

## Much Ado about Nothing?

### Status Ambitions and Iranian Nuclear Reversal

*Andrew Prosser*

#### Abstract

The prospect of Iran obtaining nuclear weapons remains a prominent regional and global security issue. In recent years, the election of a new Iranian president and a landmark nuclear deal limiting Iran's nuclear activities have fueled optimism that Iran will not get the bomb. Yet skepticism persists in expert and official circles over Iran's nuclear intentions. How can Iran's nuclear path be explained, and what factors could foster nuclear reversal? This article proposes a sociological perspective on states' nuclear choices. Notably, international standing is frequently pursued not for military power but for achievements such as cooperative diplomacy, upholding global rules, and advocacy for progressive reform. When controversial nuclear pursuits endanger highly valued status goals, states become less favorable to having nuclear weapons. Existing studies also highlight how an improving external security environment can facilitate nuclear reversal, yet this article offers a hybrid explanation combining status and security threat reduction. The present research suggests that Iran is not on an inexorable path toward nuclear acquisition. In particular, global policies that encourage nonnuclear status conceptions and diminish the security incentives for going nuclear would reduce the likelihood of a nuclear-armed Iran.<sup>1</sup>

\* \* \* \* \*

Iran's nuclear program has been one of the foremost global security issues of the twenty-first century. According to the director-general of the International Atomic Energy Agency (IAEA): "a range of activities relevant to the development of a nuclear explosive device were conducted in Iran

---

Andrew Prosser is a senior analyst with the United Nations Interregional Crime and Justice Research Institute (UNICRI) based in Geneva, Switzerland. He received his doctorate from the Graduate Institute of International and Development Studies in Geneva and is a recipient of the Herbert Scoville Peace Fellowship and the Tokyo Foundation Fellowship. The views expressed in this article are those of the author and do not necessarily reflect those of the United Nations or any affiliated institution.

prior to the end of 2003 as a coordinated effort, and some activities took place after 2003.”<sup>2</sup> In some cases analysts and officials have gone so far as to contemplate military strikes to counteract Iran’s nuclear efforts.<sup>3</sup> For years, atomic diplomacy faltered and international condemnation and sanctions ratcheted up the political and economic pressures on Iran over its nuclear activities.<sup>4</sup> However, the 2013 election of Iranian Pres. Hassan Rouhani and the 2015 signing of the Joint Comprehensive Plan of Action (JCPOA) between Iran and China, France, Germany, Russia, the United Kingdom, the United States, and the High Representative of the European Union for Foreign Affairs and Security Policy augmented hopes of easing nuclear tensions and Iran staying nuclear weapons-free.<sup>5</sup> While IAEA and US assessments indicate that Iran scaled back its nuclear bomb efforts years ago, concerns have lingered among experts and policymakers that Iran could acquire nuclear arms.<sup>6</sup>

Much analysis of the Iran nuclear issue is plagued by problems such as threat inflation and ideological bias in assessing the merits of specific nonproliferation policies—which may be relatively more cooperative or confrontational. As a result, systematic exploration of the nuclear puzzle in terms of the various potential motivating factors is needed now as much as ever. How can states’ nuclear decisions be explained, and what factors influence Iran’s nuclear choices?

This article holds that when a state does not covet power status but rather emphasizes less forceful means of setting its status apart from other states, it facilitates nuclear reversal.<sup>7</sup> *Nuclear reversal* occurs when a state aspiring to have nuclear weapons, or even possessing them, gives up its nuclear ambitions and any nuclear weapons it has.<sup>8</sup> *Status* may be defined as a state’s assessed position in a valued international or regional hierarchy.<sup>9</sup> Status and prestige are often cited as nuclear incentives,<sup>10</sup> but status explanations for nuclear policy could be more fully articulated, particularly for forms of status that are incompatible with nuclear designs. The quest for status does not inevitably favor nuclear weapons. While status deficiencies may spur frustration and power aggrandizement, states frequently prefer status for alternative endeavors such as cooperative diplomacy, upholding global rules, and progressive reform. When controversial nuclear pursuits endanger important status goals, states become favorable to nuclear reversal.

In addition, studies have demonstrated that external security factors also play a role: as a state’s security environment improves and the prospect

of armed conflict diminishes, the perceived utility of a nuclear deterrent declines and this favors nuclear reversal.<sup>11</sup> Consequently, an explanatory framework incorporating both status and security threat reduction offers a better account of nuclear reversal than either status or security alone.

The article proceeds by first discussing the link between status, sociology, and nuclear choices. Next, it presents the concept of nuclear reversal and the various pathways to reversal. It then applies the approach to derive insights on Iran's nuclear choices and how nuclear reversal could happen. A final section offers some theoretical and policy conclusions, while also assessing the potential impact of the Iran nuclear deal (JCPOA). Overall, the research suggests that Iran is not on an inevitable path toward nuclear acquisition. In particular, global policies that promote nonnuclear status conceptions and diminish the security incentives for nuclear weapons would reduce the likelihood of Iran getting the bomb.

### **Status-Based Sociological Perspective on Nuclear Choices<sup>12</sup>**

Existing nuclear explanations provide useful insights, but a status-based sociological perspective merits further consideration.<sup>13</sup> Indeed, nuclear choices are made by humans (state leaders) in a social sphere (world politics) where interstate interaction makes attentiveness to relative position almost inevitable. Governments care a great deal about their standing in comparison to other states, which can bring better international treatment, influence, and self-esteem.<sup>14</sup> Scholars are increasingly discovering the importance of status motivations in state behavior, due in part to growing research evidence that humans are intrinsically driven to seek social standing and care about their relative position.<sup>15</sup> At times, states will openly express their interest in status in international affairs. For example, Japan's Foreign Ministry has characterized its diplomatic efforts as "a way to enhance its international status," and its annual diplomatic reports have repeatedly alluded to Japan's global standing.<sup>16</sup> Similarly, when Brazil was awarded the 2016 Olympic games, Pres. Luiz Inácio Lula da Silva wept as he declared that Brazil had moved from being a "second-class country to a first-class country" and had begun "to receive the respect we deserve."<sup>17</sup> In many other instances it is plausible that status motives are kept concealed—especially on matters of national security. However, the global nuclear landscape appears less

puzzling when one accounts for the diverse array of status aspirations driving states to improve their position in relation to others.

To comprehend nuclear choices, one can look to sociological notions that Johan Galtung seminally applied to international politics.<sup>18</sup> Sociologists have shown that in a stratified social system with differing levels of individual accomplishment across multiple dimensions (for example, occupation, income, education), status disequilibria can be destabilizing.<sup>19</sup> In an achievement-oriented world, individuals with low status across the board will not perceive much entitlement to higher status. But those with higher status on some dimensions that contrast with other status shortfalls are reminded of their relative deprivation due to differential treatment. Such disequilibria create tensions between expected status and treatment and what one actually receives, causing frustration and aggressive attempts to augment one's status—and even change the structure of the system.<sup>20</sup> For example, sociologist Gary Rush has demonstrated that individuals whose occupational, income, and educational statuses are divergent are more prone to right-wing extremism.<sup>21</sup>

In the international arena, Galtung postulates that states experiencing status disequilibria will resort to aggression as a status-gratifying tool, unless alternative status channels allow upward mobility through less provocative measures.<sup>22</sup> As Galtung writes, “it is socially guaranteed, by the very structure of the system, that the disequilibrated is never left in peace with his disequilibrium. . . . In this unstable situation he has both the resources and the inner justification needed for acts of deviance.”<sup>23</sup> The current article extends this logic, arguing that state leaders' frustration with what they view as their state's inadequate status may reinforce nuclear ambitions.<sup>24</sup> Nuclear weapons could be viewed as a direct and appealing means of overcoming status deficiencies. The inherent system-changing capability might entice states yearning for status gratification.<sup>25</sup> Table 1 lists some notable status dimensions.

Which status deficiencies are potent enough to spur nuclear weapons interests?<sup>26</sup> First, nonnuclear *major powers* should perceive an appreciable deficiency when other states have nuclear weapons. Because of their extraordinary overall status, the major powers display a heightened sensitivity to power status discrepancies with other states. Particularly when other states go nuclear, major powers feel entitled to similarly equilibrate their status to this higher level. In this way, policy analyst Klaus Schubert likens France's nuclear trajectory to “the struggle of the

*grande nation* to achieve the position to which it is rightfully entitled in the hierarchy of world powers.”<sup>27</sup>

**Table 1. Status dimensions in world politics**

Status type	Primary indicators
Autonomy	<ul style="list-style-type: none"> <li>• Percent of policy decisions not influenced by external coercion or pressure</li> </ul>
Diplomatic-political	<ul style="list-style-type: none"> <li>• Diplomatic recognition by other states</li> <li>• Mediation/negotiations involvement</li> <li>• International organization participation rate</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Gross Domestic Product (GDP)</li> </ul>
Economic development	<ul style="list-style-type: none"> <li>• GDP per capita</li> </ul>
Population	<ul style="list-style-type: none"> <li>• Population size</li> </ul>
Power	<ul style="list-style-type: none"> <li>• UN Security Council permanent seat</li> <li>• Conventional military capabilities</li> <li>• Nuclear weapons possession</li> </ul>
Progressive reformer	<ul style="list-style-type: none"> <li>• Amount of foreign humanitarian and development assistance provided</li> <li>• Promotion of progressive norms/causes: social justice, poverty reduction, human rights, environment/climate protection</li> </ul>
Rule defender	<ul style="list-style-type: none"> <li>• Compliance with international law</li> <li>• Protecting rule-based international system</li> </ul>
Technical-scientific	<ul style="list-style-type: none"> <li>• Number of scientists/engineers</li> <li>• Number of high-technology companies</li> <li>• Number of Nobel prizes in sciences</li> </ul>
Territory	<ul style="list-style-type: none"> <li>• Total geographical area</li> </ul>

Second, near-major powers that have high overall status but lack a permanent UN Security Council seat will perceive a status deficiency, especially when they do not possess nuclear arms but other states have them. This inconsistency breeds frustration, as such states already experience preferential treatment due to considerable accomplishments in other areas. Nuclear weapons will be favored to aggressively overcome this status deprivation. For example, India’s nuclear weapons acquisition can be traced to the discrepancy between exceptional Indian status accomplishments on the one hand and on the other its absence from the “closed club of the five permanent members of the U.N. Security Council” as well as perceived discrimination of India as a nuclear “have-not” by the Nuclear Non-Proliferation Treaty (NPT)-recognized nuclear “haves.”<sup>28</sup>

Third, diplomatic recognition is a key status indicator in world politics. Hence isolated states experience status deprivation due to their minimal diplomatic status, which can be exacerbated by the perception that upward status mobility is circumscribed.<sup>29</sup> Particularly where status accomplishments such as technical-scientific or other achievements confer the needed impetus, nuclear weapons will appear as an attractive status device for a diplomatic pariah.<sup>30</sup> Exemplifying the status frustration of isolation, when North Korea announced plans for its October 2006 nuclear test it decried foreign efforts to isolate it. An official statement read: “[u]nder the present situation in which . . . U.S. moves to isolate and stifle the DPRK have reached the worst phase, going beyond the extremity, the DPRK can no longer remain an on-looker to . . . [these] developments.”<sup>31</sup>

As key status deficiencies diminish, states should be more favorable to a nonnuclear posture. It can likewise be observed that—often due to historical or cultural influences—many states prefer alternative (non-power-based) forms of international standing. Specifically, states often seek to set themselves apart through cooperative diplomatic efforts, promoting global rules, or progressive reform. Controversial nuclear pursuits can thwart these status objectives, especially since the international nuclear nonproliferation norm’s emergence several decades ago, which stigmatized nuclear proliferation as an improper action—a violation of international rules. The prevalence of non-power-based status notions, and the fact nuclear weapons can harm these status ambitions, help explain why many states opt for nuclear reversal.

When do status priorities favor nuclear reversal? First, diplomatic integration dampens a state’s nuclear weapons affinity, due to status fulfillment and the tendency of integrating states to value status for cooperative diplomacy and defending international rules. Particularly since the emergence of the global norm against nuclear proliferation, having nuclear arms jeopardizes these status priorities. Second, middle states embracing multilateralism, international compromise, and good global citizenship prefer status for cooperative diplomatic action, protecting international rules, and progressive reform.<sup>32</sup> In the shadow of the nuclear nonproliferation norm, middle states are unlikely to want nuclear arms because they endanger these key status goals. Lastly, military delegitimization decreases a state’s favorability to having nuclear weapons. The hierarchy of power permeates military preferences as a result of the

assigned functions militaries perform; when domestic military legitimacy falls, nuclear weapons should become less compatible with, and even harmful to, the state's status objectives.

## Nuclear Reversal Pathways

Analysts and commentators usually focus on nuclear proliferation and crisis in the nonproliferation regime.<sup>33</sup> This can be misleading, since the rate of nuclear reversal in world politics is surprisingly high—much higher in recent decades than the incidence of new nuclear aspirants or possessor states.<sup>34</sup> As noted earlier, nuclear reversal occurs when a nuclear aspirant state, or even a nuclear possessor state, gives up its nuclear ambitions and any nuclear weapons it has. Of the 31 states that have at least had nuclear ambitions since 1945, more than 20 have undertaken nuclear reversal.<sup>35</sup> Table 2 lists the states that have engaged in nuclear reversal.

**Table 2. Nuclear reversal since 1945**

State	Year of reversal	State	Year of reversal
Algeria	1992	Japan	1970 (1995)
Australia	1973	Libya	2003
Argentina	1990	Norway	1950
Brazil	1990	Romania	1989
Canada	1945 (1958)	Saudi Arabia	2004
Egypt	1970 (1981)	South Africa	1991
Germany (Federal Republic of Germany)	1960	South Korea	1982
Indonesia	1965	Sweden	1972
Iran	1979 (n/a)	Switzerland	1969
Iraq	2003	Taiwan	1988
Italy	1957	Yugoslavia	1987

*Note:* South Africa is the only nuclear possessor that engaged in nuclear reversal. Canada, Egypt, and Japan briefly restarted nuclear deliberation some years after their first nuclear reversal and then engaged in reversal a second time. These three episodes of re-nuclearization lasted only one to two years in each case. The year of each state's second reversal is listed in parentheses. Iran was the only state that maintained nuclear aspirations as of the end-year for our global data (2007), after its nuclear aspirations reemerged in 1984. The former Soviet states of Belarus, Kazakhstan, and Ukraine did give up the nuclear arms on their territory but they are not included here because they did not independently control the weapons, which were Soviet holdovers inherited with statehood upon the fall of the Soviet Union in the early 1990s. For coding details, see Andrew Prosser, "Nuclearization and Its Discontents: Status, Security, and the Pathways to Nuclear Reversal" (PhD diss., Graduate Institute of International and Development Studies, Geneva, 2010).

Clearly, states' nuclear choices are susceptible to restraining influences. Which factors might play a role? Nuclear policy expert Ariel E. Levite insightfully claims that nuclear reversal results from "a combination of factors, the exact combination of which varies between the cases . . . and over time."<sup>36</sup>

Therefore analysts wishing to elucidate why nuclear reversal happens are tasked with identifying the different constellations of variables, or pathways, which may lead states to abandon their nuclear weapons pursuits. The following pathways combine status with security developments—as well as the influence of the nuclear nonproliferation norm—enumerating the hypothesized routes a state may follow to nuclear reversal.<sup>37</sup>

### **Reversal Pathway 1: Diplomatic Integration**

Status-seeking is a pervasive phenomenon in global affairs, but it can be pursued in highly disparate ways. Notably, diplomatic integration tends to be associated with nonnuclear approaches to status enhancement. Two different status arguments help explain why integrating states are prime candidates for nuclear reversal. First, lessening diplomatic isolation signifies the easing of a key source of status deprivation in international politics. Diplomatic integration alleviates the systemically derived frustration of isolation and confers status in the form of participation in regional and international diplomatic interaction and a more palpable sense of belonging to a global diplomatic community, making the state's leadership less apt to covet nuclear weapons as a forceful means to augment status. Second, states that integrate diplomatically can be expected to display a predilection for status-garnering activities that favor the existing global order, such as cooperative diplomatic engagement and defending international rules. These status preferences go hand-in-hand with nuclear reversal because controversial nuclear weapons pursuits can jeopardize such status priorities—especially in the shadow of the nuclear nonproliferation norm.<sup>38</sup>

As argued above, security threat reduction also tends to be fundamental in promoting nuclear reversal. When external security challenges fade, state leaders have fewer justifications for a nuclear arsenal to deter or counteract armed violence. Particularly when the threat of interstate conflict recedes, reversal becomes more likely. The incidence of interstate disputes a state is involved in provides a key indication of its security threat environment.<sup>39</sup> Hence, pathway 1 dictates that diplomatic integration, when combined with a decline in a state's interstate disputes, will increase the likelihood of nuclear reversal.<sup>40</sup>

Quite a few diplomatically integrating states have chosen a nonnuclear path, and empirical investigation suggests that Libya and South Korea, as well as former nuclear possessor South Africa, followed this reversal



pathway. For example, South Africa terminated its nuclear weapons program and dismantled its small atomic arsenal in the early 1990s. While improving regional security conditions facilitated this process, status motivations were integral to South Africa's nuclear turnaround. During the apartheid era, South Africa's diplomatic isolation and exclusion from global political and scientific circles increasingly bred dissatisfaction and the perception that its international treatment was incommensurate with the country's past diplomatic accomplishments, scientific and economic achievements, and professed role as a leader in Africa.<sup>41</sup> As analyst Robert S. Jaster points out, the "perceived failure of South African diplomacy . . . led to frustration and impatience on the part of successive South African prime ministers."<sup>42</sup> An inability to counter its faltering international standing fueled relatively forceful approaches to status-seeking, notably, nuclear arming.<sup>43</sup> However, Pres. F. W. de Klerk's historic domestic reforms brought new opportunities to bolster South Africa's beleaguered status in ways that were impracticable with discriminatory domestic policies abhorred by other states. South Africa prioritized more cooperative, non-power-based forms of international standing such as diplomatic-political engagement when such status avenues appeared within reach. De Klerk told the parliament in June 1990: "[T]he prospect of once again playing a full and unrestricted role in the international community holds out the promise of immense . . . benefits for our country and all its people. . . . We have a right to make our voice heard in the councils of the nations. . . . We must . . . secure for our country its rightful place in the community of nations."<sup>44</sup> Evidently, South Africa sought to repair its international relations and cultivate its status as a responsible diplomatic actor partly to ensure external support for a peaceful domestic transition and to avoid sliding into a downward spiral of internal conflict that could destabilize the country.<sup>45</sup> Its nuclear reversal took place mainly because the political leadership understood that nuclear weapons—in violation of the global nuclear nonproliferation norm—would imperil the rehabilitation of South Africa's status in the world community.<sup>46</sup>

## Reversal Pathway 2: Middle State Status Ambitions

*Middle states* are nonmajor powers that attempt to preserve global peace and stability and shape global affairs through multilateralism, diplomatic action and international compromise, and exercising soft power

rather than military force. Middle states' foreign policies emphasize conflict resolution and mediation, UN peacekeeping, and aspiring to be "good international citizens."<sup>47</sup> These states covet international status for cooperative diplomacy and protecting global rules from violations by even the most powerful states. They also prefer to gain status through advocacy for progressive reform, including efforts toward social justice and overseas development assistance.<sup>48</sup> Nuclear weapons are unattractive for middle states since the inception of the nuclear nonproliferation norm, as having the bomb could be seen as threatening global rules and stability and thus undermine status objectives. Crucially, pathway 2 identifies middle states as being likely to exercise nuclear reversal once global nonproliferation views stigmatized proliferation as a violation of international rules and norms beginning in the 1960s. Hence this nuclear reversal pathway was common in the 1960s and 1970s but it is less so today.<sup>49</sup>

Just as in the first reversal pathway, security threat reduction similarly influences nuclear reversal in pathway 2. Thus, in this pathway a decline in a state's interstate disputes (as described in pathway 1 above), together with middle state status priorities as of the 1960s, should augment the likelihood of nuclear reversal.

