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From Transformational to Transactional Diplomacy

by Robert S. Litwak



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Preface and Acknowledgments

This monograph draws on my previous analyses in *Iran's Nuclear Chess: After the Deal*, published in 2015, and *Preventing North Korea's Nuclear Breakout*, published in 2018, and is the latest in a series of publications on the normative challenge to international order posed by "rogue states."

The impetus for this monograph was the ongoing nuclear impasse with North Korea after the abortive Trump-Kim summit in February 2019, in tandem with the U.S. withdrawal from the Iran nuclear agreement in May 2018, which has generated heightened tensions and risk of a military clash. The Trump administration eschewed its predecessor's transactional approach toward Iran, focused on the discrete nuclear issue, in favor of a transformational strategy—a comprehensive set of 12 demands that would essentially necessitate a change of regime in Tehran. With North Korea, the administration has also pursued a transformational strategy, which would entail near-term, full denuclearization in advance of meaningful sanctions relief. That demand has produced a diplomatic impasse as North Korea will not relinquish a nuclear arsenal viewed as essential to regime survival. Against the backdrop of those events, this monograph makes the analytical case for a pragmatic pivot from the transformational back to the transactional to constrain the two adversarial proliferators' threatening capabilities.

Left: US President Donald Trump is meeting with North Korean leader Kim Jong-un at the Panmunjom Joint Security Area (JSA) military demarcation line. 30 June 2019

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The views expressed here are my own.

Robert S. Litwak

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Introduction

The Trump administration's strategy to address the nuclear challenges posed by North Korea and Iran—countries the administration has designated as "rogue" states—is at an impasse.¹ After his June 2018 summit in Singapore with "Supreme Leader" Kim Jong-un, President Trump tweeted that "there is no longer a Nuclear Threat from North Korea."² But after an abortive second summit in Hanoi in February 2019 at which Kim balked at his vague commitment to denuclearization, the Trump administration was left scrambling to revive the diplomatic track.

In tandem, the Trump administration is pressing European allies to follow its lead and withdraw from the Iran nuclear agreement—as Trump did in May 2018—and re-impose economic sanctions to generate "maximum pressure" on the Tehran regime. Brian Hook, the State Department's Special Representative for Iran, said that the withdrawal had given the United States "freedom and leverage" to address Iran's malign regional activities outside the scope of the nuclear agreement and chided European allies for not joining the U.S. effort.³ Increased U.S. sanctions pressure has compounded the Tehran regime's corruption and mismanagement to create an economic crisis in Iran. Meanwhile, military tensions between the two countries have spiked, such that the Tehran regime reportedly was planning Iranian counterstrikes in anticipation of a U.S. attack.4 Such misperception could easily lead to miscalculation and inadvertent escalation. On June 20, 2019, President Trump pulled back from the brink—rescinding the order for U.S. airstrikes on

Iranian radar and missile sites in retaliation for Iran's downing of an unmanned U.S. drone.⁵ Trump, who campaigned on a platform of extricating the United States from Middle East conflicts, has been open to negotiations to with the Tehran regime—"What I'd like to see with Iran, I'd like to see them call me."

The impasses with both North Korea and Iran reflect a persisting tension in U.S. policy—whether the objective toward "rogue" states should be to change their regimes' behavior or to change the regimes themselves. Should nuclear diplomacy be *transactional*, focused narrowly on the discrete nuclear challenge, or *transformational*, comprehensively addressing these regimes' objectionable behavior? Rhetorically, with both North Korea and Iran, the Trump administration aspires for the transformational. A senior State Department official asserted, "We are trying simultaneously to pressure and to negotiate comprehensive solutions with two rogue regimes at the same time. But this very ambitiousness is a strength, not a weakness."

The Trump administration perceives North Korea's nuclear diplomacy as a proxy for the more fundamental question of the Kim regime's relationship with the outside world. Pyongyang faces a double dilemma. The U.S. demand for full denuclearization would deny North Korea the capabilities needed to deter what the Kim dynasty has long perceived as essential to regime survival. Zero warheads is not an option for them. To that extent, the U.S. objective of full denuclearization upfront is transformational. At the same time, the U.S. offer of integrating autarkic North Korea into the global economy if it denuclearizes carries the regime-changing risk of political contagion.

The administration's approach toward Iran is more overtly transformational. The breadth and magnitude of changes sought in the Tehran regime's behavior would, as one observer quipped, essentially require Iran no longer to be Iran. Acquiescing to the U.S. demand that Iran become a "normal" state would entail

changes in foreign and domestic policies that Tehran views as central to its identity and the sources of its legitimacy.

The Trump administration's eschewal of the transactional in favor of the transformational precipitated its withdrawal from the Iran nuclear agreement, which Trump has often called "the worst deal ever."8 The Joint Comprehensive Plan of Action (JCPOA), concluded between Iran and the world's major powers in July 2015 and endorsed by the UN Security Council, constrained Iran's nuclear aspirations by blocking its access to weapons-usable fissile materials. The goal was to keep Iran's latent capability latent. The JCPOA was quintessentially transactional—a deal focused exclusively on Iran's nuclear challenge, not a grand bargain encompassing other objectionable aspects of Iranian behavior, such as the Tehran regime's destabilizing regional policies and human rights abuses. The Obama administration had made the pragmatic determination that expanding the scope of negotiations beyond the urgent nuclear challenge would have scuttled the chance for success.

For U.S. opponents calling for a "better deal," the crux of their criticism was that the *transactional JCPOA* was not *transformational*—that it constrained but did not eliminate



United States-North Korea bilateral meeting in Singapore on June 12, 2018 Source: Dan Scavino Jr. [Public domain], via Wikimedia Commons

Iran's nuclear infrastructure and failed to address Iran's malign behavior outside the four corners of the deal. Critics also argued that Obama's transactional deal belied a naïve transformational bet—that over its duration, the nuclear agreement would promote the evolution of Iran into an ordinary state. When withdrawing from the JCPOA, the Trump administration embraced an agenda for immediate transformational change. Secretary of State Mike Pompeo laid out "12 very basic requirements" for "a new deal" with Iran that ranged from the dismantling of its uranium enrichment program and a cessation of missile tests to the withdrawal of Iran's Revolutionary Guards from Syria as well as the ending of the regime's longstanding support for Hezbollah. Though the administration denied that its objective was regime change, meeting Pompeo's parameters would essentially require a change of regime in Tehran.

