Coercing Allies: Why Friends Abandon Nuclear Plans

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Abstract

This paper studies under what conditions the U.S. can coerce its allies to forgo nuclear weapons. Specifically, why did Taiwan and South Korea give up their nuclear pursuits under American duress, while Israel and Pakistan attained a nuclear capability? The existing theoretical perspectives explain why some countries are resolved to pursue nuclear weapons, but they do not illuminate why some states successfully get from the motivation to build the bomb to an operational nuclear weapon and others do not.

The key finding is that denial, not punishment, succeeds in stopping and reversing allied nuclear programs. Coercion by demoralization (e.g., inspections) can be particularly effective, and the U.S. has an easier time enforcing this measure against highly-dependent allies than against low-dependence allies. Washington may not have to offer incentives to highly-dependent allies, and it can instead simply force them into submission. Low-dependence allies will not respond to either non-military rewards (e.g., economic and technological offers) or limited military reassurance (military aid) alone. Likewise, the U.S. cannot stop such allies by either (or both) full-scale punishment or limited denial.

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> *The atomic bomb […] scared its possessors more than those who did not have it.*
>
> Adam Ulam, *Stalin* (1973)

Nuclear-armed allies can create serious problems for the United States. The closest the world came to a nuclear exchange since the Cuban missile crisis was in 1999 when Pakistan threatened to use nuclear weapons against India during the Cargill War. President Bill Clinton had to personally intervene to persuade Islamabad not to engage in such dangerous diplomacy. Preventing future allies from going nuclear is bound to stay at the top of the U.S. foreign policy agenda.

The paper proceeds in the following order. First, I outline the key questions and puzzles that animate this research. In the second and third sections, I summarize my argument and key conclusions. In the fourth section, I provide brief summaries of the four case studies that are referenced throughout the paper. The fifth, sixth and seventh sections provide detailed analysis of each of the hypotheses I evaluated. I conclude by discussing the relevance of this research for International Relations theory.

Research Question and Puzzle

This paper studies under what conditions the U.S. can coerce its allies to forgo nuclear weapons. The research question is: under what conditions do U.S. coercion and inducement efforts succeed or fail in stopping or reversing an ally’s nuclear weapons program? The dependent variable is the degree of U.S. success in stopping or reversing an ally’s nuclear weapons program. Specifically, why did Taiwan and South Korea give up their nuclear pursuits under American duress, while Israel and Pakistan attained a nuclear capability? This study departs from the predominant emphasis on how the U.S. can prevent adversaries from going nuclear. In contrast, this research focuses on the U.S. efforts to coerce nuclear-seeking allies, and examines why it is hard to get such states to abandon their nuclear goals. By studying how Washington succeeded in persuading two allies (Taiwan and South Korea) to give up their nuclear pursuits but failed with two others (Pakistan and Israel), we can better understand what can and cannot work to prevent future U.S. allies from going nuclear.

The existing theoretical perspectives are useful in describing the facilitating factors that often enable states along the nuclear route. While these theories explain why some countries are highly resolved to pursue nuclear weapons, they do not illuminate why some states successfully get from the initial condition (the motivation to build the bomb) to the outcome (an operational nuclear weapon) and others do not. The universe of cases is seven allied states[2] that have sought to acquire nuclear weapons by building indigenous nuclear weapons programs (NWPs). My analysis focuses on the cases of attempted coercive nonproliferation: Taiwan, South Korea, Pakistan and Israel. The existing literature explains that these allies wanted to go nuclear to hedge their security bets against U.S. abandonment or to ensure their security against external threats, but it does not fully account for why only two of them achieved their atomic ambitions.

The answer lies in a fundamental point that the extant scholarship on nuclear proliferation, coercion and inducements often overlooks: “going nuclear” is not an ally’s “decision” alone, but a negotiation between that state and the U.S. as Washington seeks to uphold the nuclear nonproliferation norm. On the one hand, the existing literature on nuclear spread provides an incomplete account of the factors that complicate the nuclear aspirants’ proliferation progress. On the other hand, only few studies of coercion and inducements are dedicated to understanding the conditions under which such tools succeed and fail in nonproliferation campaigns. This research aims to contribute to both sets of literatures.

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[2] Australia, France, Israel, Pakistan, South Korea, Taiwan and United Kingdom.

Argument

I evaluate the existing perspectives by examining the nuclear negotiations between the U.S. and four of its allies during the Cold War. One approach is to draw on the insights of the existing theories of international politics. What do these theories lead us to expect about the behavior of nuclear-seeking states? Another approach is to look at the historical record to evaluate if and how the expectations of the extant theories are borne out by events. This research aims to do both.

The nuclear aspirations of four U.S. allies—Taiwan, South Korea, Pakistan and Israel—reflected a similar strategic logic, yet only two of them succeeded. To explain the uneven record of U.S. coercion against its Cold War allies, I evaluate three hypotheses from the coercion, inducements and nuclear spread literatures.

First, I draw a hypothesis from the alliance security dilemma literature that leads us to expect that the U.S. will have an easier time coercing those allies that are highly dependent on Washington's military protection and/or energy supplies. Second, I evaluate a hypothesis from the literature on coercion that predicts that coercion by denial holds the best chance of success, while coercion by punishment is unlikely to work. Coercion by denial works by restricting the ally's access to fissile materials, nuclear technology and equipment through multilateral or bilateral inspections (coercion by demoralization), international interdiction of technology through export controls (coercion by export controls), or actual forced disablement of the target state's nuclear facilities (coercion by disablement). Coercion by punishment operates by imposing costs—through threats not to defend the ally or through military, economic or energy sanctions—to deter the ally from moving forward on the nuclear front. Third, I assess a hypothesis from the literature on incentives, which suggests that provision of military reassurance rather than non-military rewards should increase the chances of nonproliferation success.

Summary of Key Conclusions

> *Force need not be physically used to be politically useful.*
>
> Robert Art, "To What Ends Military Power" (1980)

This research evaluates the effect of three factors—allied dependence, pressure, and inducements—on the degree of success the U.S. achieves in stopping and reversing the nuclear weapons programs of its allies. Having started with three independent factors, this research shows that the level of the ally's dependence on Washington affected the resulting effectiveness of the U.S. coercive efforts. South Korea and Taiwan were more vulnerable to pressure because of their high security and energy dependence. Pakistan and Israel were shielded from the harshest effects of pressure by their low security dependence. The level of dependence did not strongly impact the efficacy of incentives, which did not play a decisive role in any of the cases. Table 1 summarizes the preexisting U.S. security commitments to each of the four allies. These commitments lay at the root of these allies' military dependence on Washington.

Table 1. U.S. Security Commitments

	TAIWAN	**SOUTH KOREA**	**PAKISTAN**	**ISRAEL**
Tripwire	Until November 1969	Yes	No	No
Type of Defense Agreement	Mutual Defense Treaty	Mutual Defense Treaty	Defense Assistance Agreement	Defense Assistance Agreement
Nuclear Umbrella	Yes (implied)	Yes	No	No
Nuclear Weapons	Until 1974	Yes	No	No

The key finding of this project is that denial, not punishment, succeeds against allied nuclear programs. The U.S. has an easier time enforcing denial by demoralization (e.g., inspections) and disablement against highly dependent allies than against low-dependence allies. Washington can economize on incentives when confronting highly dependent allies, and it can instead simply force them into submission. Non-military rewards (e.g., economic and technological offers) and/or limited military reassurance (military aid) alone are not sufficient to stop low-dependence allies. Likewise, such allies will not be coerced by either (or both) full-scale punishment or limited denial. The U.S. has not tried providing massive military reassurance (e.g., nuclear umbrella) to low-dependence allies, and whether reassurance of this magnitude can dissuade such allies from pursuing nuclear weapons is an area for further research.

Table 2 summarizes the salient outcomes of the nonproliferation campaign in the four cases. First, the “ally’s dependence level” column indicates whether the ally was in a low or a high dependence on the U.S. Next, the “coercive denial” and “coercive threats / punishment” columns list the resulting intensity of denial and/or punishment that the U.S. was able to carry

Table 2. Salient Outcomes Across Cases

CASE	ALLY'S DEPENDENCE LEVEL	COERCIVE DENIAL	COERCIVE THREATS / PUNISHMENT	INDUCEMENTS	OUTCOME
TAIWAN	High	Full-scope on-site inspections	*Threats to punish:* - threat to cut off fuel supplies - threat to abandon militarily	Inconsistent provision of selected non-military rewards	**Success** due to effective on-site inspections
SOUTH KOREA	High	Pressure on the only supplier (France) to stop provision of plutonium reprocessing plant	*Threats to punish:* - threat to cut off fuel supplies - threat to abandon militarily	High-level public promises of strengthened military protection	**Success** due to effective third-party denial
PAKISTAN ***Plutonium*** ***1972-1978***	Low	Pressure on the only supplier (France) to stop provision of plutonium reprocessing plant	*Threat to punish:* - threat to cut off conventional military assistance and economic aid *Punishment carried out*	Offers of selected military hardware	**Limited success** due to effective third-party denial
Uranium ***1979-1990***	Low	Limited export controls	*Threat to punish:* - threat to cut off conventional military assistance and economic aid *Punishment carried out*	Offers of selected military hardware	**Failure** due to ineffective export controls
ISRAEL	Low	Half-hearted on-site inspections	*Threat to punish:* - threat to abandon militarily	Offers of selected military hardware	**Failure** due to ineffective inspections

out.[3] Finally, the "inducements" column lists the type of incentives that the U.S. provided to the target state.