For example, empirical inquiry suggests that Sweden and Switzerland both followed the middle state path to nuclear reversal. Notably, a major thrust in Sweden's postwar foreign policy was to exert diplomatic leadership as a Cold War peacemaker and fortify its stature as a promoter of the rule of law and progressive causes.<sup>50</sup> Accordingly, Sweden critiqued the respective US and Soviet military interventions in Vietnam and Czechoslovakia as well as advocated in international fora for ending the superpower arms race, poverty reduction, and social justice. As political scientist Christine Agius observes, "Sweden saw the UN as a platform to project its particular brand of internationalism which was to give it the label of an 'active neutral.' . . . Swedish participation in the UN has tended to revolve around a number of issues, such as mediation and peacekeeping, disarmament, and development. Sweden was also a key critic of superpower behaviour in the UN."<sup>51</sup> When the international normative proscription on nuclear proliferation materialized in the 1960s, Sweden appears to have abandoned its nuclear weapons aspirations to avoid damaging its middle state status. Security threat reduction also affected Sweden's changing nuclear attitudes during this time,

as military confrontation with the Soviet Union became less palpable and the progress of détente made Swedish embroilment in a superpower conflict less likely.

### **Reversal Pathway 3: Military Delegitimization**

*Military delegitimization* means the military's perspectives on status hold less sway over government policy. When domestic military legitimacy falls, nuclear weapons tend to become less desirable and lose their importance to official status aspirations. Pathway 3 holds that a substantial downturn in the amount of government resources devoted to the military (as a share of GDP) is a primary indicator.<sup>52</sup>

As with the earlier pathways, diminishing security threats are recognized to be conducive to nuclear reversal as well. Overall, pathway 3 stipulates that military delegitimization, in tandem with a decline in a state's interstate disputes (as described above), should enhance the likelihood of nuclear reversal.

For instance, empirical evidence from Brazil and Argentina—and perhaps Germany and Japan—points toward this nuclear reversal path. As political scientist Gamaliel Perruci has noted: “Brazil, in its drive for super power status under military rule (1964–85), placed strong emphasis on military might as a source of prestige and political independence.”<sup>53</sup> Brazil's military rulers wielded nuclear ambitions for years while disparaging the international nonproliferation regime as an attempt by external powers to deprive Brazil of its rightful power status.<sup>54</sup> According to professor Jean Krasno, “Brazil's leaders . . . expressed the intent to develop nuclear weapons primarily as a symbol of attaining world-power status.”<sup>55</sup> A persuasive argument holds that Brazil ultimately reversed its nuclear designs when the Brazilian military's status conceptions were discredited along with the downfall of the military regime in the 1980s. This domestic transition relegated notions of power status to a lesser priority than diplomatic-political and economic status objectives. Security trends also encouraged Brazil's nuclear reversal, which notably occurred amid an accelerating bilateral rapprochement between Brazil and Argentina: an agreement was concluded in 1979 to resolve disputes in the Plate River area and all Brazilian interstate dispute involvement ceased by the late 1980s.<sup>56</sup>

## Impact of Nonproliferation Norms

Observers have claimed that the global nuclear nonproliferation norm has facilitated nuclear restraint.<sup>57</sup> But existing explanations are not always satisfying. The nuclear nonproliferation norm is influential for many states because it magnifies incongruities between nuclear weapons and certain highly valued status goals. All other things being equal, the nonproliferation norm is expected to increase the perceived benefits of reversal, especially for states favoring diplomatic-political, rule defender, and progressive reformer status, as it associates nuclear weapons with improper behavior and flouting international rules and norms. In contrast, earlier nuclear norms in the 1940s and 1950s were largely connected to the perceived tactical military advantages of nuclear arms as well as notions of scientific and economic advancement. This meant nuclear weapons were often viewed less as a status burden and more as bolstering international status in the early nuclear era.<sup>58</sup> In our reversal pathways, the nonproliferation norm applies from the 1960s onwards.<sup>59</sup> Table 3 summarizes the different pathways that are hypothesized to lead to nuclear reversal.

**Table 3. Pathways to nuclear reversal**

Pathway	Description
Diplomatic integration	<ul style="list-style-type: none"><li>• Evolving status interests along with diplomatic integration AND</li><li>• Security threat reduction</li></ul>
Middle state status ambitions	<ul style="list-style-type: none"><li>• Middle state status interests (especially upon emergence of nuclear nonproliferation norm) AND</li><li>• Security threat reduction</li></ul>
Military delegitimization	<ul style="list-style-type: none"><li>• Evolving status interests along with military delegitimization AND</li><li>• Security threat reduction</li></ul>

*Note:* *Ceteris paribus*, reversal becomes more likely upon the emergence of the nuclear nonproliferation norm in the 1960s. The pathways do not appear to be applicable for major powers or near-major powers that already possess nuclear arms.

Notably, even a cursory examination suggests the major powers operate with a distinct nuclear logic.<sup>60</sup> The reversal pathways laid out above are not considered to be applicable to the major powers—at least not in the present international context.<sup>61</sup> Such powers are less likely to forgo nuclear arsenals, chiefly because of aversion to an expected power status deficiency. These states would perceive nuclear reversal as downgrading their international standing and treatment, since they are accustomed to first-rank status. According to our approach, major power reversal would

in all likelihood require a substantial shift in the most powerful states' notions of what it means to be a leading world power. For instance, one incremental step might be if these states were to significantly lessen the role of nuclear arsenals in their respective national security doctrines.<sup>62</sup>

According to our study Iran still qualified as a nonpower at the outset of the twenty-first century. Despite some data limitations, in more recent years Iran has in all likelihood reached the near-major power level in terms of its military and economic capabilities and its sizeable population of around 80 million people.<sup>63</sup> These comparatively high-status achievements can be expected to reinforce Iran's sense of status entitlement and its susceptibility to frustration as a result of the nonpossession of the trimmings of power status that the major powers already have, such as nuclear arms and permanent UN Security Council membership. As discussed below, there are revealing indications that such near-major power status dynamics are present in Iran's case. Nevertheless, it is clear that nuclear reversal is feasible even for near-major powers—particularly those that have not yet crossed the nuclear acquisition threshold. For example, Brazil, Germany, and Japan are all near-major powers that have forsworn nuclear ambitions. We now turn to exploring Iran's nuclear path in light of the approach presented above.

### **Examining Iran's Nuclear Path<sup>64</sup>**

Despite an inevitable degree of uncertainty, a reasonable understanding of the history of Iran's nuclear endeavors is possible based on open-source information. The beginnings of Iran's involvement in the nuclear field can be traced to the reign of Shah Mohammad Reza Pahlavi. Iran received civilian nuclear assistance as early as the 1950s through cooperation with the United States under the Atoms for Peace program. A small nuclear research reactor purchased from the United States began operating in Tehran in 1967.<sup>65</sup> Iran signed the Nuclear Non-Proliferation Treaty in 1968 and ratified it in 1970.

Iran's nuclear efforts expanded in the 1970s as the shah set up the Atomic Energy Organisation of Iran (AEOI) in 1974 and plans were made for an ambitious nuclear energy program consisting of at least twenty nuclear reactors.<sup>66</sup> Although some sources assert that a clandestine nuclear arms project was begun in the 1970s, it is not clear that an actual decision to get the bomb was made during this phase.<sup>67</sup> Akbar Etemad, the head of the AEOI between 1974 and 1978, has said that

while the shah “didn’t want nuclear weapons” the Iranian nuclear program at the time was not to exclude the possibility of acquiring them in the future and aimed to pursue a range of relevant nuclear technologies.<sup>68</sup> On balance, there is sufficient evidence to categorize Iran as having nuclear aspirations in the mid- to late-1970s. Its nuclear activities were subsequently interrupted in part as a result of the 1979 revolution and the start of the Iran-Iraq War.

Under the Khomeini regime Iran’s nuclear initiatives increased markedly in the mid-1980s. In 1984, amid the ongoing war with Iraq, Iran established a new nuclear research center at Esfahan.<sup>69</sup> There are indications of secret nuclear work during this period aiming at increasing Iran’s technical capabilities relating to nuclear armaments.<sup>70</sup> From at least the late 1980s and into the 1990s Iran received nuclear weapons-related designs, drawings, and uranium centrifuge components from the illicit A.Q. Khan procurement network.<sup>71</sup> In the civilian nuclear sphere, Russia provided technical assistance to Iran in the 1990s and worked to rebuild a partially completed nuclear power reactor at Bushehr which had been damaged during the Iran-Iraq War.<sup>72</sup>

In 2002, the existence of a clandestine uranium enrichment complex at Natanz and heavy water facility at Arak was revealed. Thereafter the IAEA repeatedly cited Iran’s noncompliance with its safeguards obligations and expressed concerns about potential military dimensions of Iran’s nuclear activities.<sup>73</sup> In 2013, it declared, “since 2002, the Agency has become increasingly concerned about the possible existence in Iran of undisclosed nuclear related activities . . . including activities related to the development of a nuclear payload for a missile.”<sup>74</sup> In late 2015, the IAEA determined that Iran had a coordinated nuclear weapons program prior to the end of 2003.<sup>75</sup> But it also judged that Iran had scaled back its nuclear weapons activities since 2003, and the US government has assessed that in recent years Iran has not made any decision to acquire nuclear arms.<sup>76</sup> While Iran has stated its nuclear activities are exclusively peaceful, the evidence presented here suggests that, for the past several years, it has attempted to keep its nuclear options open by working on its technical capacities relating to nuclear weapons without actually seeking to build the bomb.

Overall, Iranian nuclear aspirations have reasonably existed from 1974 to 1979 as well as from 1984 onwards. Based on IAEA safeguards

and US national intelligence reports, it is also warranted to categorize Iran as a nuclear weapons pursuer from 1989 to 2003.<sup>77</sup>

### **Iran's Nuclear Motivations**

Any investigation into Iran's nuclear decision-making must admit the challenges posed by the limits of available information and secrecy. Nevertheless, there exists substantial evidence that status and security influences have played a fundamental role in Iran's nuclear choices.

As regards security motives, Iran's involvement in interstate disputes increased from the mid-1960s to the mid-1970s.<sup>78</sup> Notably, tensions existed with neighboring Iraq in connection with the disputed Iran-Iraq border and the Kurdish conflict. The shah's navy patrolled the region's seas, in line with the Nixon Doctrine, in the shadow of rivalry with the nuclear-armed Soviet Union and absent a reliable security guarantee from a nuclear power.<sup>79</sup> Due in part to security concerns, Iran engaged in a massive military buildup in the 1960s and 1970s—a period overlapping Iran's initial nuclear weapons interest.<sup>80</sup>

Upon resuming its nuclear aspirations in the mid-1980s, Iran was in the midst of a devastating war with Iraq in which hundreds of thousands of Iranians died and the Saddam Hussein regime attacked Iran using chemical weapons. Additionally, in the years following the 1979 Iranian revolution and the hostage crisis, Iran was involved in hostile altercations with the nuclear-armed United States.<sup>81</sup> Iran's interstate dispute involvement peaked in the late 1980s.<sup>82</sup> Despite the end of the war with Iraq in the second half of the 1980s, Iran-Iraq relations in the 1990s remained problematic, and Iraq deliberately cultivated a sense of ambiguity among its regional adversaries regarding its weapons of mass destruction (WMD) capabilities.<sup>83</sup> More recently, although the Iraq threat diminished with the 2003 US invasion and toppling of the Saddam Hussein regime, Iran's threat landscape remained ominous in light of security tensions with Israel, the sizeable US military presence in the region (including the conflicts in neighboring Afghanistan, Iraq, and Syria), and the refusal of the George W. Bush and Barack Obama administrations to rule out the use of US military force against Iran in relation to its nuclear program.<sup>84</sup>

There are convincing signs that security considerations have influenced Iran's nuclear logic. For example, Iranian Pres. (and later Supreme Leader) Ali Khamenei apparently encouraged a gathering of Iran's scientists in

1987 to develop nuclear technology as a way to protect the state against external threats.<sup>85</sup> Later, Iranian political strategist and advisor Ali Reza Alavi-Tabar remarked in 2003: “Israel is always threatening us. If we were sure Israel wasn’t going to hit us, we wouldn’t be thinking about a bomb.”<sup>86</sup> Iran addressed an official letter to the UN secretary-general in 2006 protesting “unlawful, unacceptable and dangerous threats of use of force” by the United States.<sup>87</sup> In a 2007 poll of Iranians, nearly half of the respondents believed the United States would take military action against Iran in the next one to two years.<sup>88</sup> Revealingly, Iran repeatedly raised its security concerns as a topic to be addressed in international discussions over its nuclear program.<sup>89</sup> Lending further weight to security arguments, experts have cited external security reasons for Iran’s nuclear weapons aspirations. Ray Takeyh, a leading Iran analyst, has ascribed the country’s nuclear calculations to its “desire to craft a viable deterrent capability against a range of evolving threats.”<sup>90</sup> David Cortright and George A. Lopez from the Kroc Institute for Peace Studies have likewise posited that, “Given the worsening insecurities in the region and its hostile political relations with the United States and Israel, Iran is likely to continue feeling the need for greater deterrent capabilities, perhaps including a nuclear option.”<sup>91</sup> Similarly, RAND policy analyst Ali-reza Nader observes that “the Islamic Republic appears to be pursuing a nuclear capability as a form of deterrence against an attack by a superior military foe such as the United States.”<sup>92</sup> But there are also indications that status has played a role in Iran’s nuclear priorities.

In particular, Iran’s foreign relations have been hampered by key diplomatic-political setbacks. In the late 1960s and early 1970s, in the run-up to Iran’s early nuclear deliberation, diplomatic recognition of Iran was noticeably lower than it had previously been.<sup>93</sup> In the 1980s, Iran suffered regional diplomatic ostracism fueled by the post-revolutionary Islamic regime’s controversial policies and the Iran-Iraq War.<sup>94</sup> In recent decades multilateral sanctions and political estrangement due in part to Iran’s nuclear program have frustrated its international status, and Iran has been the subject of extensive official scrutiny emanating from the UN Security Council, IAEA, United States, and European Union over its nuclear activities.<sup>95</sup> Iran was notoriously included as part of the so-called “axis of evil” in a speech by Pres. George W. Bush in 2002. Even though Iran sought international engagement, evidenced through initiatives such as President Khatami’s “Dialogue of Civilizations”



(announced in the late 1990s), Iran's mediation efforts during the Tajikistan civil war (1992–1997), and Iranian relations with Russia, Brazil, and the nonaligned states, it was unable to escape diplomatic exclusion in many respects.<sup>96</sup> Sanguine expectations in some circles that the 2015 Joint Comprehensive Plan of Action would reverse Iran's isolation and revitalize its international relations have thus far not come to satisfactory fruition.