With North Korea, the Trump administration also opted for the transformational over the transactional. When President Trump was inaugurated, North Korea was on the verge of a strategic breakout—both quantitatively (by ramping up its warhead numbers) and qualitatively (through mastery of warhead miniaturization and long-range ballistic missiles)—that directly threatened the U.S. homeland. Unclassified projections of North Korea's nuclear arsenal made at the time estimated that by 2020 Pyongyang could possess as many as 100 warheads. North Korea crossed the nuclear weapons threshold in 2006 and posed a direct threat to South Korea and Japan. The new factor, which precipitated the current crisis with North Korea, is U.S. vulnerability to nuclear attack. President Trump tweeted, "It won't happen," signaling that the United States would not permit North Korea to acquire weapons that could reach across the Pacific. 12

In 2017, the crisis with North Korea sharply escalated. This was undergirded by inflammatory rhetoric, as Trump characterized Kim Jong-un a "madman" and North Korean state media called the

U.S. president a "dotard." The crisis was further exacerbated by an accelerated tempo of North Korean testing in 2017—23 ballistic missile launches and a high-yield nuclear detonation, which Pyongyang claimed was a hydrogen bomb—to which Trump responded with a threat of "fire and fury." Then-CIA Director Pompeo, highlighting that the administration's definition of threat was linked to the nature of the Pyongyang regime, observed that "the thing that is most dangerous" about North Korea's advancing nuclear and missile capabilities is "the character who holds the control over them today." ¹³

The surprise Singapore summit in June 2018 changed the psychology of the nuclear crisis with North Korea. The initiation of a diplomatic track pushed off consideration of a U.S. military option. Though the meeting yielded a joint statement in which the Kim regime pledged its commitment to "denuclearization of the Korean peninsula," North Korea and the United States have contending definitions of denuclearization. For Pyongyang, denuclearization would essentially require the end of the U.S. nuclear umbrella for South Korea and Japan, as well as the end of the bilateral security agreement between Washington and Seoul. For Washington, it entails the transformational goal of "CVID—complete, verifiable, irreversible denuclearization" of North Korea or what National Security Adviser John Bolton described as the "Libya model" of wholly dismantling its nuclear infrastructure under U.S. supervision as Muammar Qaddafi did in 2003.¹⁴

But after the U.S-led wars of regime change in Iraq in 2003 and Libya in 2011, zero nuclear warheads will simply not be on the table as long as the Kim family rules in Pyongyang. As CIA Director Gina Haspel observed, North Korea values its nuclear deterrent "as essential to … regime survival." In tandem with its deterrent function, the nuclear program is the North's sole bargaining chip—an asset to monetize through negotiations with the United States and South Korea. ¹⁵

Nuclear diplomacy with both North Korea and Iran is at an inflection point, at which the limits of the transformational approach are evident. In his 2019 New Year's address, Kim Jongun warned that North Korea would seek "new ways" to protect its interests if the United States continued "sanctions and pressures" to impose its conception of denuclearization on the North. ¹⁶

With Iran, the Trump administration's coercive threat to impose extraterritorial (so-called "secondary") sanctions on foreign commercial entities doing business in Iran has bred the resentment of the European Union, which passed a blocking statute requiring EU companies not to comply.¹⁷ If the unfolding U.S. policy of "maximum pressure" denies Iran any economic benefit from the nuclear deal, the Tehran regime could reevaluate its continued observance of the JCPOA. That appears to be happening. For a year after the U.S. withdrawal in May 2018, Iran had no immediate strategic imperative to withdraw and instead opted to stay in the agreement—letting the United States face international criticism for unilaterally jettisoning it, and plausibly reasoning that the Tehran regime can wait out the Trump administration. But the country's economic crisis and rising military tensions in the Persian Gulf may have led to a reassessment. In early July 2019, Iran breached the limit on low-enriched uranium stipulated in the 2015 agreement.¹⁸ British Foreign Secretary Jeremy Hunt said that there was still a "small window" to save the Iran nuclear deal—and maintain the constraints on Iran's uranium enrichment program to block its access to weapons-usable material.

To break the impasses with North Korea and Iran, the Trump administration should pivot from a transformational strategy to the transactional. The current transformational approach relies on maximalist goals that cannot be attained short of regime change; what is necessary and more plausible is a transactional strategy with discrete, limited objectives. This would decouple the urgent nuclear challenge from the indeterminate question of regime change.

With North Korea, when zero is not on the table, 20 warheads are better than 100. The larger the arsenal the greater the potential risk that the chronically cash-strapped Kim regime could sell weaponsgrade material to Iran, Pakistan, or even a non-state terrorist group. The near-term U.S. diplomatic objective should be to prevent North Korea's quantitative and qualitative breakout by codifying North Korea's current moratorium on nuclear and missile testing. Such a freeze would preclude the additional testing North Korea needs to master the complex integrated technologies to target the U.S. homeland. While Kim Jong-un has claimed that North Korea has stopped the production of nuclear weapons, a key goal of transactional diplomacy would be more fundamental—the verified cessation of the production of weapons-usable fissile materials. The price for these steps would be some U.S. sanctions relief. The U.S. narrative would be that a freeze agreement is an incremental step toward the long-term goal of denuclearization. But such a freeze would complicate U.S. alliance relationships as South Korea and Japan would continue to live under a North Korean nuclear shadow.

With Iran, the Trump administration's return to transactional diplomacy would entail establishing priorities among Pompeo's 12 parameters. Some, such as the complete cessation of uranium enrichment for which the George W. Bush administration unsuccessfully pushed without international support, will not plausibly be accepted by the Tehran regime. But others could conceivably be integrated into a new, broader deal—a "JCPOA Plus," so to speak. Indeed, the negotiators of the Iran nuclear deal never envisioned it as a stand-alone agreement but rather a precedent leading to follow-on negotiations on other discrete issues. For example, the Iranians were once open to negotiated range limits on ballistic missiles, which would deny them an intercontinental capability. But Iran's clerical regime has for now ruled out resumed diplomatic talks with a U.S. administration that unilaterally abrogated an agreement

meticulously brokered between it and the world's major powers. But a reframing of U.S. objectives—from the transformational back to the transactional—might alter that calculus of decision.

Diplomacy is an optimizing, not a maximizing, function. Neither North Korea nor Iran will accept a transformational U.S. negotiating position that they regard as tantamount to regime suicide. Transactional diplomacy offers a plausible pathway for constraining, not eliminating, these states' threatening capabilities. Moreover, a discrete focus based on countering behavior that violates established international norms will garner broader international support to amplify U.S. pressure on the Pyongyang and Tehran regimes. In short, transactional diplomacy makes the best of a bad situation. The open question is whether the current impasse will lead the Trump administration to navigate this transition from the transformational to the transactional.



Above: Satellite view of Korean peninsula at night. The only dot of light in North Korea is the capital, Pyongyang. Source: NASA



Trump's "Rogue" Redux

The nuclear challenges posed by Iran and North Korea are playing out against the historical backdrop of proliferation precedents set in Iraq and Libya. Since the end of the Cold War, the United States may have espoused a general interest in preventing proliferation and supporting the "international nonproliferation regime," but it does not regard all would-be proliferators as specific threats to American security. The perception of threat derives from the interaction of capabilities with intentions, not just the former in isolation. U.S. administrations distinguish between new and de facto nuclear proliferators—such as Israel, India, and Pakistan that challenge an important international norm but do not directly threaten the United States, and those countries designated as "rogue" that do pose such a security threat. The cases of greatest concern to the United States, in which U.S. administrations have and would actually contemplate the use of force involve a subset of countries that are pursuing nuclear capabilities and that have hostile intentions. Those states—the "rogues"—constitute hostile proliferators.

