1 Introduction: life in a nuclear-capable crowd

This book is an analysis of why some – but only some – political leaders decide to endow their states with nuclear weapons. It finds that decisions to go or not to go nuclear result not from the international structure, but rather from individual hearts. Simply put, some political leaders hold a conception of their nation’s identity that leads them to desire the bomb; and such leaders can be expected to turn that desire into state policy.

The book’s focus on individual leaders is unusual in the social-scientific literature on proliferation and non-proliferation. Indeed, most authors on the subject hardly even bother to ask the question of how leaders come to desire nuclear weapons. Instead, they simply adopt a tragic sensibility, viewing nuclear weapons as a symptom of a fallen humanity’s raw quest for power. More than a few even explicitly and unironically refer to nuclear weapons as “temptations,” to those who succumb to those temptations as “nuclear sinners,” and to the goal of non-proliferation efforts as the construction of an inevitably fragile “nuclear taboo.” This book takes a different tack. It starts its analysis by pointing out the basic fact of the history of nuclear proliferation: the large and fast-growing number of nuclear-weapons capable states, contrasted with the small and slow-growing number of actual nuclear weapons states. This combination of widespread capability with widespread restraint, which has persisted despite numerous shocks, is baffling until one sheds the tragic sensibility. To do so need not mean adopting a blithe, sunny optimism about humankind. Rather, it means seeing political leaders for what they are – flesh-and-blood human beings – and the question of acquiring nuclear weapons for what it is – a revolutionary decision. Facing the unknown and unknowable nuclear future, burdened with the responsibility of protecting their nations from destruction, leaders can hardly do otherwise than look deep inside themselves for guidance. The answers they find via that process of introspection vary widely, but they can be systematically summarized and rigorously explained.

The leaders who have chosen to thrust their nations into the nuclear club include the democratic and the dictatorial, the religious and the
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secular, the rough and the refined, the Western and the Eastern, the Northern and the Southern. Very little unites them. Yet on the basis of case studies of leaders from France, Australia, Argentina, and India, this book does find something that sets those few leaders with definite nuclear weapons ambitions apart from the many who do not harbor such ambitions. What sets those few leaders apart is a deeply held conception of their nation’s identity that I call “oppositional nationalist.” Oppositional nationalists see their nation as both naturally at odds with an external enemy, and as naturally its equal if not its superior. Such a conception tends to generate the emotions of fear and pride – an explosive psychological cocktail. Driven by fear and pride, oppositional nationalists develop a desire for nuclear weapons that goes beyond calculation, to self-expression. Thus, in spite of the tremendous complexity of the nuclear choice, leaders who decide for the bomb tend not to back into it. For them, unlike the bulk of their peers, the choice for nuclear weapons is neither a close call nor a possible last resort but an absolute necessity.

In the process of making its case about the importance of oppositional nationalism for decisions to go nuclear, the book also develops a more general model of identity-driven foreign policy decisionmaking. In particular, the book carefully outlines the linkages from leaders’ national identity conceptions, through emotions, to their ultimate foreign policy choices. This model holds the potential to improve our understanding not only of decisions on nuclear weapons, but also of other foreign policy decisions of revolutionary significance. The immediate task at hand, however, is to show the model’s applicability to the issue of nuclear proliferation.

The puzzle

A sense of tragic foreboding hangs over debates about international security today. Contemporary academic, policy and popular writings now routinely warn of a coming “second nuclear age,” as developing states and non-state actors obtain previously out of reach technologies and developed states begin stirring from a long, idealistic slumber.1 In response to this apparently gathering storm, “non-proliferation” advocates in the

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United States and elsewhere argue for tightened international systems of nuclear inspections and monitoring, “counter-proliferation” advocates promote preventive wars and great defensive shields, and “abolitionists” point to America’s own fearsome arsenal as well as those of the other nuclear weapons states as the root cause of the worldwide danger.\(^2\)

It is important to have this debate. But, amid the consternation, few have paused to consider whether the much-feared flood of new nuclear weapons states may in fact be little more than a mirage.

For this is not the first time we have faced widespread projections of a coming “second nuclear age.” The 1960s era US government and other estimates foresaw between fifteen and twenty-five nuclear weapons states by the end of the 1970s; 1970s era estimates foresaw as many as thirty-five nuclear weapons states by the end of the 1980s; the early 1990s betting line was that at least Germany and Japan and possibly many more states would soon join the nuclear weapons “club.”\(^3\)

Such forecasts – even supposedly optimistic ones – have proved too pessimistic. In spite of the breathless reporting about new uranium enrichment or fuel reprocessing capacities, it must be emphasized that the basic pattern in the history of nuclear proliferation to this point is the small number of nuclear weapons states, as compared to the large number of states capable of building those weapons. The expansion of nuclear technological capacities that previous generations feared has indeed occurred, but the expected realization of their military potential has not followed.