The leadership in Tehran has undoubtedly perceived its faltering diplomatic-political status and treatment as incommensurate with other Iranian attributes such as Iran's geostrategic importance and technical-scientific accomplishments—all the more so given the illustrious legacy of the Persian civilization.<sup>97</sup> As one knowledgeable expert observed in 2005: "Iranian leaders have been shaken by the negative attention, pressure and potential isolation they have experienced over the nuclear issue. . . . Ostracism of such a great nation as Persia—Iran—would be a major setback."<sup>98</sup> Indicative of Iran's diplomatic frustration, Iranian officials decried an alleged US-Israeli "conspiracy" to isolate Tehran.<sup>99</sup> Diplomatic-political status shortfalls can be particularly vexing since overcoming them often depends on other states' actions such as granting diplomatic recognition or refraining from admonishing the state in international fora. In line with our expectations, the ever-present drive for status in world politics has conceivably pushed an isolated Iran towards more forceful methods of status fulfillment. As with the case of South Africa, even ambiguous or "opaque" nuclear activities may be seen as a relatively direct and accessible route to status improvement.<sup>100</sup>

As noted earlier, data suggests Iran has reached the level of a near-major power—an overall status that can be expected to intensify Tehran's sense of entitlement to elevated power status. This phenomenon is not unlike what has occurred with other states in the category such as India or Brazil. As a result, Iranian policymakers commonly view their country as deserving of status as a "natural" regional or world power.<sup>101</sup> In 2009, President Ahmadinejad called for "Iran to occupy its rightful place as a world power."<sup>102</sup> Reflecting the sentiments of many Iran specialists, one expert writes, "all factions, from hard-liners to reformists, agree that Iran is entitled to regional power status."<sup>103</sup> Members of Iran's Islamic Revolutionary Guard Corps have unsurprisingly been no exception to this trend.<sup>104</sup> Analysts at times associate this penchant for power status with the ancient Persian empire, and one study refers to Iran's "historical sense

of imperial mission.”<sup>105</sup> According to middle east scholar Bahman Baktiari, “Iranian leaders have long been preoccupied with how to sustain a perception of Iran as a country with 2,500 years of recorded history and a civilization that deserves recognition and respect. Most Iranians perceive their nation as a great civilization that has been deprived of its rightful status as a regional superpower by foreign intervention, including that of tsarist Russia, Britain, the Soviet Union, and the United States.”<sup>106</sup>

Significantly, a recurring theme in the literature on Iranian policy-making is one of Iranian resentment of foreign interference that has allegedly sought to preclude Iran’s status as a regional leader or powerful state. Whereas in previous centuries such Iranian sentiments focused on great powers active in the region, notably Russia and Britain, lately they have been directed mostly at the United States and Iran’s regional neighbors such as the Sunni Arab states and Israel. As one study explains, “Iranian leaders are convinced that Western powers have systematically worked to prevent the country’s emergence as an independent regional power.”<sup>107</sup> Iranian journalist Rahman Ghahremanpour argues that this perceived external meddling to keep Iran down has bred dissatisfaction: “The majority of Iranians are not satisfied with their current role in the region nor in the international system. Western policies—perceived or real—aimed at restricting and isolating Iran intensifies [*sic*] this sense of frustration.”<sup>108</sup> In terms of Iran’s regional neighbors, Saudi Arabia is an example of a state Iranian leaders believe “harbors a deep mistrust of Iran and has been the most active in working to deny Iran a status commensurate with its aspirations.”<sup>109</sup> This tendency in Iranian policy discourse to view Iran as the victim of foreign interfering “chimes with Shia Islam’s historic perception of itself as oppressed in historical, theological and political terms.”<sup>110</sup>

I argue that Iran’s nuclear ambitions have been spurred on by its considerable status expectations on the one hand and disappointment over deficiencies in its regional and global standing on the other—apparently reinforced by the belief that foreign powers have sought to limit Iran’s status. Clearly, Iranian officials have made their interest in international status and respect plainly evident. For instance, former Pres. Hashemi Rafsanjani spoke in 2005 of a “powerful Iran” that could “find a distinguished and lofty standing among the nations of the world, a status and standing which befits the civilized nation of Iran.”<sup>111</sup> It may be difficult to unearth conclusive evidence of the extent to which Iran’s leadership

has associated nuclear weapons with status, but there are indications of status concerns underlying Iran's nuclear pursuits. In this regard, the US Director of National Intelligence stated in 2016 that status was a motivation behind Iran's nuclear designs.<sup>112</sup> In the view of nonproliferation expert Mark Fitzpatrick, Iran's nuclear efforts seek "prestige" and "national pride."<sup>113</sup> Likewise Shahram Chubin, an Iran security specialist, argues that "Iran is seeking a nuclear capability, at least a weapons option, the benefits of which it sees as prestige and domestic legitimation, regional status, and a greater voice in international relations."<sup>114</sup> A few astute observers have drawn attention to Iranian status discrepancies as a driver of Iran's revisionist policies and perhaps its nuclear ambitions. For example, middle east analyst Thomas Juneau argues there is a strong sense among Iran's leadership "that the country's rightful status is being denied by the United States and its allies. Iran therefore suffers from a status discrepancy as a result of the differential between its aspirations and the status it perceives the international community ascribes to it. Iran is thus dissatisfied, a key driver of revisionism."<sup>115</sup> With regard to the nuclear program, Chubin insightfully identifies "frustration over status and the ambition to be taken more seriously and to play a larger, more global role" as a key driver of Iran's nuclear aspirations.<sup>116</sup>

It is revealing that Iran does not appear to be on an unrestrained push to have nuclear weapons. Instead, it has evidently embraced an "option" or hedging strategy, at least since 2003, moving closer to the technical capability to produce nuclear arms without actually acquiring them. This suggests competition among diverse status perspectives in the Iranian policy-making context, to some extent presumably a reflection of Iran's less than extreme levels of isolation in recent years.<sup>117</sup> In this regard, Iran's nuclear program also appears closely tied to status aspirations in terms of national autonomy and scientific-technical prowess—status pursuits which might plausibly be achieved through civilian nuclear applications (such as energy or medicine) instead of nuclear weapons. With regard to autonomy, the desire for stature as an independent and self-sufficient actor in global affairs is a familiar aspect of the official Iranian worldview.<sup>118</sup> This is reflected in the revolutionary slogan "independence, freedom, Islamic Republic." From Tehran's standpoint, having status for autonomy reaffirms the credibility of Iran's nonaligned global stance—embodied in another Iranian revolution slogan, "neither East nor West"—and bolsters its aim of leading an "anti-hegemonic

movement in the Islamic world.”<sup>119</sup> As for nuclear projects bolstering Iran’s status in terms of scientific and technical achievement, Supreme Leader Ayatollah Khamenei has stated that Iran could become the “world leader in science in fifty years” and holds the “nuclear program as a symbol of scientific and technological prowess.”<sup>120</sup> As elaborated above, many status priorities can be distinct from or wholly incompatible with nuclear arms. Such status preferences may gain traction in a state when power status falls out of favor and new alternative routes to international standing take priority.

### **How Might Iranian Nuclear Reversal Happen?**

The theoretical arguments presented earlier provide a basis for outlining some of the plausible reversal scenarios for Iran. Specifically, two of the reversal pathways stand out as potentially applicable: diplomatic integration (pathway 1) and military delegitimization (pathway 3). The middle state path (pathway 2) appears less relevant because Iran does not fit the definition of a middle state and because of the fact most middle state reversals occurred decades ago in closer proximity to the emergence of the nuclear nonproliferation norm. For Iran, reversal pathways 1 and 3 could serve to increase the likelihood of nuclear reversal. Hybrid combinations are possible, meaning that both pathways may occur together. It is essential to now explore these options in the Iranian context as well as consider a few alternative nuclear reversal arguments and their potential relevance to Iran.

#### **Pathway 1: Diplomatic Integration**

To imagine how Iranian reversal might occur under pathway 1, the case of South Africa may offer an applicable precedent. South Africa abandoned its small cache of nuclear weapons as domestic policy changes (the end of apartheid) were enabling South Africa’s leadership to lay claim to more cooperative forms of status. Nuclear reversal was made likely when the leadership came to view nuclear weapons as a liability for South Africa’s status goals. A similar trajectory could be envisaged whereby Iran’s frustration with its diplomatic-political standing and treatment is lessened as higher diplomatic status is attained or becomes more accessible. Such developments would be aided by credible offers or prospects of diplomatic recognition from key states—regional states and

major powers in particular. Under pathway 1, the continued lifting of sanctions on Iran and lessening official criticism of Iran's behavior might help promote reversal by reducing Iran's international exclusion. In general, this pathway would involve the easing of Iran's status deprivation and Iranian emphasis on alternative channels of status enhancement rather than power aggrandizement. Regional states and world powers would contribute by opening up such new methods of status fulfillment, perhaps accepting a larger role for Iran in regional diplomacy. Finally, pathway 1 calls for an improved security threat environment, a main indicator of which would be a declining rate of interstate disputes between Iran and key interlocutors such as the United States, Israel, and Arab states in the region.

How might Iran's quest for status be expected to shift under pathway 1? Official Iranian perspectives would be expected to shift toward status conceptions that are less focused on relative power. Past diplomatically integrating states have typically sought cooperative types of international standing, such as through peaceful multilateral engagement, promoting the international legal order, and fostering socioeconomic progress. For example, postapartheid South Africa achieved status through playing a greater role in African and global governance, becoming a leading contributor to peacekeeping missions on the continent, and working at the international level towards economic development for the global south. In the case of Libya, another state that apparently followed pathway 1, comparable changes in status priorities preceded nuclear renunciation. Hence an emergent thrust of Libyan policy was to normalize its international relations (including with the United States) and garner status as a global diplomatic player and peace arbiter. Mu'ammār Gadhafi's son Seif al-Islam stated, "[Our] leader believed that . . . Libya would emerge from . . . international isolation and become a negotiator and work with the big powers to change the Arab situation."<sup>121</sup> As political psychologist Maria Rost Rublee elucidates, "giving up WMD would allow [Gadhafi] to take on a new leadership role and give him the international acceptance he had desired for so long."<sup>122</sup> Interestingly, there are signs that Iran seeks status for non-power-oriented activities, but under pathway 1 these status outlets would become more prominent, turning controversial nuclear weapons pursuits into a greater hindrance for Iran's status ambitions. Notably, Iranian leaders have shown interest in taking a leading position in matters like inter-civilizational dialogue and science and technology. Civil nuclear advancement is seen as bringing status for

Iran's scientific accomplishments and energy self-sufficiency, the latter being linked to the aforementioned primacy of autonomy in Iranian foreign policy. Iranian Pres. Hashemi Rafsanjani highlighted such interests in a 1996 speech, stating that "making use of nuclear technology for peaceful purposes is something without which a country could not find its real standing in the world."<sup>123</sup> Nuclear reversal pathway 1 envisages Iran's global exclusion subsiding and Tehran placing more value on such alternative forms of international standing.

What specific steps might facilitate nuclear reversal pathway 1 for Iran? Though various possible sequences might be envisioned, efforts by key states like the United States would appear indispensable. For example, movement towards restoring US diplomatic relations with Iran and significant progress on US-Iran security issues could be pivotal for Iran to follow pathway 1. As regards status, it could be conducive to pathway 1 for the United States and regional states like Saudi Arabia to present Iran with concrete, feasible options for the restoration of diplomatic relations. This would demonstrate the availability of non-power-oriented status options and create space for pragmatic Iranian officials and elites to successfully push for such alternative routes to status. In a similar way, states might seek to bestow a more prominent role on Iran as a diplomatic-political intermediary on regional and even global issues regarding Iraq, Afghanistan, dialogue with the Gulf Cooperation Council (GCC), or initiatives on intercultural understanding. Iran has shown an interest in playing a larger diplomatic part in many such matters, and this would be reminiscent of the negotiator role that Gadhafi aspired to for Libya in the run-up to its nuclear turnaround. Pathway 1 could also be facilitated if the United States and other states promoted increased Iranian participation in international organizations as well as lessened criticism of Iran in regional and international institutions to reduce Iran's sense of global marginalization. As one notable example, admitting Iran to the World Trade Organization (WTO) could be a promising move. WTO membership could confer much-needed status to Iran—the world's largest economy that is not a WTO member—and Iran's government has said that WTO membership is a priority.<sup>124</sup> Additionally, it would be propitious for the United States and the other nuclear deal signatories to ensure that sanctions relief for Iran continues as laid out in the JCPOA. The new US administration could hence contribute to alleviating Iran's sense of ostracism by honoring its JCPOA

sanctions relief pledges. In the same vein, the further release of Iranian assets frozen by the US government and held in US and foreign banks might indirectly improve Iran's embattled international status and treatment in line with this reversal pathway.

Each of these developments could contribute to a sort of "status accommodation"—not unlike what scholars have discussed in terms of reducing the war-making proclivities of rising powers—which could fulfill the Iranian quest for status through attainments other than nuclearization.<sup>125</sup> Nevertheless, the earlier reversals in South Africa and Libya suggest a more profound Iranian reassessment of the state's behavior and role in the world may be needed for Iran to truly embrace less power-centric status, as apparently occurred with both de Klerk and Gadhafi. Due to the fragmented nature of postrevolutionary Iran's domestic politics, such an outcome might have to emerge from a potential convergence of sufficiently influential Iranian officials. This type of rethinking—à la South Africa and Libya—is a distinct possibility; Iranian foreign policy has a tendency to vacillate between engagement and pragmatism on the one hand and relatively greater defiance and ideological opposition to the rest of the world on the other. It is imaginable that the impetus for this type of change might emanate from a president such as Rouhani, the Supreme Leader or a future successor, and/or other key domestic actors. Overall, I argue that the provision of diplomatic-political status as outlined above may well stimulate such a fundamental Iranian reassessment, by showing Iran's leaders that alternative ways of augmenting the state's status are accessible. Outside states could in this way encourage Iranian domestic actors to see value in reorienting Iran's search for status, as well as creating opportunities for them to do this and lending them credibility within Iran. Another lesson from the Libyan case is that confidants whose advice is valued by top decision-makers—like Gadhafi's son Seif al-Islam—may be important in convincing national leaders of the state's preferred role and status in world affairs. Such developments may well take time, hence one crucial added-value of the JCPOA could be in limiting Iran's technical nuclear capabilities to buy enough time for a broader policy and status shift. A window of opportunity may be open under the Rouhani presidency to make headway in this direction, although the Iranian presidential election of May 2017 will likely affect such prospects.

In terms of threat reduction, several potential conflict-reducing steps could encourage Iranian progress down pathway 1. It would be beneficial to hold joint US-Iran security discussions to build confidence and decrease the prospects of any hostilities involving Iran. For instance, working-level talks might be dedicated to seeking ways to prevent incidents and unintended escalation among the two states' naval vessels which often operate in close proximity in the Persian Gulf. US military policies and deployments in the region might be reviewed for any reasonable revisions that could be made to decrease Iranian threat perceptions and make armed conflict less likely. In addition, the United States could be well positioned to quietly facilitate nonaggression pledges and other threat-reduction measures between Iran and Israel, assuaging mutual security concerns between the two adversaries. The United States and other interested parties could work with Iran on plans for improving the security situation in Iraq and Afghanistan, with both states bordering on Iran and strongly impacting Iranian security threat perceptions. As regards Afghanistan, for example, Iran has shown an enduring interest in being involved in security actions there; Iran faces transnational threats such as drug trafficking and terrorism emanating from its Afghan border. Stepped-up global efforts to find solutions to end the protracted conflict in Syria, in which Iranian and US forces are combatants, would also have clear advantages in terms of ameliorating Iranian security. The United States and the international community could also contribute by supporting the settlement of disputes among Iran and its Gulf neighbors. Notably, the United States and Arab states might foster talks between Iran and the GCC states to jointly address security concerns, which have escalated particularly between Iran and Saudi Arabia over the past few years—reinforced by Iran's nuclear activities and the conflict in Yemen, which has pitted the two states on opposite sides of the hostilities. While these security steps would undeniably require significant efforts and political willingness, auspicious precedents favor progress. In this respect, some US-Iran security cooperation has already occurred regarding both Afghanistan and Iraq.<sup>126</sup> Further, Iran has participated in international talks on the Syria conflict. The fact that a multilateral nuclear deal was concluded in 2015 provides further evidence that agreement is possible with Iran on crucial security issues. Finally, the United States and Iran as well as other regional and European states share numerous mutual interests, such as stabilizing Iraq and Afghanistan as well as the fight



against Daesh (ISIS), which suggest that collaborative security initiatives may produce meaningful results.

To conclude, some key hurdles would need to be surmounted for Iran to take pathway 1 to nuclear reversal. First, there are domestic interests in both Iran and the United States that would oppose such steps and who in some cases benefit from continued Iranian isolation or nuclear ambitions.<sup>127</sup> As for any diplomatic or security rapprochement between the United States and Iran, such efforts face mutual distrust stemming from incidents such as the US-aided overthrow of Iranian Prime Minister Mohammad Mossadegh in 1953 and the 1979–1981 Iran hostage crisis. Further, the willingness of states to grant Iran diplomatic recognition and status may be made conditional upon reciprocal measures by Iran regarding Iranian policies viewed by Western powers and Middle Eastern and Persian Gulf states as inappropriate or destabilizing, including Iranian support for militant groups like Hezbollah. As a result, a good measure of policy flexibility on various sides would be required. In terms of security concerns, many of Iran's perceived threats are firmly rooted and involve not only the United States but also other regional actors (such as Israel and Saudi Arabia)—and thus may not dissipate quickly. The persistence of conflict among multiple warring parties in Syria is but one complicating facet of the regional security situation for which solutions are not easy. The risk of US-Iran confrontation in the Persian Gulf remains palpable and demands restraint on both sides. Nevertheless, many such obstacles could be overcome with the right mix of political determination, timing, and ingenuity. The data indicates that Iran's diplomatic isolation may not be as extreme as other diplomatic pariahs—such as South Africa and North Korea—that have gone nuclear.<sup>128</sup> Overall pathway 1 appears to be plausible for Iran even if some challenging steps remain before it moves down this reversal path.

### **Pathway 3: Military Delegitimization**

Military delegitimization is another pathway Iran could follow to nuclear reversal. This pathway represents an intriguing reversal scenario for Iran because it has previously led near-major powers such as Brazil to nuclear forbearance. Indeed, Brazil's abandonment of its nuclear ambitions more than two decades ago may offer relevant historical insights. The end of Brazilian military rule in the 1980s marked the discrediting of the military's power-oriented status conceptions. As alluded to

above, Brazilian officials came to value regional political leadership and economic forms of standing more than prospective status as a nuclear power, whereupon contentious nuclear activities became an obstacle to Brazil's status goals. Pathway 3 deserves consideration in Iran's case due to the country's substantial military expenditures that have accompanied its nuclear ambitions as well as the noticeable domestic influence particularly of the Islamic Revolutionary Guard Corps (IRGC).<sup>129</sup> Accordingly, Shahram Chubin describes the IRGC as a "formidable policy actor with security as well as commercial interests."<sup>130</sup> While the IRGC can lack popular support owing in part to its internal security role, the IRGC's domestic political clout is highlighted by the vast number of current or former IRGC members in government in recent years; for example, Pres. Mahmoud Ahmadinejad (2005–2013) was an IRGC veteran, and dozens of parliamentarians elected to Iran's majlis have had IRGC experience.<sup>131</sup> As expected, prominent IRGC members have also expressed an interest in Iran's standing as a powerful state. One past IRGC commander, for instance, has stated that the United States has "'no option' but to recognize Iran as a regional power."<sup>132</sup> While the IRGC generally did not oppose the 2015 nuclear deal—perhaps largely out of IRGC business interests in having sanctions lifted—experts have nevertheless found support for nuclear weapons among the IRGC's membership.<sup>133</sup> Under pathway 3, Iranian nuclear reversal could take hold if military status perspectives—notably, those of the IRGC—were to lose sway among Iran's leadership. This might be observed through a sizeable downturn in the share of government resources devoted to IRGC/military expenditures, probably in tandem with a substantial drop in the number of IRGC members holding political office. Like in pathway 1, security threat reduction is also necessary for this reversal pathway. As discussed earlier, this could be seen through a decline in Iran's incidence of interstate disputes with key countries like the United States and other states in Iran's region.

