclear weapon states. Under the rubric “coordination” chapter 5 confronts the fact that the nuclear weapon states have engaged in many transactions among themselves, and continue to do so; they recognize common interests, and among those interests, many would argue, is safeguarding their nuclear eminence. Effective reassurance turns on verification: chapter 6 brings in

izations’—‘if circumstances A then outcome O’—which can be an important part of theory and have important implications for practice.

“... what the focused comparison method can offer in place of a high degree of formal verification may be something more valuable—potentially a significantly greater degree of relevance to real policy problems than is usually enjoyed by statistically validated generalizations (or, for that matter, the conclusions of a single case study).”

changing technologies, and states' commitments to them, which create new capacities to verify.

In the third section—chapters 7 through 9—we take up the *whys* and *why nots* of British, French, and Chinese commitments to nuclear weapons. Chapter 7 tours institutional and public engagement with nuclear forces. Chapter 8 asks what are the costs? what are the risks? And chapter 9 explores the reasons why—despite costs and risks—successive leadership generations, citing threats and evincing fears, have insisted that nuclear weapons make for greater security.

We began this Introduction by anticipating some of the conclusions of chapter 10. It may help in reading the text to appreciate that we take the evidence to require three important conclusions. One will be familiar to students of the non-proliferation regime: Britain, France, and China, by insisting on the value of nuclear weapons to their security, make the case that any state, if its leaders are concerned for its security, should acquire nuclear weapons. Those who follow French, Chinese, or British affairs will recognize the second: that among political leadership in each of the three states are strong advocates of continued deployment and development of nuclear weapons.

Our third important conclusion is that nuclearism's permanence should not be taken for granted: there should be express private and governmental initiatives to model and simulate non-nuclear practice. Since the position of each nuclear weapon state is different, however, what must be rigorously examined are not only global terms—institutions, verification methods, challenge practices, “societal verification”—but the express reassurances which each state must achieve if a given non-nuclear alternative is to pass the test of domestic political acceptability. Designing, testing and assessing alternatives should be done in the open, not only because that is the best protection against distortion and resistance, but because the stakes will require public assent. Alternatives certainly also require canvassing means to dampen the possibility of “conventional” war, given the perverse currency of the nondisconfirmable claim that nuclear weapons prevent war.

Finally, the reader might better appreciate how we have explored the quandary of nuclear weapons by bearing in mind the question to which this inquiry repeatedly returned: if the institutional and pragmatic skills exist to design and sustain the *management* of existing

nuclear weapons without unauthorized use or nuclear war—as advocates of holding nuclear weapons insist—would it be any more difficult to design and sustain a regime in which nuclear weapons were prohibited?

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Nuclear Choices

Boutros Boutros-Ghali, opening the 1995 Nuclear Non-Proliferation Treaty Review and Extension Conference, called for an end to nuclear weapons: "No more testing. No more production. . . . Reduction and destruction of all nuclear weapons and the means to make them should be humanity's great common cause."

By contrast, on the day the conference opened *The New York Times* quoted a recent remark of the US ambassador to the Conference that calls for more rapid disarmament were "propaganda." "American officials," it reported, "say it is unrealistic to expect a nuclear-free world anytime soon."¹

Abolish nuclear weapons? Or keep them for the indefinite future? Of course, these questions have been on the table since 1945. But they are posed with fresh significance in the 1990s. Russia and the United States have declared that they are not enemies, and Britain, France, and China also disavow having enemies among the nuclear powers. Either Russia or the United States, by itself, could prevent Boutros-Ghali's cause from achieving its goal. Despite that—or perhaps because of it—the question *what global nuclear policy best serves our interest* is posed to Beijing, Paris, and London, as well as to Moscow and Washington. The second-tier Three can act to sustain the status quo, strengthening those in the United States and Russia who identify nuclear weapons with their national interest. Or they can challenge the status quo, and challenge Russia and the United States to adopt a non-nuclear understanding of their national needs.

The first premise of this book is that Britain, France, and China, in an altered political world, must again consider what global nuclear policies best serve their interests. This chapter introduces the choices available to them. It does not address their forces or procurement plans or explore their technical capabilities. These are taken up later.

1. *The New York Times*, 17 April 1995.