Summaries of Cases

The U.S. achieved nonproliferation success against Taiwan by forcing this highly dependent ally to stop its nuclear work. Taiwan depended on the U.S. for its very survival. Indeed, the Nationalists fled from China in 1949 before the Communists' final assault could devastate their forces. Henceforth, they would be protected from Beijing's attacks by the U.S. 7th Fleet. Repeated military punishment threats against Taiwan's security (threat to abandon) and civilian nuclear program failed to change this ally's determination to acquire nuclear weapons. Success was achieved thanks to coercion by demoralization and dismantlement that uncovered and stopped Taipei's nuclear work. The U.S. offered minimal technological rewards to Taiwan.
In sum, the success with Taiwan was a clear case of coercion by denial success, demonstrating how inducements are unnecessary when confronting a highly-dependent ally.

The U.S. achieved nonproliferation success in South Korea by precluding this highly-dependent ally from achieving its technological goals. South Korea's level of dependence on the U.S. was high because it lacked an effective ability to defend against a North Korean attack. This inability was vividly demonstrated in the Korean War during which the U.S. intervened to protect the Republic of Korea from Pyongyang's devastating invasion. The threat of full-scale punishment—the possibility of removal of the nuclear umbrella—did not on its own force Seoul to reconsider its nuclear work. The public and high-profile pledges to defend South Korea with nuclear weapons—the strongest military reassurance the U.S. offered to any of the four allies—

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[3] The pressure hypothesis juxtaposes the efficacy of denial versus that of punishment. This table lists denial and punishment in different columns to make cross-case comparisons easier to perform.

likewise failed to change Seoul's security calculations. Instead, coercion by export controls, which precluded France from supplying a plutonium reprocessing plant to the ROK, was required to finally stop the nuclear aspirant in its tracks. In sum, coercion by denial was decisive in achieving the nonproliferation success against South Korea.

Coercion by export controls against Pakistan's uranium enrichment program did not stop this low-dependence ally's nuclear work. Pakistan's level of dependence on the U.S. for security was low because, before 1979, it survived several wars with India without American help, and, after 1979, it played a strategic role in the Cold War. When confronting Islamabad's plutonium reprocessing and uranium enrichment programs, the U.S. relied on coercion by both denial and punishment. From 1972 to 1978, coercion through punishment by sanctions and offers of limited military aid failed to stop Pakistan's efforts to acquire a French plutonium reprocessing plant. Coercion by export controls stopped the French deal and significantly slowed Islamabad's plutonium route to the bomb. Then, starting in 1978, coercion by punishment through sanctions again failed to force Pakistan to abandon or slow down its uranium enrichment program, which A.Q. Khan championed, starting with the theft of uranium enrichment designs from the European consortium URENCO. Coercion by export controls was also limited and, ultimately, ineffective. The U.S. was unable to enforce an airtight embargo on the multitude of uranium imports that Khan was procuring worldwide. Furthermore, after 1979, the U.S. became dependent on Pakistan's help in defeating the Soviet Union in Afghanistan. This forced Washington to moderate further its nonproliferation efforts to avoid antagonizing Islamabad. Washington proposed both non-military rewards and military aid to Pakistan, but could not offer the kind of military reassurance (e.g., a nuclear guarantee) that stood a chance of redressing the significant Indo-Pakistani military imbalance, fearing that doing so could drive New Delhi further into the

Soviet camp. In sum, coercion by denial cut off the plutonium route to the bomb, but did not stop Islamabad's uranium program.[4]

The U.S. efforts to deny Israel nuclear weapons were unable to slow Israel's nuclear progress because the U.S. had little leverage over Israel for two reasons. First, Israel both survived and made territorial gains in the wars against the Arab states. Second, it was militarily stronger than its Arab adversaries. The low security dependence emboldened Israel to delay and undermine U.S. coercion by demoralization attempts, weakening its ability to uncover Jerusalem's nuclear work. Israeli leaders would tell their American interlocutors more (Golda Meir) or less (David Ben Gurion and Levi Eshkol) directly that Washington had no right to conduct full-scale inspections of Israel's nuclear facilities. Given this low dependence, President Kennedy's threat to abandon Israel, likewise lacked effectiveness and failed to break Jerusalem's nuclear resolve. Neither President Johnson nor President Nixon ever tried forcing Jerusalem to allow full-scale inspections. The U.S. never confronted Israel with clear intelligence that showed the rapid progress of its NWP. The limited military reassurance the U.S. offered was not enough to buy out Israel's NWP. Indeed, the selected military aid fell far short of the deterrent capability that Israel made abundantly clear it required. The U.S. could not offer a nuclear guarantee to Israel because of the need to retain a working relationship with the Arab states. In sum, the limited nature of the denial measures precluded stopping and reversing Jerusalem's nuclear program.[5]

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[4] Drawing on my research, some informed speculation is possible. The U.S. could have increased the chances of nonproliferation success in Pakistan by using (a) full-scale denial (discussed below) and/or (b) the most enticing inducements—nuclear guarantee or an upgraded mutual defense treaty. (A) Full-scale denial has proved effective in not only stopping highly-dependent allies' NWPs, but also in significantly slowing Pakistan's plutonium program. Thus, had the U.S. been able to cut off most of Islamabad's nuclear suppliers, it would have at least significantly slowed Pakistan's progress to the bomb—just as was the case with the plutonium route. This would not have guaranteed success, but, following Professor Matthew Bunn's logic (which I discuss later in this chapter), it might have postponed Pakistan's nuclear acquisition to the point where a bomb was no longer politically feasible. (B) That the provision of more enticing inducements could plausibly have derailed Pakistan's nuclear work is evidenced from the U.S. intelligence assessments that acknowledged that Islamabad repeatedly asked for such incentives as it made the case for its nuclear ambitions.

Conclusions Regarding Allied Dependence

An ally's high level of dependence on the U.S. is a necessary, but not a sufficient condition for success. As Table 2 shows, in both cases where the U.S. achieved complete success, the ally's dependence was high.[6] Conversely, the U.S. was unable to convince the remaining two allies with low dependence to totally give up their nuclear work.[7] However, high allied dependence does not alone lead to success. Taiwan did not denuclearize by itself despite its acute dependence; the U.S. had to apply significant pressure to force this ally, as well as South Korea, the other highly-dependent ally to stop their nuclear activities. Indeed, what was once said about the North Koreans applies equally to American allies: they "do not respond to pressure. But without pressure they do not respond" (Wit et al. 2004: 39).

In each case, the U.S. had a strong enough resolve to start the coercion campaign thereby expending its resources and investing its reputation. After all, as Thomas Schelling says, "A nation has limited resources…in the things that it can get exceptionally concerned about" (1966: 51). If the U.S. was not resolved to stop proliferation, it could have acquiesced to these allies' nuclear pursuit by limiting its response to diplomatic protestations. Quite on the contrary, in these cases the U.S. made vigorous efforts by using coercive tools that thrust its bilateral relationships with these allied nuclear aspirants into a crisis mode (Cha 2013; Negroponte 2013).

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[5] Like on Pakistan, informed speculation, grounded in the research, is possible. Israel had an equivalent level of dependence on the U.S. as did Pakistan and was offered similarly enticing inducements. Lacking specific evidence, it is at least plausible that full-scale denial and/or a nuclear guarantee could have made nonproliferation success more likely. More intrusive inspections of Israel's nuclear facilities might have publicly revealed what the U.S. intelligence privately knew—that Jerusalem was making an aggressive push in the nuclear field. A deterrent security commitment, which Israel repeatedly broached, likewise might have empowered detractors inside the Israeli government to argue that a nuclear capability was unnecessary.

[6] Both Taiwan and South Korea were unable to survive without the American military protection, making their dependence on the U.S. significant, albeit Taipei was more acutely insecure than Seoul in that it faced a nuclear-armed China whereas the ROK faced a conventionally armed North Korea.

[7] Pakistan was relatively more dependent on the U.S. than Israel because it confronted a nuclear-armed and conventionally-stronger adversary (India) whereas Israel faced conventionally-weaker set of Arab states against which it had won several wars.

