PART I

The Logic of Nuclear Skepticism

1 *Nuclear Blackmail in International Politics*

In the early hours of July 16, 1945, in New Mexico's Jornada del Muerto desert, the United States detonated the world's first nuclear device: a single test bomb with the explosive power of more than 18,000 tons of TNT. The shock wave from the explosion was felt over 100 miles away, but its effects reverberated around the world. Over the next several decades, the United States spent trillions of dollars building and maintaining a vast nuclear arsenal.[1] At its peak in the mid-1960s, America's stockpile consisted of more than 30,000 atomic warheads. Seventy years into the nuclear age, it is time to ask: what exactly has the United States gained from its investment in the bomb? What has it been able to do with nuclear weapons that it could not have done without them?

The United States is not the only country interested in the answers to these questions. Nine other countries have built nuclear weapons since 1945 (see Table 1.1). All of these states made tremendous sacrifices in order to acquire atomic weaponry. Zulfikar Ali Bhutto, the former prime minister of Pakistan, famously boasted that his countrymen would "eat grass" in order to produce the Pakistani bomb. Pakistan ultimately built a nuclear arsenal – but only at a tremendous financial cost. The production of China's atomic bomb likewise required a significant readjustment of national priorities. Beijing's official guidelines for building the bomb indicated that all "other projects for our country's reconstruction will have to take second place to the development of nuclear weapons."[2] More recently, North Korea endured years of crippling economic sanctions and international isolation in order to join the nuclear club. Are the benefits that stem from

[1] One study calculated that the United States spent $5.5 trillion on its nuclear arsenal between 1940 and 1996, amounting to nearly one-third of all U.S. military spending for that period (Schwartz, 1998).
[2] Quoted in Perkovich (1999, 80).

Table 1.1 ***States that have acquired nuclear weapons.***

Country	Year Acquired
United States	1945
Soviet Union	1949
Great Britain	1952
France	1960
China	1964
Israel	1967
India	1974
South Africa	1979*
Pakistan	1987
North Korea	2006

* South Africa dismantled its arsenal in the early 1990s.

possessing nuclear weapons sufficient to justify these kinds of sacrifices? What have Pakistan, China, and other nuclear powers gained from privileging nuclear weapons programs at the expense of their economic development and other national priorities?

Scholars and politicians have puzzled over the political effects of nuclear weapons for decades. Yet most thinking about nuclear weapons has been devoted to a single idea: the ability of nuclear weapons to deter aggression. In 1953, the physicist Robert Oppenheimer – the so-called father of the atomic bomb – famously likened the emerging American-Soviet rivalry to "two scorpions in a bottle, each capable of killing the other, but only at the risk of his own life."[3] Most research about nuclear diplomacy over the last seven decades has sought to determine the conditions under which this tenuous balance can hold. A key question in this literature, for example, is whether nuclear weapons contributed to the "long peace" that emerged among the great powers after World War II.[4]

But deterring external aggression is just one-half of the equation. It is also possible that nuclear weapons have *coercive* utility. In other words, nuclear weapons might help countries throw their weight

[3] Monk (2012, 610).
[4] See Gaddis (1987).

around to force changes that serve their political interests.[5] Nuclear-armed countries could, for example, try to compel others to relinquish territory, dismantle military bases, pay reparations, or even alter their domestic policies. Just as in nuclear deterrence, the goal is to threaten punishment so severe that the target will capitulate to avoid the possibility of being attacked with nuclear weapons. Are nuclear weapons useful for these more assertive forms of political leverage?

Military coercion has been called "the dark side of international relations."[6] Using, or threatening to use, military force to advance one's political interests is sometimes perceived as morally reprehensible, particularly if nuclear weapons are involved. Nevertheless, when it is successful, coercive diplomacy can be an efficient way for a state to advance its interests. If states can get what they want in world politics without actually having to fight, they can avoid potentially costly wars and other military adventures. For example, the United States was ultimately able to expel Saddam Hussein from Kuwait in the 1991 Persian Gulf War – but Washington surely would have preferred if its military threats had been sufficient to accomplish that objective. Indeed, the most effective threat, as Thomas Schelling argues, is one that never has to be implemented.[7] It is therefore important to understand when and how states can exercise coercive diplomacy effectively.