How would the Iranian status priorities be expected to change under pathway 3? Power-based status would be superseded by other goals, such as the desire to achieve political and economic standing in international affairs. The status leanings of the IRGC, which focus upon the hierarchy and instruments of power, would be downgraded so as to no longer shape Iranian policy priorities. A relative proclivity for non-power-oriented status would make nuclear weapons appear as more of a hindrance to enhanc-

ing Iran's status. In this regard, while near-major power Brazil has continued to pursue recognition as a "big country" in world affairs, Brazil's civilian officials placed renewed emphasis upon earning regional and global standing through diplomatic engagement, cooperation within multilateral regimes, regional economic integration, and national economic progress. As John R. Redick argues, Brazilian officials "came to accept the view that maintenance of the independent nuclear policy would seriously jeopardize their relations with nations that could affect another, more central, policy objective: achieving world stature and leadership for Brazil."<sup>134</sup> Another component of Brazil's search for status has been to seek reforms of the UN Security Council, enabling permanent Brazilian membership along with fellow "G4" states Germany, India, and Japan—which may be associated with power status but is also closely tied to diplomatic-political stature.<sup>135</sup> If Iran were to follow pathway 3, it might be expected to reconceive of near-major power standing in this manner by focusing on earning status through playing a prominent role diplomatically and economically, in line with global rules and norms, and wielding "soft power" rather than nuclear arms.

What are some concrete steps that might bring about reversal pathway 3 in Iran's case? As one possibility, it is conceivable that specific domestic events could amplify domestic enmity of the IRGC and weaken its legitimacy. This would set off a domestic shift or realignment causing power-oriented status perspectives to lose influence in Iranian policy making. For example, if large-scale popular protests or demonstrations were to occur (not unlike the upheaval typifying the contested 2009 Iranian presidential election), this might alter the IRGC's extensive influence in the country—for example, by provoking a backlash to IRGC repression of demonstrators or by exerting pressure for domestic institutional reforms. In similar fashion, various other potential domestic or international events may be envisaged, such as major IRGC scandals or civil society campaigns, which could impel key figures such as the supreme leader to push further in downgrading the extensive domestic position of the IRGC. Such domestic reforms might be seen, for instance, in moves to curtail the IRGC's role and financial resources. Future elections might also promote pathway 3 by decreasing the presence of IRGC members holding government office. Observers have noted that the Ahmadinejad presidency (2005–2013) marked a period of particularly "militarized" Iranian governance, hence to some extent President Rouhani's election

in 2013 may have tipped the balance back towards pathway 3—although not yet to a sufficient extent to cause nuclear reversal.<sup>136</sup> Hence the next Iranian presidential election can also be expected to have consequences pertinent to pathway 3. It can equally be postulated that a successive new supreme leader after Ali Khamenei, who is less favorable to (and less strategically reliant upon) the wide-ranging economic, political, and military engagements of the IRGC, could use his position to rein in the Revolutionary Guards' domestic political role and influence, which could stimulate Iran's movement along pathway 3. The interconnections between the IRGC and the conservative clerical network in the country present challenges for this pathway, however.<sup>137</sup> Finally, this pathway would require steps towards lessening Iran's perceived security threats in the region, as explained for pathway 1 above. It is interesting to note that Iran's status and security can also be viewed as somewhat interrelated; for example, a more peaceful regional security environment could feasibly provide the impetus for reduced Iranian security spending and reliance upon the IRGC.

What actions from outside Iran could be conducive to pathway 3? Undoubtedly, the ability of external parties to alter domestic military legitimacy and status priorities in Iran is somewhat constrained. Moreover, any attempt to interfere would need to proceed cautiously and with sensitivity to avoid counterproductive reactions within Iran in light of its past experience with external interference in Iranian domestic affairs. At the same time, there are steps that the international community might take. For example, military-to-military cooperation and engagement between Iran—including Revolutionary Guard personnel—and other states, centering on experience and training in relation to humanitarian and peacekeeping operations, could serve to stimulate interest in non-nuclear approaches to international status and recognition. Nonnuclear states that participate significantly in UN peacekeeping missions might be candidates for such collaboration and exchange, for instance Brazil, Spain, and Sweden. Another type of external step that could advance pathway 3 would be to prudently offer educational and material support to civil society and nongovernmental organizations that advocate non-militaristic visions of Iranian society and policy. Likewise, the expansion of civil society, cultural, and sports exchanges between Iran and Western states may reinforce the availability of a range of non-power-oriented global status opportunities among Iranian society. Notably, it bears

mentioning that the IRGC is not a homogenous entity and its members have diverse perspectives, including on politics and the potential role of nuclear weapons in Iran's international status.<sup>138</sup> Indeed, the IRGC did largely go along with the 2015 nuclear agreement, even if mostly for pragmatic economic reasons, and certainly some IRGC members support pragmatic or reformist policies. With a view to pathway 3, external states might explore reasonable ways of reaching out to or supporting such constituencies. Finally, alleviating Iran's security threats is another important component of pathway 3 where outside states could make a difference. Hence, as described under pathway 1 above, the United States, Iran's regional neighbors, and other international actors might take steps to improve Iran's security environment as laid out for pathway 1.

Overall, while the evidence does not dictate that Iran will imminently move down reversal pathway 3, there are some promising indications and the pathway is quite relevant to Iran—especially in view of its apparent position as a near-major power.<sup>139</sup> It should also be stated that, given Iran's embattled diplomatic-political situation, pathway 3 may be more effective in bringing Iranian nuclear reversal if complemented by parallel progress down pathway 1 as well.

## **Potential Alternative Arguments**

It is worthwhile to consider some alternate nuclear reversal explanations in the case of Iran. In this regard, key arguments might be envisaged in relation to: (1) external security environment (without status arguments); (2) domestic politics/political economy; (3) coercive pressure; and (4) regime change. We now explore the conceivable impact of these factors in turn.

### **External Security Environment**

Since nuclear weapons are frequently associated with deterring aggression from other states, we might ask whether security threat reduction alone can explain nuclear reversal? Analysts have frequently relied upon security factors as a core argument to explain nuclear weapons choices. Further, all but two past nuclear reversals occurred in tandem with a measurably improved external security situation.<sup>140</sup> However, as observed by Stanford experts Scott D. Sagan and Ariel E. Levite, the empirical record is replete with instances of nuclear decisions that do

not fit neatly with an account solely focused on security.<sup>141</sup> For instance, while Libya's long-held nuclear ambitions were driven partly by regional security realities and its reversal was indeed preceded by a drop in Libya's interstate disputes, to ascribe the Gadhafi regime's nuclear about-face exclusively to external security would be to overlook critical aspects of the reversal picture. Libya in the 1990s and early 2000s rethought its revolutionary agenda and role in the world—with profound implications for Libya's policy and status interests.<sup>142</sup> As Libya moderated its objectionable policies and attempted to burnish its diplomatic standing, its controversial nuclear pursuits became a serious impediment to Libya's revised status goals. Sweden's nuclear history offers a further case in point. As suggested above, Sweden's nuclear reversal can be partially traced to lower threat levels and East-West détente. However, Sweden's interstate dispute involvement was generally modest in the decades following World War II. Further, as nuclear policy specialist Eric Arnett has pointed out, most studies on Sweden point primarily to non-security-based reasons to explain its nuclear choices.<sup>143</sup> Sweden's reversal can be more convincingly explained if one accounts for Swedish beliefs about the country's stature as a role model and "active neutral" promoting peace, the rule of law, and progressive causes such as disarmament and humanitarian action, along with its desire to avoid jeopardizing its status with contentious nuclear activities that contravened an emerging global norm against nuclear proliferation. Finally, the absence of nuclear renunciation among the major powers further supports the contention that security threat reduction must be combined with additional factors to comprehend nuclear reversal patterns. For example, British Prime Minister Harold Macmillan stated decades ago that Britain's independent nuclear force "gives us a better position in the world, it gives us a better position with respect to the United States. It puts us where we ought to be, in the position of a Great Power."<sup>144</sup> Hence although the United Kingdom's interstate disputes subsided with the end of the Cold War and Britain entered an era of objectively lower threat from interstate violence, Britain has maintained its nuclear force.<sup>145</sup> The British case lends further weight to nuclear arguments focusing on status interests.

Could security threat reduction alone lead to Iranian reversal? This is unlikely because, as the empirical record shows, the choice for nuclear forbearance typically derives from security in conjunction with other factors. As Levite has sensibly pointed out, "although a favorable

external security outlook appears necessary to bring about nuclear reversal, it rarely if ever appears to be sufficient, by itself, to produce this outcome.”<sup>146</sup> Iran is no exception to this observation and its security environment is best understood not as an alternate, competing explanation of nuclear reversal but rather as an integral complement to status arguments.

### **Domestic Politics/Political Economy**

How might domestic political competition and factional interests impact nuclear reversal? Domestic arguments view the preferences and actions of specific domestic constituencies, such as government bureaucracies or even nongovernmental groups, as crucial in determining policy outcomes.<sup>147</sup> Domestic actors—notably, nuclear scientists, military officers, and election-minded officials—may develop preferences favoring nuclear arms and seek to mobilize pro-bomb coalitions which could impede nuclear reversal, at times uniting with international supporters and norms.<sup>148</sup> For example, national security strategist Peter R. Lavoy describes how national political and military elites establish myths about the state’s “insecurity or its poor international standing” to popularize nuclear weapons as sources of military security and international influence.<sup>149</sup> Levels of democratic governance may also shape nuclear choices, as elites in democracies might have relatively less autonomy to promote nuclear weapons based on parochial incentives.<sup>150</sup> In political-economic terms, professor Etel Solingen holds that leaderships advocating global economic integration and liberalizing reforms should seek to avoid the domestic political costs of nuclearization, whereas “nuclearization implies fewer costs for inward-looking leaders and for constituencies less dependent on international markets, investment, technology, and institutions, who can rely on nuclear weapons programs to reinforce nationalist platforms of political survival.”<sup>151</sup> There is evidence that domestic factors have impacted the outcome or timing of states’ nuclear decisions. For instance, key atomic technocrats and military strategists in the official bureaucracies in India and France apparently pushed their respective states’ nuclear programs forward.<sup>152</sup> And as Solingen points out, nuclear reversal in Argentina, Brazil, Egypt under Sadat, Japan, South Africa, South Korea, and Taiwan was conducted under leaderships relying for their political survival on exported industrialization.<sup>153</sup> However, in some cases the evidence on domestic

politics is mixed; hence in Libya and South Africa nuclear reversal took place in spite of any bureaucratic opposition and by regimes that were relatively undemocratic.

With regard to Iran, much has been written about the role of factional politics and internal disputes in Iranian policymaking.<sup>154</sup> Domestic bureaucratic interests may shed light on aspects of Iran's nuclear path, such as the persistence of nuclear ambitions even under relatively moderate or reform-minded leaders such as the Mohammad Khatami presidency (1997–2005). Though Supreme Leader Ali Khamenei is routinely described as the ultimate arbiter of Iranian security and defense policies and Iran's rulers have emphasized that nuclear decision-making is based on "consensus," indeed several often-competing domestic actors vie for influence on the nuclear issue.<sup>155</sup> While there may be broad domestic consensus on Iran's right to nuclear technology for scientific and economic development, the positions of domestic leaders and elites on nuclear weapons are thought to diverge significantly in many instances.<sup>156</sup> It is not always easy to ascertain specific Iranian domestic actors' views on nuclear arms since such positions are not typically publicly revealed, but, for example, analysts have in the past cited the IRGC and perhaps Iran's atomic agency (the AEOI) as potentially having pronuclear weapons interests.<sup>157</sup> From a domestic politics approach, reversal might occur in Iran if antinuclear coalitions were to gain influence or if pronuclear lobbies within the IRGC or atomic establishment were to lose domestic political clout. Solingen's political-economic account would predict reversal if the Iranian government were to further embrace economic liberalization as its political model—a perspective that might view Hassan Rouhani's presidency as fairly promising. It is hard to dispute that domestic political realities would be involved in any Iranian nuclear reversal. Moreover, there are some interesting points of overlap between our status-based approach and domestic accounts; as one example, both perspectives might postulate that declining IRGC influence in politics would increase prospects for nuclear forbearance. However, domestic politics can usefully be seen as shaping the broader status motivations affecting states' nuclear choices, which are conditioned by regional and systemic factors as well as domestic influences. Notably, the way in which domestic political differences play out with regard to Iran's long-running foreign policy dichotomy between ideological opposition to the outside world and international engagement will likely have major re-



percussions for the nuclear issue. As Chubin observes, “the nuclear issue has long been a proxy for the broader question of how Iran should relate to the world—and whether it should pursue its interests unilaterally or with reference to others’ concerns.”<sup>158</sup> In line with our approach, the way this broad question is resolved within Iran should be indicative of whether the Iranian leadership prefers to seek Iranian standing through controversial nuclear pursuits or through alternative endeavors less focused on power status.<sup>159</sup>

### **Coercive Pressure**

Might coercive interstate pressure facilitate nuclear reversal? Coercion may involve external threats to use military force or the threat or imposition of other costly measures such as economic sanctions. As regards Libya, “strong” versions of the coercion argument are unconvincing. For example, US Vice President Dick Cheney controversially asserted in 2004 that Libya’s relinquishing of its nuclear aspirations was “one of the great by-products” of the American military interventions in Iraq and Afghanistan.<sup>160</sup> This assertion is problematic because, in reality, Gadhafi had officially offered to give up his WMD activities as early as May 1999—well before the Iraq and Afghanistan invasions—and he gave secret assurances to the British Foreign Office on WMD renunciation in August 2002.<sup>161</sup> But there is evidence that more modest coercive measures such as the US and multilateral economic sanctions imposed on Libya, particularly in the 1990s, may have helped augment the potential incentives (that is, sanctions removal) for Libya’s broader shift towards more cooperative foreign and security policies.<sup>162</sup> As regards South Africa, former Atomic Energy Corporation (AEC) Chairman J. W. de Villiers has denied that US pressure affected South Africa’s nuclear reversal. Waldo Stumpf, the AEC chief executive officer who oversaw South Africa’s nuclear dismantlement, has stated that US nonproliferation pressure actually kept South Africa “out of the NPT longer.”<sup>163</sup> While US nonproliferation advocacy probably reinforced for de Klerk the benefits of denuclearization, it is unclear that American pressure was decisive. In the case of Brazil, restrictive US export policies, “rather than encouraging a change . . . tended to reinforce a sense of victimization and provided fuel for the nationalistic nuclear theology. Ultimately, change came from within . . . Brazil, rather than being imposed from the outside.”<sup>164</sup> Mitchell Reiss similarly finds that in Brazil’s case, “U.S.

officials admit that American pressure had little or no influence.”<sup>165</sup> Experts and policy makers have at times lauded the efficacy of coercion, but this influence can be overstated. Political scientist Russell J. Leng’s work illustrating the limits of coercive diplomacy provides valuable insights. Leng finds based on a study of 677 influence attempts that states tend to reply to coercion in kind, hence coercion often begets more coercion. Drawing on psychological insights, Leng argues, “States tend to respond in kind to both coercive and cooperative influence tactics. The most effective influence strategy, in terms of achieving a diplomatic success without going to war, appears to be a reciprocating strategy in which the state begins with tit-for-tat responses to coercive influence tactics and then offers cooperative initiatives, most often in the form of carrot-and-stick inducements.”<sup>166</sup> Thus Leng’s findings suggest that coercive measures such as sanctions or threats of force targeting states with nuclear ambitions would normally lead to coercive responses rather than compelling any desired nuclear reversal outcome.

As for Iran, nonproliferation specialists Celia L. Reynolds and Wilfred T. Wan have noted that “sanctions have exacerbated economic problems arising from the structural weaknesses and mismanagement of Iran’s economy, especially under Ahmadinejad’s presidency and since his contested re-election in June 2009.”<sup>167</sup> Iran’s economic reliance on oil exports and related aspects of the rentier state would seemingly ripen its vulnerability to sanctions. Further, domestic discontent with the negative economic impacts of sanctions previously imposed by the UN Security Council, the United States, United Kingdom, and others appears to have contributed to the election of President Rouhani in 2013 as well as the conclusion of the JCPOA. Yet it would be less convincing to argue that coercive measures will reverse Iran’s nuclear aspirations. Alireza Nader wrote in 2012, “[i]t is unclear if sanctions have weakened or strengthened the Iranian regime’s resolve to pursue the nuclear program.” He also observes “sanctions . . . may convince certain factions to take escalatory actions and continue or even accelerate the nuclear program’s development.”<sup>168</sup> Such measures have for many years failed to induce Iranian reversal and in the future could be expected to prompt the sort of tit-for-tat escalation described by Leng—a counterproductive outcome from the nonproliferation point of view. Indeed, according to our approach, sanctions can be expected to augment the international exclusion of isolated states and hence could actually reinforce the status

incentives for nuclear weapons. While coercive measures may find relative success in situations of asymmetric bargaining leverage over the coercion target (e.g., US-South Korea, US-Taiwan), this is hardly apparent for Iran.

In terms of more forceful coercive approaches, previous threatening rhetoric about military force by the United States and Israel has not elicited Iran's reversal. The covert assassination of Iranian nuclear scientists by foreign agents and cyber attacks against Iran's nuclear facilities have represented technical setbacks but have not visibly altered Iran's fundamental nuclear priorities. Moreover, nuclear researchers Sarah Kreps and Zain Pasha find that military threats empower domestic coalitions that are hostile to international regimes such as the NPT.<sup>169</sup> Finally, Israel's and Iraq's past military strikes to destroy nuclear installations in Iraq and Iran, respectively, failed to subdue the latter states' nuclear aspirations.<sup>170</sup>

### **Regime Change**

What can be said of the potential role of a leadership transition or "regime change" in eliciting nuclear reversal? In its most extreme form, regime change under military force in Iraq in 2003 did erase any lingering nuclear ambitions wielded by the Saddam Hussein regime—but this came with vast human, material, and other negative consequences. In South Africa and Brazil domestic leadership transitions preceded nuclear reversal, although both cases consisted of internal political successions due to elections rather than being imposed by external force. However, nuclear forbearance came about in Libya in the absence of any regime change.