2 Nuclear Designs

Here we sketch the decision environment of leaderships and publics of the three “second-tier” nuclear powers, locating them in the political issues they must confront.

The second premise is that anyone considering nuclear futures must take the British, French, and Chinese forces into account. How Britain, France, and China respond to proposed nuclear futures must have enormous impact on what global future is chosen. Boutros-Ghali’s cause would fail if Britain, France, or China were to refuse it adamantly.

Do nuclear weapons serve their holders’ “national interests”? Are they useful? Weapons are a practical matter. They are designed and deployed for practical effects. It is not surprising, then, that there are many different answers to the question “are nuclear weapons useful?,” since utility is a function of circumstance. A weapon to deter nuclear attack is ill-suited to protecting delivery of food and medicine.

Moreover, in the practical world “useful” steps have unwanted consequences, not easily weighed against intended purpose. Bearing such difficulties in mind, however, we find that the principal dispositions toward nuclear weapons turn heavily on people’s answers to two questions: “are they useful?” and “are their inherent dangers tolerable?” Not surprisingly, those who are drawn to nuclear weapons’ usefulness also imagine that states can manage them.

US and Soviet (Russian) arms control policies have changed radically since 1985. The changes can be summed up as reductions, revelations, consultations. What effects have these had on the Three? Like Russia and the United States, each of the Three has also been compelled to define its stance on nuclear proliferation more clearly—and more publicly. In the mid-1990s that has meant declaring positions on several dicey subjects: is the global non-proliferation regime adequate? how could Israel, Pakistan and India be induced to come in? should we abandon nuclear tests? if so, how much should we spend on simulations? and how can we use the Non-Proliferation Treaty to advance non-proliferation without endangering our own nuclear forces?

The NPT Review and Extension Conference itself has reshaped the debate. Non-nuclear weapon states are emboldened. Japan has found a new voice. Abolition is a topic for discussion as it was not before May 1995. The world has, in this respect, changed.

Nuclear Choices

Setting nuance aside, there are six distinct positions about the political and military use of nuclear weapons. Each reflects judgments of utility, danger, and the capacity of the State to manage nuclear weapons safely.

The nuclear status quo—in which Britain, France, and China take part—bridges three of the principal positions.

1. *Nuclear war-fighters* talk of how to use nuclear weapons, either because they are the best weapons for a hypothetical war, or because others will use them. States either deploy nuclear weapons or submit. Nuclear weapons are best understood as very powerful conventional weapons.

No longer often voiced, this view circulated after World War II, expressing the script of arming and fighting which had grown up in the pre-nuclear era.

2. *Wielders* share with war-fighters the conviction that having nuclear weapons gives an advantage, but they recognize that thinking of nuclear weapons as “old bombs made large” will lead to fateful and irrecoverable disasters.

On some points—that nuclear weapons will not go away, and that states which intend to remain free must have them—wielders and war-fighters work from similar premises. Wielders see in nuclear weapons a source of prestige, influence, and—to speak bluntly—power. They believe they can manage a nuclear capacity responsibly and exercise it for political advantage. In rare circumstances nuclear weapons might actually be used, with great care and discrimination. Most who hold this view, however, stop short of imagining their actual use: political gain is to be achieved by being *able* to detonate nuclear weapons, not by actually doing so. These are *nuclear wielders*.

3. *Holders* follow nuclear wielders in believing that nuclear weapons will not go away, that the state can manage nuclear weapons without losing control, and that the nuclear state receives prestige and influence. Their defining position, however, is that nuclear weapons are necessary for deterrence of other nuclear states, and

4 Nuclear Designs

to meet contingencies which might arise beyond the horizon of foresight.

They do not expect ever to detonate a nuclear weapon against an enemy, and are quite explicit about it. They actively reassure other states that *barring nuclear attack, or a threat as grave* they have no intention of using or threatening to use their nuclear weapons.