An emerging wisdom in international relations scholarship says that countries armed with large nuclear arsenals can bully other states into submission by raising the prospect of nuclear punishment. Even some national leaders seem to share this view. This perspective is consequential because if nuclear weapons are powerful tools of coercion, then the United States might benefit from building a larger nuclear arsenal – and from using military force to destroy other nations' nuclear programs. Indeed, many influential observers advocate for these policies today.

This book, however, challenges this emerging consensus. It asks whether nuclear-armed states have advantages in coercive bargaining. We show that nuclear weapons have far less utility for coercive diplomacy than many people believe. For all the money spent on

[5] We use the term "coercion" to refer to the use of threats to revise the status quo. Note, however, that some scholars use the term more broadly to refer to all military threats, including deterrent threats. See Schelling (1960), George and Smoke (1974) and Art (2003).

[6] Pape (1996, 3).

[7] Schelling (1966, 10).

atomic bombs, they have bought precious little coercive leverage for states.

A Fresh Look at Nuclear Weapons in the 21st Century

The political effects of nuclear weapons have puzzled scholars and strategists ever since the United States dropped the first atomic bomb on Hiroshima, Japan, in August 1945. Deterrence theorists produced reams of scholarship on the role of nuclear weapons in the Cold War superpower standoff between the Soviet Union and the United States.[8] They wanted to know whether nuclear weapons had any political utility in a world of mutually assured destruction (MAD), where a nuclear first strike by either the Americans or the Soviets would likely result in the annihilation of both countries. These scholars focused heavily on high-profile superpower crises in Berlin, Cuba, and elsewhere.

Over the last two decades, however, the world has changed in ways that the nuclear deterrence literature did not anticipate. We no longer live in a world in which two superpowers face one another with tens of thousands of nuclear warheads at their disposal. Instead, we find ourselves in a "unipolar" world with one superpower – the United States. In this new global landscape, regional nuclear powers, like India and Pakistan, are increasingly important. However, most theories of nuclear coercion were designed to explain the behavior of superpowers – not regional nuclear powers. These theories may not apply to today's strategic environment.

Moreover, nuclear deterrence theory has little to say about how nuclear states interact with nonnuclear rivals. Yet these interactions are increasingly important in the post–Cold War world – especially for the United States. Many of Washington's most important adversaries over the last several years have been so-called rogue regimes that did not possess the bomb, such as Iraq, Iran, and Syria. Many of the theories developed during the Cold War have little to say about whether nuclear weapons can be used to coerce nonnuclear states.

This book provides a theory of nuclear coercion that is updated for the 21st century. It shows that nuclear weapons have little coercive utility in today's world. Even during the Cold War, nuclear arsenals

[8] See, for example, Brodie (1959), Schelling (1966), Betts (1987), Jervis (1989), and Trachtenberg (1991).

were far less useful for coercion than many people believe. The opposing view – that nuclear weapons aid coercive diplomacy – is badly misguided.

The Nuclear Coercionist School

According to one view, nuclear weapons help countries intimidate and blackmail their adversaries – not just deter them. The nuclear "coercionist" school, as we call it, traces its roots back to the early days of the atomic age, when many American officials saw the U.S. nuclear monopoly as a tool for molding Soviet behavior to their liking. During the Cold War, the coercionist perspective receded as deterrence, not compellence, emerged as the cornerstone of U.S. nuclear policy. Since the end of the Cold War, however, the coercionist view has enjoyed something of a renaissance, drawing adherents both from those who fear aggression from new nuclear states as well as those who see nuclear weapons as a useful tool for U.S. coercive diplomacy. The coercionist viewpoint comes in several different flavors, with important differences – and a few disagreements – between them. But they all share a basic belief that nuclear weapons are useful for more than just self-defense.