To produce results, resolve requires capacity. Washington's leverage to bring about the nonproliferation results it strenuously sought to achieve varied from case to case depending on that state's level of dependence on the U.S. (or, more precisely, the balance of dependence between the U.S. and that country). With highly-dependent allies, the U.S. had the leverage to force them to acquiesce to its coercion by demoralization efforts. When dealing with such allies, the U.S. can also confront them with the intelligence to make clear that they are violating their nonproliferation promises. With low-dependence allies, the U.S. has a harder time getting its way for two reasons. First, if the U.S. has a strategic interest in the ally, Washington will be less willing to confront the target with proliferation intelligence for fear of antagonizing a valuable friend. Clearly, this was the case with Pakistan. Second, even if it does confront such an ally with irrefutable evidence, Washington lacks the bilateral leverage to get its way. The likely result is that the U.S. would destabilize a valuable relationship, while not achieving its nonproliferation objectives. The cases in this research bear out these observations.

The high dependence of allies such as South Korea and Taiwan made them vulnerable to pressure. Both allies would suffer significantly from a loss of a superpower patron on whose security assurances they had come to depend. In both cases, too, the U.S. bilateral interests in these allies paled in comparison with the priority of keeping them non-nuclear. The U.S. had already abandoned Taiwan politically to China in 1972 by agreeing that the island would not be an independent state. This was an affordable price to pay for the U.S.-China normalization that helped encircle the Soviet Union and advance Washington's key geopolitical objective of defeating Moscow in the Cold War. On the other hand, a nuclear Taiwan would undermine these critical efforts. The same balancing act (political abandonment, military status quo) that the U.S. performed on Taiwan would be harder to pull off with South Korea because Washington did not have the kind of understanding with Pyongyang that it had reached with Beijing. Thus, the U.S. probably had less actual flexibility with Seoul given ROK's military vulnerability vis-à-vis North Korea, but abandoning the ROK still was conceivable when compared to the geopolitical repercussions of a nuclear South Korea (Gregg 2013). A nuclear-armed ROK could have provoked the Soviets to become more engaged in Northeast Asia and, the U.S. worried at the time, possibly even could have prompted Moscow to arm North Korea with nuclear weapons. The U.S. strategic interest in Seoul and Taipei was insignificant compared with the priority of keeping them non-nuclear in order to prevent them from undermining its Cold War grand strategy. In sum, given the problems nuclear acquisition by either ally would cause the U.S., both Taipei and Seoul were expendable. The U.S. had much less leverage over Pakistan and Israel.

While dependence level does not by itself explain the variation in the degree of nonproliferation success, the Pakistan and Israel cases show that low dependence of an ally on the U.S. for its security reduces the resulting effectiveness of U.S. coercive tools. The low-dependence allies have less to lose, so the U.S. has fewer pressure areas against which to inflict costs when engaging in a nonproliferation campaign. Neither Israel nor Pakistan owed their survival to the U.S., thus depriving the U.S. of critical sources of coercive leverage.[8] This limited leverage can help explain the U.S. inability either to enforce the inspections of the Israeli nuclear facilities or to deploy any inspections to Pakistan.

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[8] This statement applies to Israel before 1967—the year Israel achieved a nuclear capability—after which the U.S. investment in Jerusalem's security increased substantially.

Donald Gregg, who served as the national security advisor to Vice President George H. W. Bush, wrote the following about Pakistan:

> "in [at] least two meetings with Pakistani president Zia ul Haq we were frustrated by not being able to tell the Pakistani to stop what we knew he was doing, due to the sources and methods issue. [...] the Paks never placed the high value on their relationship with the US that President Park Chung Hee did. Those were the crucial differences between the two cases" (Gregg 2013).

Some of this limited leverage was of the U.S.'s own making. After all, the U.S. refused to offer either Jerusalem or Islamabad the kinds of security assurances that they sought. What it had not given, it could not threaten to take away. In addition, in the case of Pakistan, the U.S. had to moderate the use of available tools because of its strategic interest in that ally. As Chapter 5: Pakistan discussed, before 1979, the U.S. priority was to prevent Pakistan from realigning with the Soviet Union (and China) and, after 1979, the goals shifted to assuring Pakistan unflagging support for the anti-Soviet mujahedeen efforts. For both reasons, the U.S. had to moderate its nonproliferation demands—already circumscribed by Pakistan's low dependence—on this strategic ally.

"Suffering requires a victim that can feel pain or has something to lose." The findings of this research generally accord with Thomas Schelling's observation (1966: 2). Coercion works better against highly-dependent allies than against low-dependence allies because when confronting the former Washington can carry out pressure at an acceptable cost to itself, thus freeing itself to use the full range of available coercive options. The costs of coercion are low for the U.S. because it benefits considerably less from the bilateral relationship with a highly-dependent ally than does the target itself. Simply put, the ally depends more on the U.S. than vice versa. The consideration of the costs of coercion is important because it draws attention to the credibility deficit influencing the U.S. nonproliferation efforts against allies: threats against allies are difficult to make credibly because by carrying them out the U.S. would be hurting its own interests. When confronting highly-dependent allies, the U.S. credibility deficit is not as significant, the possibility of a worsened relationship is not very costly for Washington and is, therefore, highly credible to the ally whose costs are much higher because it would be endangering a critical relationship from which it derives significant and wide-ranging benefits. In sum, the more dependent the ally, the more vulnerable to pressure it will be.[9] However, allied dependence—and the ally's concomitant vulnerability to pressure—does not guarantee coercive success as the next section discusses.

Conclusions Regarding Pressure

This research helps sharpen Glenn Snyder's insight—"the least dependent partner will enjoy the most influence, and vice versa" (2007: 199)—by specifying what type of coercion is more likely to achieve nonproliferation success. Indeed, strong pressure does not equal effective pressure. Coercion by punishment can inflict higher costs on the target than coercion by denial because it impacts a wider range of the ally's vital interests. (In particular, as the last section showed, the U.S. can inflict devastating costs on highly-dependent allies.) Conversely, coercion by denial inflicts costs only on the ally's NWP—but, as this research shows, it is a far more effective nonproliferation tool. The U.S. has to apply the right kind of pressure—and with the appropriate intensity—to convince its allies to give up their nuclear pursuits. The preceding observations provide support to Robert Pape's argument that coercion by denial works better than coercion by punishment.[10]

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[9] A counter-argument can be made that Taiwan and South Korea never tried acquiring nuclear weapons, but were, instead, counter-coercing to get the U.S. not to withdraw or weaken its protection. This project does not attempt to determine exactly what these countries' intentions were. It is plausible that these countries—for example, South Korea—learned how to counter-coerce the U.S. not to reduce its nuclear deterrent (Engelhardt 1996). Threatening to join the nuclear club was as valuable as getting the actual weapon, the reasoning goes. Nonetheless, the U.S. coercion clearly succeeded in setting back these countries' nuclear progress—whatever the purpose for which they were pursuing it. The U.S. still stopped them from moving forward on the nuclear front. Taipei and Seoul might not have been resolved to go all the way to building a nuclear weapon, but they sought (or, at least, appeared) to put themselves in a position to do so by attempting to acquire the relevant equipment and technology. Whether these proliferation-related activities were in fact aimed at acquiring a nuclear capability may be debatable though I take at face value the U.S. intelligence assessments that claimed that nuclear capabilities were, indeed, the purpose of these activities. What is not subject to debate, however, is that the U.S. was able to stop these activities through its coercion campaign. In sum, the paper reveals how proliferation processes can be stopped by coercion.

Conclusions Regarding Punishment

Punishment at any level is not sufficient for success. As can be seen from Table 1, the U.S. threatened military abandonment (the strongest possible punishment) in both of the complete success cases (Taiwan and South Korea). As I discussed in the South Korea and Taiwan chapters, however, such threats did not on their own lead these allies to abandon their nuclear pursuits. Taiwan's leadership did not stand down its atomic work despite persistent and highly-credible American threats to abandon the island militarily to China and to cut off the fuel supplies without which Taipei's energy sector would not survive. Likewise, South Korea's President Park was warned unequivocally that the U.S. would withdraw its nuclear umbrella if the ROK persisted with its nuclear work. He rejected U.S. demands and continued trying to acquire the French plutonium reprocessing plant. Even if these allies doubted America's credibility, they could never be sure that the U.S. was bluffing, and the price of a mistaken assumption about the U.S. intentions could have been catastrophic. The low-dependence allies were equally recalcitrant as the Pakistani case illustrates.

Actual limited punishment through sanctions against Pakistan failed to decisively alter Islamabad's nuclear calculus. Pakistan was not nearly as dependent on the U.S. as Taiwan and South Korea were, so Washington had a more limited range of options when trying to coerce this ally. For example, threatening to breach the bilateral relationship (as noted, usually the most feared prospect faced by U.S. allies) was not a real option vis-à-vis Pakistan because Islamabad did not owe its security—let alone survival—to the U.S. Pakistan, to quote Schelling, could not "feel the pain."

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[10] However, as my cases show, success through coercion by denial is hard to achieve. This goes to the broader point that successful coercion is difficult to pull off, substantiating the insights from the coercive diplomacy literature (Art 2003).

