NORMS AND NUCLEAR PROLIFERATION: SWEDEN'S LESSONS FOR ASSESSING IRAN

by Eric Arnett

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Policymakers, journalists, and researchers often write or speak as if security concerns alone determine states' decisions whether or not to acquire nuclear weapons.[1] Indeed, this school of thought has largely dominated political and academic discourse on the subject of nuclear weapons since the dawn of the atomic age. Many recent—and especially post-Cold War—analysts writing on these subjects, however, have moved away from this paradigm, focusing attention instead on such influences as domestic politics, organizational pressures, cognitive/psychological factors, and international norms.[2] Of these influences, perhaps the least attention has been focused on the impact of norms, whose weight in nonproliferation decisions has only recently begun to be appreciated and analyzed.

Within this evolving literature, Scott Sagan's recent article ("Why Do States Build Nuclear Weapons?") represents an important—if somewhat tentative—attempt at developing a new understanding of the impact of international norms on nuclear proliferation.[3] In his analysis, Sagan focuses considerable critical attention on the realist or so-called "security" model—the argument that states build nuclear weapons in response to foreign threats, especially nuclear threats. He makes the case that the model is inadequate to explain historical state behavior because otherwise inexplicable results can only be accounted for by domestic politics and international norms.

My analysis aims to provide three refinements to Sagan's argument based on a reexamination of the Swedish case. First, I present a case in which security concerns—the acute threat from the Soviet Union and no alliance with another nuclear weapon state—should overwhelm domestic politics and international norms, yet nuclear weapons still are not acquired. This case suggests that security concerns alone are even less powerful for understanding state behavior than Sagan concludes. Second, I demonstrate that domestic politics and norms are inextricably intertwined. Domestic politics reflect norms, and norm-building can be a powerful argument in domestic politics, even when nuclear weapons have popular support. This finding requires an elaboration of Sagan's "norms" model, which links nuclear acquisition (or non-acquisition) to a state's perception of its identity or role in the international system. Specifically, my argument seeks to link this point to his "domestic poli-

tics" model—the view that bureaucratic politics and domestic institutions play a major role in nuclear weapons decisionmaking. To make this linkage, I draw on Peter Katzenstein's "cultural" approach—the argument that national security decisionmaking is influenced by state perceptions of appropriate behavior and self-identity.[4] The perspective I develop in this study draws particularly on his notion of *constitutive* norms, or norms that express a shared identity among the citizens of a state or among members of a particular political leadership. Finally, I examine a specific case of proliferation concern, Iran, and suggest that there is reason for greater optimism than is expressed by Sagan and generally supposed by observers relying on the security model.

EXAMINING SAGAN'S THREE MODELS AND HIS EXAMPLES

Like many authors, Sagan concedes that the security model seems to explain adequately most historical cases in which nuclear weapons were acquired, although he makes an important refinement: the model does not always account for the delays between a security stimulus and the predicted policy response. He notes that, while the United States, the Soviet Union, China, Israel, and Pakistan acquired nuclear-weapon capabilities almost immediately upon gaining the wherewithal and perceiving a threat,[5] India did not develop a nuclear option until 10 years after it had the capability and 12 years after its war with China. Furthermore, states that gave up nuclear capabilities were motivated by more than the removal of an urgent threat. He concludes that his domestic politics and norms models are necessary to redress the inability of the security model alone to explain these phenomena.

Sagan's domestic politics model is rather limited, comprising only organizations with vested interests in nuclear-weapon capabilities, including nuclear establishments, military bureaucracies, and politicians. He does not consider anti-nuclear organizations or actors that can sometimes have equal or greater political power in states considering whether to acquire nuclear weapons, as was the case in Sweden. These organizations may derive their identity and financing from their anti-nuclear positions, and therefore should be considered interest groups comparable to pro-nuclear politicians. The positions of anti-nuclear actors can be affected strongly by international nuclear norms, and they are likely to use norm-building as an argument in debate.

In Sagan's application of the domestic politics model to the Indian case, anti-nuclear sentiment in the Indian elite is responsible in part for the delay in the development of the nuclear option, along with arguments about cost. This anti-nuclear sentiment was inadequate to prevent development of the nuclear option or the 1974 nuclear test, which Sagan says should be accounted for by pro-bomb populism and the clout of the nuclear establishment.[6] In other words, the Indian case suggests that anti-nuclear actors can delay but not stop bomb programs. In contrast, anti-nuclear actors succeeded in stopping Sweden's nuclear weapon program completely, despite the influence of the nuclear establishment and the popularity of the nuclear option among the electorate.

Sagan also applies his domestic politics model to cases in which states reconsidered their interest in or possession of nuclear weapons. He concludes that the South African case can probably be explained better by fear of the African National Congress assuming control of the weapons than the reduced threat to the state from abroad, whereas the Argentine and Brazilian cases can be explained primarily by democratization.[7] While the emphasis on the domestic politics model in his explanations is credible, the reduction in or absence of a threat is important to all three cases. In the Swedish case, there was no change in the dominant elite perception of an acute threat during the reversal of position on the desirability of nuclear weapons.

Sagan's norms model is also limited in practice, although in principle it contains both "international regulatory norms" and "constitutive norms within states," as defined by Katzenstein.[8] Sagan suggests that states sometimes pursue nuclear weapons primarily for their prestige value or *grandeur*, as he concludes was the case with France.[9] An important part of Sagan's argument is that France faced a threat no greater than that faced by other North Atlantic Treaty Organization (NATO) allies or the neutral or non-aligned states between the blocs, yet only France of the continental states followed the nuclear course to its conclusion. Sagan does not, however, distinguish between NATO members, which enjoyed a nuclear guarantee despite misgivings, and the neutral or non-aligned countries, which did not.[10] Of these, Sweden and Finland had lost their last wars with Russia and the Soviet Union,

respectively, with major loss of life and territory. Sagan's model helps explain why France alone saw nuclear weapons as the best answer to its security problem—because of an elite consensus that France was the sort of country that should have nuclear weapons. However, it does not explain why Sweden, with a greater security problem, drew the opposite conclusion at the same time, when international norms were the same. Clearly, international norms are perceived differently by different actors. Further, the expectation that norms can be changed is a useful weapon in domestic debates. This was the case in Sweden, as will be shown below.