There is a widespread assumption among international relations scholars that nuclear weapons provide coercive leverage. Though this belief is not universal, scholars often assume that nuclear weapons allow countries to coerce their adversaries. Consider the following conclusions from prominent studies of coercive diplomacy:

- "Nuclear weapons provide more than prestige, they provide leverage. They are useful in coercive diplomacy, and this must be central to any explanation of why states acquire them."[9]
- "Even if the coercer's nuclear resources are limited, the prospect of damage far worse than the most intense conventional assault will likely coerce all but the most resolute defenders."[10]
- "Coercion is more likely to work . . . if the coercer enjoys a unilateral nuclear advantage."[11]

[9] Beardsley and Asal (2009b, 297).
[10] Pape (1996, 38).
[11] Horowitz and Reiter (2001, 163).

- "When the compeller enjoys a monopoly over nuclear weapons, he can virtually dictate conditions to the compellee."[12]
- "States that enjoy nuclear superiority over their opponents are more likely to win nuclear crises."[13]
- "Nuclear weapons aid the coercive capabilities of the United States."[14]
- "Nuclear weapons are inherently valuable for political (especially coercive) purposes."[15]

The coercionist perspective begins from a simple and irrefutable observation: nuclear weapons are terrifyingly destructive. When deciding to back down or stand firm in a crisis, countries must consider whether they could prevail in an eventual war at an acceptable cost. Armed conflict with a nuclear-armed coercer could result in the destruction of a state's major cities and the killing of hundreds of thousands – and perhaps millions – of its civilians. Countries have obvious incentives to avoid this kind of punishment. By threatening to inflict massive amounts of pain, nuclear nations therefore can compel targets to reverse unfavorable policies or hand over disputed items.

Absolutists and Relativists

The nuclear coercionist school encompasses a wide array of views about the conditions under which nuclear weapons can be useful tools of coercion. Most, however, fall into one of two camps, which we label *absolutists* and *relativists*. Nuclear absolutists suggest that the mere possession of a nuclear arsenal – of any size – allows states to blackmail and intimidate other states, regardless of others' military capabilities. Proponents of this view suggest, for example, that if Iran builds a nuclear arsenal, it would be able to coerce the United States and Israel – even though both of those states would have overwhelming nuclear superiority over Iran. Indeed, whenever a nondemocratic regime appears on the cusp of acquiring the bomb, it is seemingly pro forma for senior officials in the United States to raise alarm about the danger of nuclear blackmail. In the 1950s, for instance, Secretary

[12] Merrill and Peleg (1984, 34).
[13] Kroenig (2013, 141).
[14] Thayer and Skypek (2013, 43).
[15] Dittmeier (2013, 494).

of State John Foster Dulles argued that nuclear weapons "might in the future get into the hands of irresponsible dictators and be used as a form of international blackmail."[16] Half a century later, President George W. Bush echoed the same view when he asserted that countries such as Iran, Iraq, and North Korea would be able to "blackmail" the United States and its allies if those regimes acquired the bomb.

Nuclear relativists, on the other hand, focus on the nuclear balance. For relativists, a state's ability to use its arsenal for coercive leverage is conditional on having a nuclear advantage over its opponent. Relativists are divided, however, on just how much of an advantage is necessary for nuclear weapons to be useful tools of coercive bargaining. Some argue that nuclear states cannot use their arsenals for coercive purposes if their opponents also possess the bomb. According to this perspective, a state with a large arsenal could coerce nonnuclear opponents, but not countries that might retaliate with nuclear weapons, since the latter could impose unacceptable damage in a retaliatory attack.

Other relativists, however, assert that nuclear coercion can be effective, even against other nuclear powers. What matters, these scholars argue, is whether the coercing state enjoys "nuclear superiority" over its opponent. Nuclear-superior states – those with larger and more sophisticated nuclear arsenals – have an important advantage, in this view. As Robert Jastrow once claimed (with no trace of irony), "he who can blow the world up three times has more power than he who can blow it up only twice."[17]

Brinkmanship and the Manipulation of Risk

In a crisis with two nuclear states, carrying out a nuclear threat would likely mean mutual suicide. How, then, can nuclear coercion be effective against other nuclear states? For some scholars, nuclear brinkmanship provides an answer.[18] According to brinkmanship theory, a nuclear state can coerce its opponent by taking dangerous escalatory actions that increase the risk of an unintended disaster.

[16] Dulles (1957).
[17] Jastrow (1983).
[18] Classic studies of nuclear brinkmanship include Schelling (1960), Schelling (1966), and Powell (1990).