After the U.S.-led wars of regime change in Iraq (2003) and Libya (2011), North Korea and Iran are the remaining countries designated as "rogues" by U.S. administrations since the end of the Cold War. President Barack Obama eschewed the term, which is a unilateral American political category without standing in international law. He instead called North Korea and Iran "outliers," thereby framing their challenge in terms of conduct that violated international norms. The attendant eschewal of regime

change as a U.S. objective created a basis for garnering broad international support for a strategy of pressure and engagement whose aim was to bring these states into compliance with their international obligations. (Iran remains an adherent of the Nuclear Non-Proliferation Treaty [NPT], while North Korea was a signatory but withdrew.) President Trump, a self-proclaimed disrupter seeking to differentiate himself from his predecessor, revived the "rogue" rubric. The issue here is not a preoccupation with language, but rather with the contrasting strategies and policies that derived from that nomenclature since the beginning of the post-Cold War era.

FROM THE END OF THE COLD WAR TO 9/11

The term "rogue state" entered the U.S. foreign policy lexicon as the Cold War ended and after the 1991 Gulf War to reverse the Iraqi invasion of Kuwait. Saddam Hussein's Iraq was the rogue archetype: a regime pursuing weapons of mass destruction (WMD) and employing terrorism as an instrument of state policy. The Clinton administration designated the "rogues"—whose core group was Iraq, Iran, North Korea, and Libya—as a distinct category of states in the post-Cold War international system. With the demise of the Soviet threat, a downsized U.S. defense force posture was reconfigured to address a "major regional contingency" involving a "rogue state" in the Middle East or Northeast Asia.

Rogue state was a unilateral American political concept—without foundation in international law—which was analytically soft and applied selectively against a diverse set of states that were hostile to the United States. The concept also proved problematic in practice. Once a state was relegated to this category "beyond the pale," the default strategy was comprehensive containment and isolation. Diplomatic engagement, as when the Clinton administration concluded a nuclear deal with North Korea in 1994, was castigated by hardline critics as tantamount to appeasement. The administration recognized that the term had become a political

straitjacket, frustrating its ability to apply differentiated strategies tailored to the circumstances in each country, so it was expunged from the U.S. diplomatic lexicon by the Clinton State Department in June 2000 and replaced with the awkward moniker: "states of concern."

Though the term was revived by the George W. Bush administration before 9/11, "rogue" rhetoric came back with a vengeance after the terrorist attacks of September 11, 2001. Despite assertions that "everything has changed" and likening the date to a demarcation as stark as B.C. and A.D., 9/11 did not change the structure of international relations. But it did lead to a redefinition of threat. In its 2002 National Security Strategy, the Bush administration explicitly argued that the dangers of the post-9/11 world derived from the very character of America's adversaries—irredeemable "rogue states" and undeterrable terrorist groups, such as Al Qaeda, whose only constraints are practical and technical, not moral or political. WMD proliferation and terrorism created a deadly nexus of capabilities and intentions. U.S. policymakers were driven by the nightmare scenario of a "rogue state" transferring a nuclear, biological, or chemical capability to a terrorist group in order to carry out a mass-casualty attack on the American homeland.

The redefinition of threat precipitated a major shift in strategy. The Bush administration asserted that the Cold War concepts of containment and deterrence were "less likely to work against leaders of rogue states [who are] more willing to take risks" and more prone than an orthodox great power rival (such as the Soviet Union or contemporary China) to use weapons of mass destruction. The 2002 National Security Strategy elevated the use of force, as "a matter of common sense and self-defense," not only *preemptively*, against imminent threats (a usage consistent with international law), but also *preventively*, against "emerging threats before they are formed." This assessment propelled the shift from a pre-9/11 strategy of *containment and deterrence* to a post-9/11 emphasis on *regime change*. Changing the conduct of rogue states was deemed unlikely and inadequate because their threatening behavior was inextricably linked to the character of their ruling regimes: it derived from "their true nature," as President Bush put it.²²

The Bush foreign policy after 9/11 exhibited key characteristics of neo-conservatism—often called "Wilsonianism in boots." Neo-conservatism combined the twenty-eighth president's emphasis on democracy promotion with an assertive nationalism that sought to perpetuate American dominance and rejected the constraints that international institutions might impose on American power—hence, the administration's assertive defense of American sovereignty. Channeling American power through international institutions may have been crucial to American diplomatic success before 9/11, but the Bush administration saw that arrangement as an unacceptable check on American power in the transformed security environment after 9/11.

The radical new approach extended to transforming other societies—"nation-building"—since the definition of threat was now linked to regime type. Bush the realist became, as one observer quipped, Wilson on steroids—espousing democratization as the antidote to terrorism and declaring that America's mission was to "end tyranny."²⁴ This was an ambitious revisionist agenda. The United States was "behaving more like a revolutionary state than one committed to preserving the arrangements that seem to have suited it well," political scientist Robert Jervis stated. "President Woodrow Wilson wanted to make the world safe for democracy. Bush extends and reverses this, arguing that only in a world of democracies can the United States be safe."²⁵

PRECEDENTS OF 2003: IRAQ AND LIBYA

Iraq became the test case for the new strategy. Before 9/11, Saddam Hussein was likened by Secretary of State Colin Powell to a "toothache." Afterwards, the asserted nexus between proliferation and terrorism—Saddam's resistance to the WMD disarmament mandated by the UN Security Council and the Iraqi regime's purported links to Al Qaeda—provided the rationale

for preventive military action to topple this rogue regime as a matter of urgency. Fecretary of Defense Donald Rumsfeld later acknowledged that the decision to go to war was based not on new intelligence, but rather on viewing old intelligence "through the prism of 9/11."

After the successful U.S. military march on Baghdad in April 2003 to oust Saddam, Bush administration officials described the intervention in Iraq as a "type"—a model of coercive nonproliferation through regime change.²⁹ In the heady weeks after the cessation of "major combat operations," before the onset of the deadly Iraqi insurgency against U.S. forces, President Bush stated that the Iraq precedent had implications for how the United States would approach the challenges posed by other "rogue states," specifically North Korea and Iran. In Iraq, he claimed, America had "redefin[ed] war" by demonstrating the U.S. ability to decapitate a regime without inflicting unacceptable collateral damage on the civilian population.³⁰ A senior administration official said that the message of Iraq for Iran's theocratic regime was: "Take a number."³¹

Just eight months after the fall of Baghdad, in December 2003, Libyan dictator Muammar Qaddafi announced that his country was voluntarily terminating its covert WMD programs and voluntarily submitting to intrusive international inspections to certify compliance. The surprise announcement, which came on the heels of a financial settlement for the terrorist bombing of Pan Am 103 over Lockerbie, Scotland in 1988, was hailed by President Bush as an essential step that would permit Libya to "rejoin the international community." In January 2004, a month after Qaddafi's surprise announcement, more than 25 tons of nuclear and ballistic missile components were airlifted from Libya to the United States. Inspectors began the complicated process of destroying Libya's stockpile of chemical agents and munitions, and Russia removed highly enriched uranium from Libya's Soviet-design nuclear research reactor.³² The Bush administration reciprocated by lifting

sanctions to permit American commercial activities in Libya, establishing diplomatic liaison offices in Tripoli and Washington, and ending U.S. opposition to Libya's entry into the World Trade Organization.³³

If Iraq had set an important precedent—nonproliferation through a change of regime—Libya offered the alternative: nonproliferation through change in a regime. Competing narratives were advanced to explain Qaddafi's strategic turnabout. Bush administration officials proclaimed it a dividend of the Iraq war. Qaddafi had been "scared straight" (as one analyst put it) by the demonstration effect of the regime-change precedent. Alternatively, former Clinton administration officials, who had been involved in negotiations with Libya since the late 1990s, argued that the decision culminated a decade-long effort by the Libyan dictator to shed his country's pariah status and reintegrate into the global system in response to escalating domestic economic pressures. The respective external and internal factors emphasized in these competing narratives were necessary but not sufficient conditions for change. The crux of the Libyan deal was the Bush administration's tacit but clear assurance of security for the regime: in short, if Qaddafi halted his objectionable external behavior with respect to terrorism and proliferation, Washington would not press for a change of regime in Tripoli. Without such a credible security assurance, what incentive would Qaddafi have had to relinquish his WMD arsenal? Logically, the belief that he would still be targeted by the U.S. administration for regime change regardless of any change in his behavior would have created a powerful incentive for him to accelerate his regime's efforts to acquire unconventional weapons as a strategic deterrent.