In the case of Iran, would the emergence of a new supreme leader facilitate nuclear forbearance? Has the 2013 election of President Rouhani made a difference regarding a prospective Iranian nuclear reversal? I contend that a high-level "changing of the guard" may contribute to making reversal easier. But this would be contingent largely upon any potential changes in fundamental nuclear motivations, notably status and security. For instance, if the new official(s) were to moderate policies disliked by other states this could favor the pursuit of diplomatic-political or other alternative types of standing for Iran that would obviate its nuclear aspirations. Similarly, if the new leader(s) were able to rein in the influence of status perspectives such as those of the IRGC, then this could encourage Iranian status approaches favoring reversal. Or if they were

to foster regional conflict resolution and engage further with the United States towards reducing perceived security threats, this could foster nuclear reversal. Hopes were raised that President Rouhani's election could lead to nuclear renunciation, but this has not yet happened and clearly the 2015 JCPOA—albeit a significant step towards tension reduction, building confidence, and limiting technical nuclear capabilities—cannot be equated with nuclear reversal. More generally, previous reversal cases such as Libya and arguably Sweden demonstrate that regime change may not be essential for Iranian nuclear reversal to happen, as such policy change can also emerge from within the regime under the right conditions.

Overall, the implication here is that alternate explanations of nuclear reversal may hold value, and for some states arguments such as domestic politics and leadership transitions may complement our status and security account.<sup>171</sup> But in Iran's case, it is not evident that these alternate explanations tell us more about how nuclear reversal could occur than could a status and security-based approach.

### **Conclusion: Much Ado about Nothing?**

This article has outlined an original explanation of states' nuclear weapons choices to shed light on Iran's nuclear path. Comparatively few studies have shifted the focus from proliferation to nuclear reversal—despite the empirical prevalence of this phenomenon. The approach presented here yields innovative theoretical conclusions about the reasons for nuclear reversal as well as concrete policy insights. Significantly, status perspectives merit renewed attention in accounts of nuclear behavior. States frequently seek to earn status and set themselves apart in world politics. Moreover, most states prefer accomplishments that do not involve nuclear weapons as a route to higher global standing. While frustrating status deficiencies foster nuclear aspirations, the widespread predilection for status through activities like cooperative diplomacy, promotion of global rules and progressive reform, and perhaps economic achievements, explains why many states opt for nuclear reversal.

Several distinct pathways exist where status and security factors bolster prospects for nuclear reversal. Within these pathways, developments such as diplomatic status improvement and the decline of domestic military legitimacy are associated with nonnuclear status ambitions. The evolution of the global nuclear nonproliferation norm is also an integral part

of the reversal story, as is the improvement of a state's security threat environment. Notably, our approach helps clarify the puzzle of norm compliance: the global norm against nuclear proliferation is argued to induce nuclear reversal particularly when it results in nuclear weapons impinging on a state's ability to accumulate preferred types of international status, such as for diplomatic-political accomplishments and defending global rules and norms.<sup>172</sup>

What policy insights can be identified regarding Iran? Importantly, an Iranian bomb is not inevitable. This research provides a clear blueprint for those seeking to prevent Iran from going nuclear, one that requires policy evolution beyond the breadth of the 2015 nuclear deal. First, strategies focusing on isolation and sanctions are unlikely to have the desired nonproliferation effect. Instead, effective policies under reversal pathway 1 would promote diplomatic recognition of Iran and minimize its international exclusion. Progress toward the normalization of US-Iran diplomatic relations would be a promising step. In general, the United States and the international community should present Iran with concrete opportunities for enhancing its diplomatic recognition and could seek for Iran a more prominent role as a diplomatic-political intermediary—for instance on regional issues such as Afghanistan or on intercultural initiatives. This should have the effect of opening up non-power-oriented routes to Iranian status and create space for receptive Iranian officials to push for such standing; the result would be a kind of nonnuclear “status accommodation” of Iran in world politics. In a similar vein, the United States and others could promote increased Iranian participation in international organizations such as the World Trade Organization—an Iranian priority—while also toning down criticism of Iran in multilateral fora to reduce Iran's perceived global exclusion. If the new US administration aims to encourage Iranian reversal, it would do well to honor US commitments to sanctions relief made in the JCPOA as a means to reduce Iran's ostracism. In addition, reversal pathway 3 points to delegitimizing military status notions. Though this path will likely depend mainly on domestic events in Iran, external measures can be envisaged. These efforts would need to proceed with sensitivity to Iranian attitudes on foreign interference in Iran's domestic affairs to avoid counterproductive effects. Thus, states could seek military-to-military engagement with Iran's military and Revolutionary Guards, centering on experience with humanitarian operations, to foster

interest in nonnuclear avenues to international standing. States might also consider prudent educational and material support to civil society organizations that advocate nonmilitaristic visions of Iran's society and role in the world. Likewise, the expansion of civil society, cultural, and sports exchange programs between Iran and other states could highlight alternative global status opportunities among Iranian society and elites.

Iranian reversal also requires reducing Iran's perceived security threats. Policies that defuse conflicts in the Middle East and ameliorate Iran's security environment should be more effective than the threat of military force. Such conflict-reducing steps are essentially a universal requirement for nuclear reversal. Efforts by the United States to prevent or peacefully resolve interstate disputes with Iran would constitute progress. For example, US-Iran security dialogue should be undertaken to build confidence and avoid hostilities such as potential mishaps between naval vessels in the region. Talks should likewise be held with the aim of finding ways to improve the security situation in Iraq and Afghanistan, bearing in mind Iran's interest in alleviating transnational threats on its borders. The United States should review its military policies in the region for any reasonable modifications that could decrease Iran's perceived threats. Finding solutions to end the protracted Syria conflict should similarly be a priority in order to reduce Iran's security motivations for nuclear weapons. The United States may likewise be well positioned to discreetly broker nonaggression pledges and threat-reduction measures between Iran and Israel. The resolution of disputes between Iran and the Gulf Cooperation Council states, including Saudi Arabia, should also be supported. There are multiple security interests shared by Iran, the United States, European states, and other actors, such as stabilizing Afghanistan and the fight against Daesh Islamic extremists, which should enable many of these security efforts to make progress.

What is the role of the 2015 Iran nuclear deal? While the JCPOA is a noteworthy achievement in terms of easing tensions and limiting Iran's technical capacity in relation to nuclear arms, it would be erroneous to equate the JCPOA with a more fundamental reversal decision. This article has taken a relatively long-term perspective on Iran's nuclear motivations and its focus is not on the nuclear deal. In general, the JCPOA is certainly no nuclear reversal panacea. That being said, despite the considerable political discourse focusing on limiting Iran's capabilities, it is conceivable that the nuclear deal could, in the final analysis,

have lasting effects in lessening Iran's nuclear motivations. In this way, aspects of the deal might have the effect of nurturing some of the status and security dynamics noted above. This could be anticipated, for example, if relief from coercive sanctions on Iran—potentially leading to further diplomatic and political interaction and cooperation—were to decrease the burden of Iranian isolation and encourage alternative Iranian status aspirations. Or the nuclear agreement might contribute to assuaging Iran's security concerns, notably if it were to act as a catalyst for subsequent bilateral US-Iran security reassurance. Hence the nuclear deal's impact should be foreseen mainly insofar as it influences the basic status and security motivations driving Iran's nuclear ambitions—and it remains too early to assess the extent of these effects. Reversal may require several years in Iran's case; meanwhile, the JCPOA could impose enough technical constraints over a decade-and-a-half window for these status and security processes to advance.

In sum, global policies targeting Iran's status and security concerns should be expected to augment the prospects for nuclear reversal. The success of the world community in securing Iran's reversal will potentially hinge upon whether Iranian status interests are addressed, including by bringing Iran into the international diplomatic fold, as well as sufficiently easing Iran's security threats. While numerous political hurdles and intermediate steps can be expected along the way, such a course of action could align Iranian status seeking toward nonnuclear pursuits. These developments can be encouraged by key states willing to take supportive measures. On the Iranian domestic front, the election outcomes of 2013 and 2016 may have been a step toward greater official receptiveness to nonnuclear status ambitions. However, this is not yet fully apparent and the next Iranian president could alter the domestic landscape. As a further observation, it merits reiterating that continuing international support for the nuclear nonproliferation regime is essential to maintaining the strength of the global norm against nuclear proliferation, which in turn is crucial to preserving a situation where nuclear arming is unappealing to most states as they search for status in the world. Therefore the United States and other states should steadfastly support the nonproliferation regime and efforts to discredit nuclear proliferation if the desire is to effectively prevent an Iranian bomb. **SSQ**

## Notes

1. An earlier version of this article was presented at the annual convention of the International Studies Association (ISA), San Francisco, CA, 3–6 April 2013. I wish to thank the ISA panel participants as well as the *Strategic Studies Quarterly* editor, Mike Guillot, and reviewers for their helpful comments on earlier versions.

2. International Atomic Energy Agency (IAEA), *Final Assessment on Past and Present Outstanding Issues regarding Iran's Nuclear Programme*, Report by the Director General, GOV/2015/68, 2 December 2015, 15. Iran has maintained that its nuclear activities are not for nuclear arms and that it is exercising its right to peaceful nuclear technology.

3. See Jamie M. Fly and Gary Schmitt, "The Case for Regime Change in Iran," *Foreign Affairs*, 17 January 2012, <http://www.foreignaffairs.com/articles/137038/jamie-m-fly-and-gary-schmitt/the-case-for-regime-change-in-iran>; Matthew Kroenig, "Time to Attack Iran," *Foreign Affairs* 91, no. 1 (January/February 2012): 76–86, <http://www.jstor.org/stable/23217150>. US Pres. Barack Obama previously had suggested that the use of military force could be an option with regard to Iran's nuclear activities, echoing earlier statements by Pres. George W. Bush; see Laura MacInnis, "Obama: No Options Off Table On Iran Nuclear Program," *Reuters*, 25 January 2012, <http://in.reuters.com/article/2012/01/25/usa-obama-speech-iran-idINDEE8004C20120125>.

4. Nuclear negotiations often focused on obtaining Iran's commitment to limit certain sensitive nuclear activities, notably uranium enrichment operations, and persuading Iran to enhance transparency of its nuclear program to build confidence in its peaceful nature. From Iran's side, it notably sought sanctions relief and recognition of its right to the peaceful use of nuclear technology. Sanctions on Iran have been multilateral through the UN Security Council, as well as regional (e.g., EU) and unilateral (e.g., United States).

5. Key provisions of the 2015 Joint Comprehensive Plan of Action (JCPOA), informally the Iran "nuclear deal," include: Iran agreeing to limit its uranium enrichment capacity to 5,060 IR-1 centrifuges at the Natanz Fuel Enrichment Plant for 10 years, with some advanced centrifuges also being introduced over time; Iran pledging to perform uranium enrichment only at the Natanz site; Iran limiting its maximum uranium enrichment level to 3.67 percent for 15 years; Iran reducing its low-enriched uranium stockpile to under 300 kilograms for 15 years; Iran converting its Fordow facility into a nuclear technology center engaging in joint international scientific partnerships; Iran converting the Arak nuclear reactor to limit plutonium production; Iran refraining from reprocessing plutonium for 15 years; Iran increasing the number of designated IAEA inspectors in the country to approximately 130–150; and the comprehensive lifting of all UN Security Council sanctions as well as multilateral and national sanctions related to Iran's nuclear program, and, eventually, restrictions on conventional arms and missile-technology acquisition. Iran's negotiating partners apparently aimed through the nuclear deal to shut off the various possible Iranian pathways to the bomb for a significant period of time, as well as to increase the amount of warning time in case Iran were to attempt to rush to build nuclear weapons.

6. IAEA, *Final Assessment*; James Risen and Mark Mazzetti, "U.S. Agencies See No Move by Iran to Build a Bomb," *New York Times*, 24 February 2012, <http://www.nytimes.com/2012/02/25/world/middleeast/us-agencies-see-no-move-by-iran-to-build-a-bomb.html>; and Office of the Director of National Intelligence (ODNI), *Iran: Nuclear Intentions and Capabilities*, National Intelligence Estimate, November 2007. For recent concerns regarding Iran getting nuclear arms, see for example: David E. Sanger and Michael R. Gordon, "Future Risks of an Iran Nuclear Deal," *New York Times*, 23 August 2015, <https://www.nytimes>



.com/2015/08/24/world/middleeast/in-pushing-for-the-iran-nuclear-deal-obamas-rationale-shows-flaws.html; David Albright, Andrea Stricker, and Serena Kelleher-Vergantini, *Analysis of the IAEA's Report on the Possible Military Dimensions of Iran's Nuclear Program*, Institute for Science and International Security, 8 December 2015; Joni Ernst, "The Danger of the Iran Deal," *CNN.com*, 11 September 2015, <http://edition.cnn.com/2015/09/10/opinions/ernst-iran-nuclear-deal/>; and Barak Ravid, "Netanyahu: Iran Nuclear Deal Makes World Much More Dangerous, Israel Not Bound by It," *Haaretz*, 14 July 2015, <http://www.haaretz.com/israel-news/1.665821>.

7. Overall, it can be argued that a probabilistic understanding of nuclear choices is preferable to a deterministic causal approach; see Sonali Singh and Christopher R. Way, "The Correlates of Nuclear Proliferation: A Quantitative Test," *Journal of Conflict Resolution* 48, no. 6 (2004): 859–85, <http://www.jstor.org/stable/4149798>.

8. Similarly, *nuclear forbearance* refers to when a state is neither wielding nuclear ambitions nor in possession of nuclear bombs.

9. Status is a relational good that is gauged relative to other states. Status is assessed by the state itself or other states or actors, although it can be assumed to roughly correspond to some underlying measure of a state's rank. Status is evaluated with respect to one specific hierarchy or more generally refers to a state's composite status over a number of hierarchies (or dimensions). Different states and actors may place relatively more or less emphasis on certain status hierarchies, perhaps wishing to promote the value of certain forms of status and discredit other hierarchies. Ideational beliefs about what types of status are most appropriate or beneficial are thus relevant. Yet status is conceptualized here as closely linked to material properties or activities. Each of the status categories identified herein should be valued by some percentage of states in the international system. For studies on status in international affairs, see Johan Galtung, "A Structural Theory of Aggression," *Journal of Peace Research* 1, no. 2 (1964): 95–119, <http://www.jstor.org/stable/423250>; T. V. Paul, Deborah Welch Larson, and William C. Wohlforth, eds., *Status in World Politics* (New York: Cambridge University Press, 2014); William C. Wohlforth, "Unipolarity, Status Competition, and Great Power War," *World Politics* 61, no. 1 (2009): 28–57, <http://www.jstor.org/stable/40060220>; J. David Singer and Melvin Small, "The Composition and Status Ordering of the International System: 1815–1940," *World Politics* 18, no. 2 (1966): 236–82, <http://www.jstor.org/stable/2009697>; Reinhard Wolf, "Respect and Disrespect in International Politics: The Significance of Status Recognition," *International Theory* 3, no. 1 (2011): 105–42, <http://doi.org/c2hv96>; David Sylvan, Corinne Graff, and Elisabetta Pugliese, "Status and Prestige in International Relations" (paper prepared for the International Studies Association Meeting, Vienna, September 1998); and Barry O'Neill, *Honor, Symbols, and War* (Ann Arbor: University of Michigan Press, 1999).

10. Jo L. Husbands, "The Prestige States," in *Nuclear Proliferation in the 1980s*, ed. William H. Kincaid and Christoph Bertram (New York: St. Martin's, 1982), 112–36; Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security* 21, no. 3 (1996–1997): 54–86, <http://doi.org/dgvztt>; Richard N. Rosecrance, ed., *The Dispersion of Nuclear Weapons: Strategy and Politics* (New York: Columbia University Press, 1964); George Quester, *The Politics of Nuclear Proliferation* (Baltimore: Johns Hopkins University Press, 1973); and Barry O'Neill, *Nuclear Weapons and National Prestige*, Cowles Foundation Discussion Paper no. 1560 (New Haven, CT: Cowles Foundation for Research in Economics, Yale University, 2006). With regard to the work by Sagan (1996–1997), it can be pointed out that there are similarities between Sagan's description of prestige motivations ("norms model") and our arguments. For instance, both approaches highlight how international stature may be sought through alternative, nonnuclear accomplishments as well as recognize that normative

and historical factors can affect any given state's nuclear priorities. However, the current article can be distinguished in that it emphasizes the drive for status (in different forms) as a nearly universal facet of world politics; it identifies various key status dimensions; it applies the notion of status deficiencies as conceived by sociologists as nuclear motivating factors; and it tries to more broadly account for global patterns of nuclear reversal using status insights. As a definitional matter, it may be noted following Paul et al., *Status in World Politics*, that "status" implies a hierarchy whereas the term "prestige" is not hierarchical.

11. T. V. Paul, *Power Versus Prudence: Why Nations Forgo Nuclear Weapons* (Montreal: McGill-Queen's University Press, 2000); and Ariel E. Levite, "Never Say Never Again: Nuclear Reversal Revisited," *International Security* 27, no. 3 (2002–2003): 59–88, <http://www.jstor.org/stable/3092114>. For more on the relations between a state's security threat environment and its nuclear weapons choices, see Sagan, "Why Do States Build Nuclear Weapons?"; Richard K. Betts, "Paranoids, Pygmies, Pariahs and Nonproliferation Revisited," in *The Proliferation Puzzle*, ed. Zachary S. Davis and Benjamin Frankel (London: Frank Cass, 1993), 100–124; Leonard Beaton and John Maddox, *The Spread of Nuclear Weapons* (New York: Praeger, 1962); Saira Khan, *Nuclear Proliferation Dynamics in Protracted Conflict Regions: A Comparative Study of South Asia and the Middle East* (Aldershot, UK: Ashgate, 2002); Singh and Way, "The Correlates of Nuclear Proliferation."