Pakistan was the only ally against which the U.S. actually carried out coercion by military punishment (cutting off military aid). In doing so, the U.S. directly targeted Pakistan's military sector, seeking to undercut its security, but Pakistan's low dependence reduced the impact of these measures in two ways. First, the low-level U.S. military relationship with Pakistan meant that the U.S. could only cut off the meager aid it was supplying. This would not drastically change Pakistan's security prospects vis-à-vis the militarily-superior India. Pakistan's low military dependence meant that the U.S. could not impose high enough costs that would make the NWP an unbearable short-term liability for Islamabad. Second, Pakistan's Cold War realignment alternatives forced the U.S. to further moderate the implementation of its coercive measures. Specifically, the U.S. worried that, if it pressed its ally too hard, Pakistan might have re-aligned with the Soviets or the Chinese. Thus, Washington sought to reduce the pain inflicted on its ally by continuing to carry out the existing arms contracts and only cutting off new deliveries. These measures did not impose prohibitive costs because, as noted, the promised new arms deliveries were insignificant compared to Pakistan's strategic balancing requirements against India. Pakistan's low military dependence took the sting out of the pain brought by military punishment, which failed to discernibly slow, stop or reverse Pakistan's uranium NWP. Coercion by (threat of or actual) punishment alone, as the literature expects, is less effective than denial in leading to successful nonproliferation outcomes.

The research largely confirms Pape's explanations for why punishment alone is unlikely to work. First, punishment does not work, Pape argues, because the stakes are too important for the target state to give up (Pape 1996: 21). States pursue nuclear weapons to assure their long-term security against formidable or implacable adversaries (Pakistan and Israel), or to hedge against potential abandonment by a superpower patron (Taiwan and South Korea). Such strategic benefits are hard to override, even when punishment is inflicted, and this explains why punishment is unlikely to succeed. The costs the U.S. can threaten or actually impose through punishment are also inherently limited by the U.S. credibility deficit mentioned earlier: the U.S. cannot harm its friends without undermining its own interests (e.g., vis-a-vis the Soviet Union.)

The second reason punishment does not work, according to Pape, is that nationalism will strengthen the target state's resistance to pressure and the resolve to persevere (Pape 1996: 21-2). Applied to nuclear negotiations, Pape's argument points to a simple strategic reason why punishment is not likely to succeed against allies: it is counterproductive. Punishment deepens the ally's fundamental insecurity, thus strengthening, not undermining, its desire to go nuclear.[11] Countries pursue nuclear weapons because of uncertainty regarding the security promises of its superpower patron. They cannot be sure, as Avery Goldstein points out, that the U.S. will keep its promises to protect them. When the U.S. threatens to breach security ties with an ally, while at the same time promising to firm up the security guarantees if the target gives up its nuclear ambitions, it strengthens the ally's uncertainty about its patron's intentions that lies at the root of the ally's nuclear pursuit. This helps explain why the highly-credible military abandonment threats failed to break Taiwan's and South Korea's nuclear resolves.

Conclusions Regarding Denial

Full-scale denial is necessary, and, when used against highly-dependent allies, sufficient for success. Coercion by denial proved decisive in both success cases by serving the knockout blow to Taiwan's nuclear ambitions by intrusive on-site inspections and subsequent disablement of its nuclear facilities (coercion by demoralization and disablement) and to ROK's nuclear plans by President Carter's intervention with the French (coercion by export controls).

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[11] Nationalism, through a "rally around the flag" popular dynamic, can be one expression of this insecurity.

The U.S. was able to force full-scope inspections on Taiwan. Due to its military and energy dependence, Taiwan could not reject the robust coercion by demoralization and disablement efforts that directly imposed the coercive nonproliferation will of the United States on the island's nuclear decision-making. For example, during the Ford and Carter Administrations, the U.S. dictated to the Taiwanese which types of nuclear research activities were allowed and which were proscribed. Washington took another far-reaching step by repatriating almost all of the spent fuel from Taiwan to make sure that Taipei had absolutely no recourse to weapons-grade plutonium even in "dirty" (not reprocessed / separated) form. And during the Reagan Administration, upon discovering that Taiwan clandestinely restarted the plutonium reprocessing work the U.S. thought it had stopped years before, the U.S. went as far as removing the heavy water from Taiwan's plutonium-producing reactor, thus rendering it inoperable. (This was an unusually intrusive action given the fact that the U.S. did not build this reactor, and, following the nonproliferation standards, thus should not have had a say on how it was used.)

When confronting Taiwan, the U.S. not only stopped, but comprehensively reversed its NWP. It is clear that Taipei was in no position to refuse these actions, given its extreme military dependence on Washington (Negroponte 2013). One former State Department official's observation illustrates how overall dependence played the key role in the Taiwan case. This was not just coercion, Allen Sessoms pointed out in an interview, but "a 'deal'—you've got my back [i.e., security protection], and I'm not going to do anything [in the nuclear field] that drives you crazy” (Sessoms 2013). Brent Scowcroft echoed this point, stressing that getting Taiwan to back down involved a “negotiation,” using various levers of U.S. influence over the island (Scowcroft 2013). The Taiwan case is an example of how coercion by demoralization and disablement is more likely to work against highly-dependent allies, giving Washington more leverage to pressure the nuclear aspirant to accept such sovereignty-infringing measures. Taiwan buckled given its high dependence, while Israel did not.

Israel thwarted the American efforts to engage in coercion by demoralization (through meaningful inspections) that could reveal and stymie Jerusalem’s nuclear work. The U.S. did send “visitors” to the Dimona reactor, but Jerusalem exerted total control over the process, starting with the insistence that the U.S. team be called scientific “visitors”—not “inspectors.” Israel also refused to accept such “visits” on a bi-annual basis and never allowed the visitors to carry measurement instruments. In doing so, it called the U.S. bluff by ignoring President Kennedy’s nominally fearsome threat to breach the bilateral relationship if Jerusalem did not acquiesce to bi-annual visits. It could afford to do so given its low dependence on the U.S. military protection, having survived without the U.S. deterrence (against the Arab states) since coming into existence in 1948. Limited preexisting security commitments translated into limited influence.

Even in a tough case like Pakistan, whose dependence on the U.S. was low, full-scale coercion by export controls managed to score a limited success against Islamabad’s plutonium program when the U.S. persuaded Paris not to supply a reprocessing plant to Pakistan. Similar denial efforts through export controls against Islamabad’s uranium program ended up being limited and, as a result, failed to do more than somewhat slow down the inexorable progress of the NWP.[12] Coercion by demoralization (e.g., on-site inspections) might have worked better, but firmer conclusions are hard to make since the U.S. lacked the leverage to deploy such measures against Pakistan.

Thinking counterfactually based on the research in this paper, we can speculate that coercion by demoralization could have stood a better chance of stopping Islamabad's uranium program. Inspections might have slowed or stopped on the ground the Pakistani work on its uranium facilities, as Islamabad was using imports that the limited export controls were unable to fully stop. Indeed, coercion by demoralization can be most useful against countries, like Pakistan, that are not relying on foreign suppliers (or have already acquired the necessary nuclear components) and are therefore less vulnerable to coercion by export controls. However, as I analyze in chapter 5: Pakistan, coercion by demoralization was almost impossible to enforce in that case most likely because the U.S. lacked the requisite leverage over Islamabad (Miller 2012). As noted, Israel also prevented the U.S. from carrying out coercion by demoralization. In sum, coercion by demoralization (and, especially, coercion by disablement) works better against highly dependent allies because with those allies the U.S. has the ability, given their dependence on the U.S., to force its way into the country and take actions that stop the nuclear work on the ground.

A possible explanation for why denial proves critical for nonproliferation success is that such measures lengthen the time the ally requires to get the bomb. Professor Matthew Bunn argues that if the bomb takes 20 years to build, it may come too late to be militarily useful (2003: 11). Therefore, he points out, actions that prolong the time to bomb "do not merely delay the inevitable acquisition of nuclear weapons by states; they can affect the probability that states will decide to go forward with a nuclear weapons program" (2003: 11).[13] "It seems likely," Professor Bunn concludes, "that nonproliferation policies designed to keep this time ["from a first decision to pursue a nuclear weapons option to the actual acquisition of a nuclear weapon"] as long as possible will be particularly important to proliferation outcomes" (2003: 16).

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[12] As a former nonproliferation official Carleton Stoiber put it, after A. Q. Khan's URENCO theft, stopping Pakistan was "extremely difficult if not impossible" (Stoiber 2013).

Conclusions Regarding Inducements

Inducements of any type are neither necessary nor sufficient for success. Neither limited non-military rewards nor full-scale military reassurance led to success in the Taiwan and South Korean cases. The provision of limited military reassurance likewise failed to lead to success in Pakistan and Israel. As noted, it remains to be investigated if massive military reassurance can stop low-dependence allies.