The contrasting nonproliferation precedents of 2003—a change of regime in Iraq; a change *in* a regime in Libya—provided the political backdrop for the escalating nuclear crises with North Korea and Iran. North Korea was viewed by Bush administration

officials as essentially a xenophobic failed state with an advanced nuclear weapons program whose leadership's all-consuming priority was regime survival. The collapse of the U.S.-North Korean Agreed Framework, negotiated by the Clinton administration in 1994 to freeze the North's plutonium-production capability, created the occasion for the Pyongyang regime's move toward nuclear weaponization. Iran had a less advanced nuclear program, but was perceived to be the more dynamic threat because of its oil wealth, its unpredictable president's radicalism and incendiary rhetoric, and its sponsorship of terrorism and destabilizing regional policies.

The Bush administration was caught between the Iraq and Libya precedents. It could not replicate the Iraq model of coercive nonproliferation through regime change in North Korea and Iran, and regime collapse in either country was not an immediate prospect. At the same time, the administration's hardline rhetoric (Vice President Cheney's bald declaration, "We don't negotiate with evil, we defeat it") negated the possibility of offering assurances of regime security that were central to Libya's accession to comprehensive and verifiable WMD disarmament.³⁴

The Bush administration's mantra was "all options are on the table." But to what end? Senior officials from the president down sent out a consistently mixed message, never clarifying whether the U.S. policy goal was to change regimes or to change their conduct. The administration did participate in negotiations with these "rogue" regimes—with Iran, indirectly through the EU-3 (Britain, France, and Germany); with North Korea, directly through the Six-Party Talks (whose other members were China, Russia, Japan, and South Korea). But the second term of the George W. Bush administration, when hardliners were reportedly less influential, could not get past the legacy of the first term. As a consequence, the administration missed opportunities to test Iranian and North Korean intentions—to determine, in short, whether these regimes would be willing to give up their nuclear programs. And it paid

the price as both countries crossed important red lines: North Korea tested a nuclear device in October 2006, while Iran mastered the process of uranium enrichment, an important technological threshold for the production of weapons-grade fissile material.

State sovereignty, the cardinal principle of international relations, figured centrally as an issue in the UN debates preceding the U.S.-led and U.S.-assisted military interventions in Iraq and Libya, respectively. In Iraq, in early 2003, the George W. Bush administration argued that only a change of regime—in essence, the negation of Iraqi sovereignty through the removal of Saddam -could bring that country into compliance with UN Security Council resolutions (passed in the wake of the 1991 Gulf War) mandating WMD disarmament. Administration officials viewed Iraq through the "prism" of 9/11, which produced a radical shift in both the definition of threat (the "nexus" of terrorism and proliferation, focused on "unpredictable rogue states" and undeterrable terrorist groups, such as Al Qaeda) and the recasting of U.S. strategy (from containment and deterrence to a new emphasis on military preemption and regime change). In short, a pre-9/11 containment strategy of keeping Saddam "in his box" would no longer suffice in a post-9/11 world.

When the United States invaded Iraq without the UN Security Council's legitimizing approval, it acted outside the institutional structure within which American power had been embedded since World War II. As political scientist John Ikenberry has argued, that embedded quality (making U.S. power more legitimate and less threatening to other states) has been key to America's international success. For many in the international community, leaving Saddam Hussein in power was seemingly preferable to the precedent that would be set by the United States' overthrowing the Iraqi regime. The opposition of Russia and China was also the product of strategic calculation to check the United States.

The Bush administration characterized Iraq as a demonstration conflict: as one official put it, "Iraq is not just about Iraq.... It is of a type." But the administration, particularly after the triumphalism following the fall of Baghdad gave way to an intractable insurgency, was unable to apply the Iraq precedent—coerced nonproliferation through regime change – in the nuclear crises with North Korea and Iran. At the same time, however, the Bush administration was unwilling to offer those "rogues" the tacit but clear security assurance of the Libya deal by making clear that the U.S. objective was a change not of regime.

THE OBAMA ADMINISTRATION

The rogue reset was evident in President Obama's offer in his January 2009 inaugural address to "extend a hand [to adversaries] if you are willing to unclench your fist." ³⁷ The Obama administration eschewed regime-change rhetoric and reframed the challenges posed by North Korea and Iran in terms of their non-compliance with established international norms rather than with reference to a unilateral American political concept. In keeping with that approach, Obama eschewed the term "rogue," instead characterizing them as "outlier" states.³⁸ In his December 2009 Nobel Peace Prize acceptance speech, Obama defended his engagement strategy, citing the historical precedent of an earlier president and a state which, at the time, was viewed as the functional equivalent of a contemporary rogue state: "In light of the Cultural Revolution's horrors, Nixon's meeting with Mao appeared inexcusable—and yet it surely helped set China on a path where millions of its citizens have been lifted from poverty and connected to open societies." Declaring that it is "incumbent upon all of us to insist that nations like Iran and North Korea do not game the system," Obama concluded, "Engagement with repressive regimes lacks the satisfying purity of indignation.... [But] no repressive

regime can move down a new path unless it has the choice of an open door."³⁹

The Obama administration's approach, captured under the rubric "comprehensive engagement," was laid out more fully in its National Security Strategy of May 2010.40 The document stated that the United States sought the further development of a "rulesbased international system." It offered "adversarial governments" a structured "choice": abide by international norms (and thereby gain the tangible economic benefits of "greater integration with the international community") or remain in non-compliance (and thereby face international isolation and punitive consequences).⁴¹ The Obama administration unpacked the Bush administration's mixed message, making clear its openness to a Libya-type agreement. But the adversarial states rebuffed the extended hand and refused to walk through the open door: North Korea conducted a second nuclear test in May 2009 and sank a South Korean naval vessel; Iran baulked at a proposed agreement by the P5+1 (the permanent members of the UN Security Council plus Germany) to bring the country's nuclear program into NPT compliance. Opponents of the administration's Obama's engagement strategy, turning the Bush-era criticism on its head, asked whether Obama would "take no for answer."