Katzenstein makes stronger claims for norms than Sagan does, but his choice of postwar Japan as his primary case does not allow him to draw the stronger, more general conclusions that can be supported by the Swedish case. Katzenstein's Japan is nonviolent and uncomfortable with the military, while Sweden—despite its consensual and orderly society—is only non-aligned in peace in order to remain neutral in war. Although Sweden has not fought a war in this century, its level of military preparation is comparable to that of major NATO members and relies on conscription.[11] The idea of acquiring nuclear weapons was popular in Sweden in the 1950s, where Japanese public opinion has always been deeply opposed to acquiring nuclear weapons. Japan's freedom of action has been strictly limited by its close relationship with United States, with which Sweden has had a looser, more ambivalent relationship, especially during the late 1950s and 1960s, the period of greatest interest here. Japanese elites see their country as exceptional to such an extent that international norms are of unusually low consequence, but Sweden—in seeking to strike a "third way" between East and West—has been more conscious of international norms and its role in promoting them.

THE SECURITY MODEL AND THE SWEDISH CASE

A problem for the dominant security model is that it cannot adequately account for the Swedish government's change of position between 1955, when it appeared likely to acquire nuclear weapons, and 1960, by which time it had decided not to. Furthermore, an explanation based on the security model is fundamentally incompatible with what is publicly known about the Swedish case.[12] The security model nevertheless informs public debate about nuclear decisionmaking in other cases[13] and has led to popular inferences about Sweden's current nuclear intentions. It is therefore important to subject the security model to the Swedish test and attempt to account for any inconsistencies that result.

There are two ways in which the security model might attempt to account for the Swedish decision. The first way would note Swedish interest in nuclear weapons, arising as early as the end of World War II, and follow its rise through the early 1950s until an internal debate created a crisis in 1957. After this crisis, the government concluded that Sweden enjoyed a tacit nuclear guarantee from NATO and did not require an independent nuclear deterrent.[14] Such an explanation does not explain how Sweden—a non-aligned country that lost its last war with Russia and has a close relationship with Finland, a part of Swedish territory conquered by Russia in the 19th century which had fought and lost a war with the Soviet Union as recently as 1945—could be adequately reassured by such a tacit guarantee, when full NATO allies often were not reassured even by a formal guarantee.[15]

Another possible explanation would attempt to dismiss the case with the claim that Sweden was not actually threatened by Soviet nuclear weapons and therefore had the luxury of deciding for other reasons whether or not to acquire nuclear weapons.[16] In this model, security considerations impel some states to acquire nuclear weapons, but are irrelevant to the Swedish case. In fact, Sweden continued to feel threatened by the Soviet Union until the end of the Cold War, during which time it invested heavily, at a rate seen in few other countries, not only in conventional defense but also civil defense against nuclear and chemical attack. This explanation, therefore, must either be dismissed for not acknowledging the Swedish perception of a threat or be modified to account for the distinction between threat perception and actual threats. Such a modification is antithetical to realism's basic assumption that actual threats are perceived as such.

The security model cannot account for the Swedish decision not to acquire nuclear weapons because it neglects the means by which Sweden came to that decision. While debate can exist within states in the security model, the stimulus of a clear threat should ultimately provoke a response, whether acquisition of nuclear weapons or solicitation of

a nuclear guarantee. The response might be filtered through a debate about nuclear norms, party politics, other bureaucratic and social priorities, and the like, but these epiphenomena should finally give way before the enormity of security considerations.

In Sweden, this was not the case. In 1955, the majority of the Swedish population, the ruling Social Democrats, and the armed services all favored acquiring nuclear weapons. Five years later, all but the military had changed their positions. Those who reversed themselves cited not the lack of a plausible threat, but the fundamental immorality of nuclear weapons, the importance of keeping an uncompromising anti-nuclear faction in the Social Democrats, the emergent norm against West European states acquiring nuclear weapons, and constraints imposed by technology and the budget. In any case, after 1956, Swedish nuclear installations were under bilateral safeguards, following a cooperation agreement with the United States, which was promoting a norm against nuclear proliferation. U.S. efforts to prevent proliferation also induced Sweden to shift from indigenous heavy water reactors to imported light water reactors in its civilian program, thereby limiting its ability to reverse the decision. Only by 1965 had the military reassessed the need for nuclear weapons in the most plausible scenarios and abandoned the nuclear option. The weapon-oriented portion of the nuclear infrastructure was already moribund. It is fair to say that Sweden has not considered becoming a nuclear weapon state since and does not have any special wherewithal to do so now. But before elaborating the role of norms in the Swedish reversal, a brief overview of Swedish nuclear and security policy from 1945 to 1965 is in order.

The Perceived Threat to Sweden

The Swedish military, having been interested in nuclear weapons from the first news of Hiroshima, was obliged to adjust Swedish defense policy to the dawning of the nuclear age. The first Soviet nuclear test in 1949 coincided with Sweden's increasing concern about its ability to defend its airspace and its decision to remain non-aligned. In the early 1950s, it was not clear which states would have nuclear weapons or how many they would have. It was a politically and technologically volatile period in which international norms were being established but remained uncertain.

Many Swedes feared a Soviet invasion, either over land in the north or by sea in the south. Opinion polls suggested that the Swedish public's support for even a *purely defensive* war effort would be unenthusiastic if the enemy were armed with nuclear weapons. However, if Sweden itself had nuclear weapons, public morale would be improved.[17] The army conducted exercises in nuclear conditions, as they understood them, and believed the problem of defense was manageable. Swedish nuclear weapons could break up an amphibious invasion and force the enemy to disperse for easier engagement with conventional forces.[18] Sweden was only interested in tactical nuclear weapons that would be used on Swedish territory or nearby seas.[19] For reasons not directly related to security, Sweden never considered strategic nuclear weapons that could reach the Soviet Union.[20] They would have been too expensive and undercut Sweden's policy of nonalignment. This policy was rooted in a constitutive norm reinvigorated and deepened by World War II: Sweden's identity as a nation nonaligned in peace and neutral in war.

When Air Force Chief Bengt Nordenskiöld first proposed in 1952 that Sweden move beyond the defensive research on nuclear weapons and their effects that had begun in the late 1940s, the Social Democrats did not react favorably.[21] In 1954, when the Supreme Commander recommended that Sweden consider acquiring nuclear weapons by 1965, the Social Democrats remained skeptical, although newspapers reflecting the party's interests were somewhat positive.[22] The popular Prime Minister Tage Erlander was inclined toward the nuclear option but uncomfortable with the idea of Sweden's becoming the fourth nuclear weapon state.[23]

In 1955, the opposition Conservative Party called for procurement of nuclear weapons, raising the public salience of the issue.[24] The Social Democrats were ambivalent, and their split became public knowledge.[25] In 1956, an anti-nuclear faction of the party made clear that they would not support the acquisition of nuclear weapons under any circumstances.[26] Their opposition came at precisely the moment that the party was losing support in the electorate. As the party's crisis deepened in 1957, the majority of Social Democrats and the electorate apparently favored going nuclear. The issue had come to a head.