4. *Arms controllers* center on management, control, and stabilization of nuclear forces. They are less optimistic that nuclear weapons can be safely maintained in inventory. Nuclear weapons imply risk. Since there are several nuclear states each must maintain a credible deterrent capability, but priority should be given to steps—typically multilateral steps—to reduce the dangers inherent in nuclear weapons. The only reason to have nuclear weapons is to deter nuclear attack, so other missions, such as deterring conventional attack and backing up assertive strategies, should be refused.
5. *Disengagers* depart from arms controllers in emphasizing the extraordinary destructive capacities of nuclear weapons. In its reformist version, this means deterrence can be achieved at low levels, subject to careful control; forces are *selectively* disengaged. In its radical version, it is deeply pessimistic about the long-term capacity of states to manage nuclear forces without using them. Existing forces should be subject to severe controls, put insofar as possible beyond ready access by military or civil authority.
6. *Abolitionists*, like disengagers, stress the destructiveness of nuclear weapons. They doubt that “disengagement”—even complete non-deployment—can adequately guard against use. In any case, they contend that abolition is politically easier to achieve, and technically easier to enforce, than any scheme which retains nuclear weapons under national, joint, or international control.

These six positions, then, range between two simply stated poles: one, that security lies in being ready to fight a nuclear war, and the other, that security lies in being unable to fight a nuclear war. In

practice, of course, those committed to one position typically hold some dispositions and attitudes characteristic of adjoining positions. These views can be found among the military, political leadership, defense analysts, and public of all five declared nuclear weapon states.

FIGURE 1.1
Six Views of Nuclear Weapons

The consensual range in all five declared nuclear weapon states centers on holders, but includes wielders, arms controllers, and disengagers as well. (China's declaratory policy urges "complete prohibition and thorough destruction" of nuclear weapons, but its practical position—as long as others have nuclear weapons—is like that of other holders.) Internal arguments concern what capabilities to retain or create and how far toward disengagement and abolition the state should move. Where is the greatest security to be found?

Positions of the Three

Where does each of the Three stand on this spectrum? It may be useful to speak of the center of gravity of the consensus in a given country, provided we understand that it is a rough judgment.

French arguments in 1992 revealed sharp internal divisions.

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Some officials and public figures argued vigorously that France required a nuclear capacity with which to threaten any "third-world dictator" who might in the future challenge French security; in citing Qadaffi of Libya or Sadaam Hussein of Iraq they showed themselves to be wielders, threatening some future nuclear proliferator or a state which might mount a non-nuclear assault on French interests. Others, mainstream holders, argued for the status quo. A third group were holders, but strongly interested in arms control. They wanted a capable and autonomous French deterrent, but a truly minimum one, in a world in which proliferation and Star Wars initiatives were restrained by international agreement. The *Livre Blanc sur la Défense* of early 1994, a compromise document embracing views of "holders" and "arms controllers," insists on the necessity of deterring threats to France but keeps "wielding" at arm's length.

Britain, by contrast, was deeply hunkered down to protect its special position as a nuclear state. Little public debate takes place. Wielding is not an issue. Onetime Labour Party calls for British unilateral nuclear disarmament are now almost completely silent.

Britain's fundamental position was set out succinctly by Malcolm Rifkind, secretary of state for defense, in a talk on 16 November 1993:

Having achieved a stable and secure system of war-prevention in the Cold War context, we should be in no hurry to throw away the benefits. NATO strategy, and the United Kingdom nuclear contribution within it, is designed to preserve stability at a minimum level of deterrence . . .

Our desire to preserve stability in Europe is matched by our equal determination to foster stability elsewhere, which means preventing the introduction of nuclear weapons . . . The aim must be to secure an international environment in which states are not motivated even to consider proliferation, and in which every possible measure is taken to ensure that the means of proliferation are not made available. . . .

Nuclear weapons will continue to have a positive and constructive role within a particular frame work which has been developed, with difficulty, over decades. Beyond those limits there lie enormous dangers in the proliferation of nuclear weapons.²

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2. House of Commons. Session 1993-94. Defence Committee. Second Report. *Progress of the Trident Programme*. 4 May 1994. Written Evidence. 5. "Excerpt from a speech made by the Secretary of State for Defence, entitled 'UK Defence Strategy: A Continuing Role for Nuclear Weapons' (17 [sic] November

China's position reflects the fact that her deterrent remains incomplete. Beijing continues to voice abolition as declaratory policy—"complete prohibition and thorough destruction"—but simultaneously pursues a fully credible and robust deterrent. Far from urging that nuclear weapons be wielded, consensus focuses on *acquiring* and then *holding* nuclear weapons once acquired. The center is wary of specific nuclear arms control measures, fearing they could be used by Russia and the United States to prevent China's modernization and consolidate US and Russian superiority. So the Chinese consensual range is much narrower than in France or even Britain.