President Obama visits South Korea in 2012. Photo courtesy of whitehouse.gov

In Libya, in 2011, the U.S.-assisted overthrow of the Qaddafi regime set another important precedent. The UN Security Council authorized the intervention on humanitarian grounds and was calculatedly silent on the question of regime change so as not to create a divisive split on the Council, as in 2003 on Iraq. A UN-authorized intervention that began under a humanitarian rationale morphed within weeks into an overt regime change mission on NATO's part. The argument advanced by the Western powers spearheading the military action was essentially that only the removal of the Libyan dictator could ensure the achievement of the resolution's humanitarian objective. Russia and China issued pro forma objections to this mission creep, but ultimately acquiesced. Neither power saw Qaddafi's ousting as a major challenge to its strategic interests, but Moscow did make explicit that Libya did not set a precedent applicable to other cases, notably Syria. ⁴²

That Qaddafi was toppled under a humanitarian rather than counter-proliferation rubric was a distinction without a difference from the perspective of Pyongyang and Tehran. The crux of the Libyan deal in 2003 had been a tacit but clear security assurance—that the United States would not attempt to replicate the Iraq precedent if Qaddafi accepted verified WMD disarmament. The open question after his 2011 ouster and death was whether the United States had priced itself out of the security assurance market with both North Korea and Iran.

The Obama administration continued to pursue a dual-track strategy of pressure and engagement toward the outliers. Washington made clear that the U.S. objective was behavior change—bringing both North Korea and Iran into compliance with the international nonproliferation norm—not regime change. In the case of North Korea, which had crossed the nuclear threshold in 2006 with a weapons test, the Obama administration conducted secret negotiations with the Kim Jong-un regime that yielded the so-called Leap Day Agreement of February 29, 2012.

That agreement, which froze North Korean nuclear and missile tests in return for U.S. food aid, was halted after North Korea launched a satellite, which it claimed was for civilian purposes. The Obama administration then pivoted to a strategy of "strategic patience," premised on the assessment that renewed negotiations should await a change in the Kim regime's behavior.

Iran offered a more promising negotiating opportunity with the election of a reformist president, Hassan Rouhani, who had campaigned on a platform of negotiating a resolution of the nuclear issue to win relief from international sanctions. As discussed in the Iran section below, Rouhani was given a narrow writ by for negotiations focused solely on the nuclear issue by Iran's Supreme Leader Ali Khamenei. The ensuing negotiation with the United States and the world's other major powers (the P5+1, or EU3-3) culminated in the Joint Comprehensive Plan of Action (JCPOA) in July 2015. The JCPOA was a deal, not a grand bargain with Iran—transactional, not transformational. It constrained Iran's uranium enrichment program, thereby blocking the Tehran regime's access to weapons-usable material for at least 15 years. That the JCPOA was limited in scope, confined just to the nuclear challenge, became the focal point of criticism. Congressional critics called for a "better deal"—a transformational one—addressing the full range of international concerns about Iran, notably the Tehran regime's destabilizing regional policies.

THE TRUMP ADMINISTRATION

A telling symbol of the Trump administration's strategy toward North Korea and Iran, as well as its general inclination to break decisively with the foreign policies of its predecessor, was its revival of the term "rogue" state. The White House's 2017 *National Security Strategy* starkly characterized the threat to international order posed by "the rogue states of Iran and North Korea":

The scourge of the world today is a small group of rogue regimes that violate all principles of free and civilized states. The Iranian regime sponsors terrorism around the world. It is developing more capable ballistic missiles and has the potential to resume its work on nuclear weapons that could threaten the United States and our partners. North Korea is ruled as a ruthless dictatorship without regard for human dignity. For more than 25 years, it has pursued nuclear weapons and ballistic missiles in defiance of every commitment it has made. Today, these missiles and weapons threaten the United States and our allies. The longer we ignore threats from countries determined to proliferate and develop weapons of mass destruction, the worse such threats become, and the fewer defensive options we have. 43

The evolution of the Trump administration's policies toward North Korea and Iran will be examined, respectively, in the sections that follow. Pertinent to this discussion is how President Trump's revival of the "rogue" category influenced the evolution and execution of those policies.

The "rogue" term inextricably links the threat posed by the "rogue" state to the character of its regime. Therefore, as was argued in the lead up to the Iraq war, merely addressing that state's dangerous conduct does not resolve the threat to U.S. security if the ruling regime remains unchanged. Viewed through this optic, the core problem with *transactional* diplomacy, such as the JCPOA with Iran, is that it is not *transformational*. That is the essence of Trump's rogue redux. This shift from Obama's transactional approach to the transformational dashed hopes of JCPOA proponents that the Iran precedent of constraining an adversarial state's nuclear capabilities could be replicated with North Korea—with its advanced program now on the verge of a strategic breakout through acquisition of the capabilities to target the U.S. homeland with a nuclear weapon.

The blunt instrument of the Trump administration's transformational strategy toward North Korea and Iran has been comprehensive economic sanctions under the rubric of "maximum pressure." The administration has roiled relations with allies, as well as Russia and China by threatening to impose extraterritorial (so-called secondary) sanctions on foreign commercial entities that continue to conduct business in Iran. The strategy of maximum pressure has revived the question whether the U.S. objective is behavior change or the maximalist one of regime change.

With Iran, Secretary of State Michael Pompeo's 12 parameters linked the nuclear issue to a comprehensive set of demands to make Iran a "normal" country. Though the administration has declared that its objective is not regime change, Iranian compliance would essentially require just that. With North Korea, the administration has pressed for the transformational goal of full denuclearization prior to U.S. economic sanctions relief. But the U.S. intelligence community's assessment is that North Korea is not going to give up nuclear capabilities viewed as essential to regime survival. For Pyongyang, nuclear capabilities serve twin functions—a deterrent to external attack and a perennial bargaining chip to leverage food and other economic aid. Zero warheads is simply not on the table as long as the Kim family rules in Pyongyang.

By defining threat in terms of the character of regimes, Trump's rogue redux undergirded the administration's shift from transactional to transformational strategies toward North Korea and Iran. But the rogue revival carried an additional important connotation—the view that these are essentially crazy states. As during the lead up to the Iraq War in 2003, the imputation of irrationality, linked to regime type, has been central to the argument for preventive military action to deny "rogue" states these capabilities. In 2017, when North Korea was conducting nuclear

and long-range missile tests and Washington and Pyongyang were trading threats (such as Trump's "fire and fury" tweet), then National Security Advisor H.R. McMaster asserted that "classical deterrence theory" does not "apply to a regime like the regime in North Korea."

Though the summits between Trump and Kim have not led to a breakthrough on denuclearization, the meetings have changed the psychology of the crisis. In touting his personal relationship with Kim, Trump has normalized the Pyongyang regime. North Korea is no longer characterized as a crazy state that is undeterrable. That change in perception pushes off consideration of preventive military action and creates space for diplomacy—the realistic goal of which would be to freeze North Korea's nuclear and missile capabilities. But despite the initiation of a diplomatic track, the U.S. goal of full denuclearization upfront is transformational in that it would require the Kim family to relinquish the capability that it views as essential to regime survival. In short, the end-state goal of "CVID" (complete, verifiable, and irreversible denuclearization) would require a change of regime in Pyongyang.