In order to resolve the conflict, Erlander convened a party Atomic Weapons Committee (AWC) in November 1958. The AWC comprised

advocates from both sides, with military experts and well-prepared opponents of nuclear weapons. The pro-nuclear side had greater confidence, but the anti-nuclear side made clear that they would not bend.[27] Erlander claimed to be sympathetic with the pro-nuclear side, but did not want to risk dividing the party over the issue, a reflection of Sweden's regulatory norm of government by consensus rather than majority.[28] To make matters more difficult for the pro-nuclear side, a poor showing in national elections the same year forced the Social Democrats into coalition with the adamantly anti-nuclear Communists.

Nevertheless, public support for nuclear weapons continued to increase. A series of polls by the Committee for Psychological Defense Preparedness (in Swedish, BPF) asked exactly the same question in 1957, 1958, and 1959: "The media have discussed the question of whether Sweden ought to equip itself with atomic weapons. Do you believe that we ought to do that or not?" Pro-nuclear sentiment increased each year from 40 percent to 57 percent between 1957 and 1959, whereas anti-nuclear feeling declined from 28 percent to 16 percent.[29]

At the beginning of 1959, the AWC's confidential debate was paralleled by the parliament's public discussions of a number of bills to fund weapons research, all of which were rejected. When the AWC finally released its report in November 1959, it articulated a policy under which nuclear weapons would not be acquired, but defensive research would continue. The supreme commander continued to request funds for weapons research, but was rebuffed. In any case, Sweden was dependent on the United States for technology and fissile material, which was delivered under safeguards. The armed services, the air force in particular, acknowledged that Sweden could not afford nuclear weapons, in addition to an ambitious program to develop indigenous conventional weapons.[30] In 1965, the supreme commander finally conceded that Sweden had essentially given up the option of developing nuclear weapons.[31] Sweden's security environment had not changed meaningfully, but the nation's position on acquiring nuclear weapons had turned about completely.

A Secret Swedish Nuclear Option?

Although Sweden turned decisively away from nuclear weapons in 1959 and reiterated its decision by signing the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1968, suspicions remain about its intentions. The Defense Research Establishment's (FOA) continued military research and the presence of Sweden's civilian nuclear infrastructure suggest an abiding interest in nuclear weapons to some realist scholars and observers who tacitly accept the realist explanation of Sweden's behavior. But a brief history of Sweden's nuclear infrastructure discredits this line of inference.

The Swedish nuclear authority Atomenergi was created in 1947. It was originally intended to produce both electricity and fissile material for weapons from Swedish uranium.[32] In 1952, FOA began its research on nuclear weapon.[33] In 1954, Sweden's first research reactor, R1, went critical with Norwegian heavy water. In 1956 a second reactor, R2, was bought from the United States under bilateral safeguards. A third reactor, R3 (better known as Ågesta, after its location in Stockholm's southern suburbs), was being designed as a dual-use facility that would produce electricity and could be used for a small amount of weapons material in a crisis. A fourth reactor, R4 Marviken, was to be used to produce large quantities for an arsenal of 100 weapons.

In 1957, FOA suggested using Ågesta to produce a small number of weapons quickly, by 1960 if necessary, as an interim capability pending Marviken's scheduled start-up in 1968. This proposal gives an idea of how urgent Sweden's security concerns seemed at the time. Ågesta was not started up until 1963, however, and was put under bilateral safeguards according to an April 1958 agreement with the United States because it was to use U.S.-supplied fuel.[34] Also in 1958, the Defense Ministry directed FOA to shift its emphasis in favor of defensive research. Although defensive research was a major endeavor and its extent was sometimes questioned, it was strictly limited and never exceeded those limits.[35]

The safeguarded R2 reactor finally went critical in 1960, and, in 1961, Sweden had the hypothetical capability to violate its agreement with the United States, remove the fissile material, and fashion it into a crude nuclear device. Swedish uranium did not become available until 1965.[36] In 1963, FOA decided not to conduct criticality experiments, and by July 1972, it stopped doing research with the plutonium it had acquired to study equations of state.[37] Marviken's reactor design

was found to be poor and work was abandoned in 1970. By then, Sweden had abandoned heavy water plants using indigenous uranium in favor of U.S.-designed light water plants using imported uranium on cost grounds.[38] The year 1974 also marked the final disassembly of all plutonium facilities and a reorganization of FOA that dispersed its nuclear expertise.[39] By 1997, FOA had 30 people doing defensive research; few have any experience with the physics of weapons.[40]

This short history demonstrates that a variety of technological and economic factors had acted to constrain Sweden's ability to go nuclear before that option became feasible. Because Atomenergi was charged with producing affordable electricity, it was willing to accept U.S. safeguards in exchange for better technology, even if that ruled out acquiring nuclear weapons quickly. For that matter, the U.S. government's decision that nuclear nonproliferation was more important than a Swedish nuclear arsenal's additional contribution to nuclear deterrence demonstrates the power of the emergent international norm against nuclear proliferation. Although Sweden's bid for an indigenous capability to produce nuclear weapons was foreclosed politically before the infrastructure could be built, problems with the designs of Ågesta and Marviken suggest that technological and cost constraints would eventually have overwhelmed the project.[41]

Despite this well publicized history, the myth of a secret Swedish nuclear option persists, in part because it seems to be required by the realist explanation of state behavior. Most famously, in 1985, the Swedish popular science magazine *Ny Teknik* published an article that claimed Sweden had designed a workable bomb and continued to do experiments related to weapon design through 1972 after signing the NPT.[42] The article was apparently meant to smear Olof Palme, who had initially supported acquiring nuclear weapons and was portrayed as a key figure in what the author seems to have hoped would be a major election-year scandal. In fact, the bomb had been designed during the period when it was legal to do so, and the experiments would not have violated the NPT in any case.[43] Also in 1985, CBS News reported that Sweden had 10 nuclear weapons.[44]

Nearly 10 years later, in November 1994, *The Washington Post* reported that the very existence of Ågesta, shut down but not decommissioned, amounted to a breach of the spirit of the NPT and a sign that Sweden was secretly maintaining the option to make nuclear weapons on short notice.[45] The *Post*'s story was based on speculation by unnamed U.S. officials and was regarded by surprisingly many observers as accurate, in part because Sweden could only be expected to hedge in the realist paradigm.[46] In fact, Ågesta is being maintained to prevent its becoming an environmental risk, pending a decision on Sweden's strategy for high-level waste disposal, and could not be used to produce weapons quickly.[47] If it were to be used for making plutonium, it would require new fuel and heavy water, which is not available in Sweden. Given problems with the design, it would be easier to start from scratch.