12. This section draws upon the author's paper, "The Road to Global Nuclear Zero? Why the Nuclear Powers are Unlikely to Follow in South Africa's Footsteps," prepared for the Annual Convention of the International Studies Association, Montreal (March 2011).

13. The nuclear literature often emphasizes external security, domestic, or normative drivers of nuclear weapons choices; see Sagan, "Why Do States Build Nuclear Weapons?" For example, T. V. Paul distinguishes between high, medium, and low conflict regions and anticipates nuclear forbearance when states do not face regional security tensions from protracted conflicts and enduring rivalries; see Paul, *Power Versus Prudence*. Focusing on domestic political-economic aspects, Etel Solingen contends that leaderships advocating global economic integration prefer to avoid risky nuclear weapons pursuits that could impede trade and capital flows, endanger economic reforms, and alienate political constituencies; see Solingen, *Nuclear Logics: Contrasting Paths in East Asia and the Middle East* (Princeton, NJ: Princeton University Press, 2007). Differently, Jacques E. C. Hymans attributes states' nuclear weapons preferences to individual leaders' national identity conceptions; see Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (Cambridge, UK: Cambridge University Press, 2006). From a normative perspective, Maria Rost Rublee, relying on social psychology and constructivism, unpacks three distinct mechanisms—persuasion, social conformity, and identification—by which the international nuclear nonproliferation norm takes hold within a state; see Maria Rost Rublee, *Nonproliferation Norms: Why States Choose Nuclear Restraint* (Athens, GA: University of Georgia Press, 2009).

14. Galtung, "A Structural Theory of Aggression"; Paul et al., *Status in World Politics*.

15. See for instance Paul et al., *Status in World Politics*; Wohlforth, "Unipolarity"; and Wolf, "Respect and Disrespect in International Politics." For research on the significance of status motivations in human behavior, see Klaus Fliessbach, Bernd Weber, Peter Trautner, Thomas Dohmen, Uwe Sunde, C. E. Elger, and Armin Falk, "Social Comparison Affects Reward-Related Brain Activity in the Human Ventral Striatum," *Science* 23, no. 318 (2007): 1305–1308, <http://doi.org/dqvgb5>; Christoph Loch, Michael Yaziji, and Christian Langen, "The Fight for the Alpha Position: Channeling Status Competition in Organizations," *European Management Journal* 19, no. 1 (2001): 16–25, <http://doi.org/dtrvsr>; and Robert H.

Frank, *Choosing the Right Pond: Human Behavior and the Quest for Status* (New York: Oxford University Press, 1985).

16. Ministry of Foreign Affairs of Japan, *Diplomatic Bluebook 1983* (Tokyo: Ministry of Foreign Affairs, 1983); see in general the *Diplomatic Bluebook* of various years, from 1971 onward, <http://www.mofa.go.jp/policy/other/bluebook/>. The *Diplomatic Bluebooks* refer frequently to Japan's substantial international "status," "standing," and/or "position."

17. Alexei Barrionuevo, "Dancing Into the Evening, Brazil Celebrates Arrival on World Stage," *New York Times*, 3 October 2009, <http://www.nytimes.com/2009/10/04/world/americas/04brazil.html>. As a further example, the Georgian government's foreign policy seeks to "enhance the security and international status of Georgia" and achieve an "appropriate and dignified position in the system of international relations," quotation from the Ministry of Foreign Affairs website, accessed 1 March 2017, <http://www.mfa.gov.ge/MainNav/DiplomatService/MissionValues.aspx?lang=en-US>. Similarly, Singapore has pointed out its intention for the state "to be an extraordinary nation by strengthening . . . our international standing." Ministry of Foreign Affairs statement, 18 January 2016, [https://www.mfa.gov.sg/content/mfa/media\\_centre/press\\_room/pr/2016/201601/press\\_20160118.html](https://www.mfa.gov.sg/content/mfa/media_centre/press_room/pr/2016/201601/press_20160118.html).

18. Galtung, "A Structural Theory of Aggression."

19. For sociological literature on status consistency/equilibrium, see Gerhard E. Lenski, "Status Crystallization: A Non-Vertical Dimension of Social Status," *American Sociological Review* 19, no. 4 (1954): 405–13, <http://www.jstor.org/stable/2087459>; Edward E. Sampson, "Status Congruence and Cognitive Consistency," *Sociometry* 26, no. 2 (1963): 146–62, <http://doi.org/bt593x>; Moshe Hartman, "On the Definition of Status Inconsistency," *American Journal of Sociology* 80, no. 3 (1974): 706–21, <http://www.jstor.org/stable/2777255>; R. David Smith, "The Career of Status Crystallization: A Sociological Odyssey," *Sociological Research Online* 1, no. 3 (1996), <http://www.socresonline.org.uk/1/3/3.html>; and Samuel B. Bacharach, Peter Bamberger, and Bryan Mundell, "Status Inconsistency in Organizations: From Social Hierarchy to Stress," *Journal of Organizational Behavior* 14, no. 1 (1993): 21–36, <http://www.jstor.org/stable/2488127>.

20. Elton F. Jackson, "Status Consistency and Symptoms of Stress," *American Sociological Review* 27, no. 4 (1962): 470, <http://www.jstor.org/stable/2090028>; Galtung, "A Structural Theory of Aggression."

21. Gary B. Rush, "Status Consistency and Right-Wing Extremism," *American Sociological Review* 32, no. 1 (1967): 86–92, <http://www.jstor.org/stable/2091721>.

22. Galtung, "A Structural Theory of Aggression," 111.

23. *Ibid.*, 100.

24. External constraints on upward status mobility may reinforce this frustration.

25. Two main assumptions are made here. First, states wish to demonstrate status as a central impulse in international affairs. Second, international politics can be conceived of as a stratified social realm of interacting units (states). We do not aim to test a full-fledged status inconsistency theory as sociologists have done; instead, we identify the status deficiencies most likely to spur dissatisfaction and hence favorability to having nuclear weapons.

26. Nuclearization also appears to be influenced by external security factors (notably interstate disputes, nuclear rivals, and lack of a security guarantee from a nuclear power), international nuclear norms (especially norms in the early nuclear age relating nuclear arms to military and scientific-technical prowess), and technical opportunity factors; see Andrew Prosser, "Nuclearization and Its Discontents: Status, Security, and the Pathways to Nuclear Reversal" (PhD diss., Graduate Institute of International and Development Studies, Geneva, 2010).

27. Klaus Schubert, "France," in *Security With Nuclear Weapons? Different Perspectives on National Security*, ed. Regina Cowen Karp (Oxford, UK: Oxford University Press, 1991), 173.

28. Jaswant Singh, "Against Nuclear Apartheid," *Foreign Affairs* 77, no. 5 (1998): 41–52, <http://doi.org/cwcp5>.

29. States may be stymied in their efforts to improve diplomatic status given the strong dependence of this form of status on other states. Thus low diplomatic status often elicits frustration. Isolated states envisage little status to be lost, and likely much to gain, by challenging the nuclear status quo.

30. Isolated states such as Israel, South Africa, and North Korea acquired nuclear arms and other former pariahs, including South Korea and Taiwan, have had past nuclear ambitions; see Betts, "Paranoids, Pygmies, Pariahs." However, sociological status reasons for this trend are underexplored.

31. Democratic People's Republic of Korea (DPRK), Statement by the Foreign Ministry (Pyongyang), 3 October 2006, [http://www.europarl.europa.eu/meetdocs/2004\\_2009/documents/fd/dkor20061010\\_0015/dkor20061010\\_0015en.pdf](http://www.europarl.europa.eu/meetdocs/2004_2009/documents/fd/dkor20061010_0015/dkor20061010_0015en.pdf).

32. As suggested earlier, these preferences can partly reflect state-specific historical and cultural attributes.

33. See for example: Victor A. Utgoff, ed. *The Coming Crisis: Nuclear Proliferation, U.S. Interests, and World Order* (Cambridge, MA: MIT Press, 2000); Thomas C. Reed and Danny B. Stillman, *The Nuclear Express: A Political History of the Bomb and Its Proliferation* (Minneapolis, MN: Zenith Press, 2009); Ariel E. Levite, *Heading for the Fourth Nuclear Age*, IFRI Security Studies Center Proliferation Paper (Paris: Institut Français des Relations Internationales, 2009); Eric Gartzke and Matthew Kroenig, "A Strategic Approach to Nuclear Proliferation," *Journal of Conflict Resolution* 53, no. 2 (2009): 151–60, <http://www.jstor.org/stable/20684579>; Gordon Corera, *Shopping for Bombs: Nuclear Proliferation, Global Insecurity, and the Rise and Fall of the A.Q. Khan Network* (Oxford, UK: Oxford University Press, 2006); Chaim Braun and Christopher F. Chyba, "Proliferation Rings: New Challenges to the Nuclear Nonproliferation Regime," *International Security* 29, no. 2 (2004): 5–49, <http://www.jstor.org/stable/4137585>; and Leonard Spector, *Going Nuclear* (Cambridge, MA: Ballinger, 1987). The relatively smaller body of literature which has focused wholly or partly on nuclear restraint includes: Paul, *Power Versus Prudence*; Etel Solingen, *Nuclear Logics: Contrasting Paths in East Asia and the Middle East*; Mitchell Reiss, *Bridled Ambition: Why Countries Constrain their Nuclear Capabilities* (Washington, DC: Woodrow Wilson Center, 1995); Mitchell Reiss, *Without the Bomb: The Politics of Nuclear Nonproliferation* (New York: Columbia University Press, 1988); Rublee, *Nonproliferation Norms*; James Joseph Walsh, "Bombs Unbuilt: Power, Ideas, and Institutions in International Politics," PhD diss., Massachusetts Institute of Technology, 2001; and Levite, "Never Say Never Again."

34. For the purpose of this article, a state may nuclearize in any given year to one of three distinct levels: (1) executive deliberation of the possibility or utility of acquiring nuclear weapons and/or authorization of research with nuclear weapons applications to be conducted for defense purposes rather than for purely civilian ends (*nuclear deliberation*); (2) authorization of nuclear weapons acquisition (*nuclear pursuit*); or (3) possession of nuclear weapons (*nuclear possession*). Nuclear *aspirations* or *ambitions* indicate the state is either a nuclear deliberator or a pursuer. This scheme is adapted from Singh and Way, "The Correlates of Nuclear Proliferation."

35. In addition, the three post-Soviet states of Belarus, Kazakhstan, and Ukraine all rid themselves of the nuclear weapons on their territory during the 1990s and hence may offer some relevant insights regarding nuclear reversal incentives. For example, authors have pointed out that Ukraine gave up its nuclear weapons in part because Ukrainian officials viewed nuclear

renunciation as a better route to international standing than keeping the weapons; see Sagan, "Why Do States Build Nuclear Weapons?," 81; and William C. Potter, *The Politics of Nuclear Renunciation: The Cases of Belarus, Kazakhstan, and Ukraine*, Henry L. Stimson Center Occasional Paper no. 22 (Washington, DC: Stimson Center, 1995), 44. However these three states cannot be considered as cases of reversal per se since they did not operationally control their nuclear weapons and their arsenals were obtained not due to their independent sovereign decision but rather under the Soviet program.

36. Levite, "Never Say Never Again," 69.

37. The reversal pathways are ideal-types, to which specific states may conform to varying degrees. Hybrid combinations of multiple pathways may be possible. Each pathway is expected to increase the likelihood of nuclear reversal rather than embodying a deterministic causal path.

38. In particular, pathway 1 stipulates that a state's diplomatic isolation level fall below one-half. This measure uses diplomatic isolation data which account for (absence of) diplomatic recognition from neighboring states and major powers. The data come from Dong-Joon Jo and Erik Gartzke, "Determinants of Nuclear Weapons Proliferation," *Journal of Conflict Resolution* 51, no. 1 (2007): 167–94, <http://www.jstor.org/stable/27638542>.

39. Interstate disputes are measured with data indicating the five-year moving average of the number of militarized interstate disputes per year for each state; Singh and Way, "The Correlates of Nuclear Proliferation." These data draw on the Correlates of War militarized dispute data, <http://www.correlatesofwar.org/>. Other security developments such as nuclear rivalries ending and a security alliance with a nuclear-armed power could impact reversal in some cases, but these factors are not included in the reversal pathways.

40. In particular, a decline in a state's interstate dispute average to one-half the highest level since its nuclear ambitions emerged is a critical threshold.

41. Notably, South Africa's level of diplomatic isolation in the 1970s and 1980s was substantially higher than in the two preceding decades and its participation in international organizations had fallen from 40 organizations to just two by 1972; see Helen E. Purkitt and Stephen F. Burgess, "South Africa's Nuclear Decisions," letter to the editor, subject: "The Rise and Fall of the South African Bomb" by Peter Liberman *International Security* 27, no. 1 (2002): 187, <http://www.jstor.org/stable/3092157>. Similarly, South Africa was denied participation in the UN General Assembly in 1974, contributing to its perceived diplomatic estrangement.

42. Robert S. Jaster, *The Defence of White Power: South African Foreign Policy under Pressure* (London: Macmillan, 1988), 32.

43. James Barber and John Barratt describe South Africa's failure "to rid itself of the stigma of racism or improve its international status. Its hopes of transforming the situation on the foundation of the outward policy and dialogue were dashed. . . . In its frustration it talked of establishing a new international role, of turning its back on the West"; see James Barber and John Barratt, *South Africa's Foreign Policy: The Search for Status and Security 1945–1988* (Cambridge, UK: Cambridge University Press, 1990), 152. South African Foreign Minister Hilgard Muller spoke of an "international vendetta" being waged against the country while also emphasizing South Africa's prominence as a major trading nation; *ibid.*, 155; and D. J. van Vuuren, "South Africa's Foreign Policy and International Practice during 1976 as Reflected Mainly in Speeches, Statements and Replies by the Government in Parliament," in *South African Yearbook of International Law* (Pretoria: University of South Africa, 1976), 317.

44. Henk Botha, "South Africa's Foreign Policy and International Practice – 1990," in *South African Yearbook of International Law* (Pretoria: University of South Africa, 1990–1991), 191.

45. In this regard, de Klerk stated in 2006: “I wanted South Africa to return as soon as possible to the international arena, and I wanted to convince the rest of the world that we really were not playing with words, we really were prepared to undertake negotiations which would result in fundamental change. I wanted to achieve international support for the change process in South Africa, and I wanted to ensure that the leading countries of the world would keep an eye over the negotiation process and that if [there were] a threat of the negotiations deteriorating into further conflict, then they would step in to assure that a negotiated solution is guaranteed.” “Q & A: F. W. de Klerk on Iran, Nukes,” *Newsweek*, 12 May 2006, <http://europe.newsweek.com/qa-f-w-de-klerk-iran-nukes-109987?rm=eu>.

46. De Klerk would later state: “A nuclear deterrent had become not only superfluous, but in fact an obstacle to the development of South Africa’s international relations.” Anne-Marie Kriek, “South Africa’s Foreign Policy and International Practice – 1992 – an Analysis,” in *South African Yearbook of International Law* (Pretoria: University of South Africa, 1992–1993), 204.

47. For literature on middle states (powers), see: Andrew Hurrell, Andrew F. Cooper, Guadalupe González González, Ricardo Ubiraci Sennes, and Srinu Sitaraman, *Paths to Power: Foreign Policy Strategies of Intermediate States*, Latin American Program Working Paper no. 244 (Washington, DC: Woodrow Wilson International Center for Scholars, 2000); Andrew F. Cooper, Richard A. Higgott, and Kim Richard Nossal, *Relocating Middle Powers: Australia and Canada in a Changing World Order* (Vancouver, Canada: University of British Columbia Press, 1993); Laura Neack, “Middle Powers Once Removed: The Diminished Global Role of Middle Powers and American Grand Strategy” (paper prepared for the Annual Convention of the International Studies Association, Los Angeles, CA, March 2000); and Yolanda Kemp Spies, “Middle Power Diplomacy,” in *The Sage Handbook of Diplomacy*, ed. Costas M. Constantinou, Pauline Kerr, and Paul Sharp (London: Sage, 2016), 281–93. Middle states also tend to be democratic states that stand to benefit in significant ways from the existing international political and economic order. I use the term “middle states” to preclude any conceptual ambiguities surrounding the term “middle powers”; see Hurrell et al., *Paths to Power: Foreign Policy Strategies of Intermediate States*. On “soft power,” see Joseph S. Nye Jr., “Soft Power,” *Foreign Policy* 80 (1990): 153–71, <http://www.jstor.org/stable/1148580>; Joseph S. Nye Jr., *Soft Power: The Means to Success in World Politics* (New York: PublicAffairs, 2004).

48. Middle state status preferences are often molded by specific historical, geographical, and/or cultural influences, which could variously include: previous wars, proximity to or relations with major powers, or other significant national experiences.

49. I classify Finland, Denmark, Norway, Sweden, Australia, Canada, and Switzerland as middle states, in line with the literature on middle states which regularly mentions the Scandinavian states, Australia, Canada, and Switzerland. This categorization, albeit somewhat rough, aligns with our conceptualization of middle state status priorities.

50. Sweden’s inclinations toward diplomatic compromise, respect for the rule of law, and reformism stemmed partly from Swedish Social Democratic values as well as costly past experience with great power conflicts in earlier centuries, which had only harmed Sweden’s interests; see for example Paul M. Cole, *Atomic Bombast: Nuclear Weapon Decisionmaking in Sweden, 1945–1972*, Henry L. Stimson Center Occasional Paper no. 26 (Washington, DC: Stimson Center, 1996), 7.

51. Christine Agius, *The Social Construction of Swedish Neutrality: Challenges to Swedish Identity and Sovereignty* (Manchester, UK: Manchester University Press, 2006), 108.