The U.S. offered full military reassurance to South Korea by promising to defend it with nuclear weapons. To Taiwan, the U.S. only offered limited non-military rewards, such as renewal of licenses for Taipei's civilian nuclear power reactors. From these two complete success cases, the conclusion can be drawn that inducements do not play as significant a role for highly-dependent allies as the scholarship on incentives leads us to expect. The logic of the literature suggests that provision of military reassurance, rather than non-military rewards, should increase the chances of success because such inducements are more likely to undercut the ally's insecurity that impelled it to pursue the NWP. In other words, the incentives that satisfy an ally's current and future security needs are more likely to persuade it to abandon the future gains it hopes to enjoy if it persists and is ultimately successful in making its nuclear weapons program operational. However, inducements did not play significant roles in either Taiwan or South Korea. Taiwan was forced into submission when it was offered minimal non-military rewards. Having politically abandoned Taipei, the U.S. made little effort to reassure it of its future intentions; furthermore, having promised non-military rewards, Washington provided them inconsistently.[14] The Taiwan case thus suggests that in the cases of the most acute dependence by an ally, the U.S. can economize on incentives and achieve success primarily by coercive denial.

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[13] Levite agrees, arguing that "buying time" is critical for a nonproliferation strategy (2002/3: 59).

The South Korean case is unique in that the U.S. made two public, high-level pledges to defend it with nuclear weapons. Both of these features (public and high-level) made the pledges highly credible because the U.S. was issuing a direct warning to the Soviets and the North Koreans about the consequences of an attack on South Korea. As noted previously, the strength of this military reassurance becomes clear once we compare it to the U.S. approach to the Arab-Israeli conflict. In that case, President Kennedy made a diplomatically "balanced" statement, speaking for the security interests of both parties, which, as could be expected, failed to reassure the Israelis.

The failure of these public and high-level military guarantees to change the South Koreans' minds was surprising. Military reassurance did not work because in 1978 Seoul still engaged in negotiations with France about purchasing the reprocessing facility. President Carter's coercion by export controls was necessary to stop this renewed attempt in its tracks. Donald Gregg's account helpfully illustrates this point by describing the failure of an earlier reassurance attempt: "The visit to Seoul of President Ford and Henry Kissinger, in the fall of 1974, en route to a meeting with the Soviet leadership in Vladivostok, was *very reassuring* to Park, and the relationship was stabilized. The nuclear program *was stopped later on*, when South Korea had to go abroad to purchase items that it could not produce itself [thus making itself vulnerable to coercion by export controls]" (Gregg 2013, emphasis added). In sum, South Korea was the only case in which the U.S. explicitly pledged to strengthen its deterrent for an ally, and this military reassurance failed alone to bring about a nuclear change of heart in Seoul.

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[14] The Taiwan Relations Act sought to reassure Taipei that Washington's military protection remained, but the U.S. did nothing to rescind its decision to politically abandon the island.

For Pakistan and Israel, Washington chose to provide only limited military reassurance (selected military aid) to strengthen their defensive capabilities, and equally unequivocally refused to provide anything approaching a deterrent capability that both states repeatedly requested. The U.S. knew that the arms it offered to Pakistan would not even allow it to balance—let alone, deter—India.[15] The Israeli case also shows that the Kennedy Administration drew a clear line between a defensive buildup to bring Jerusalem to the point of parity with its Arab adversaries and massive military aid that Israel requested that could have allowed Israel to deter its enemies.

Neither of these limited reassurance measures managed to persuade Pakistan or Israel to stop their nuclear work. Low-dependence allies respond to neither non-military rewards (e.g., economic and technological offers) nor limited military reassurance (e.g., military aid).[16] In sum, inducements of limited military value are unlikely to persuade low-dependence allies to give up on the goal of having a nuclear deterrent.

Implications for Theory

My research examines the nuclear nonproliferation negotiations between the U.S. and its Cold War allies. The U.S. used military reassurance and non-military rewards to convince its allies to stay non-nuclear, but coercion—the other tool of nonproliferation persuasion—was more effective than inducements in getting allied states to abandon atomic ambitions. The fact that coercion in service of nonproliferation ever worked is puzzling given the anarchic nature of the international system which creates strong incentives for states to strengthen their defensive capabilities against adversaries in an uncertain world. Thus, even coercive bargaining should be unlikely to succeed in overcoming these security imperatives by persuading states to stop building the ultimate deterrent weapons. This research sheds some light on this puzzle, showing coercive denial to be more efficacious than coercive punishment.

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[15] As I discuss in more detail in chapter 5 (Pakistan), the U.S. strategic interest in retaining a working relationship with India weighed decisively against the provision of stronger military reassurance to Pakistan.

[16] Further research is required to understand if a nuclear deterrent umbrella can convince low-dependence allies to abandon nuclear pursuit.

The available evidence allows us to draw firmer conclusions from the cases of highly-dependent allies because full-scale measures (strong and credible punishment threats [South Korea and Taiwan], full-scope inspections [Taiwan], and significant military reassurance [South Korea]) were used in those cases. From these cases, it is possible to conclude that neither reassurance nor punishment work on their own, while inspections can work if they are full-scope.

The low-dependence cases, however, do not allow us to make such clear inferences because they featured the use of limited coercive and inducement tools (export controls [Pakistan], inspections [Israel], offers of military aid [Pakistan and Israel]). Thus, several counterfactual questions, which were discussed earlier, remain. The U.S. was unwilling to use strong military reassurance with either Pakistan or Israel because of its conflicting geopolitical priorities—i.e., maintaining relationships with India and the Arab states, respectively. Likewise, the priority of preventing Pakistani realignment with the Soviets and the Chinese and, after 1979, of assuring Islamabad’s support for the anti-Soviet effort in Afghanistan prevented the U.S. from fully using the already-limited coercive leverage against this ally. Had these conflicting priorities not handicapped the U.S. decision-making, the outcomes in the Pakistani and Israeli cases might have been different.

Concluding Observations

These theoretical implications notwithstanding, the emphasis on studying the use of coercion against allies may still seem counterintuitive. Why try to understand how the U.S. can get its way with friends when influencing adversaries is, arguably, a much more pressing and relevant foreign policy priority? The historical record suggests that if U.S. allies acquire nuclear weapons they would become considerably harder to control. The imperative of restraining erstwhile friendly regimes led the U.S. to oppose nuclear acquisition by South Korea and Taiwan. In the former case, Washington feared that Seoul would take a harsh stance against North Korea, likely provoking the Soviet Union and/or China to intervene and inevitably drawing the U.S. into the conflict. In the latter case, the U.S. had good reasons to worry that a nuclear Taipei would be emboldened to confront China with unforeseen consequences for East Asian security and for U.S.-China normalization.

Studying the conditions for successful coercion against allies may be even more relevant now than it was in the past. If allies start losing trust in the U.S. security guarantees, some of them will be tempted to seek nuclear weapons with detrimental effects for vital U.S. interests in the Middle East and East Asia. It is thus important for the U.S. to learn how to coerce nuclear-seeking allies more effectively.

Bibliography

Albright, David and Corey Gay. 1998. "Taiwan: Nuclear Nightmare Averted," Bulletin of the Atomic Scientists, January/February.

Albright, David. 2010. *Peddling peril: how the secret nuclear trade arms America's enemies*. New York: Free Press.

Ali, Ghulam. Undated. "Fifty-Fifth Anniversary of Sino-Pakistan Relations: An Appraisal." On file with author.

Allison, Graham T., Herve de Carmoy, Therese Delpech and Chung Min Lee. 2006. *Nuclear Proliferation: Risk and Responsibility*. Washington D.C.: Trilateral Commission.

Art, Robert J. 2003. “Coercive Diplomacy: What Do We Know?” In Art, Robert J. and Patrick M. Cronin, eds. *United States and Coercive Diplomacy*. Washington, D.C.: U.S. Institute of Peace.

Art, Robert J. and Patrick Cronin. 2006. “Coercive Diplomacy.” In Crocker, Chester, Fen Hampson, and Pamela Aall, eds., *Leashing the Dogs of War: Conflict Management in a Divided World*. Washington, DC: United States Institute of Peace Press.

Art, Robert J. 1980. “To What Ends Military Power?” *International Security* 4 (4):3-35.

Auerbach, Stuart. 1979. Panel Told Pakistan Gained A-Weapons Ability by "End Runs". *Washington Post*, May 2.

Barre, Bertrand. 1985. "France's Pragmatic Approach to Nonproliferation." In Rodney W. Jones, Cesare Merlini, Joseph F. Pilat and William C. Potter, eds. *The Nuclear Suppliers and Nonproliferation: International Policy Choices*. Toronto: Lexington Books.

BBC Summary of World Broadcasts. 2004. “South Korea said close to developing nuclear weapons in 1970s,” August 1. Available through Lexis Nexis database.

Bennett Jones, Owen. 2002. *Pakistan: eye of the storm*. New Haven [Conn.]: Yale University Press.