NORMS AND DOMESTIC POLITICS

During Sweden's 10-year debate over acquiring nuclear weapons, a variety of actors took part for disparate reasons. The motivations and influence of these actors are obviously highly contingent, but they nevertheless offer an important test of the realist model of nuclear proliferation. More importantly, they suggest that domestic politics and international norms are inextricably intertwined and together are even more powerful than suggested by Sagan.

At the highest political level, the decision not to acquire nuclear weapons was made by Prime Minister Erlander and the Social Democrats' AWC. Fortunately, Erlander's memoirs and the AWC's deliberations are a matter of public record.[48] Erlander said that he was convinced it would not be appropriate to produce nuclear weapons for two reasons: he did not want to divide the party or destabilize the policy of non-alignment, issues of domestic politics directly related to Swedish regulatory and constitutive norms. He also believed that Sweden would never use nuclear weapons first—a belief also rooted in norms—and, therefore, should campaign instead for complete nuclear disarmament. This goal would be undermined if Sweden had nuclear weapons.[49] Furthermore, he did not want to reinforce the norm of industrialized states acquiring nuclear weapons at a time when Germany might be making that decision, which in fact it was.[50] Finally, Erlander shared the Defense Ministry's concern with the high cost for a nation of eight million, even a prosperous one.[51]

Military arguments rooted in se-

curity concerns were also considered, but ultimately put aside because of concerns related to norms. As early as 1947, the Supreme Commander was first attracted by nuclear weapons as a way of offsetting Sweden's numerical inferiority and geographical disadvantages. FOA concurred, based on an assessment that nuclear weapons would be few and strategic, so that the logic of deterrence, as it was then understood, would apply.[52] In 1954, with NATO's shift to the "New Look" defense based on a larger number of nuclear weapons, including tactical nuclear weapons, FOA followed fashion. The Swedish army prepared to fight on a nuclear battlefield and sought its own nuclear weapons for tactical roles. Like NATO, Sweden was shocked by the 1955 Carte Blanche exercise, a war simulation involving 335 nuclear weapons and 1.7 million fatalities (even without accounting for radioactive fallout). Civil defense preparations and the planning assumption, rooted in constitutive norms, that Sweden would use its weapons on or near its own territory, reinforced this impression for Swedes. Nevertheless, in 1957, the supreme commander thought it self-evident that Sweden would acquire nuclear weapons by the late 1960s and did not submit a nonnuclear option among his four long-term defense plans.[53]

It was not until 1960 that FOA concluded that a war involving nuclear weapons would likely kill two to three million Swedes, more than a quarter of the population.[54] Nevertheless, FOA continued some work relevant to weapon design under the rubric of defensive research until 1962. By that time, it was clear that Sweden would not ever acquire nuclear weapons and, indeed, could not afford to fund both the *Viggen* fighter aircraft and nuclear weapons. With the culture of operations research taking hold after Stig Norén's appointment as air force chief in 1960, the *Viggen* was seen as more important than the bomb.[55]

Once the air force's support was lost—since the Defense Ministry and the parliament were unwilling to countenance the supreme commander's interest in nuclear weapons—defense planners reevaluated the scenarios that might draw Sweden into war with the Soviet Union. They concluded that a war was unlikely unless NATO and the Warsaw Pact were already fighting, in which case Sweden's nuclear forces would have little additional deterrent value. Sweden's official renunciation of nuclear weapons in 1968 repeated this position.[56] While this face-saving argument has been accepted by some realist scholars as consonant with their conclusion that the Swedes thought they had an implicit nuclear guarantee from the West, it does not in fact account for Sweden's having decided against the nuclear option before the military made this finding. Furthermore, it does not explain why the military abandoned other roles it had identified for nuclear weapons, including intra-war deterrence and the tactical advantage of forcing an invading force to disperse.

IMPLICATIONS FOR NONPROLIFERATION POLICY

While nuclear proliferation is a highly contingent phenomenon and this article examines only one case, that case casts serious doubt on the realist model of proliferation behavior. It suggests inferences that are relevant to other cases and are more optimistic than those based solely on the understanding of norms developed by Sagan and Katzenstein.

Most importantly, norms are more powerful than Sagan suggests. He concludes that they must be considered along with security concerns but that "the majority of the most pressing proliferation cases today appear to be best explained by the basic security model."[57] In contrast, the Swedish case demonstrates that changing norms can lead to major reversals on the nuclear issue even if there are no significant changes in a difficult security situation and even if pro-nuclear actors can appeal to populism.

The implications for Sagan's policy prescriptions are significant. While he recommends strengthening the positions of anti-nuclear actors in states of concern and continued, perhaps improved compliance with Article VI of the NPT,[58] his case studies do not encourage confidence that the result of these steps would be a success, defined as an abiding reversal of pro-nuclear sentiment. The Swedish case makes clear that success is possible, perhaps even in the most pressing cases. Without this encouraging result, there would be little reason to follow Sagan's recommendations.

Nonproliferation efforts are often said to be "only" exercises in delay, after which proliferation is still inevitable, barring a change in the security situation.[59] Sagan's analysis of the Indian case would appear to support this hypothesis most directly, and his other cases do not refute it. The Swedish case suggests that delay can lead to a policy reversal, even in the absence of a change

in the security situation. In 1948, FOA estimated that Sweden could have had the bomb by 1956. If a crash program had been launched, Sweden might have deployed weapons before elite opinion changed, a development that would have, in turn, strongly affected international norms.

The norms that most strongly affected Sweden's decision were: 1) the domestic regulatory norm of decisionmaking by consensus (which effectively gave uncompromising anti-nuclear actors a veto over the decision); 2) a number of specifically Swedish constitutive norms that limited the way in which nuclear weapons could be used, mitigating their military value; 3) international norms regarding standards of state behavior that Sweden hoped to influence; and 4) the influence of one such norm—in favor of nuclear nonproliferation—on technology transfer from the United States to Sweden. Although Iran is often depicted as an unrepentant "rogue state" that flouts international standards of behavior, there is reason to believe that Iran's nuclear decisionmaking can also be affected by some of these norms, in part because they affect suppliers of nuclear technology and in part because they have a domestic aspect.

Iran

First, constitutive norms, stemming from the Iranian leadership's shared understanding of the state's identity, have the greatest potential for affecting Iranian behavior. Iranian officials regularly denounce nuclear proliferation and disavow any intention to deploy nuclear weapons, in part for moral reasons related to the legitimacy of the Islamic republic: the Koran's prohibition on the use of indiscriminate weapons. In addition to the Islamic component of its identity, Iran's leadership continues to emphasize its special role as a champion of the world's oppressed that is "neither East nor West," a self-conception that also leads it to reject the superpowers' nuclear weapons and campaign for complete nuclear disarmament.