52. Data on military expenditure as a share of GDP come from the Stockholm International Peace Research Institute (SIPRI), SIPRI Military Expenditure Database, [http://www.sipri.org/research/armaments/milex/milex\\_database](http://www.sipri.org/research/armaments/milex/milex_database). Some additional pre-1980s data are ob-

tained from SIPRI, *SIPRI Yearbook 1980* (London: Taylor and Francis, 1980). Two additional indicators are also relevant: (1) a government shift from military to civilian hands (i.e., when the highest executive officeholder changes from a military to a civilian official); and (2) constitutional restrictions that substantially limit the military's activities. Due to data limitations, the two supplementary indicators are not comprehensively coded for all states.

53. Gamaliel Perruci, "The North-South Security Dialogue in Brazil's Technology Policy," *Armed Forces & Society* 21, no. 3 (1995): 372, <http://doi.org/brzm8c>.

54. H. Jon Rosenbaum, "Brazil's Nuclear Aspirations," in *Nuclear Proliferation and the Near-Nuclear Countries*, ed. Onkar Marwah and Ann Schulz (Cambridge, MA: Ballinger, 1975), 268; Paul, *Power Versus Prudence*, 110.

55. Jean Krasno, "Brazil's Secret Nuclear Program," *Orbis* 38, no. 3 (1994): 431, <http://doi.org/b9xbh2>; see also Leonard Spector, *Going Nuclear* (Cambridge, MA: Ballinger, 1987). Michael Barletta similarly concludes that a fundamental motivation for Brazil's military nuclear program "was that it was viewed by military officers as a means to realize their ambition to enhance Brazil's international stature." Barletta, *The Military Nuclear Program in Brazil* (Stanford, CA: Center for International Security and Arms Control, 1997), 16.

56. John R. Redick, *Nuclear Illusions: Argentina and Brazil*, Henry L. Stimson Center Occasional Paper no. 25 (Washington, DC: Stimson Center, 1995), 19–20; and John R. Redick, Julio C. Carasales, and Paulo S. Wrobel, "Nuclear Rapprochement: Argentina, Brazil, and the Nonproliferation Regime," *The Washington Quarterly* 18, no. 1 (1994): 107–122, <http://doi.org/ctmmcz>.

57. This norm is defined as a commonly held belief among states that nuclear weapons acquisition violates standards of appropriate behavior in world politics; cf. Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," *International Organization* 52, no. 4 (1998): 887–917, <http://www.jstor.org/stable/2601361>; and Peter J. Katzenstein, ed., *The Culture of National Security: Norms and Identity in World Politics* (New York: Columbia University Press, 1996).

58. Notably, the Cuban missile crisis in the early 1960s was a factor in disrupting prevailing nuclear norms and augmenting the status costs of nuclear weapons.

59. The nuclear nonproliferation norm can be traced to the 1960s. An Irish UN General Assembly resolution was adopted in 1961 calling for measures to halt the spread of nuclear arms; see Emily Bailey, Richard Guthrie, Darryl Howlett, and John Simpson, *PPNN Briefing Book, vol. I, The Evolution of the Nuclear Non-Proliferation Regime* (Southampton, UK: Programme for Promoting Nuclear Non-Proliferation, 2000). Furthermore, the Nuclear Non-Proliferation Treaty (NPT) was negotiated during the 1960s, with its adoption taking place in 1968.

60. The major powers are states that reach high composite power, economic, and population levels and are permanent UN Security Council members. For recent years, the major powers include the United States, Russia, United Kingdom, France, and China. For coding details regarding major powers, near-major powers, and non-powers, see Prosser, "Nuclearization and Its Discontents."

61. Nor do the reversal pathways apply to near-major power nuclear possessors (i.e. India). However they do appear to apply to non-possessor near-major powers such as Brazil, Germany, and Japan—and likely Iran.

62. For further discussion of the major powers' nuclear logics and the potential for nuclear disarmament, see Prosser, "Nuclearization and Its Discontents," chap. 10; and Prosser, "The Road to Global Nuclear Zero?"

63. For coding details, see Prosser, "Nuclearization and Its Discontents."

64. For statistical and case study evidence in support of the article's theoretical arguments, see *ibid.*

65. David Albright and Andrea Stricker, "Iran's Nuclear Program," in *The Iran Primer: Power, Politics, and U.S. Policy*, ed. Robin Wright (Washington, DC: United States Institute of Peace, 2010), 77–81; IAEA, Research Reactor Database, <https://nucleus.iaea.org/RRDB/RR/ReactorSearch.aspx>.

66. Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar, *Deadly Arsenals* (Washington, DC: Carnegie Endowment for International Peace, 2005), 298; Shyam Bhatia, *Nuclear Rivals in the Middle East* (New York: Routledge, 1988), 83. Iran placed orders with West German and French entities in the 1970s for the supply of nuclear energy technology, including the construction of two nuclear power reactors at Bushehr.

67. On the alleged secret nuclear arms project comprising weapons design and computer analyses, see Spector, *Going Nuclear*; and Bhatia, *Nuclear Rivals in the Middle East*, 82–85. The Shah reportedly stated to a French interviewer that Iran would one day possess nuclear arms "without a doubt and sooner than one would think," but this statement was later refuted; see John K. Cooley, "More Fingers on the Nuclear Trigger?," *Christian Science Monitor*, 25 June 1974, as quoted in Anne Hessing Cahn, "Determinants of the Nuclear Option: The Case of Iran," in *Nuclear Proliferation and the Near-Nuclear Countries*, ed. Onkar Marwah and Ann Schulz (Cambridge, MA: Ballinger, 1975), 199.

68. Zubeida Malik, "The Man Who Turned Iran Nuclear," *BBC News*, 28 March 2013, <http://www.bbc.com/news/world-middle-east-21938310>. Former Iranian Foreign Minister Ardeshir Zahedi has said that the Shah's strategy was to create a nuclear option consisting of "the know-how, the infrastructure and the personnel needed to develop a nuclear military capacity within a short time without actually doing so. . . . The assumption within the policy-making elite was that Iran should be in a position to develop and test a nuclear device within 18 months"; see Ray Takeyh, *Hidden Iran: Paradox and Power in the Islamic Republic* (New York: Times Books/Henry Holt, 2006), 136.

69. Rodney W. Jones, Mark G. McDonough, Toby F. Dalton, and Gregory D. Koblenz, *Tracking Nuclear Proliferation: A Guide in Maps and Charts, 1998* (Washington, DC: Carnegie Endowment for International Peace, 1998), 169.

70. Solingen, *Nuclear Logics*, 164; and Albright and Stricker, "Iran's Nuclear Program," 78.

71. David Rohde and David E. Sanger, "Key Pakistani Is Said to Admit Atom Transfers," *New York Times*, 2 February 2004: A1, <http://www.nytimes.com/2004/02/02/world/key-pakistani-is-said-to-admit-atom-transfers.html>.

72. The Bushehr reactor was later completed and was connected to the power grid in 2011, under IAEA safeguards and with nuclear fuel from Russia; see IAEA Power Reactor Information System (PRIS), <https://www.iaea.org/PRIS/CountryStatistics/ReactorDetails.aspx?current=310>; and Albright and Stricker, "Iran's Nuclear Program," 79.

73. See for example: IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, Report by the Director General, GOV/2003/75, 10 November 2003, 9–10; IAEA, *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007) and 1803 (2008) in the Islamic Republic of Iran*, Report by the Director General, GOV/2008/15, 26 May 2008, 3–5; and IAEA, *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran*, Report by the Director General, GOV/2011/65, 8 November 2011, 10, annex. In 2006, the IAEA transmitted its dossier on Iran to the UN Security Council, which expressed concern at the possibility of military nuclear activities in Iran; see United Nations Security Council, Resolution 1696, S/RES/1696, 31 July 2006, 1.



74. IAEA, *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran*, Report by the Director General, GOV/2013/6, 21 February 2013, 9.

75. IAEA, *Final Assessment*.

76. Ibid.; statement of James R. Clapper, director of National Intelligence, *Worldwide Threat Assessment of the US Intelligence Community*, to the US Senate Select Committee on Intelligence, 9 February 2016, 8, [https://www.dni.gov/files/documents/SSCI\\_Unclassified\\_2016\\_ATA\\_SFR%20\\_FINAL.pdf](https://www.dni.gov/files/documents/SSCI_Unclassified_2016_ATA_SFR%20_FINAL.pdf); Risen and Mazzetti, “U.S. Agencies See No Move by Iran to Build a Bomb”; and ODNI, *Iran: Nuclear Intentions and Capabilities*. Page 15 of the IAEA’s report states: “The Agency assesses that a range of activities relevant to the development of a nuclear explosive device were conducted in Iran prior to the end of 2003 as a coordinated effort, and some activities took place after 2003. The Agency also assesses that these activities did not advance beyond feasibility and scientific studies, and the acquisition of certain relevant technical competences and capabilities. The Agency has no credible indications of activities in Iran relevant to the development of a nuclear explosive device after 2009.”

77. This period of nuclear pursuit is broadly compatible with recent IAEA assessments and it is in line with the November 2007 US National Intelligence Estimate that noted Iran pursued nuclear weapons “from at least the late 1980s to 2003.”

78. As noted earlier, the data used here indicate the five-year moving average of the number of militarized interstate disputes per year for a given state.

79. It can also be noted that Britain’s military presence in the region diminished as of the early 1970s.

80. Anthony H. Cordesman, *After the Storm: The Changing Military Balance in the Middle East* (London: Bloomsbury, 2016), 381. The Shah’s purported aspirations towards regional primacy for Iran in the Gulf may also have been a factor driving this military buildup; see Roham Alvandi, “Nixon, Kissinger, and the Shah: the Origins of Iranian Primacy in the Persian Gulf,” *Diplomatic History* 36, no. 2 (2012): 337–72, <http://doi.org/b2j5>.

81. For example, the United States attacked Iranian oil platforms and destroyed an Iranian frigate and other naval vessels in the Persian Gulf in 1987–1988 during Operation Nimble Archer and Operation Praying Mantis, in retaliation for Iran’s attacks on Kuwaiti oil tankers and its use of sea mines; see Dan Lamothe, “A Brief History of Iran-U.S. Naval Altercations as Tensions Rise near Yemen,” *Washington Post*, 21 April 2015, [https://www.washingtonpost.com/news/checkpoint/wp/2015/04/21/a-brief-history-of-iran-u-s-naval-altercations-as-tensions-rise-near-yemen/?utm\\_term=.1ded074de23d](https://www.washingtonpost.com/news/checkpoint/wp/2015/04/21/a-brief-history-of-iran-u-s-naval-altercations-as-tensions-rise-near-yemen/?utm_term=.1ded074de23d); and “Operation Praying Mantis,” *GlobalSecurity.org*, accessed 3 March 2017, [http://www.globalsecurity.org/military/ops/praying\\_mantis.htm](http://www.globalsecurity.org/military/ops/praying_mantis.htm).

82. Specifically, Iran’s interstate dispute average climbed to 9.6 in 1988.

83. Saddam Hussein after the 1991 Persian Gulf War “purposely gave an ambiguous impression about [Iraqi WMD] possession as a deterrent to Iran”; Iraq Survey Group (ISG), *Comprehensive Report of the Special Advisor to the DCI on Iraq’s WMD* (Duelfer Report), vol. I (Regime Strategy) (Washington, DC: United States Government Printing Office, 2004), 9, [https://www.cia.gov/library/reports/general-reports-1/iraq\\_wmd\\_2004/transmittal.html](https://www.cia.gov/library/reports/general-reports-1/iraq_wmd_2004/transmittal.html).

84. “Bush Says all Options on Table on Iran,” *Reuters*, 19 June 2007, <http://www.reuters.com/article/2007/06/19/us-usa-iran-idUSN1945300920070619>; and MacInnis, “Obama: No Options Off Table On Iran Nuclear Program.”

85. Khamenei stated: “Regarding atomic energy, we need it now. . . . Our nation has always been threatened from outside. The least we can do to face this danger is to let our enemies know that we can defend ourselves. Therefore, every step you take here is in defense

of your country and your [r]evolution. With this in mind, you should work hard and at great speed." See "Nuclear Weapons – Iranian Statements," GlobalSecurity.org, <http://www.globalsecurity.org/wmd/world/iran/nuke2.htm>.

86. Quoted in *Dealing with Iran's Nuclear Program*, International Crisis Group Middle East Report no. 18 (Amman/Brussels: ICG, 2003), 12, <https://d2071andvip0wj.cloudfront.net/18-dealing-with-iran-s-nuclear-program.pdf>.

87. UN General Assembly, "Letter dated 17 March 2006 from the Permanent Representative of the Islamic Republic of Iran to the United Nations addressed to the Secretary-General," A/60/730, 22 March 2006, 2, [http://repository.un.org/bitstream/handle/11176/18370/A\\_60\\_730%3bS\\_2006\\_178-EN.pdf?sequence=21&isAllowed=y](http://repository.un.org/bitstream/handle/11176/18370/A_60_730%3bS_2006_178-EN.pdf?sequence=21&isAllowed=y).

88. Roy Gutman, "Poll Shows Iranians Support Uranium-enrichment Program," McClatchy Newspapers, 24 January 2007, <http://www.mcclatchydc.com/latest-news/article24461023.html>.

89. See Glenn Kessler, "In 2003, U.S. Spurned Iran's Offer of Dialogue," *Washington Post*, 18 June 2006: A16, <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/17/AR2006061700727.html>; Government of Iran, "Proposal By Iran Presented to Political and Security Working Group Geneva – January 17, 2005," Proposal to the EU3/Iran Political and Security Working Group, 17 January 2005.

90. Ray Takeyh, "Iranian Options: Pragmatic Mullahs and America's Interests," *The National Interest* 73 (Fall 2003), 53, <http://www.jstor.org/stable/42895640>.

91. David Cortright and George A. Lopez, "Bombs, Carrots, and Sticks: The Use of Incentives and Sanctions," *Arms Control Today* 35 (March 2005): 19–24, <http://www.jstor.org/stable/23627336>.

92. Alireza Nader, "Influencing Iran's Decisions on the Nuclear Program," in *Sanctions, Statecraft, and Nuclear Proliferation*, ed. Etel Solingen (Cambridge, UK: Cambridge University Press, 2012), 211. The weight of Iran's external security environment upon its nuclear choices is echoed by T. V. Paul, who argues that Iran is interested in nuclear weapons as a means to deter aggression by regional adversaries; T. V. Paul, "Disarmament Revisited: Is Nuclear Abolition Possible?," *Journal of Strategic Studies* 35, no. 1 (2012): 149–69, <http://doi.org/b2jq>.

93. As noted above, our data reflect diplomatic recognition from neighboring states and the major powers.

94. Iran's diplomatic exclusion in the second half of the 1980s reached one-fifth of neighboring states and major powers not extending diplomatic relations, while this figure lessened in the 1990s. Symptomatic of Iran's isolation during the Iran-Iraq War was the fact that Iran was the target of an international arms embargo led by the United States whereas Iraq received conventional arms supplies from several states; see Geoffrey Kemp, "How to Stop the Iranian Bomb," *The National Interest* 72 (Summer 2003): 48–58, <http://www.jstor.org/stable/42897482>.

95. Iran often denounced the international sanctions imposed on it, which comprised travel bans on officials involved in the nuclear program, an arms embargo, financial sanctions, an oil embargo by the European Union, and other penalties. Iran sought sanctions relief in nuclear negotiations, proposals for which frequently did not meet Iran's expectations; see "History of Official Proposals on the Iranian Nuclear Issue," Arms Control Association, January 2014, [http://www.armscontrol.org/factsheets/Iran\\_Nuclear\\_Proposals](http://www.armscontrol.org/factsheets/Iran_Nuclear_Proposals).

96. Notably, Iran and the United States have not maintained bilateral diplomatic relations with one another for decades. Admittedly, Iran has forestalled extreme isolation to an extent, having maintained or established diplomatic relations with states, for example, from Europe and the global South.

97. In fact, Iranian politicians often highlight in their speeches the great and unique nature of Iran's accomplishments and capacities as a nation and people.

98. Statement of George Perkovich, in "Iran: Weapons Proliferation, Terrorism and Democracy," testimony before the United States Senate Foreign Relations Committee, 19 May 2005, 8, <http://www.foreign.senate.gov/imo/media/doc/PerkovichTestimony050519.pdf>.

99. Craig Whitlock and Liz Sly, "For Iran and Saudi Arabia, Simmering Feud Is Rooted in History," *Washington Post*, 11 October 2011, [https://www.washingtonpost.com/world/national-security/for-iran-and-saudi-arabia-simmering-feud-is-rooted-in-history/2011/10/11/gIQAh-YugdL\\_story.html](https://www.washingtonpost.com/world/national-security/for-iran-and-saudi-arabia-simmering-feud-is-rooted-in-history/2011/10/11/gIQAh-YugdL_story.html).

100. On nuclear opacity, see Avner Cohen and Benjamin Frankel, "Opaque Nuclear Proliferation," *Journal of Strategic Studies* 13, no. 3 (1990): 14–44, <http://doi.org/fb4j7b>. For additional studies on South Africa's nuclear motivations, see Prosser, "Nuclearization and Its Discontents," chap. 9; Prosser, "The Road to Global Nuclear Zero?"; Peter Liberman, "The Rise and Fall of the South African Bomb," *International Security* 26, no. 2 (Fall 2001): 45–86, <http://www.jstor.org/stable/3092122>; and Waldo Stumpf, "South Africa's Nuclear Weapons Program: From Deterrence to Dismantlement," *Arms Control Today* 25, no. 10 (December 1995/January 1996): 3–8, [https://www.armscontrol.org/system/files/ACT\\_South%20Africa\\_9601.pdf](https://www.armscontrol.org/system/files/ACT_South%20Africa_9601.pdf).

101. See for example, "Zarif: Iran Top Regional Power," *Iran Daily*, 30 October 2016, <http://www.iran-daily.com/News/171212.html>; and Luciano Zaccara, "Iran's Permanent Quest for Regional Power Status," in *Diplomatic Strategies of Nations in the Global South*, ed. Jacqueline Anne Braveboy-Wagner (New York: Palgrave Macmillan, 2016), 181–211.

102. Thomas Erdbrink, "A Deeply Polarized Iran Prepares to Choose a President," *Washington Post*, 12 June 2009, <http://www.washingtonpost.com/wp-dyn/content/article/2009/06/11/AR2009061104106.html>.