Although both sides understand that the other would not rationally start a nuclear war, the possibility of accidental nuclear escalation can turn seemingly incredible threats into credible ones.

To illustrate, consider a colorful illustration offered by Schelling in his classic book *Arms and Influence*. Imagine two mountain climbers that are tied together, standing near the edge of a cliff. If one climber wants to intimidate the other, perhaps he could threaten to jump over the edge. The problem is that this threat would not be credible, since it would be suicidal. But by moving ever closer to the edge of the cliff, the climber can raise the chance that some unforeseen accident – loose gravel, a gust of wind, momentary vertigo – might cause one climber to slip and carry both to certain death. The longer he stands near the edge, and the closer he gets to the chasm, the more likely it becomes that the other climber will lose his nerve and give in.

Nuclear coercion theory argues that this dynamic is what drives confrontations between nuclear-armed countries. Nuclear states prevail in crises with other nuclear states, according to this view, by raising the risk that a crisis will spiral out of control and result in a war that neither side would rationally choose. Some theorists contend that states with a nuclear advantage are particularly likely to utilize brinkmanship tactics.[19] They can take greater risks in crises – and enhance their odds of victory – because their opponents will suffer more than they will if war breaks out. This argument seemingly offers an elegant solution to the problem of incredible threats, showing how states can derive coercive value from their nuclear arsenals even if they would never rationally use them.

Another strand of nuclear coercion theory goes even further, suggesting that nuclear brinkmanship – or an explicit nuclear threat – is not necessary for nuclear states to derive coercive leverage from their arsenals. According to this view, nuclear weapons loom in the background of international crises even when states do not make explicit nuclear threats. In 1956, before he became the Pentagon's second-in-command

[19] See, for example, Trachtenberg (1985, 139) and Kroenig (2013). However, other brinkmanship theorists – most notably Jervis (1984) and Powell (1990) – reject the notion that nuclear superiority makes states push harder in crises. These scholars argue instead that the balance of resolve determines a state's willingness to generate risk in a crisis. Despite this key difference, both of these perspectives embrace the notion that states can extract coercive utility from their nuclear arsenal when nuclear threats might appear incredible.

official, Paul Nitze argued that "whether or not atomic weapons are ever again used in warfare, the very fact of their existence, the possibility that they could be used, will affect all future wars . . . In this sense even the cold war is an atomic cold war."[20] Nuclear states therefore should be able to coerce their adversaries without ratcheting up the risk of nuclear war. Nuclear alerts, nuclear deployments, and explicit verbal threats are not needed for states to gain political leverage over their adversaries: simply possessing the bomb is often enough. One study put it bluntly: "even if a state never makes an explicit nuclear threat, the mere presence of nuclear weapons may exert a powerful coercive role in low-level militarized disputes."[21]

Problems with the Nuclear Coercionist School

The nuclear coercionist perspective offers some useful insights into the dynamics of nuclear blackmail, but it also has significant limitations. One problem is that it does not seem to explain the historical record very well. Nuclear-superior states have often failed to get their way in coercive disputes with other nuclear powers. Soviet pronouncements of its nuclear superiority, for example, did not help achieve a more favorable resolution to its territorial disputes with China in the late 1960s. The United States likewise has not had much luck altering North Korea's aggressive policies since Pyongyang's first nuclear test in 2006. Moreover, nuclear states frequently have failed to coerce even nonnuclear adversaries. The shadow of America's nuclear arsenal did not convince Afghan leaders to hand over al Qaeda operatives after the group conducted terrorist attacks against American targets in 1998 or 2001. Great Britain could not coerce Argentine forces to withdraw from the Falkland Islands without a fight in 1982, despite deploying nuclear forces to the South Atlantic. The Soviet Union could not force Iran or Turkey to hand over disputed territory in the early 1950s, after Moscow acquired the bomb. China has similarly been unable to make relatively weak states – including, Brunei, Malaysia, Philippines, Taiwan, and Vietnam – abandon their claims to the disputed Spratly Islands in the South China Sea.

[20] Nitze (1956).
[21] Horowitz (2009, 251).