Today, although nuclear technology is decidedly old technology and ex-Soviet scientists and fissile material have been on the market for over a decade,\(^4\) to the best of our knowledge fewer than ten states actually have the bomb. These are the United States (first nuclear weapons test 1945); Russia (1949); Great Britain (1952); France (1960); China (1964); India (“peaceful nuclear explosion” 1974; first official nuclear weapons test

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Figure 1.1 Potential vs. actual nuclear proliferation

1998); Pakistan (1998); plus almost certainly Israel (likely test 1979), and possibly North Korea (no test yet).\(^5\)

Figure 1.1 offers a rough picture of the evolution in the numbers of actual and potential nuclear weapons states over time, adapted from work by Stephen Meyer and Richard Stoll on states’ latent nuclear capabilities.\(^6\)

The figure reports their data at five-year intervals.\(^7\)

This yawning gap between technical potential and military reality should have led to widespread rethinking of the phenomenon of nuclear

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\(^5\) It should also be noted that South Africa admitted production of a supply of “bombs in the basement” before their dismantlement in 1991. In addition, three Soviet successor states other than Russia briefly “inherited” some of the former superpower’s nuclear stockpile, though they never had operational control of the weapons.

\(^6\) To be considered nuclear-capable, states must satisfy the following conditions: indigenous uranium deposits (until 1970, when the international uranium market opened up); experience with mining and metallurgy; sufficient installed electrical capacity (200 megawatts); indigenous steel, nitric acid, electronic ignition production; a heavy construction industry; and a supply of chemists, physicists, chemical and nuclear engineers with three years’ experience operating a nuclear reactor of any size. The original model of nuclear capability was developed in Stephen Meyer, *The Dynamics of Nuclear Proliferation* (Chicago: University of Chicago Press, 1984). For Stoll’s updated data, see http://es.rice.edu/projects/Poli378/Nuclear/Proliferation/model.html.

\(^7\) Note that I have recoded the date of latent nuclear capacity for one country, Belgium, on the basis of my field research there. Stoll’s data set misses the fact that Belgium had ample uranium reserves already in the 1940s in the Congo, which was its colony at the time.
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weapons proliferation. To a surprising extent it has not. Much of the proliferation literature continues to focus its attention primarily on the “supply-side” issue of the growth of technical capacities. Volumes with titles like How Nuclear Weapons Spread are devoted entirely to analyses of the technological similarities between civilian and military nuclear programs.8 Such a focus on technical capacity leads many proliferation specialists to persist in foretelling “life in a nuclear-armed crowd” a quarter-century after Albert Wohlstetter coined the phrase.9 Indeed, William Arkin has aptly labeled the study of proliferation “the sky-is-still-falling profession.”10

This is not to claim that all of the current literature is in denial about the gap between technical potential and military reality. Indeed, awareness of that gap has produced soaring evaluations of the past effectiveness of the “non-proliferation regime” and its centerpiece, the Non-Proliferation Treaty (NPT). The rising reputation of the regime over the past two decades has been especially noticeable in academic writing on international relations. Scholars working within all three major international relations paradigms – realists, institutionalists, and constructivists – have pointed to the regime as an essential dam holding back the tide of nuclear proliferation:

• Realists stress that the regime provides a framework for joint great power application of export controls, technical safeguards agreements, and other supply-side means of blocking states from acquiring and applying nuclear know-how.11

• Neo-liberal institutionalists stress that the regime offers states a functional means to escape the presumed proliferation “prisoner’s dilemma” by giving them the assurance that their rivals are also keeping their nuclear powder dry.12

• Finally, constructivists stress that the regime has contributed to a “nuclear taboo,” an international normative prohibition on the use of

nuclear weapons, which has reduced their utility, tarnished their image, and thus diminished their attractiveness.¹³

The non-proliferation regime has made a difference. Careful case study research on various countries’ nuclear histories has detailed the regime’s role in easing many of them further down the nuclear weapons-free path.¹⁴ Therefore, the mounting evidence that the regime today is encountering increasing political and technical difficulties is a matter of no little concern. But this begs the real question: has the regime caused states that otherwise would have decided to acquire nuclear weapons not to do so, or has it simply reinforced the non-proliferation commitments of already abstaining states? The chorus of praise for the regime implicitly suggests that without it the world would today be home to a “nuclear-armed crowd.” But in fact there is much reason to doubt this counterfactual about the regime’s impact.