Is the relationship of second-tier states to these five positions distinct from that of Russia and the United States? Or are the five states more nearly similar? At an earlier time—for example, when Khrushchev was blustering with 100 MT weapons, or John Foster Dulles warned of "massive retaliation"—the superpowers acted as wielders to an extent unthinkable, given their small programs, for the second-tier states. With forty years' experience, however, views of large and small nuclear weapons holders have appreciably converged. All are more cautious, less given to displaying their weapons, more aware of the catastrophic effects of large-scale nuclear weapons use for all.

The Non-Use and Non-Proliferation Regimes

Since 1945 the nuclear weapon states have *in effect* maintained a *non-use regime*, but have brandished weapons and made muted threats to use them, both by the simple fact of their deployment and by specific statements, transfers, and changes of alert level at times of confrontation.

Measures against technology transfer were first practiced as unilateral steps to retain front-runner advantage. Later, this *non-proliferation regime* was codified in the Non-Proliferation Treaty (NPT). In addition to its provisions against acquisition of nuclear weapons by new states, the NPT requires good-faith negotiation of disarmament by existing nuclear-weapons states, eventually leading to the abandonment of nuclear weapons.

In that respect the NPT is one element of an *arms control regime*

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or *management regime* posited on joint management of levels, types, deployment, disengagement, and decommissioning of nuclear warheads and delivery systems. Some see arms control as a preliminary to abolition (with interim stability objectives); others view arms control as a means to enhance stability of persistent nuclear forces (while also reassuring the public). The NPT also embraces a norm of *non-possession*, for all non-nuclear weapon states, and commits all adherents—subject to conditions—to realize an *abolition regime*.

“Regime” designates a body of rules and practices, sometimes set down in an agreed text, which clarifies expectations and regulates consensual permissions. These four regimes—non-use, non-proliferation, management, and non-possession—have their sole force from the acts and promises of authoritative officers of states. In some respects they support one another: non-use, for example, works against proliferation, while non-proliferation may support non-use. But pursuing the four regimes at once flirts with inconsistency, and can engender outright conflict. The management of nuclear weapons draws its *raison d’être* from deterrence, which requires a readiness to use, even if that readiness is intended to serve non-use. Moreover, management implies possession, which contradicts a non-possession regime applied to all. The nuclear weapon states skirt these contradictions by several devices: they talk of the weapons in highly focused contexts—for example, as weapons potentially “in the hands of terrorists”—and they claim management and non-proliferation for the present but abolition for some indefinite future. They take their possession of nuclear weapons as an incontestable fact and right, and aspirations for possession as a criminal wrong.

French, British, and Chinese nuclear programs have implications for the four regimes of non-use, non-proliferation, management, and non-possession. One family of implications follows from the assumption that something akin to the status quo will persist indefinitely. Quite different implications follow if one assumes, instead, that further significant denuclearization measures will be placed on the table.

Nuclear Weapons Among Nuclear Weapon States

From the vantage of Britain, France, and China, there is good reason to study alternatives to the strategic nuclear status quo. New arrangements could actually endanger security, introducing greater

risk. Alternatively, they could decrease the likelihood of nuclear war, or of unauthorized use, without offsetting harms.

START II

In January 1993 George Bush and Boris Yeltsin set their names to the START II Treaty. That agreement provides that by 2003 (or as early as 2000) Russia and the United States will each have 3500 or fewer strategic warheads, a reduction of roughly 70 per cent from the number deployed before START I and II were agreed. Its authors certainly took British, French, and Chinese programs into account, concluding that even after START II cuts mutual US-Russian deterrence, and their capacity to deter others, would remain secure.

Deeper Cuts

The best current estimate, least confident about China, is that Britain, France, and China will deploy about 900 strategic nuclear weapons in 2000, of which 600 will be aboard British and French submarines.³ Thus, under START II the aggregate minipower strategic arsenal in the year 2000 might approach a third that of Russia.