103. Thomas Juneau, *Squandered Opportunity: Neoclassical Realism and Iranian Foreign Policy* (Stanford, CA: Stanford University Press, 2015), 83.

104. For example, former IRGC commander Mohsen Rezai stated in 2007 that it is Iran's "principal and indisputable right to become a regional power"; as quoted in Mohsen M. Milani, "Tehran's Take: Understanding Iran's U.S. Policy," *Foreign Affairs* 88, no. 4 (July/August 2009): 46–62, <http://www.jstor.org/stable/20699621>.

105. Robert Lowe and Claire Spencer, eds., *Iran, its Neighbours and the Regional Crises* (London: Chatham House, 2006), 8.

106. Bahman Baktiari, "Seeking International Legitimacy: Understanding the Dynamics of Nuclear Nationalism in Iran," in *Nuclear Politics in Iran*, ed. Judith S. Yaphe (Washington, DC: Institute for National Strategic Studies, National Defense University, 2010), 23, <http://ndupress.ndu.edu/Portals/68/Documents/stratperspective/middle-east/middleEastPerspectives-1.pdf>.

107. Juneau, *Squandered Opportunity*, 83. In addition, Shahram Chubin points out that "Iranians believe that the United States . . . misses no opportunity to deny it its rightful role and to weaken it"; see Chubin, *Iran's Nuclear Ambitions* (Washington, DC: Carnegie Endowment for International Peace, 2006), 14. Also see Shashank Joshi, *The Permanent Crisis: Iran's Nuclear Trajectory* (New York: Routledge, 2012), 13.

108. Rahman Ghahremanpour, "Iran Looking West: Identity, Rationality and Iranian Foreign Policy," in *Iran and the West: Regional Interests and Global Controversies*, ed. Rouzbeh Parsi and John Rydqvist, FOI Special Report (Stockholm: FOI, 2011), 56.

109. Juneau, *Squandered Opportunity*, 84.

110. Joshi, *The Permanent Crisis*, 43. As Bahman Baktiari writes, "Shi'ite history reinforces this deep sense of victimization. . . . The relevance of this identity is not lost on Iranian politicians." Baktiari, "Seeking International Legitimacy," 23.

111. See “Iran Press: Rafsanjani’s Statement Outlines Reasons behind Candidacy Decision,” *Iran*, 11 May 2005, in BBC Monitoring, 14 May 2005, as quoted in Chubin, *Iran’s Nuclear Ambitions*, 152. On Iranian leaders’ desire for respect for Iran, see Baktiari, “Seeking International Legitimacy,” 23.

112. Clapper, *Worldwide Threat Assessment of the US Intelligence Community*.

113. Mark Fitzpatrick, “Lessons Learned from Iran’s Pursuit of Nuclear Weapons,” *The Nonproliferation Review* 13, no. 3 (2006): 527–37, <http://doi.org/dfqnhm>.

114. Chubin, *Iran’s Nuclear Ambitions*, 137.

115. Juneau, *Squandered Opportunity*, 81.

116. Chubin, *Iran’s Nuclear Ambitions*, 16.

117. Additionally, while not emphasized here as a primary explanation of Iranian nuclear aspirations, it is interesting to note that domestic military legitimacy and influence appears to broadly correspond with Iran’s nuclear ambitions in recent decades. Thus the military under the shah was lavished with expensive weapons systems and its budget grew enormously for much of the 1970s; see John P. Miglietta, *American Alliance Policy in the Middle East, 1945–1992* (Lanham, MD: Lexington Books, 2002), 95. Subsequently, the military gained legitimacy during the Iran-Iraq War and the Islamic Revolutionary Guard Corps’ (IRGC) influence in Iranian politics and society flourished especially as of the 1990s. See Nikola B. Schahgaldian, *The Iranian Military Under the Islamic Republic* (Santa Monica, CA: RAND, 1987), 36–38; Alireza Nader, “The Revolutionary Guards,” in *The Iran Primer: Power, Politics, and U.S. Policy*, ed. Robin Wright (Washington, DC: United States Institute of Peace, 2010), 59–61; and Greg Bruno and Jayshree Bajoria, “Iran’s Revolutionary Guards,” Council on Foreign Relations, 12 October 2011, <http://www.cfr.org/iran/irans-revolutionary-guards/p14324>. Military legitimacy within a state may reinforce power status seeking; the link between military legitimacy and status priorities is expounded below in the context of nuclear reversal.

118. See Ghahremanpour, “Iran Looking West”; and R. K. Ramazani, *Independence Without Freedom: Iran’s Foreign Policy* (Charlottesville, VA: University of Virginia Press, 2013).

119. See Zaccara, “Iran’s Permanent Quest for Regional Power Status”; and Ghahremanpour, “Iran Looking West,” 54. Iran’s autonomy status is interconnected as well with the crucial regime goal of achieving legitimacy, both internally and in Iran’s external affairs. On the official Iranian interest in gaining legitimacy for Iran, see Baktiari, “Seeking International Legitimacy.”

120. E’TEMAD-E MELLI, 7 October 2006, as paraphrased in Solingen, *Nuclear Logics*, 169.

121. Bruce W. Jentleson and Christopher A. Whytock, “Who ‘Won’ Libya? The Force-Diplomacy Debate and Its Implications for Theory and Policy,” *International Security* 30, no. 3 (Winter 2005/2006): 48, <http://www.jstor.org/stable/4137487>.

122. Rublee, *Nonproliferation Norms*, 161.

123. “President on Peaceful Use of Nuclear Power,” IRNA (Tehran), 2 January 1996, in FBIS Document FTS 19960102000270; as quoted in Nuclear Threat Initiative, “Iran Nuclear Chronology,” 2 January 1996, <http://www.nti.org>.

124. See Tom Miles, “Iran, Biggest Economy Outside WTO, Says It’s Ready to Join,” *Reuters*, 17 December 2015, <http://www.reuters.com/article/us-iran-wto-idUSKBN0U02NZ20151217>.

125. On status accommodation, see Paul, et al., *Status in World Politics*; and T. V. Paul, ed., *Accommodating Rising Powers: Past, Present, and Future* (Cambridge, UK: Cambridge University Press, 2016).

126. Iran has cooperated with the United States in the effort to secure Afghanistan against the Taliban; see Dina Esfandiary and Ariane Tabatabai, “Iran’s ISIS Policy,” *International Affairs* 91, no. 1 (2015): 1–15, <http://doi.org/b2hw>. Additionally the United States and Iran have held

joint talks to address Iraq security issues, for instance in 2007 and 2008 during the George W. Bush administration.

127. For example, in Iran these domestic actors may consist of hard-line clerics and so-called principlist conservative officials who define themselves and the regime's legitimacy based on opposition to the West and the current international order; others may be segments of the IRGC and perhaps the atomic research establishment.

128. Iran's diplomatic isolation and interstate dispute figures actually satisfied our formal threshold for nuclear reversal for some years in the 1990s. This is in line with our understanding that the reversal pathways are associated with an increased likelihood of reversal, rather than deterministic causation. Limited data coverage results in a less complete empirical picture more recently.

129. Although admittedly not Iran's regular military, the IRGC plays a role in both external and internal security in Iran and has land, sea, and air forces of up to 150,000 members; Nader, "The Revolutionary Guards." It is useful to point out that the IRGC plays a noteworthy role in Iran's nuclear and missile programs.

130. Shahram Chubin, "Iran: Domestic Politics and Nuclear Choices," in *Strategic Asia 2007-2008: Domestic Political Change and Grand Strategy*, ed. Ashley J. Tellis and Michael Wills (Seattle, WA: National Bureau of Asian Research, 2007), 315–16.

131. Chubin, "Iran: Domestic Politics and Nuclear Choices," 316; Judith S. Yaphe and Charles D. Lutes, *Reassessing the Implications of a Nuclear-Armed Iran*, McNair Paper no. 69 (Washington, DC: National Defense University, 2005), 6.

132. Juneau, *Squandered Opportunity*, 83.

133. Nader, "The Revolutionary Guards"; and Chubin, "Iran: Domestic Politics and Nuclear Choices," 315–16.

134. Redick, *Nuclear Illusions: Argentina and Brazil*, 44.

135. Maria Regina Soares de Lima and Mônica Hirst, "Brazil as an Intermediate State and Regional Power: Action, Choice and Responsibilities," *International Affairs* 82, no. 1 (2006): 21–40, <http://www.jstor.org/stable/3569128>; Ewen MacAskill, "Push to Enlarge Security Council Looks Doomed," *The Guardian*, 14 July 2005, <https://www.theguardian.com/world/2005/jul/15/unitednations>; and "India, G4 Partners Reaffirm 'Unwavering Commitment' to UNSC Reforms," *The Times of India*, 24 September 2016, <http://timesofindia.indiatimes.com/india/India-G4-partners-reaffirm-unwavering-commitment-to-UNSC-reforms/article-show/54493322.cms>.

136. See, for example, William Samii, "The Military-Mullah Complex: The Militarization of Iranian Politics," *The Weekly Standard*, 23 May 2005, <http://www.weeklystandard.com/article/6824>; and Yaphe and Lutes, *Reassessing the Implications of a Nuclear-Armed Iran*.

137. For instance, Ray Takeyh notes that "the Guards and the hardline clerics have a relationship of mutual dependence"; Takeyh, "How Powerful Is Iran's Revolutionary Guard Corps?," Council on Foreign Relations, 16 June 2016, <http://www.cfr.org/iran/powerful-irans-revolutionary-guard-corps/p38009>.

138. Nader, "The Revolutionary Guards."

139. Iran has previously satisfied the criteria for reversal pathway 3, notably for a brief period in the early 1990s when the data indicate a drop in military expenditures after the Iran-Iraq War ended. Again, the pathways do not represent deterministic causal paths but rather increase the likelihood of nuclear reversal. Data coverage is incomplete for the post-2000 era.

140. Only early nuclear reversers Germany and Italy did not experience a decline in interstate disputes as specified in the nuclear pathways described above.

141. Sagan, “Why Do States Build Nuclear Weapons?”; and Levite, “Never Say Never Again.”

142. See Rublee, *Nonproliferation Norms*, 154–62.

143. Eric Arnett, “Norms and Nuclear Proliferation: Sweden’s Lessons for Assessing Iran,” *The Nonproliferation Review* 5, no. 2 (Winter 1998): 41, <https://www.nonproliferation.org/wp-content/uploads/npr/arnett52.pdf>.

144. Quoted in Andrew J. Pierre, *Nuclear Politics: The British Experience with an Independent Strategic Force 1939–1970* (London: Oxford University Press, 1972), 178.

145. British nuclear weapons were deemed necessary for new contingencies for which they would objectively seem to be of lesser strategic necessity, such as countering threats from terrorists and “uncertain future” scenarios; see United Kingdom Ministry of Defence, *The Strategic Defence Review: A New Chapter*, cm 5566, vol. I (London: Ministry of Defence, 2002), 12; and United Kingdom government, *The Future of the United Kingdom’s Nuclear Deterrent*, Defence White Paper, cm 6994 (Norwich, UK: Crown Copyright, December 2006), 18–19, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/27378/DefenceWhitePaper2006\\_Cm6994.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/27378/DefenceWhitePaper2006_Cm6994.pdf).

146. Levite, “Never Say Never Again,” 74.

147. Domestic bureaucracies may promote policies based on parochial priorities and conceptions of organizational mission; see Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown and Company, 1971); and Morton H. Halperin, *Bureaucratic Politics and Foreign Policy* (Washington, DC: Brookings Institution, 1974).

148. Sagan, “Why Do States Build Nuclear Weapons?”; and Steven Flank, “Exploding the Black Box: The Historical Sociology of Nuclear Proliferation,” *Security Studies* 3, no. 2 (Winter 1993/94): 259–94, <http://doi.org/dcjvck>.

149. Peter R. Lavoy, “Nuclear Myths and the Causes of Nuclear Proliferation,” in Davis and Frankel, *The Proliferation Puzzle*, 199.

150. Michael Barletta, “Democratic Security and Diversionary Peace: Nuclear Confidence-building in Argentina and Brazil,” *National Security Studies Quarterly* 5, no. 3 (1999): 19–38; and Singh and Way, “The Correlates of Nuclear Proliferation.”

151. Solingen, *Nuclear Logics: Contrasting Paths in East Asia and the Middle East*, 17.

152. Lavoy, “Nuclear Myths and the Causes of Nuclear Proliferation”; and Lawrence Scheinman, *Atomic Energy Policy in France under the Fourth Republic* (Princeton, NJ: Princeton University Press, 1965).

153. Solingen, *Nuclear Logics*, 45.

154. See Chubin, “Iran: Domestic Politics and Nuclear Choices”; and Kevjn Lim, “National Security Decision-Making in Iran,” *Comparative Strategy* 34, no. 2 (2015): 149–68, <http://doi.org/b2hn>.

155. For more on Iranian nuclear decision making and the actors involved, see Lim, “National Security Decision-Making in Iran”; Shahram Chubin, “Decisionmaking for National Security: The Nuclear Case,” in *Understanding Iran*, ed. Jerrold D. Green, Frederic Wehrey, and Charles Wolf, Jr. (Santa Monica, CA: RAND, 2009), 52–65; Shahram Chubin, *Iran’s Nuclear Ambitions*. Important national security matters are regularly decided within the Supreme National Security Council (SNSC), which consists of, among others: the President, the Defense Minister, the IRGC Commander, the Foreign Minister, and representatives of the Supreme Leader. Further Iranian domestic inputs into nuclear policy appear to emanate from, notably, the AEOI and informal and clerical networks linked to the Supreme Leader; see Chubin, “Decisionmaking for National Security: The Nuclear Case.”

156. See Chubin, “Iran: Domestic Politics and Nuclear Choices,” 318.

157. *Ibid.*, 314–17.
158. Shahram Chubin, “The Politics of Iran’s Nuclear Program,” *The Iran Primer*, United States Institute of Peace, August 2015, <http://iranprimer.usip.org/resource/politics-irans-nuclear-program>.
159. There are some further shortcomings to domestic politics arguments when applied to potential Iranian nuclear reversal. First, domestic accounts may not sufficiently allow for key individuals or bureaucracies to have a change of heart. This can exclude plausible outcomes such as pronuclear officials reversing their nuclear outlook, as Gadhafi did in Libya. In addition, amid Iran’s complex political scene composed of various actors and centers of influence, it is not evident that a domestic politics approach could disentangle these influences enough to offer unambiguous conclusions about how or when nuclear reversal may happen. Which actors are the most significant for a potential reversal? Which domestic institution(s) would trump the others?
160. Dick Cheney, Vice Presidential Debate, 5 October 2004, transcript, *Washington Post*, [http://www.washingtonpost.com/wp-srv/politics/debatereferee/debate\\_1005.html](http://www.washingtonpost.com/wp-srv/politics/debatereferee/debate_1005.html); and Jentleson and Whytock, “Who ‘Won’ Libya?,” 48.
161. Jentleson and Whytock, “Who ‘Won’ Libya?,” 70–73.
162. Official discussions with the United States and Britain likewise appear to have highlighted for Gadhafi the diplomatic and economic advantages that could be gained from reining in Libya’s nuclear ambitions.
163. Reiss, *Bridled Ambition*, 32.
164. Redick, *Nuclear Illusions*, 48.
165. Reiss, *Bridled Ambition*, 70.
166. Russel J. Leng, “Escalation: Competing Perspectives and Empirical Evidence,” *International Studies Review* 6 (2004): 59, <http://www.jstor.org/stable/3699725>.
167. Celia L. Reynolds and Wilfred T. Wan, “Empirical Trends in Sanctions and Positive Inducements in Nonproliferation,” in Solingen, *Sanctions, Statecraft*, 80.
168. See Alireza Nader, “Influencing Iran’s Decisions,” in Solingen, *Sanctions, Statecraft*, 211–12.
169. Sarah Kreps and Zain Pasha, “Threats for Peace? The Domestic Distributional Effects of Military Threats,” in Solingen, *Sanctions, Statecraft*, 174–207.
170. It should also be noted that military strikes would likely elicit “blowback” effects. As Mohsen M. Milani explains, “the costs and unintended consequences of a preemptive strike would be exorbitant. Military or unconventional retaliation by Iran cannot be ruled out. . . . Tehran also has some leverage in Iraq, Lebanon, Afghanistan, and in the Persian Gulf that it could manipulate to complicate matters for the United States. . . . Any preemptive strike is likely to unify Iran, strengthen the conservatives, and generate anti-Americanism—and this in a country where the perception of the United States today is considerably more favorable than in most other Islamic countries.”; Milani, “Iran, the Status Quo Power,” *Current History* 104, no. 678 (2005): 36, <http://www.currenthistory.com/Article.php?ID=39>.
171. Another potential argument holds that Iran covets nuclear arms for regional dominance and coercion of other states, thus making Iranian nuclear reversal unlikely. While we have seen that Iran does seek to be recognized as a powerful state, the contention that it wants to dominate and coerce others is questionable. For instance, Mohsen M. Milani points out that Iran has largely transitioned to policies seeking to uphold the regional status quo; see Milani, “Iran, the Status Quo Power.”
172. We do not claim here to elaborate all determinants of status preferences or all ways status influences nuclear policy; rather we aim to identify some key status influences on nuclear

## *Much Ado about Nothing?*

reversal patterns. While we recognize status as generally entailing a combination of material achievements or actions and the concurrent belief that the accomplishments are important, additional conceptual elaboration of the material and ideational elements of status could be fruitful with regard to nuclear decision-making. In general, future research could usefully shed further light on how status impacts state behavior—in the nuclear domain as well as in other areas. For instance, examining the notion of status reference groups could help further clarify the relations between status and nuclear arms, notably in terms of the other state, regional, and/or international constituencies that are relevant in influencing status pursuits. On status reference groups, see Deborah Welch Larson and Alexei Shevchenko, “Status Seekers: Chinese and Russian Responses to U.S. Primacy,” *International Security* 34, no. 4 (2010): 63–95, <http://www.jstor.org/stable/40784562>.

### **Disclaimer**

The views and opinions expressed or implied in SSQ are those of the authors and are not officially sanctioned by any agency or department of the US government. We encourage you to send comments to: [strategicstudiesquarterly@us.af.mil](mailto:strategicstudiesquarterly@us.af.mil).