Presidents and spiritual leaders both have appealed to these constitutive norms. Then-President Hojjatolislam Ali Akbar Hashemi-Rafsanjani stated: "Nuclear weapons are against the culture, ideology and the political view of this honorable system."[60] Rahbar (Spiritual Leader) Ayatollah Ali Khamenei stated: "We do not seek to obtain and use banned weapons, because we respect our principles and our faith."[61] Anti-nuclear statements by Iranian leaders are now so common that reversing course by publicly acquiring nuclear weapons, much less using them, would at the very least require substantial reinterpretation of constitutive norms and might not be possible unless there were a crisis as severe as the Iraqi invasion.

If domestic constitutive norms suggest that Iran might convincingly reject nuclear weapons, a second consideration, regulatory norms relating to how such a decision might be made, are less clear. The gradual liberalization of society—beginning with the death of Ayatollah Ruhollah Khomeini and the end of the war with Iraq in 1988, and continuing with the election of President Rafsanjani and more recently President Mohammad Khatami—could ultimately lead to a state that is both more democratic and committed to decisionmaking by consensus. In turn, this shift could strengthen the hand of those opposed to nuclear weapons.[62] On the other hand, it could become more democratic, but also fractious and majoritarian, perhaps failing in the process to control parts of the military (or at least the paramilitary Islamic Revolutionary Guard Corps), industry, and the technology base.

The effect of norms on the changing Iranian polity should be grist for exciting research. But the majority of researchers approaching the issue from the perspective of nonproliferation or security studies apparently assumes that Iran is on an irrevocable course towards nuclear weapons. Meanwhile, scholars studying Iran from a more cultural perspective tend to neglect the nuclear issue or simply assume that the accusations made against the Islamic Republic are untrue.[63]

As was the case in Sweden, Iranian officials who oppose nuclear weapons can couch their case in security terms if necessary. Some have already said they share the perception of anti-nuclear Swedes that having nuclear weapons would provoke rather than deter attack, a possibility that realists generally discount.[64] In unipolar security systems like the Persian Gulf, one of the main security interests of states like Iran opposed to regional hegemons like the United States is to avoid provoking attack. Nuclear capabilities may not reliably deter the dominant power, but could be a potential cause of war. Statements of Iranian leaders suggest that some of them now accept this view.[65]

The Swedish case also shows how civilian nuclear power can be a competitor to a weapon option, even

within the same organization, if technology transfer is informed by international nonproliferation norms. Although access to non-weapon uses of nuclear technology is guaranteed to non-nuclear weapon states party to the NPT, it is often assumed that civilian power projects mainly function in states of concern as a means of acquiring expertise and technology for secret weapon programs. The Swedish case suggests that the creation of an organization with the primary mission of providing electricity can lead to decisions that ultimately undermine the weapon option, especially with respect to technologies selected and safeguards.

This third consideration may apply to Iran too. Iran has chosen light water reactors for power generation and agreed to accept the International Atomic Energy Agency's (IAEA's) "93+2" (Part I) safeguards in addition to its NPT-mandated inspections.[66] Iran has also invited IAEA personnel to visit suspect sites not covered by its safeguards agreement, an invitation that was accepted in 1992, 1993, and 1997. That invitation remains open and is a significant complication for a covert weapon program.

This approach to nuclear transparency stems in part from Iran's eagerness for civilian nuclear technology. Iran's suppliers are also bound by norms codified in the NPT to avoid transferring any technology that could help Iran produce nuclear weapons. Since Russian sales to Iran will go forward despite U.S. opposition, the importance of exploiting the opportunity offered by these sales to affect domestic politics should not be ignored. It may even be the case that the cause of nonproliferation would have been better served if supplier states with better nonproliferation records had been permitted to sell civilian nuclear technology to Iran.

CONCLUSION

If my elaboration of Sagan's norms model is grounds for greater hope that nuclear nonproliferation efforts can succeed, it also suggests greater responsibilities on the part of some actors. Most obviously, while Sagan suggests a variety of norms that the nuclear weapon states might be willing to strengthen—not proliferating, not testing, not threatening non-nuclear weapon states, and not using nuclear weapons first, for example—he does not make clear that the norm that matters most in cases where proliferation is prevented is the one against having nuclear weapons at all. While domestic politics may involve actors opposing the acquisition of nuclear weapons on the grounds of promoting the norm against possession, the one way that nuclear weapon states can reinforce this norm is obvious. Although it is unlikely that states will defect from the nonproliferation regime simply to punish the nuclear weapon states, several states—including Sweden—gave up nuclear weapons with the understanding that they would be eliminated globally. In Sweden, that decision has become deeply ingrained as a constitutive norm, but in other cases the decision may be less clear cut.[67]

At the domestic level, there exist additional opportunities to prevent proliferation in appropriate cases. A variety of norms can reinforce the determination of anti-nuclear actors and give them more power, even when leaders and publics support acquiring nuclear weapons. In cases like Sweden and Japan, where norms require consensus, anti-nuclear actors still must make their case, for which they need access to information and expertise. In cases where norms are in flux, anti-nuclear actors also require the promotion of regulatory norms that will empower them through consensual decisionmaking. This consideration should inform not only nuclear and trade policies, but also the encouragement and assessment of democratization in states of concern. A more open debate is important for reinforcing anti-nuclear actors, but consensual decisionmaking norms—even under one-party dynasties, as in Sweden under the Social Democrats and Japan under the Liberal Democrats—may also make a decision against nuclear weapons more likely. The Russian model of democratization, with many undisciplined parties, is less attractive for this reason.

In a number of nuclear and threshold states, anti-nuclear actors do not have the political power to reverse proliferation. In fact, the very lack of regard for consensual decisionmaking in these countries is preventing the negotiation and signature of arms control agreements (in India and Pakistan) and the enactment of arms control agreements that have been signed (in the nuclear weapon states).[68] In these cases, it appears that domestic constitutive norms—their identities as nuclear weapon states—may now matter more than the promotion of international norms through disarmament, even as security concerns are relaxed.

[1] See, for example, John J. Mearsheimer, "Back to the Future: Instability in Europe after the Cold War," *International Security* 15 (Summer 1990), pp. 5-56; John J. Mearsheimer, "The Case for a Ukrainian Nuclear Deterrent," *Foreign Affairs* 72 (Summer 1993), pp. 50-66; Barry R. Posen, "The Security Dilemma and Ethnic Conflict," *Survival* 35 (Spring 1993), pp. 44-45; and Kenneth Waltz, *Nuclear Proliferation: More May Be Better*, Adelphi Paper No. 171 (London: International Institute for Strategic Studies, 1984). For a thorough overview of members of this school, see Tanya Ogilvie-White, "Is There a Theory of Nuclear Proliferation? An Analysis of the Contemporary Debate," *The Nonproliferation Review* 4 (Fall 1996), pp. 44-48.