If the United States and Russia cut even further than envisaged in START II, and the minipowers did not, the minipowers' share of the whole would grow still further. At some point Russia or the United States would certainly insist that no more cuts be made unless the minipowers also took part. Among the questions faced by the Three, not as a technical exercise in numbers but as a political and strategic issue, is whether they should *resist* yielding some of their nuclear capability at that juncture. To what ends have the minipowers built nuclear weapons, and what purposes do they now see them serving?

3. Norris et al. estimate deployed British warheads at 300 in 1991 and 292 in 2000 (of which 192 are submarine-borne), after dropping to 200 in the early 1990s as SSBNs were withdrawn before their replacements were operational. They take the French force in 1991 to be 538 and in 2000 464 (of which 402 will be submarine-borne). Acknowledging the greater uncertainties about the Chinese force, they estimate China has 300 deployed weapons and an additional 150 "tactical" nuclear weapons "which are available, but not deployed." Robert S. Norris, Andrew S. Burrows and Richard W. Fieldhouse, *Nuclear Weapons Databook*, volume V. *British, French, and Chinese Nuclear Weapons* (Boulder, Colorado: Westview, 1994) pp. 65, 214 and 358-359. Henceforth cited as Norris et al.

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Issues of numbers arise with the question “wouldn’t a smaller force serve as well?” So we must also understand how qualitative claims about purpose and the actual forces—size, composition, training—are connected.

Disengagement

The United States and Russia have taken modest steps to disengage. They signed the INF Treaty (1987) and have removed nuclear weapons from battlefield forces and surface ships. They have agreed to “detarget” one another. They are reducing the numbers of warheads and delivery vehicles.

During the Cold War the superpowers deterred one another by instant readiness to retaliate, the epitome of engagement. Disengagement measures—including *impediments* to the use, or the prompt use, of nuclear weapons—can be thought of as *functional approximations of reductions*. For example, warheads could be separated from their launchers and placed in monitored warehouses, from which they had to be removed and physically mounted before they could be used. They could not be used *quickly* or *secretly*. Therefore they could not be used *accidentally*, *impetuously*, or *by someone who was not authorized*.

If leaders had to announce their intention to make nuclear weapons ready, and could only resume possession of them after some days had passed, they would have the benefit of disengagement, but could resort to nuclear weapons in the event of “unforeseen” changes in security. They could sidestep the criticism of abolition that it gives up a capability which might be needed for survival. But as long as they did not invoke “necessity,” the effect would have some similarity to abolition. A nuclear war *could* be fought—as it could not in an abolition world—but only after a period in which political forces could mobilize against it.

Disengagement and deeper cuts may be mixed. The INF Treaty contains just such provisions. Nuclear warheads were severed from missiles, which were crushed, and undertakings were exchanged not to build or deploy intermediate-range systems. The warheads themselves, however, were retained by their owners.

A further question for the Three, then, is how they might respond to—or press for—moves to disengage.

Abolition (Zero)

Abolition is reduction to zero. It implies prohibition. By definition, the minipowers must take part, whether jointly, or by responsive unilateral steps. Moreover, the same strict demands to avoid concealment, and to perform effective monitoring and verification, apply to each of the minipowers, as well as to Russia and the United States.

Given that no established nuclear weapon state can be compelled to denuclearize, abolition can be achieved only by consent of all. This veto would ensure a minipower one last chance to extract concessions from its nuclear capacity—another reason why disengagement, rather than abolition, might appear attractive.

A persuasive case can be made that abolition is easier to verify and sustain than any other outcome. However, in an abolition world every nook and cranny in which a nuclear weapon state might have hidden nuclear weapons has new salience; issues of access and verification that are less compelling when states are permitted several tens or hundreds of warheads become paramount at zero.

Relations of Nuclear and Non-Nuclear States: “Extended Deterrence” and Positive Assurances

Relations between states having nuclear weapons and those without raise different questions. Relations *among nuclear weapon states* are dominated by concepts of alliance, restraint, deterrence, and negotiated management. They concern shared political understandings, even when the parties are ostensible enemies. Relations *between states which are nuclear-armed and those which are not* turn on alliance, restraint, negative guarantees, positive assurances, asymmetric exposure, and subordination, recognized in part in the terms of the Non-Proliferation Treaty. These relations reflect weakness and deference, even when the parties are ostensible friends.