Bernauer, Thomas and Dieter Ruloff. 1999. *The politics of positive incentives in arms control*. Columbia, S.C.: University of South Carolina Press.

Binder, David. 1976. U.S. Joings in Pact on Atomic Curbs with 6 Countries. *New York Times*, February 24.

Black, Ian and Simon Tisdall. 2010. “Saudi Arabia urges US attack on Iran to stop nuclear programme,” *Guardian*, November 28, available online at http://www.guardian.co.uk/world/2010/nov/28/us-embassy-cables-saudis-iran.

Bunn, Matthew. 2003. “Realist, Idealist, and Integrative Approaches to Proliferation Policy.” Unpublished manuscript, January 24. On file with author.

Burr, William. 2007. “The Taiwanese Nuclear Case: Lessons for Today,” Carnegie Endowment Proliferation Analysis, August 9, http://www.carnegieendowment.org/2007/08/09/taiwanese-nuclear-case-lessons-for-today/6cq. Accessed June 2012.

Byrne, John and Steven M. Hoffman. 1996. “The Ideology of Progress and the Globalization of Nuclear Power,” in Byrne, John and Steven M. Hoffman, eds. *Governing the Atom: The Politics of Risk*. London: Transaction Publishers.

Carnegie Endowment. 2012. “Saudi Arabia May Acquire Nuclear Capable Dong Feng Ballistic Missiles from China,” *Proliferation News*, Carnegie Endowment for Internaitonal Peace, July 26, http://carnegieendowment.org/2012/07/26/saudi-arabia-may-acquire-nuclear-capable-dong-feng-ballistic-missiles-from-china/d0c2.

Cha, Victor D. 1999. *Alignment despite antagonism: the United States-Korea-Japan security triangle*. Stanford, CA: Stanford University Press.

Chakma, Bhumitra. 2002. Road to Chagai: Pakistan's Nuclear Programme, Its Sources and Motivations. *Modern Asian Studies* 36 (4):871-912.

Chapman, William. 1978. "U.S. Moves to Show Ability to Rush to Seoul's Aid," *Washington Post*, March 16, Lexis Nexis.

Choi, Kang and Joon-sung Park. 2008. "South Korea: Fears of Abandonment and Entrapment." In Alagappa, Muthiah, ed. *The long shadow: nuclear weapons and security in 21st century Asia*. Stanford, CA: Stanford University Press.

CIA. 1978. "South Korea: Nuclear Developments and Strategic Decisionmaking," June. National Foreign Assessment Center. Available through Digital National Security Archive at http://nsarchive.chadwyck.com/home.do.

Clausen, Peter A. 1993. *Nonproliferation and the national interest: America's response to the spread of nuclear weapons*. New York, NY: HarperCollins.

Clough, Ralph N. 1993. "Chiang Ching-Kuo's Policies Toward Mainland China and the Outside World." In Shao-chuan Leng, ed. *Chiang Ching-kuo's Leadership in the Development of the Republic of China on Taiwan* (New York: University Press of America).

Cohen, Avner. 1998. *Israel and the Bomb*. New York: Columbia University Press.

Cohen, Stephen S. 1987. "Growing Soviet Interest in South Asia." In Ray S. Cline, James Arnold Miller, Roger E. Kanet, eds. *Soviet Global Strategy toward Asia*. Boulder, CO: Westview Press.

Coll, Steve. 2004. *Ghost wars: the secret history of the CIA, Afghanistan, and bin Laden, from the Soviet invasion to September 10, 2001*. New York: Penguin Press.

Collier, David and James Mahoney. 1996. "Insights and Pitfalls: Selection Bias in Qualitative Research." *World Politics* 49(1): 56-91.

Copper, John Franklin. 1979. "Taiwan's Options," *Asian Affairs* , Vol. 6, No. 5 (May - June), pp. 282-294.

Cordesman, Anthony. 2003. *Saudi Arabia Enters the Twenty-first Century*. Westport, CT: Praeger.

Corera, Gordon. 2006. *Shopping for bombs: nuclear proliferation, global insecurity, and the rise and fall of the A.Q. Khan network*. New York: Oxford University Press.

Crawford, Timothy W. 2003. *Pivotal Deterrence: Third-Party Statecraft and the Pursuit of Peace*. Ithaca: Cornell University Press.

Cronin, Patrick M. 2008. *Double trouble: Iran and North Korea as challenges to international security*. Westport, CT: Praeger.

CSIS. 1968. *The Gulf: Implications of British Withdrawal*. Washington, D.C.: Center for Strategic and International Studies.

Doern, Bruce, Arslan Dorman, and Robert Morrison. 2001. "Precarious Opportunity: Canada's Changing Nuclear Energy Policies and Institutional Choices." In Doern, Bruce, Arslan Dorman, and Robert Morrison, *Canadian Nuclear Energy Policy: Changing Ideas, Institutions, and Interests* (Toronto: University of Toronto Press).

Drezner, Daniel. 1999. *The sanctions paradox: economic statecraft and international relations*. New York: Cambridge University Press.

Dunbabin, John P. D. 1994. *The Cold War: The Great Powers and Their Allies*. New York: Longman.

Engelberg, Stephen and Michael R. Gordon. 1988. “Taiwan Halts Work on Secret Plant to Make Nuclear Bomb Ingredient,” *New York Times*, March 23, http://www.nytimes.com/1988/03/23/world/taipei-halts-work-on-secret-plant-to-make-nuclear-bomb-ingredient.html?pagewanted=all&src=pm. Accessed June 2012.

Engelhardt, Michael J. 1996. “Rewarding Nonproliferation: The South and North Korean Cases.” *The Nonproliferation Review* (Spring-Summer).

Facts on File. 1976. U.S., Pakistan Discuss French A-plant. *Facts on File World News Digest*, August 14.

FAS (Federation of American Scientists). 2002. “Pakistan Nuclear Weapons,” available at http://www.fas.org/nuke/guide/pakistan/nuke/index.html (website last updated December 11).

Fearon, James D. 1998. “Bargaining, Enforcement, and International Cooperation.” *International Organization* 52 (2):269-305.

Foran, Virginia I. 1992. Strategic Non-Proliferation: Balancing Interests and Ideals. *National Security Archive*.

Frankel, Benjamin. 1993. “The Brooding Shadow: Systemic Incentives and Nuclear Weapons Proliferation.” In Davis, Zachary and Benjamin Frankel, eds. *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results.* London: Frank Cass.

Gazit, Mordechai. 2000. “The Genesis of the US-Israeli Military-Strategic Relationship and the Dimona Issue,” *Journal of Contemporary History*.

Geddes, Barbara. 1990. “How the Cases You Choose Affect the Answers You Get: Selection Bias in Comparative Politics,” Political Analysis, 2:1, pp. 131-150.

George, Alexander L. and Andrew Bennett 2005. Case studies and theory development in the social sciences. Cambridge, MA: MIT Press.

George, Alexander L. and Timothy J. McKeown. 1985. “Case Studies and Theories of Organizational Decision-Making.” In Coulam, Robert F. and Richard A. Smith, eds., *Advances in Information Processing Organizations*, vol. 2, Greenwich, CT: JAI Press.

Gleysteen, William H., Jr. 1999. Massive Entanglement, Marginal Influence: Carter and Korea in Crisis. Washington, D.C.: Brookings Institution Press.

Globe and Mail. 1980. A Bomb for Pakistan. Globe and Mail, June 20.

Goldstein, Avery. 2000. *Deterrence and Security in the 21st Century: China, Britain, France and the Enduring Legacy of the Nuclear Revolution.* Stanford, CA: Stanford University Press.

———. 1995. “Discounting the free ride: alliances and security in the postwar world,” *International Organization*.

Grant, Ruth W. 2006. “Ethics and Incentives: A Political Approach.” *The American Political Science Review* 100 (1): 29-39.

Harding, Harry. 1992. *A Fragile Relationship: The United States and China since 1972.* Washington, D.C.: Brookings.

Hasan, Zubeida. 1969. "Pakistan's Relations with the U.S.S.R. in the 1960s," *The World Today*, January. London: Royal Institute of International Affairs.

Hatch, Michael T. 1986. *Politics and Nuclear Power: Energy Policy in Western Europe*. Louisville, KY: The University Press of Kentucky.

Hayes, Peter. 1991. *Pacific Powderkeg: American Nuclear Dilemmas in Korea*. Lexington, MA: Lexington Books.

Hersman, Rebecca K. C. and Robert Peters. 2006. "Nuclear U-Turns: Learning from South Korean and Taiwanese Rollback." *The Nonproliferation Review* (November).

Hibbs, Mark. 1999. "Legacy of Secret Nuclear Program Led U.S. to Blunt ROK Cooperation," *Nucleonics Week*, January 7, Lexis Nexis.

Hickey, Michael. 1999. *The Korean War: The West Confronts Communism*. New York: The Overlook Press.