[2] On these approaches, see Ogilvie-White, "Is There a Theory of Nuclear Proliferation?" pp. 48-55.

[3] Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security* 21 (Winter 1996/97).

[4] Peter J. Katzenstein, *Cultural Norms and National Security: Police and Military in Postwar Japan* (Ithaca, NY: Cornell University Press, 1996).

[5] Sagan, "Why Do States Build Nuclear Weapons?" p. 85.

[6] *Ibid.*, pp. 66-68.

[7] *Ibid.*, pp. 70-71.

[8] Katzenstein, *Cultural Norms and National Security*, p. 18. According to Katzenstein, norms are shared but changeable understandings of appropriate behavior and expressions of identity. They can be *regulatory* (defining appropriate behavior) or *constitutive* (expressing shared identity) and may affect relations within states (governments), between states and polities (governments and constituencies), or among states. Sagan's focus on just two of these accounts for his attempt to separate domestic politics from norms and the rather weak claim that he makes on behalf of the power of norms to change state behavior.

[9] Sagan, "Why Do States Build Nuclear Weapons?" pp. 76-80. Sagan also discusses the case of Ukraine renouncing nuclear weapons (pp. 80-82), but his discussion exaggerates Ukraine's ability to assume control of the weapons on its territory and is not germane to the issues identified in this paper.

[10] *Ibid*., p. 78.

[11] Reserve officers are viewed so favorably that they are often more successful as politicians or executives than other candidates despite having to serve one month every two years. Conscientious objection has been relatively uncommon.

[12] There are several good accounts of the Swedish case. Of these, only Prawitz claims that the decision was made primarily on security grounds, although his argument is that Swedish thinking followed changes in international norms through which the contribution of nuclear weapons to security were understood. Jan Prawitz, "Non-Nuclear is Beautiful, or Why and How Sweden Went Non-Nuclear," *Kungl Krigsvetenskapsakademiens Handlingar och Tidskrift* 198 (June 1994), p. 49.

[13] Here I am referring to the work of such authors as Mearsheimer, Posen, and Waltz, among others.

[14] This is inferred from Swedish contingency plans to admit NATO forces summarized in Paul M. Cole, *Sweden Without the Bomb: The Conduct of a Nuclear-Capable Nation Without Nuclear Weapons* (Washington, D.C.: RAND, 1994); and Paul M. Cole, *Atomic Bombast: Nuclear Weapon Decision Making in Sweden 1945-1972* (Washington, D.C.: Stimson Center, 1996).

[15] A proponent of the security model might attempt to finesse this question with the claim that Sweden always maintained the option to develop nuclear weapons on short notice as a hedge. This is simply untrue, as will be seen below.

[16] Alternatively, it could be argued that Sweden made a mistake by not following the prescription suggested by the security model, but was saved from the consequences by the robust NATO deterrent. This line of argument can only be accepted if the realist paradigm is meant to generate compelling but not always convincing policy proposals rather than to describe actual state behavior. Usually proponents make the latter claim.

[17] The most striking of these polls was conducted in December 1957. It first asked whether Sweden should resist an unnamed attacker. Of those who did not reply "yes" (35 percent), nearly half changed their opinion "if our armed forces were equipped with atomic weapons." Similar polls had been conducted beginning in October 1955, all showing Soviet nuclear weapons would reduce Swedes' will to resist. These polls are quoted extensively in P. Ahlmark, *Den svenska atomvapendebatten* (The Swedish Atomic Weapon Debate) (Stockholm: Aldus/Bonniers, 1965), pp. 105-107.

[18] Supreme commander's report for 1957 in Wilhelm Agrell, *Alliansfrihet och atombomber—kontinuitet och förändring i den svenska försvarsdoktrinen 1945-1982* (Non-alliance and atom bombs—continuity and change in the Swedish defense doctrine 1945-1982) (Stockholm: Liber, 1985), p. 218; also Mitchell Reiss, *Without the Bomb: The Politics of Nuclear Nonproliferation* (New York: Columbia University Press, 1988), pp. 51-52.

[19] Interviews with Swedish officers and officials cited in Reiss, *Without the Bomb*, p. 47.

[20] Reiss, *Without the Bomb*, pp. 52-53.

[21] Lars Wallin, "Sweden," in Regina Cowen Karp, ed., *Security With Nuclear Weapons? Different Perspectives on National Security* (Oxford: Oxford University Press, 1991), p. 368.

[22] Ahlmark, *Svenska atomvapendebatten*, p. 22.

[23] Statement to the Riksdag (Parliament), summarized in Wallin, *Sweden*, p. 369.

[24] Reiss, *Without the Bomb*, p. 48.

[25] Ahlmark, *Svenskaatomvapendebatten*, pp. 15, 23-24.

[26] *Sveriges socialdemokratiska kvinnoförbundskongressprotokoll* (Sweden's Social Democratic Women's Association Congress Protocol) (Stockholm: Sveriges socialdemokratiska kvinnoförbund, 1956).

[27] Wallin, "Sweden," p. 377.

[28] Tage Erlander, *Tage Erlander, 1955-1960* (Stockholm: Tidens Förlag, 1976), p. 54. In this sense, Sweden is similar to Germany and Japan as described by Katzenstein in *Cultural Norms and National Security*. Like Germany, but unlike Japan, Sweden was concerned not only with domestic constitutive norms when deciding about nuclear weapons, but also by international norms. The style of consensus-building in Germany and Sweden is less concerned with public opinion than in Katzenstein's Japan. For these reasons, the Swedish case suggests that international norms are more important than Katzenstein's Japanese case can demonstrate and that resistance to acquiring nuclear weapons in Germany is likely to be more robust than suggested by a prominent realist. Mearsheimer, "Back to the Future."

[29] A better known poll by SIFO (Swedish Institute for Opinion Research) that suggested a drop in support for nuclear weapons was not well designed. SIFO's December 1957 poll noted that the Supreme Commander's recommendation that nuclear weapons be acquired had support from some politicians and newspapers, then asked, "Do you believe that we ought to acquire atomic weapons for our armed forces or not?" Respondents were 43 percent in favor and 36 percent opposed. In 1959, SIFO simply asked, "What do you think is best for a country like Sweden: to have some sort of atomic weapons or to completely abstain from atomic weapons?" The result of referring to a constitutive norm ("a country like Sweden") instead of a regulatory norm (to accept what elites have already suggested might be a consensus opinion) was 51 percent opposed to nuclear weapons and 29 percent in favor. Ahlmark, *Svenska atomvapendebatten*.