Could Britain, France, and China, before electing to “go nuclear,” have chosen otherwise? They could have disregarded US and Soviet weapons. Ignoring nuclear weapons, they would have relied on the nuclear powers to forego nuclear attack (or serious and consequential threat of attack), whether out of good will or calculation. Or they could have sheltered behind one (or both) of the superpowers, relying on that state to make nuclear threats—deterrent threats—on

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their behalf. Sheltering is well-recognized in the “extended deterrence” offered to allies, and in “positive assurances” to non-nuclear states. States without nuclear weapons today have these same three choices: to arm, ally, or ignore.

Most practice a policy of disregard, bolstered by seeking generic “negative assurances” and “positive assurances.”⁴ Conscious of their remove from Eurasian centers of bloc confrontation, judging that they had no bond of history or blood by which to commit a nuclear weapon state to risk on their behalf, the state leaders of Africa, Latin America, and the smaller peripheral states of south and southeast Asia have taken it as their lot to accept exposure. If actively concerned with the issue, they have expressed that concern in UN organs and negotiations on the Non-Proliferation Treaty.

The remaining states have followed several distinct strategies. First, in a few cases leaders have decided, despite the costs, to develop nuclear weapons themselves. India, Israel, South Africa, and Pakistan have designed and built nuclear weapons. South Africa claims it has dismantled its weapons and abandoned the program.⁵ Iraq, and pos-

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4. “Negative assurances” or “negative guarantees” are commitments *not to use nuclear weapons*, in defined circumstances, against stipulated targets. For example, a state might give a “no first use” commitment that it would not be the first to use nuclear weapons in an episode. Or it might stipulate that it would not use nuclear weapons against a state not deploying them.

“Positive assurances” or “positive guarantees” are commitments—often cast in indirect or ambiguous language—to assist a non-nuclear weapon state subject to nuclear attack or threats of attack from a nuclear power. However allusively the commitment may be written, it must be public, for otherwise it would have no deterrent effect.

5. India exploded a nuclear device in 1974; it has not displayed nuclear weapons. Israel is believed, confirmed by the Mordechai Vanunu affair, to have two hundred or more nuclear weapons and means of delivery. South Africa disclosed that it undertook a nuclear weapons program, fabricated six or seven warheads, never tested, and then destroyed the warheads, though the revelations may have been importantly incomplete. Pakistan has neither declared nor displayed nuclear weapons, but statements of former officials appear intended to tell of a well-advanced program. In 1994 former Prime Minister Nawaz Sharif said “I confirm Pakistan possesses the atomic bomb,” prompting a Pakistani Foreign Ministry reply that “In the course of its development of a peaceful nuclear program, Pakistan has acquired the capability to acquire nuclear weapons, but we have made a sovereign decision not to produce them.” *International Herald Tribune*, 25 August 1994. Analysts with access to intelligence data take it as a fact that Pakistan and India now have nuclear weapons, or can assemble them in a short time. On Sweden, see Martin Fehrm, “Sweden,” in Josef Rotblat (ed),

sibly Iran and North Korea, aspire to nuclear status. Argentina and Brazil, once aspirants, have declared that they no longer are. (Sweden and Canada elected not to pursue bomb programs.) Ceausescu's Rumania reportedly flirted with a nuclear program.⁶ Second, some states have sought and received guarantees within the framework of an alliance: NATO certainly implied an extension of US (and British) guarantees to the NATO allies.⁷ Third, the nuclear weapon states have made unilateral declarations. China, for example, has forsworn first use. Fourth, non-nuclear weapon states have sought generic assurances *as a group*, and some assurances have been extended by nuclear weapon states. The 1968 British, Soviet, and US commitments acknowledged in Resolution 255 of the United Nations Security Council, undertaken as part of the negotiation with non-nuclear weapon states on the NPT, are the most comprehensive example of guarantees, even if they are also a study in avoidance of binding text. Fifth, in a few instances non-nuclear weapon states have sought explicit positive assurances from a nuclear weapon state, outside the "alliance" framework of the Cold War. India's 1964-65 contacts with Britain may have been of this kind.