First of all, if the regime were indeed the key to containing proliferation, then proliferation should have been rampant before the regime became a real factor in states’ calculations, in the mid-1970s. Yet as Figure 1.1 shows, already then there was a wide gap between the numbers of nuclear-capable and nuclear weapons states. So, according to the very logic of those who take a “strong” view of the regime’s success, by the time the regime was finally built, it should have been too late to prevent widespread proliferation.

Second, if the regime were so crucial, then recent proliferation should have been limited to “rogue states” that do not worry about their position in international society. Such states, not surprisingly, have been the focus of most policymakers’ proliferation worries.¹⁵ But, in fact, the list of nuclear weapons states is no rogues’ gallery, and two of the youngest nuclear powers, India and Pakistan, are widely internationally recognized states whose ultimate choices for the bomb were even made by democratically elected leaders.


¹⁵ For a skeptical view of this development, see Raymond Tanter, Rogue Regimes: Terrorism and Proliferation (New York: St. Martin’s Press, 1999).
Third, for the regime to play the key role that has been ascribed to it, it would have to have created stable expectations among states that it would last. But, in fact, the regime’s survivability is regularly called into question, with the regime’s proponents often the loudest doubters of all. Not only have they viewed all sorts of actions around the world, such as India’s and Pakistan’s 1998 tests, as potential mortal blows to the cause of non-proliferation; they also see various types of inaction, such as the continuing maintenance of large arsenals by the nuclear powers, as equally dangerous to the regime. Given this generalized perception of the regime’s weakness in the policy world (which stands in stark contrast to its glimmering academic reputation), it is hard to buy into the notion that it provides states with the stable expectations they crave.

Finally, if the regime is widely perceived as brittle, those who know it best equally perceive it as hollow. Close analysis of the regime’s actual operation finds a set of ambiguous and erratically enforced rules, myriad technical loopholes, and underfunded international agencies. For one thing, until recently international inspections were only carried out at declared nuclear facilities. The case of pre-1991 Iraq shows how easily a determined state could hide the true extent of its nuclear program. Since the possibilities for cheating have been so wide open, the existence of the regime could hardly have reassured any states that were prone to doubt the good faith of their peers. Thus, if this really were a prisoner’s dilemma type situation, they should have cheated and gone nuclear themselves. But instead, the vast majority of states have not “defected” from the regime.

In short, for all its utility, the non-proliferation regime simply cannot support the explanatory weight that it has been asked to bear. What, then, accounts for the slow pace of proliferation? This book suggests that the answer lies less in external efforts to stop states from going nuclear, and more in the hearts of state leaders themselves. It argues that, in fact, contrary to the conventional wisdom, most state leaders are not sorely tempted by the prospect of “going nuclear.” Rather, state leaders tend to lack sufficient levels of motivation and/or certitude to catapult their states into a new and dangerous world of nuclear deterrence. In short, the

16 See, for instance, Ambassador Thomas Graham, Jr. and Douglas B. Shaw, “Nearing a Fork in the Road: Proliferation or Nuclear Reversal?” Nonproliferation Review, Vol. 6, No. 1 (Fall 1998), pp. 70–76; Schell, “The Folly of Arms Control.”
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non-proliferation regime has appeared to be a dramatic success because few state leaders have desired the things it prohibits.\footnote{The general logic behind this point is elaborated in George W. Downs, David M. Rocke, and Peter N. Barsoom, “Is the Good News About Compliance Good News About Cooperation?” \textit{International Organization}, Vol. 50, No. 3 (Summer 1996), pp. 379–406.}

This argument turns the typical proliferation puzzle on its head. The typical puzzle has been, “Why are there so few nuclear weapons states?” This book asks instead, “Why are there any at all?” The book then answers this question in great detail, building both a theoretical model and a comparative empirical study of four nations’ nuclear histories to show how some leaders do manage to generate enough will to grasp for the “absolute weapon,” while most of their peers do not.


not resolve the fundamental disconnect between the common expectation of widespread proliferation and the reality of limited proliferation – indeed, it deepens that puzzle. Most nuclear-weapons-capable states must deal with the presence of nuclear weapons in their wider regions, want to boost their self-esteem, and have domestic constituencies that would profit materially from an indigenous nuclear weapons effort. If, as Sagan suggests, any of these reasons on its own should be enough to motivate the choice for the bomb, it is hard to understand why more nuclear-weapons-capable states – including Germany, Japan, Sweden, and many others – never made that choice.