With Iran, the Trump administration's abrogation of the JCPOA, in tandem with the reimposition of U.S. sanctions to create "maximum pressure" has led the Tehran regime to push the envelope of the 2015 nuclear agreement—for example, by exceeding the stockpile limit of low-enriched uranium that Iran is permitted. National Security Advisor John Bolton has said that this Iranian action is a deliberate effort to shorten the breakout time to a weapon—which is the longstanding U.S. redline. ⁴⁵ Compounding the danger is the risk of misperception and miscalculation. In late June 2019, the Iranian downing of an unmanned drone almost precipitated a U.S. military strike—but Trump reportedly rescinded the order just before the commencement of military action. Having campaigned on a platform of extricating the United States from

Middle East conflicts, Trump pulled back from military action fraught with escalatory potential. In the immediate aftermath of this episode, the president said that the overriding U.S. goal was to prevent Iran from possessing nuclear weapons. Trump said that an Iran without nuclear weapons would be prosperous and have the U.S. president as "a best friend." Though Iran, perhaps posturing, asserts no interest in resuming diplomacy with Washington, the aftermath of the drone incident—and Trump pulling back from the brink of conflict—creates a potential opening.

The politics of nuclear diplomacy—whether talks with North Korea can come to fruition and be initiated with Iran—are uncertain. But, as will be examined in this monograph's final section, one can analytically identify the conditions for success. A pivot by the Trump administration from a transformational to transactional strategy would entail decoupling the nuclear issue from that of regime change. The clocks for the two are not in sync. Whereas the former is immediate and urgent, the timeline for the latter is uncertain and indeterminate. Transactional diplomacy through coercive engagement would aim to constrain, not eliminate, these adversarial proliferators' capabilities to buy time and prevent bad situations from getting worse.



Above: Iran's nuclear facility at Arak, Photo courtesy of en.wikipedia.org



North Korea: From Saber-Rattling to Summitry

The first summit meeting between President Donald Trump and North Korean "supreme leader" Kim Jong-un in Singapore on June 12, 2018 was long on atmospherics and short on detail. The meeting yielded a joint statement in which North Korea pledged its commitment to denuclearization, which tracked previous such affirmations made by the Kim family regime dating back to 1992. The major outcome of the meeting was to change the psychology of the nuclear crisis with North Korea: the initiation of a diplomatic track tabled the consideration of a U.S. military option, which had received heightened attention in 2017.

At the Singapore summit, Kim committed to the "complete denuclearization of the Korean Peninsula," not the denuclearization of North Korea. This semantical distinction pointed to the contending definitions of "denuclearization" in Washington and Pyongyang—and the diplomatic hurdles that would be encountered in achieving that contested end state. At the second summit, in Hanoi in February 2019, President Trump, in the words of a U.S. official to the *New York Times*, decided to "go big," with a proposal to trade U.S. sanctions relief for the dismantling of North Korea's entire nuclear arsenal. But Kim balked at a proposal that U.S. administrations have essentially been offering for the last quarter century, and the summit ended abruptly. In the wake of the abortive summit, North Korea accused the United States of pushing a "unilateral and gangster-like demand for denuclearization."

Left: Rockets are carried by military vehicles during a military parade to celebrate the centenary of the birth of North Korea's founder Kim Il-sung in Pyongyang Source: Reuters

The nuclear impasse, turning on the core issue of denuclearization, persists. U.S. intelligence officials have assessed that this objective is unattainable as the Kim family views its nuclear arsenal as central to regime survival. Zero warheads is not on the negotiating table as long as the Kim family rules in Pyongyang. In that respect, the U.S. goal of CVID—the complete, verifiable, and irreversible denuclearization" of North Korea—is transformational. The open question (addressed in the final section of this monograph) is whether an interim transactional agreement, whose goal would be to freeze the North's program and prevent Pyongyang from acquiring the breakout capability to target the U.S. homeland with a nuclear weapon, is attainable.

U.S. POLICY EVOLUTION

In the wake of World War II, the 38th parallel separating Soviet and U.S. occupation forces became the official political demarcation between North and South Korea. With the rival North/South governments claiming sovereignty over the entire Korean peninsula, the structure of this Cold War conflict was set. 48 North Korea's so-called "Great Leader," Kim Il-sung, emboldened by a favorable balance of power after the 1949 withdrawal of U.S. forces, launched a surprise offensive in June 1950, after receiving approval from Stalin to "liberate" the south. 49

The Korean War was waged under the shadow of U.S. nuclear weapons: Truman gave "active consideration" to their use, and Eisenhower's subsequent threatening ambiguity is credited by diplomatic historians as a major factor (along with the death of Stalin) influencing North Korea's acceptance of a ceasefire along the 38th parallel in mid-1953.⁵⁰ After the armistice, which remains in place today in the absence of a formal peace treaty, the United

States retained troops in South Korea and deployed tactical nuclear weapons to deter the resumption of hostilities.

The end of the Cold War created a diplomatic opening for negotiations between the United States and the DPRK, as well as between the two Koreas. In 1991, the George H.W. Bush administration announced the withdrawal of tactical nuclear weapons from South Korea, as part of a global U.S.-Soviet agreement to eliminate most nonstrategic nuclear weapons. The Kim Il-sung regime reciprocated by accepting an International Atomic Energy Agency (IAEA) safeguards agreement to ensure that North Korea was abiding by its Nuclear Non-Proliferation Treaty (NPT) obligations, and by concluding a ROK-DPRK "Joint Declaration on the Denuclearization of the Korean Peninsula" that committed the two sides to forgo the production of nuclear weapons and the possession of nuclear reprocessing and uranium enrichment facilities.

The First Nuclear Crisis

In the early 1990s, North Korea, designated by the United States as a "rogue state," balked at IAEA inspections of its nuclear sites and sought to link international access to the cancelation of joint U.S.-ROK military exercises. The Clinton administration conducted direct negotiations with the North Koreans even as the Kim Il-sung regime made an escalatory threat to withdraw from the NPT. Of particular concern to U.S. officials was a CIA National Intelligence Estimate (NIE) that the North Koreans, during a 1989 shutdown of the Yongbyon reactor, could have separated enough plutonium from spent fuel rods for two nuclear bombs. 51

The first nuclear crisis with North Korea was precipitated by Pyongyang's announcement in April 1994 that the Yongbyon reactor would be shut down so that spent fuel from its core could be removed. The alarming estimate was that reactor fuel rods contained sufficient plutonium to produce four or five nuclear bombs. The Kim Il-sung regime refused to allow IAEA inspectors to conduct tests to clarify whether the spent nuclear fuel was part of the original load when the 5-megawatt reactor became operational (as claimed by Pyongyang), or whether it had been replaced after the 1989 shutdown (as suspected by the Clinton administration), with the plutonium extracted and diverted into a weapons program.⁵²

In June 1994, the crisis further escalated when the Clinton administration announced that the United States would seek the imposition of multilateral economic sanctions on North Korea through the UN Security Council. As the administration reinforced the U.S. military presence in South Korea as a deterrent, the Kim Il-sung regime remained defiant, proclaiming that economic sanctions would be an act of war. To meet the North Korean nuclear challenge, the Clinton administration adopted a strategy of coercive diplomacy based on economic sanctions after considering, and rejecting, the alternative of a preventive military strike on the Yongbyon nuclear installation. The overriding concern



President Bill Clinton meeting with Special Envoy Vice Marshal Cho Myong-nok, First Vice Chairman of the National Defense Commission of North Korea, in the Oval Office, October 10, 2000. Source: https://en.m.wikipedia.org/wiki/

for U.S. officials, in effectively removing the military option from consideration, was that air strikes could have a "catalytic" effect—triggering a general war on the Korean peninsula. General Gary Luck, then commander of U.S. forces in South Korea, warned that such a conflict would result in one million casualties and entail economic costs of \$1 trillion. 53