[30] G. Dyrssen and G. Rapp, *Mål och Medel för Svenskt Militärt Försvar* (Ends and Means for Swedish Military Defense) (Stockholm: Seelig, 1961), cited in Wallin, "Sweden," p. 375.

[31] Agrell, *Alliansfrihet och atombomber*, p. 240.

[32] *Svenskatomenergipolitik—motiv och riktlinjer för statens insatser på atomenergiområdet 1947-1970* (Swedish atomic energy policy—motivations and guidelines for the state's efforts in the atomic energy field 1947-1970) (Stockholm: Ministry of Industry, 1970), pp. 5-6.

[33] *Ibid.* (for material in rest of paragraph).

[34] Reiss, *Without the Bomb*, p. 61.

[35] The strongest criticism of the defensive research program was Christer Larsson's. Larsson documents how far FOA progressed toward the capability to separate plutonium and fabricate a weapon, but acknowledges that FOA was subject to civilian control and that the risk of the option being exploited for weapons was therefore low. He also documents the thorough dismantling of the residual ability to produce weapons after Sweden signed the NPT in 1968. Christer Larsson, "Historien om en Svensk Atombomb, 1945-1972" (The History of a Swedish Atom Bomb, 1945-1972), *Ny Teknik*, April 25, 1985, pp. 55-83; in

JPRS-WER-85-012-L (27 June 1985). The Swedish Government investigated Larsson's claims and found that FOA had not violated its directives. O. Forsberg, *Svensk kärnvapensforskning 1945-72* (Swedish nuclear weapons research 1945-1972) (Stockholm: Ministry of Defence, 1987). Despite Larsson's assertion to the contrary, FOA never had any fissile material from Ågesta outside of safeguards. FOA officials (names withheld by request), communication with author, March 1996.

[36] A prototype extraction plant was built in the early 1950s and a full-scale plant capable of 120 tons per year was running in 1965. It was shut down in the early 1970s in accordance with a 1966 agreement with the United States that Sweden would use only U.S.-supplied fuel and be subject to IAEA inspections beginning September 15, 1966. *Agreement for Cooperation Between the Government of the United States of America and the Government of Sweden Concerning Civil Uses of Atomic Energy*, July 28, 1966, cited in Reiss, *Without the Bomb*, p. 72. See also Wallin, "Sweden," p. 291.

[37] Sweden received 9.3 kg of plutonium fuel samples and sources from the United States between 1957 and 1984. U.S. Department of Energy (DOE), *Plutonium: The First 50 Years* (Washington, D.C.: DOE, 1996), p. 72. Other transfers of plutonium included 10 grams from the United Kingdom and 100 grams from France. Wallin, "Sweden," p. 365; and Larsson, "Historien om en Svensk Atombomb," pp. 15, 38. Plutonium experiments began in 1965. *Ibid.*, p. 67.

[38] *Svenskatomenergipolitik*, cited in Wallin, "Sweden," p. 363.

[39] Wallin, "Sweden," p. 365. Of course, it was and is still hypothetically possible (though not likely) that Sweden could remove enriched uranium from its safeguarded nuclear plants to make weapons in a time of national emergency, as suggested by George Quester, "Sweden and the Nuclear Non-Proliferation Treaty," *Cooperation and Conflict* 5 (January 1970). Even that possibility will be removed if Sweden follows through on its mandated commitment to eliminate nuclear power by 2010.

[40] T. Larsson, "Reinterpreting the Bombast," *Washington Quarterly* 20 (Autumn 1997), p. 237. Larsson is the director of research at FOA.

[41] The Supreme Commander had been willing in 1957 to devote five percent of the defense budget to producing 10 nuclear weapons per year, despite this representing some 10 to 20 percent of the procurement budget and provoking second thoughts among the service chiefs, especially the navy. His estimate was based on the assumption that Marviken would be operating smoothly by 1968, which it was not. In the same year, FOA estimated that weapons could be fabricated from materials created at Ågesta three to four years after its expected start-up in 1960, but Ågesta was not ready until 1963.

[42] Larsson, "Historien om en Svensk Atombomb." Swedish officials told Reiss that the experiments had been concluded by the end of 1969, before the NPT entered into force in 1970. Reiss, *Without the Bomb*, pp. 74-77.

[43] Ten experiments were conducted with 10 grams of plutonium each. All remaining nuclear material of concern was transferred from the FOA facility in Studsvik in 1969-1970 for reprocessing in Belgium before being sold to Germany. Larsson, "Historien om en Svensk Atombomb," pp. 76, 84-85. None of the experiments involved fabricated components of a weapon and therefore would not have violated the NPT's language that prevents non-nuclear weapon states from conducting tests using weapons or their components. George Bunn and Roland Timerbaev, *Nuclear Weaponization Under the NPT: What is Prohibited, What can be Inspected, Who Should do it?* (Washington, D.C.: Program for the Promotion of Nuclear Nonproliferation, 1994).

[44] The program is discussed and denied by a Swedish official in Reiss, *Without the Bomb*, p. 76.

[45] Steve Coll, "Neutral Sweden Quietly Keeps Nuclear Option Open," *The Washington Post*, November 25, 1994, pp. 1, 42-46; and Steve Coll, "Sweden's Quiet Quest: Nuclear Arms Option," *International Herald Tribune*, November 26-27, 1994.

[46] Mazarr, for example, made the following factually incorrect assertion: "Sweden maintains nuclear-weapon capabilities beyond those commonly understood to mean complete and total disarmament." Michael J. Mazarr, "Virtual Nuclear Arsenals," *Survival* 37 (Autumn 1995), p. 8.

[47] A recent (March 1997) visit to the plant, which is near a residential suburb of Stockholm and surrounded by a golf course, a riding school and an historic park, reveals a site in poor condition with few signs of activity (not even routine maintenance of the grounds) within the security fence. Sweden's difficulties with waste disposal are reviewed in Rolf Lidskog, "The Politics of Radwaste Management in Sweden," *Acta Sociologica* 37 (1994), pp. 55-73.

[48] Erlander, *Tage Erlander*, pp. 94-98; and *Neutralitet, försvar, atomvapen—rapport till Socialdemokratiska partistyrelsen* (Neutrality, defense and atomic weapons—report to the Social Democratic Party committee) (Stockholm: Tidens Förlag, 1960). The minutes of the AWC were made public after the dissolution of the Soviet Union. Previously, the frank discussion of the Soviet threat was considered too sensitive given Sweden's non-alignment.