Pace Sagan, a closer focus on the demand side of proliferation in fact reveals not how many reasons state leaders have to “go nuclear,” but rather how few. In the interconnected system that is the world, many foreign policy decisions are likely to have various direct and indirect effects, some intended and some unintended. And the decision to go nuclear is a revolutionary decision. As such, it is likely to disturb the system more than any other, inviting huge, multifarious, and unpredictable consequences. Top decisionmakers, experienced as they are in the art of politics, cannot fail to recognize the enormity of the choice before them. For example, while on fieldwork in India in 1965, the political scientist Stephen P. Cohen typed up a list of thirty-four separate arguments over the bomb current among Indian elites at that time. The list gives us a sense of the difficult nature of the nuclear choice, not just in India but wherever the question comes up. A summary of Cohen’s list is in Table 1.1.

Not only for India but for every state, this is a decision with potentially massive consequences on every level of politics and policy, including profound effects in the areas of military strategy, diplomacy, economics, domestic institutions, and ethical or normative self-image. It is difficult to determine the likely effects of the decision to go nuclear even on any one of these levels, and what is more, as Amartya Sen points out, the various prudential and normative levels are inextricably intertwined.

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24 Indeed, part of the unpredictability here is that there may not be many consequences at all; the attempted revolution may fizzle. This is the assessment of the nuclear “revolution” that is made by John Mueller, *Retreat from Doomsday: The Obsolescence of Major War* (New York: Basic Books, 1989), esp. ch. 5. But Mueller also notes that most people believe that there has been a nuclear revolution; and those beliefs are what interest us most here.

Table 1.1 Cohen’s “India and the bomb: a catalog of arguments” (abridged)\(^a\)

<table>
<thead>
<tr>
<th>Issue-Area</th>
<th>Pro-Bomb Spin</th>
<th>Anti-Bomb Spin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military-Strategic</td>
<td>• Bomb will deter attack</td>
<td>• Bomb will invite attack</td>
</tr>
<tr>
<td></td>
<td>• Bomb can be used tactically</td>
<td>• Any use of bomb risks escalation</td>
</tr>
<tr>
<td></td>
<td>• Bomb makes up for conventional military deficits</td>
<td>• Bomb is logistical nightmare and too big for most targets</td>
</tr>
<tr>
<td>Diplomatic-Reputational</td>
<td>• Bomb will raise national prestige</td>
<td>• Abstaining will raise national prestige</td>
</tr>
<tr>
<td></td>
<td>• Others are going nuclear</td>
<td>• Others will only go nuclear if we do</td>
</tr>
<tr>
<td></td>
<td>• We can easily break our commitment to a peaceful nuclear program</td>
<td>• Others will be alienated if we go back on our word</td>
</tr>
<tr>
<td>Economic</td>
<td>• Bombs are cheap</td>
<td>• Bombs are dear</td>
</tr>
<tr>
<td></td>
<td>• Bomb will give us more power in trade and aid talks</td>
<td>• Bomb will invite economic sanctions</td>
</tr>
<tr>
<td>Domestic-Institutional</td>
<td>• The people are demanding it</td>
<td>• The people are not demanding it</td>
</tr>
<tr>
<td></td>
<td>• The military and scientists want it</td>
<td>• Principle of civilian control of foreign and defense policy</td>
</tr>
<tr>
<td>Ethical-Normative</td>
<td>• Bomb would be a statement of independence from imperialists</td>
<td>• Bomb would be an admission that we are no better than the imperialists</td>
</tr>
<tr>
<td></td>
<td>• We must avenge the deaths of our soldiers</td>
<td>• Taking vengeance only produces new suffering</td>
</tr>
<tr>
<td></td>
<td>• Nehru built the basis for the bomb</td>
<td>• Nehru opposed the bomb in principle</td>
</tr>
</tbody>
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Note: \(^a\)Stephen P. Cohen private archive, Washington, DC.

In short, to go nuclear is an ideal-typical “big decision.”\(^26\) In light of this, the standard menu of “security,” “prestige,” or “domestic political” motivations for foreign policy choice is insufficient. The consequences of going nuclear are simply too vast to allow for a reasonable cost-benefit calculation. To be sure, various voices in society may sound strong pro- or anti-bomb notes; but the responsibility for choosing wisely is much