Hong, Sung Gul. 2011. "The Search for Deterrence: Park's Nuclear Option." In Kim, Byung-kook and Ezra F. Vogel, eds. *The Park Chung Hee Era: The Transformation of South Korea*. Cambridge, MA: Harvard University Press.

House of Representatives, United States Congress. 1978. *Investigation of Korean-American Relations: Report of the Subcommittee on International Organizations of the Committee on International Relations,* October 31. Washington, D.C.: U.S. Government Printing Office.

Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg. 2007. *Economic Sanctions Reconsidered*, 3rd ed. Washington, D.C.: Peterson Institute.

Hussain, Zahid. 2010. *The scorpion's tail: the relentless rise of Islamic militants in Pakistan and how it threatens America*. New York: Free Press.

Hymans, Jacques E. C. 2006. *The psychology of nuclear proliferation: identity, emotions, and foreign policy*. New York: Cambridge University Press.

IISS. Various Years. *The Military Balance*. London: International Institute of Strategic Studies.

Indo-Soviet Treaty of Peace. 1971. Text available online at http://en.wikipedia.org/wiki/Indo-Soviet_Treaty_of_Friendship_and_Cooperation. Accessed August 2012.

Jahn, George. 2004. "Extended Taiwan nuclear weapons program cited," *Seattle Times*, October 14, http://seattletimes.nwsource.com/html/nationworld/2002062563_nuke14.html. Accessed June 2012.

Jennings, Ralph. 2011. "Taiwan Develops Advanced Missiles," June 15, http://www.voanews.com/content/taiwan-develops-advanced-missiles-despite-improved-ties-with-china-123987259/140837.html.

Jentleson, Bruce W., and Christopher A. Whytock. 2005/6. "Who 'Won' Libya?: The Force-Diplomacy Debate and Its Implications for Theory and Policy." *International Security* 30 (3):47-86.

Jervis, Robert. 1978. "Cooperation under the Security Dilemma," *World Politics* January.

Jewish Virtual Library. 2012a. "Eisenhower Tells Israel to Withdraw From Sinai & Ben-Gurion Responds," available at http://www.jewishvirtuallibrary.org/jsource/History/ikewarn.html.

Jewish Virtual Library. 2012b. "Eisenhower's Message to Ben-Gurion During the Suez Campaign, October 31, 1956," available at http://www.jewishvirtuallibrary.org/jsource/Quote/ikesuez.html.

Jo, Dong-Joon and Erik Gartzke. 2007. "Determinants of Nuclear Weapons Proliferation." *The Journal of Conflict Resolution* 51 (1):167-194.

Kang, Jungmin and H.A. Feiveson. 2001. "South Korea's Shifting and Controversial Interest in Spent Fuel Reprocessing," *The Nonproliferation Review*, Spring.

Kennedy Library. 1963. News Conference 55, May 8, available at http://www.jfklibrary.org/Research/Ready-Reference/Press-Conferences/News-Conference-55.aspx.

Khan, Muhammad Z. and John K. Emmerson. 1954. United States-Pakistan Mutual Defense Assistance Agreement. *Middle East Journal* 8 (3):338-340.

Kim, Seung-young. 2001. "Security, Nationalism and the Pursuit of Nuclear Weapons and Missiles: The South Korean Case, 1970-82," *Diplomacy & Statecraft*, Vol. 12, No. 4, December.

Kim, Yong-Jick. 2011. "The Security, Political, and Human Rights Conundrum, 1974-1979." In Kim, Byung-kook and Ezra F. Vogel, eds. *The Park Chung Hee Era: The Transformation of South Korea*. Cambridge, MA: Harvard University Press.

King, Gary, Robert O. Keohane and Sidney Verba. 1994. *Designing social inquiry: scientific inference in qualitative research*. Princeton, NJ: Princeton University Press.

Kohl, Wilfrid L. 1971. *French Nuclear Diplomacy*. Princeton, NJ: Princeton University Press.

Kroenig, Matthew. 2010. *Exporting the bomb: technology transfer and the spread of nuclear weapons.* Ithaca: Cornell University Press.

Kwak, Tae-hwan and Wayne Patterson. 1999. "The Security Relationship between Korea nd the United States, 1960-1982." In Lee, Yur-bok and Wayne Patterson, eds. *Korean-American Relations, 1866-1997*. Albany, NY: State University of New York Press.

Lasensky, Scott B. 2001. *Buying Peace and Security? U.S. Positive Economic Inducement Strategies for Reducing Regional Conflicts and Retarding Weapons of Mass Destruction Proliferation*. Ph.D. Dissertation, Brandeis University.

Lavoy, Peter R. 1993. "Nuclear Myths and the Causes of Nuclear Proliferation." In Davis, Zachary and Benjamin Frankel, eds. *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results.* London: Frank Cass.

———. 1996. "Nuclear Proliferation Over the Next Decade: Causes, Warning Signs, and Policy Responses," *Nonproliferation Review*, Vol. 13.

Levi, Michael A. and Michael O'Hanlon, Michael. 2005. *The future of arms control*. Washington, D.C.: Brookings Institution Press.

Levite, Ariel E. 2002/3. "Never Say Never Again: Nuclear Reversal Revisited." *International Security* 27 (3): 59-88.

Litwak, Robert. 2003/4. "Non-proliferation and the Dilemmas of Regime Change," *Survival* 45, no. 4 (Winter), pp. 7-31.

Martinez, Cecilia and John Byrne. 1996. "Science, Society and the State: The Nuclear Project and the Transformation of the American Political Economy." In John Byrne and Steven M. Hoffman, eds. *Governing the Atom: The Politics of Risk*, vol. 7: Energy and Environmental Policy. London: Transaction Publishers.

Menon, Rajan. 1986. *Soviet Power and the Third World*. New Haven: Yale University Press.

Mitchell, Jerek J. 2004. "Taiwan's Hsin Chu Program." In Campbell, Kurt M., Robert J. Einhorn, Mitchell Reiss, eds. *The nuclear tipping point: why states reconsider their nuclear choices*. Washington, D.C.: Brookings Institution Press.

Morrison, Robert and Edward Wonder. 1978. *Canada's Nuclear Export Policy*. Ottawa, Canada: Norman Paterson School of International Affairs.

Morrison, Robert. 2001. "Global Nuclear Markets in the Context of Climate Change and Sustainable Development." In Doern, Bruce, Arslan Dorman, and Robert Morrison, *Canadian Nuclear Energy Policy: Changing Ideas, Institutions, and Interests*. Toronto: University of Toronto Press.

Mott, William H., IV. 2001. *Soviet Military Assistance: An Empirical Perspective*. London: Greenwood Press.

Nau, Henry R. 1974. *National politics and international technology: nuclear reactor development in Western Europe*. Baltimore, MD: Johns Hopkins University Press.

Nincic, Miroslav. 2010a. "Getting What You Want: Positive Inducements in International Relations." *International Security* 35 (1):138-183.

———. 2010. *The Logic of Positive Engagement*. Ithaca: Cornell University Press.

Oberdorfer, Don. 1979. Pakistan: The Quest for Atomic Bomb; Problem Discussed by West, Moscow, Peking. *Washington Post*, August 27.

Oberdorfer, Don. 2001. *Two Koreas: A Contemporary History*. New York: Basic Books.

Pape, Robert A. 1996. *Bombing to win: air power and coercion in war*. Ithaca, N.Y.: Cornell University Press.

Paul, T. V. 2000. *Power versus prudence: why nations forgo nuclear weapons.* Montreal: McGill-Queen's University Press.

Payne, Robert. 1969. *Chiang Kai-shek*. New York: Weybright and Talley.

Perkovich, George. 2006. Could Anything Be Done To Stop Them? Lessons from Pakistan, *Nonproliferation Policy Education Center*.

______. 1999. *India's nuclear bomb: the impact on global* proliferation. Los Angeles: University of California Press.

Porter, Bruce D. 1984. *The USSR in Third World Conflicts*. London: Cambridge University Press.

Ravenal, Earl C. 1971. "Approaching China, Defending Taiwan," *Foreign Affairs*, Vol. 50, No. 1 (October), pp. 44-58.

Raza, Rafi. 1997. *Zulfikar Ali Bhutto and Pakistan, 1967-1977*. Karachi, [Pakistan]: Oxford University Press.

Reardon, Robert J. 2010. *Nuclear Bargaining: Using Carrots and Sticks in Nuclear Counter-Proliferation*. Ph.D. Dissertation, Massachusetts Institute of Technology.

Reed, Thomas C. and Danny B. Stillman. 2009. *Nuclear Express: A Political History of the Bomb and Its Proliferation*. Minneapolis, MN: Zenith Press.

Reiss, Mitchell. 1988. *Without the bomb: the politics of nuclear nonproliferation*. New York: Columbia University Press.

Richelson, Jeffrey. 2006. *Spying on the bomb: American nuclear intelligence from Nazi Germany to Iran and North Korea*. New York: Norton.