A nation that builds robust nuclear weapons capabilities seeks stability through a deterrent force under national control. But in solving its own security problem it creates security problems for others, who perceive a new threat. This is the logic of proliferation. The builder creates an asymmetric and fundamentally threatening relationship to states without nuclear weapons. China may have resolved an issue of status and autonomy vis-à-vis the United States and the Soviet Union in 1964, but it created an issue for India and Japan. India

Non-proliferation: The why and the wherefore (London: Taylor and Francis, 1985), pp. 213-220; on Israel, see Seymour Hersh, *The Samson Option: Israel's Nuclear Arsenal and American Foreign Policy* (New York: Random House, 1991); on South Africa, see the forthcoming book by Renfrew Christie; David Albright, "South Africa and the Affordable Bomb," in *Bulletin of the Atomic Scientists*, July-August 1994, pp. 37-47; and David Albright, "South Africa's Secret Nuclear Weapons," in *ISIS Report*, May 1994 (Institute for Science and International Security).

6. "Vremya" (Moscow television), 19 April 1995.
7. NATO preparations assumed the possibility of nuclear attack against the alliance, and the possibility of the alliance introducing nuclear weapons against conventional attack. The North Atlantic Treaty itself, however, only commits each party to take "such actions as it deems necessary" to restore security.

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created an issue for Pakistan, Israel for Iraq. The effect is to bolster the case of advocates of new nuclear programs.

The question which haunts this study is whether there is any *other* path than that taken by Britain, France and China by which a leadership can secure its people's future in a world with *some* nuclear states. The question clearly has two forks: do Britain, France and China secure their people's futures by deploying a nuclear deterrent? and was there—is there—any other path? We will introduce the notion of "positive assurances" here and then return to it, from time to time, throughout the text.

"Positive Assurances"

The most focused discussion of positive assurances took place around drafting and approval of the Non-Proliferation Treaty (1968). Neither negative nor positive assurances were written into the NPT, but three nuclear weapon states—the USSR, United Kingdom, and United States—drafted a joint text of qualified positive assurances which they submitted to the United Nations Security Council. It was then passed by the Security Council as Resolution 255 on 19 June 1968.⁸ As the key sections of the text show, the resolution acknowledges unilateral undertakings of the three drafters and recognizes their freedom to act, but it makes no commitment to the non-nuclear-weapon states:

The Security Council . . .

1. Recognizes that aggression with nuclear weapons or the threat of such aggression against a non-nuclear-weapon State would create a situation in which the Security Council, and above all its nuclear-weapon State permanent members, would have to act immediately in accordance with their obligations under the United Nations Charter;

2. Welcomes the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act or an object of a threat of aggression in which

8. The vote was 10 for, none against, and 5 abstaining. For: Canada, China, Denmark, Ethiopia, Hungary, Paraguay, Senegal, USSR, United Kingdom, and United States. Abstaining: Algeria, Brazil, France, India, and Pakistan. Mohamed I. Shaker, *The Nuclear Non-Proliferation Treaty: Origin and Implementation 1959-1979*, volume 2 (New York: Oceana, 1980), pp. 476-477.

nuclear weapons are used;

3. Reaffirms in particular the inherent right, recognized under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

The joint text did not satisfy those non-nuclear states, including India, which sat in the Eighteen Nation Disarmament Conference, forerunner of today's Conference on Disarmament. As part of the *quid pro quo* for signing an NPT they had sought automatic assurances of aid. India was concerned by China's program.⁹

Beijing had not yet assumed China's seat on the Security Council. Its position at this time—in the early stages of weapons building, and only beginning to emerge from the Cultural Revolution—was that the decision to build nuclear weapons or not was an issue of sovereignty and “breaking the monopoly of the super-powers” a good thing. Beijing attacked the joint draft even before it had been formally submitted to the Security Council for discussion, framing it as part of a US-Soviet maneuver against China.¹⁰

Both the United States and Soviet Union suggested that France also take on commitments of the pledge. US negotiator William C. Foster said he hoped France would commit to immediate action to defend non-nuclear-weapon states which signed the proposed treaty.¹¹ But at that juncture France was not taking part in the Eighteen Nation Disarmament Conference in Geneva, and when Resolution 255 came before the Security Council she abstained. French representatives told the Security Council and General Assembly that French nuclear weapons were for defense only and were not intended to be used to threaten or attack.¹² Almost twenty-five years would pass before

9. *The New York Times*, 8 March 1968. Mohamed Shaker observes that positive guarantees became “entangled” in non-proliferation issues from China's first nuclear weapons test, which had a particular impact on India. There was “no doubt” the declarations and Resolution 255 “were mainly aimed at the People's Republic of China.” Shaker, vol. 2, pp. 515, 520, 532.