In mid-June 1994, as the Clinton administration was

mounting a diplomatic campaign for economic sanctions, the escalating crisis was unexpectedly defused by former President Jimmy Carter's controversial mission to Pyongyang. The Carter-Kim summit led to intensive negotiations over several months that culminated in the U.S.-DPRK Agreed Framework of October 1994. The accord embodied a series of carefully calibrated, reciprocal steps that would be implemented over a decade-long period and that could be halted or broken off in the event of Pyongyang's non-compliance. North Korea pledged to remain an NPT party and to cease reprocessing and agreed to trade off its three graphite-moderated reactors and reprocessing facility for two 1,000-megawatt proliferation-resistant light-water reactors (which were to be constructed by an international consortium comprising the United States, Japan, and South Korea). In addition, the Agreed Framework obligated the Kim Jong-il regime to implement the 1991 ROK-DPRK denuclearization agreement, while the United States offered the DPRK a "negative security assurance," pledging that it would not use nuclear weapons against North Korea while it remained an NPT party. Though hardline critics balked at the diplomatic engagement of a "rogue state," Clinton administration officials defended the 1994 accord as the best of a bad set of options.

The Second Nuclear Crisis

The George W. Bush administration reluctantly reaffirmed the U.S. commitment to the Agreed Framework, but the administration was divided between pragmatists, who sought to build on the Clinton record, and hardliners, who, in an early National Security Council memorandum, argued that a no-negotiations stance would maintain "moral clarity."⁵⁴

The 9/11 terrorist attacks led to a major shift in the definition of threat and U.S. strategy.⁵⁵ The Bush administration argued that

the United States was threatened by unpredictable "rogue" states and undeterrable terrorist groups, like Al Qaeda. The containment strategy pursued by the Clinton administration, which focused on changing the "rogues" behavior, was deemed no longer adequate because the threat derived from the *character* of the regime. President Bush's declaration that the threat posed by the states in the "axis of evil"—North Korea, Iraq, and Iran—derived from "their [ruling regime's] true nature" and led to his administration's shift from a strategy of containment to one of regime change after 9/11. This argumentation was central to the Bush administration's case for a preventive war against Iraq in 2003.

Underlying the Bush administration's internal debate about policy options toward North Korea were contending assessments of the Pyongyang regime's durability and vulnerability. Strategies are predicated on concepts of societal change in the target state. These critical threshold assumptions for strategy formulation are frequently implicit and not subjected to rigorous analysis. In the case of North Korea, a hardline strategy was undergirded by an intelligence assessment that the DPRK system was under extraordinary stress. 56 North Korea "is teetering on the edge of economic collapse," Deputy Secretary of Defense Paul Wolfowitz argued, and that "is a major source of leverage." The premise that North Korea was on the verge of collapse was marshaled in support of a strategy of hard containment to squeeze the Pyongyang regime and thereby hasten that collapse. Conversely, this assessment of regime vulnerability suggested that the alternative engagement strategy, which would incorporate economic carrots to induce a change in North Korean behavior, could have the perverse effect of propping up the "teetering" regime. The Bush administration never reconciled the policy tension between these opposing approaches, with one official acknowledging, "The problem is [that] people are operating from different assumptions."58

In October 2002, the United States, drawing on new intelligence from Pakistan about the nuclear black market activities of A.Q. Khan, confronted North Korea about a covert uranium-enrichment program that would offer the North an alternative route to nuclear weapons acquisition, and which would be in violation of the Agreed Framework. In 2003, the diplomatic confrontation over North Korea's uranium-enrichment activities turned into a much more urgent situation involving its renewed acquisition of plutonium. The revelation of the DPRK's covert uraniumenrichment program led the Bush administration to declare the Agreed Framework "dead." As one former U.S. official put it, to confront the North Koreans about a uranium enrichment program of unknown scope, the Bush administration terminated the nuclear agreement that had frozen a plutonium program of known scope. An alternative would have been to address North Korean non-compliance within the Agreed Framework process, thereby maintaining the plutonium freeze and preventing North Korea from gaining access to fissile material sufficient for approximately six nuclear weapons.

In 2003, North Korea withdrew from the NPT and prepared to reprocess 8,000 fuel rods that had been stored in cooling ponds pursuant to the Agreed Framework and to extract plutonium for approximately six nuclear weapons. While IAEA Director General Mohamed ElBaradei recommended the North Korean case for referral to the United Nations in 2002-2003, the Bush administration, then wanting to maintain the Security Council's focus solely on Iraq, conveyed no sense of urgency as Pyongyang threatened to cross the "red line" of plutonium reprocessing. The administration rebuffed suggestions from former national security advisor Brent Scowcroft and defense secretary William Perry to intensively pursue bilateral negotiations with Pyongyang to reinstate the plutonium freeze.

In August 2003, with North Korea poised to acquire additional weapons-grade fissile material, the first of an eventual six rounds of Six Party Talks (involving the United States, North and South Korea, China, Japan, and Russia) was convened to pursue a diplomatic solution to the nuclear impasse. U.S. diplomatic engagement through this multilateral process was complemented by augmented economic pressure. In September 2005, the U.S. Treasury Department sanctioned a Chinese bank located in Macau, Banco Delta, for distributing North Korean counterfeit currency and laundering the Pyongyang regime's revenues from criminal enterprises. Many other Chinese banks were influenced by the Banco Delta episode, subsequently freezing suspect North Korean accounts, out of fear they would be barred from conducting commerce in the United States. The Banco Delta sanctions, in turn, prompted the Kim Jong-il regime to suspend its participation in the Six Party Talks.

In October 2006, North Korea conducted a nuclear test and became the world's ninth nuclear-weapon state. This bold move overturned the U.S. assumption that a Chinese red line would deter Pyongyang from openly crossing the nuclear threshold. In response, the UN Security Council, with Chinese and Russian support, imposed sanctions to block the Kim Jong-il regime's importation of luxury goods and authorized the United States and other states to interdict North Korean shipping to prevent "illicit trafficking in nuclear, chemical or biological weapons, as well as their means of delivery and related materials." ⁵⁹

To bring the Kim regime back to the negotiating table, the Bush administration lifted the sanctions on Banco Delta. In the resumed Six Party Talks, in February 2007, North Korea agreed to dismantle the Yongbyon facility and to make a full disclosure of its past and present nuclear programs. In October 2008, after North Korea had halted activities at Yongbyon and released a document about its nuclear history (though omitting disclosure of its uranium

enrichment program and its nuclear exports to other countries), the Bush administration removed the DPRK from the U.S. list of state sponsors of terrorism.⁶⁰

U.S. ambivalence about the Six Party process was evident throughout, with administration hardliners concerned about "rewarding bad behavior," while pro-engagement pragmatists viewed the talks as a possible mechanism to constrain the North's nuclear capabilities. The Bush administration sent a mixed message whether the U.S. objective was behavior change or regime change—and achieved neither. As discussed in the policy options section below, a key condition for the successful implementation of coercive diplomacy is the limitation of objective; the target state has no incentive to change behavior, such as abiding by nonproliferation norms, if it believes the coercer is pursuing the maximalist objective of regime change.