[49] Erlander, *Tage Erlander*, pp. 94-98. See also Wallin, "Sweden," pp. 377-78.

[50] Wallin, "Sweden," p. 369.

[51] Erlander told Mitchell Reiss in 1983 that he had not been convinced by the moral arguments of the anti-nuclear faction. Reiss, *Without the Bomb*, p. 60. In general, he showed impatience with the faction's leader, Inga Thorsson, on occasion shocking his colleagues by treating her rudely. Olof Ruin, *Tage Erlander: Serving the Welfare State, 1946-69* (Pittsburgh: University of Pittsburgh Press, 1990), pp. 166-67.

[52] This assessment was made in the supreme commander's report for 1947, cited in the seminal source on these reports for the period, Agrell, *Alliansfrihet och atombomber*.

[53] Supreme commander's report for 1957, in Agrell, *Alliansfrihet och atombomber*.

[54] Reiss, *Without the Bomb*, p. 64.

[55] Dyrssen and Rapp, *Mål och Medel för Svenskt Militärt Försvar*, cited in Wallin, "Sweden," p. 375; and Agrell, *Alliansfrihet och atombomber*, p. 166-67.

[56] Report of the 1965 Parliament Defence Commission, *Säkerhetspolitik och Försvarsutgifter* (Security Policy and Defense Expenditure), SOU 1968:10 (Stockholm: Defence Department, 1968); and the subsequent parliamentary document *Proposition 1968/110*. This document is discussed by the man who was Director General of FOA from 1957 until 1968 in Martin Fehrm, "Sweden," in Jozef Goldblat, ed., *Nuclear Proliferation: The Why and the Wherefore* (London: Taylor & Francis, 1985), pp. 217-219.

[57] Sagan cites Iran, Iraq, North Korea, and Libya as the most pressing. *Ibid.*, p. 84. Of these, only Iran shows important features of nuclear governance. Iran is also the most "pressing," since Iraq and North Korea are subject to special attention through, respectively, the United Nations and an Agreed Framework with the United States. Libya is generally not seen as a military or nuclear proliferation threat comparable to the other three.

[58] Sagan, "Why Do States Build Nuclear Weapons?" pp. 72-3. Article VI contains the commitment of the states parties to end the nuclear arms race at an early date and to seek verifiable nuclear and general and complete disarmament.

[59] Spector concludes that a primary motivation for those who hold this view is higher defense spending. Leonard S. Spector, "Neo-nonproliferation," *Survival* 37 (Spring 1995).

[60] Voice of the Islamic Republic of Iran, 9 February 1995, cited in BBC/ME/2225 MED/9, 11 February 1995.

[61] Voice of the Islamic Republic of Iran, 8 February 1994, cited in BBC/ME/1918 MED/3, 10 February 1994.

[62] According to one report, U.S. officials think Iran's alleged program to develop nuclear weapons was shelved in 1995. Joseph Fitchett, "Ousting Iranian, Russia Signaled US on Arms," *International Herald Tribune*, December 9, 1997, pp. 1, 4. For the claim that the cabinet and legislature has become less enthusiastic about civilian nuclear power since Khatami's election, see Mark Hibbs, "Amrollahi Ouster Challenges Stalled Bushehr PWR Project," *Nucleonics Week*, October 9, 1997, p. 12.

[63] For a remarkable example of two contradictory articles in the same journal, see Milton Viorst, "The Limits of the Revolution," *Foreign Affairs* 74 (November/December 1995); and Charles Lane, "Germany's New Ostpolitik," *Foreign Affairs* 74 (November/December 1995).

[64] Deputy Foreign Minister Mohammad Javad Larijani, sometimes accused of coordinating foreign procurement of materiel for the alleged nuclear weapon program: "Iran is entitled to produce nuclear weapons. But the question is: What is the use of this if it is going to increase our obligations and will not ensure our security for us?" Zaki Shihab, *Al-Wasat*, 9-15 October 1995, pp.

20-21; in FBIS-TAC-95-006 (6 December 1995), p. 55. An official Iranian newspaper similarly concluded in an editorial that nuclear weapons decrease the security of weak states like Iran. "Work on an Alternative," *Kayhan International*, 7 July 1993; in FBIS-NES-93-136, (19 July 1993), pp. 74-75.

[65] Eric Arnett, "Beyond Threat Perception: Assessing Military Capacity and Reducing the Risk of War in Southern Asia" in Eric Arnett, ed., *Military Capacity and the Risk of War: China, India, Pakistan and Iran* (Oxford: Oxford University Press, 1997).

[66] Mark Hibbs, "Iran agrees to monitoring under 93+2, Part I safeguards," *Nuclear Fuel*, January 13, 1997. Iran reiterated its intention to accept "93+2" safeguards at the IAEA's 1997 general conference and at a meeting between Director General Hans Blix and then-President Rafsanjani, but has not yet concluded the required agreement.

[67] Indeed, on the few occasions when Iranian officials have publicly advocated acquiring nuclear weapons, they have cited the failure of international norms. Most famously, then-Speaker of the Majlis Rafsanjani: "The moral teachings of the world are not very effective when war reaches a serious stage; the world does not respect its own resolutions, and closes its eyes to the violations ... We should fully equip ourselves in the defensive and offensive use of chemical, bacteriological and radiological weapons." "Hashemi-Rafsanjani Speaks on the Future of the IRGC Islamic Revolutionary Guard Corps," Tehran Radio Domestic Service, 6 October 1988; in FBIS-NES (7 October 1988), p. 52. In the 1990s, Iranian leaders have reiterated their appeal to norms without explicitly condoning the acquisition of nuclear weapons. Then-Deputy President Ataollah Mohajerani, thought to be one of the cabinet's nuclear hawks: "If the Zionist regime has the right to possess nuclear weapons, then all Moslem countries have this right as well." *Abrar*, 2 November 1991. This and a number of similar statements citing international norms are catalogued in Shahram Chubin, *Iran's National Security Policy: Capabilities, Intentions and Impact* (Washington, D.C.: Carnegie Endowment for International Peace, 1994), pp. 52-53; and Shai Feldman, *Nuclear Weapons and Arms Control in the Middle East* (Cambridge, MA: MIT Press, 1997), pp. 137-138.

[68] The difficulties of ratifying START II and the test ban are well known. The domestic politics of arms control in India and Pakistan is discussed in Eric Arnett, ed., *Nuclear Weapons and Arms Control in South Asia after the Test Ban*, SIPRI Research Report No. 14 (Oxford: Oxford University Press, 1998).