10. Shaker, p. 534. *Renmin Ribao*, “A Grave Step in Forming a US-Soviet Counter-Revolutionary Nuclear-Military Alliance,” *Peking Review*, vol. 11 no. 2, pp. 31-32.

11. *The New York Times*, 8 March 1968.

12. Shaker, p. 533, citing A/PV. 1672 (prov.), 12 June 1968, p. 7 and SCOR, 1430th meeting, 17 June 1968, paragraph 52.

France and China signed the NPT.

Resolution 255 accords nuclear-weapon states a special status. This raises two kinds of issues. One asks: if Japan or Germany were to become a permanent member of the Security Council, would it want to have nuclear weapons? The second speaks of the special responsibilities of UN Security Council permanent members in talking of the British or French or Chinese nuclear program. Should these be linked?

Paragraph 1 of Resolution 255 says that all UN members but *above all* the nuclear-armed permanent members must respond to nuclear aggression against a non-nuclear weapon state "in accordance with their obligations under the United Nations Charter." Still, the Charter was written and adopted before Hiroshima and says nothing about nuclear weapons. It records that Members "confer" on the Security Council—not on the permanent members—"primary responsibility for the maintenance of international peace and security."¹³ The Security Council determines which members shall carry out its decisions "for the maintenance of international peace and security."¹⁴ There is no special standing for permanent members, except that they must "concur" in the Security Council decision. Confounding "permanent member" status and "nuclear-armed" status complicates both the issue of UN commitment to maintain international peace and security and the issue of nuclear futures. They are obviously related, but in no simple way.

The Frailty of Assurances

The effort expended to obtain both negative and positive assurances shows that non-nuclear states wanted firm public commitments. They would get restraint ("negative") and deterrence ("positive") on the cheap. In return for nuclear weapon states' committing to negotiate nuclear disarmament, they would forego weapons programs themselves, programs most of them had neither intentions nor resources to undertake. If they later chose to, they could execute an escape clause in the NPT, allowing them to leave it.

Logically assurances are worth nothing. If "positive assurances"

13. United Nations Charter. Article 24.

14. *Ibid.*, Article 48.1.

would take the form of a nuclear response to an errant nuclear-weapon state, the enforcer would open itself to retaliation. Would an otherwise secure state run that risk? This logic had led France to conclude in the 1960s that US guarantees could not be relied upon.

Guarantees to non-nuclear states, however veiled and dependent on political will at the time they would be called, declare a script of retaliation. Their force lies, however, in an argument from interest: that no nuclear weapon state could allow another to gain commanding sway and resources by making nuclear threats. This fact made positive guarantees credible *enough*: that is, undismissible, and marking too great a risk to run.

Then Why Build Nuclear Weapons?

Why aren't non-nuclear states satisfied by assurances from their nuclear partners? In short: because assurances cannot resolve three ineradicable uncertainties.

First is that the guarantor, however sincere today, might turn aside at the crucial moment. For example, it could be paralyzed by domestic turbulence.

Second, even a committed guarantor might read a specific threat or incursion as tolerable, not serious enough to bring in nuclear arms. For example, a "regional" nuclear weapon state carefully modulating the diplomatic and grand-strategic use of its nuclear weapons could have important effects without provoking intercession by the nuclear-armed guarantor.

Third, a guarantor could change color and become the enemy.

In short, assurances persuasive *for any future contingency* are unavailable. Non-nuclear states, like the nuclear weapon states themselves, are dependent upon the restraint and prudence of those who have nuclear weapons. But their objective choices—at a decisive moment—are unmistakably fewer than those available to nuclear-armed states. If they judge that condition intolerable, they may embark on a nuclear weapon program of their own. Something like that was part of the calculus of Britain, of France, and of China. This fact sets the context for the three programs we will now examine.

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