Ross, Robert S. 1995. *Negotiating Cooperation: The United States and China, 1969-1989*. Stanford, CA: Stanford University Press.

———. 2003. "The 1995-96 Taiwan Strait confrontation: coercion, credibility, and the use of force" In Art, Robert J. and Patrick M. Cronin, eds. *United States and Coercive Diplomacy*. Washington, D.C.: U.S. Institute of Peace.

Rueckert, George L. 1998. *On-site Inspection in Theory and Practice: A Primer on Modern Arms Control Regimes*. Westport, CT: Praeger.

Sagan, Scott D. 2011. “The Causes of Nuclear Weapons Proliferation,” *Annual Review of Political Science*, Vol. 14.

———. 1996/1997. “Why Do States Build Nuclear Weapons? Three Theories in Search of a Bomb,” *International Security*, Vol. 21.

Safran, Nadav. 1981. *Israel: The Embattled Ally*. Cambridge, MA: Harvard University Press.

———. 1963. *The United States and Israel*. Cambridge, MA: Harvard University Press.

Sattar, Abdul. 2007. *Pakistan's foreign policy, 1947- 2005: A concise history*. Karachi: Oxford University Press.

Scheinman, Lawrence. 1965. *Atomic Energy Policy in France under the Fourth Republic*. Princeton, NJ: Princeton University Press.

Schelling, Thomas C. 1966. *Arms and influence*. New Haven: Yale University Press.

———. 1960. *The strategy of conflict*. Cambridge: Harvard University Press.

Sharp, Jeremy M. 2012. “U.S. Foreign Aid to Israel,” *CRS Report to Congress*, March 12, http://www.fas.org/sgp/crs/mideast/RL33222.pdf.

Sigal, Leon V. 1998. *Disarming strangers: nuclear diplomacy with North Korea.* Princeton, NJ: Princeton University Press.

Singh, Sonali, and Christopher R. Way. 2004. “The Correlates of Nuclear Proliferation: A Quantitative Test.” *The Journal of Conflict Resolution* 48 (6):859-885.

Smith, J. P. 1978. “Glenn Asks Probe of Korea Arms Plan,” *Washington Post*, November 4, Lexis Nexis.

Snyder, Glenn H. 2007. *Alliance Politics*. Ithaca: Cornell University Press.

———. 1961. *Deterrence and Defense: Toward a Theory of National Security.* Princeton, N.J.: Princeton University Press.

———. 1984. “The Security Dilemma in Alliance Politics.” *World Politics* 36 (4):461-495.

Snyder, Scott. 2010. “South Korean Nuclear Decision Making.” In Potter, William C. and Gaukhar Mukhatzhanova. *Forecasting nuclear proliferation in the 21st century*, vol. 2. Stanford, CA: Stanford University Press.

Solingen, Etel. 2007. *Nuclear logics: contrasting paths in East Asia and the Middle East.* Princeton, N.J.: Princeton University Press.

Spanier, John W. 1959. *The Truman-MacArthur Controversy and the Korean War*. Cambridge, MA: Harvard University Press.

Spector, Leonard S. and Jacqueline R. Smith. 1990. *Nuclear ambitions: the spread of nuclear weapons, 1989-1990*. Boulder: Westview Press.

Stork, Joe. 1986. Pakistan's Nuclear Fix. *MERIP Middle East Report* (143):16-18.

Subramanian, Ram R. 1982. *Nuclear proliferation in South Asia: security in the 1980s*. Canberra, Australia: Strategic and Defense Studies Centre, Research School of Pacific Studies, Australian National University.

Taiwan Documents Project (A), “Mutual Defense Treaty between the United States of America and the Republic of China,” http://www.taiwandocuments.org/mutual01.htm. Accessed May 2012.

Taiwan Documents Project (B), “Taiwan Relations Act,” http://www.taiwandocuments.org/tra01.htm. Accessed May 2012.

Tucker, Nancy Bernkopf. 2005. “Taiwan Expendable? Nixon and Kissinger Go to China,” *The Journal of American History*, Vol. 92, No. 1 (June), pp. 109-135.

———. 1992. *Taiwan, Hong Kong, and the United States, 1945-1992: Uncertain Friendships*. New York: Twayne Publishers.

Tuomi, Helena. 1985. "International Nuclear Commerce in Transition," *Current Research on Peace and Violence*, Vol. 8, No. 2.

Ulam, Adam B. 1968. *Expansion and Coexistence: The History of Soviet Foreign Policy, 1917-67*. New York: Praeger.

United States Forces Korea. 2011. “Mutual Defense Treaty between the Republic of Korea and the United States of America.” Available at http://www.usfk.mil/usfk/%28A%28D2LORmv0ywEkAAAAOGI0ZTRlZjktYTYwNy00MDAyLTgxMTItOGIwZDc2ZGYyNTNlVI5tm0oOVcy0AJ8wyV0MbZxeUd01%29S%280ztucfqcpotxeo3dprqgdpas%29%29/showcontent.aspx?id=76&AspxAutoDetectCookieSupport=1.

Van Evera, Stephen. 1997. *Guide to methods for students of political science*. Ithaca: Cornell University Press.

Walsh, Edward and George C. Wilson. 1977. “President Defends His Korea Policy Carter, Citing 'Breach,' Defends Singlaub Ouster; Push to Develop Nuclear Weapons Hinted in Seoul,” *Washington Post*, May 27, available through Lexis Nexis.

Waltz, Kenneth N. 1959. *Man, the state, and war: a theoretical analysis*. New York: Columbia University Press.

Wars for Vietnam. 2011. “President Nixon's Speech on ‘Vietnamization,’ November 3, 1969.” Available at http://vietnam.vassar.edu/overview/doc14.html.

Washington Post. 1977. “Carter: '. . . the Duty to Say No When Spending is Excessive'; 'Main Concern . . . Is Rate of Inflation',” *Washington Post*, May 27, Lexis Nexis.

Washington Post. 1977. “Infantry Unit to Be Last Out of Korea; Bulk of U.S. Infantry to Remain in Korea Until End of Pullout,” *Washington Post*, July 27, Lexis Nexis.

Weiner, Tim. 1997. “How A Spy Left Taiwan in the Cold,” *New York Times*, December 20, http://www.nytimes.com/1997/12/20/world/how-a-spy-left-taiwan-in-the-cold.html?pagewanted=all&src=pm. Accessed June 2012.

———. 2007. *Legacy of Ashes: The History of the CIA*. New York: Doubleday.

Wirsing, Robert. 1991. *Pakistan's security under Zia, 1977-1988: the policy imperatives of a peripheral Asian state*. New York: St. Martin's Press.

Wit, Joel S., Daniel Poneman and Robert L. Gallucci. 2004. *Going critical: the first North Korean nuclear crisis*. Washington, D.C.: Brookings Institution Press.

Wood, Joe and Philip Zelikow. 1996. “Persuading a President: Jimmy Carter and American Troops in Korea,” Harvard Kennedy School Case Study #1319.0.

Yager, Joseph A. 1984. *The Energy Balance in Northeast Asia*. Washington, D.C.: Brookings.

Yoon, Won-sup. 2008. “Park Sought to Develop Nuclear Weapons,” *Korea Times*, January 15. Available through Lexis Nexis database.

Young, James V. 2003. *Eye on Korea: An Insider Account of Korean-American Relations*. College Station, TX: Texas A&M University Press.

Interviews

(listed in alphabetical order)

1. David Aaron, phone conversation, February 2013.
2. Graham Allison, Harvard Kennedy School, November 2012.
3. Hans Binnendijk, Washington, D.C., February 2013.
4. Matthew Bunn, Harvard Kennedy School, October 2010 and e-mail communication, March 2013.
5. Alex Burkart, phone conversation, January 2013.
6. Victor Cha, Washington, D.C., February 2013.
7. Shai Feldman, Brandeis University, May 2011.
8. Abraham Friedman, Washington, D.C., February 2013.
9. Donald Gregg, e-mail communication, March 2013.
10. Olli Heinonen, Harvard Kennedy School, November 2010.
11. James Humphreys, Waltham, MA, November 2012.
12. Fred McGodrick, Sichuate, MA, November 2012.
13. Steven Miller, Harvard Kennedy School, October 2012.
14. John Negroponte, Yale University, April 2013.
15. Joseph Nye, Harvard Kennedy School, April 2013.
16. Gary Samore, Harvard Kennedy School, March 2013.
17. Jonathan Sarna, Brandeis University, July 2012.
18. Brent Scowcroft, Washington, D.C., February 2013.
19. Allen Sessoms, Washington, D.C., February 2013.
20. Rob Simmons, North Stonington, CT, February 2013
21. Thomas Simons, Harvard Davis Center for Russian and Eurasian Studies, September and October 2012.
22. Joseph Stern, e-mail communication, January 2013.
23. Carleton Stoiber, Washington, D.C., February 2013.
24. David Squire, Boston, July 2012.