From Engagement to "Strategic Patience"

President Obama, who campaigned on a platform of diplomatically engaging adversary states, inherited twin nuclear challenges with North Korea and Iran. His inaugural address metaphor of extending a hand to unclenched fists was a stark contrast to the Bush administration's regime-change rhetoric. President Obama subsequently described the two countries as "outliers"—states that flout international norms by defying their obligations under the NPT. Senior White House aides confirmed that use of the term, which Obama used in an April 2010 interview with the *New York Times* about the administration's *Nuclear Posture Review*, was a calculated departure from the Bush-era moniker of "rogue state." The shift in nomenclature from "rogue" to "outlier" was intended to convey that a pathway was open for these states to rejoin the "community of nations" if they came into compliance with international norms.

In pivoting from a regime-change strategy to engagement, the Obama administration was rejecting the assessment of the "collapsists" (to use economist Marcus Noland's term), who posited that the Kim regime was "teetering." Underlying the Obama administration's offer to Pyongyang of normalization of relations for denuclearization was an assessment that the nuclear and societal change timelines were not in sync and that the two issues therefore needed to be decoupled. The Obama administration sought a near-term nuclear agreement curtailing the DPRK's capabilities, while relegating the internal process of societal change to play out on an indeterminate timetable.

The Obama administration offered North Korea a structured choice: abide by international norms and thereby gain the economic benefits of "greater integration with the international community" or remain in noncompliance and thereby face international isolation and punitive consequences.

The Obama administration unpacked the Bush administration's mixed message and made clear that the U.S. objective was to change the conduct of this "outlier" state, not to externally engineer a change of the Kim family regime.

But the Obama administration's overture was instead met by renewed North Korean provocations to force concessions, including international recognition of the DPRK's status as a de facto nuclear-weapon state. In 2009 and 2010, North Korea carried out long-range ballistic missile launches, a second nuclear-weapon test, an attack on a South Korean naval vessel, and the shelling of a South Korean border island. These provocative moves indicated an emphasis less on using its nuclear program as a bargaining chip to extract concessions than on obtaining international recognition as a de facto nuclear-weapon state. U.S. intelligence analysts speculated that the spike in North Korean belligerence was linked to domestic politics; the ailing Kim Jong-il, who was reported to have suffered

a stroke in August 2008, sought to bolster the position of his heir apparent, third son Kim Jong-un.⁶³

A further complication arose from NATO's intervention in Libya in 2011. North Korea (as well as Iran) seized on this regime takedown as proof that Qaddafi had been duped by the West when he dismantled his nuclear program. A North Korean official stated that the 2003 agreement had been "an invasion tactic to disarm the country," The Obama administration had been prepared to offer the Kim regime a Libya-type security assurance as part of its negotiating strategy.

When Kim Jong-un succeeded Kim Jong-il after the latter's death in December 2011, the window for diplomatic engagement appeared to open. A "Leap Day" agreement was reached between U.S. and North Korean diplomats on February 29, 2012, under which the North would suspend ballistic missile tests and open itself to international inspections in return for the resumption of U.S. food aid. But within two weeks, the "Leap Day" agreement fell apart when Pyongyang announced plans to launch a satellite using a ballistic missile covered under the moratorium. During a visit to South Korea, President Obama said the days of "rewards for provocations" were over.65 In February 2013, North Korea conducted its third nuclear-weapon test amidst evidence from commercial satellite imagery that its 5-megawatt plutoniumproducing reactor at Yongbyon had been restarted. The Kim Jong-un regime also reportedly expanded the country's uranium enrichment capacity with the installation of additional cascades of centrifuges at its Yongbyon facility.66 These developments raised the specter of North Korea's considerably expanding the size of its nuclear arsenal.

Under the rubric of "strategic patience," the Obama administration imposed escalating sanctions on North Korea to bring the Kim Jong-un regime back to the negotiating table. But the resumption of the Six Party Talks stalled over Pyongyang's insistence that

the North be recognized as a nuclear-weapon state. The Obama administration, rejecting this precondition, held to its own insistence that the goal of diplomacy should be "CVID"—the complete, verifiable, and irreversible denuclearization of North Korea. But the director of national intelligence, James Clapper, cast doubt on whether a full rollback of the DPRK's nuclear program remained a feasible U.S. policy objective. "The notion of getting the North Koreans to denuclearize is probably a lost cause," he stated. "They are not going to do that. That is their ticket to survival."

The Third Nuclear Crisis

In 2017, the crisis with North Korea sharply escalated. The escalation was rhetorical as Pyongyang and Washington traded personal epithets: Trump, who had been warned by the CIA not to personalize the crisis with the North Korean dictator ruling a family cult, referred to Kim Jong-un as a "madman" and "little rocket man," while North Korean state media called the U.S. president a "dotard." In tandem with this rhetorical escalation was an accelerated tempo of North Korean testing in 2017—23 ballistic missile launches and a high-yield nuclear detonation, which Pyongyang claimed was a hydrogen bomb. North Korea's program, which had been determined and incremental over the years, assumed new urgency. Acquiring the ability to target the U.S. homeland with a nuclear weapon became Kim Jong-un's Manhattan Project. President Trump engaged in saber-rattling, warning that the United States would respond to North Korean provocations with "fire and fury like the world has never seen."

In response to the North Korean missile and nuclear tests, the Trump administration ramped up economic sanctions through a policy of "maximum pressure." In the absence of a diplomatic track, and having declared that the administration was unwilling to rely on deterrence, it also reaffirmed that the military option—bombing North Korea's nuclear infrastructure and missile testing sites—remained on the table to prevent a breakout. But the military

option, considered and rejected by Clinton administration during the first nuclear crisis in 1994, continues to carry the catastrophic risk that even a limited strike to address North Korea's nuclear threat would likely escalate into a general war on the Korean peninsula. The escalating threats ("fire and fury") and hyperbolic rhetoric of 2017 gave way to the surprise announcement that Trump would have a face-to-face meeting with Kim in Singapore in June 2018.

The Trump-Kim Summits

Two, not mutually exclusive, narratives explain North Korea's pivot to diplomacy, initially with South Korea and then with the United States, in 2018. The first is that the Trump policy of "maximum pressure," which resulted in a contraction of the North Korean economy, had brought the Kim regime to the negotiating table. A second narrative is that North Korea had completed an ambitious round of nuclear and missile tests in 2017 and, pocketing those gains, was open to dialogue. The summit also offered a propaganda coup, which burnished Kim's reputation at home, through images broadcast globally of North Korea's "supreme leader" engaged in one-on-one negotiations with the leader of a superpower.

On the American side, the one-day summit generated a mixed message. While President Trump claimed that the June 2018 summit meeting had "largely solved" the North Korean nuclear crisis, U.S. officials conceded that it marked the start of a phased, long-term diplomatic process. Two months after the summit, National Security Advisor John Bolton acknowledged that North Korea has "not taken the steps we feel are necessary to denuclearize" and stated that U.S. economic sanctions would remain in place until Pyongyang started that process.

But North Korea and the United States have contending definitions of denuclearization—and the developments in the northeast Asian region that would be necessary to achieve that state. For North Korea, denuclearization would essentially entail the end of the U.S. nuclear umbrella for South Korea and Japan, as well as the end of the bilateral security agreement between Washington and Seoul. Given those maximalist conditions, the realistic near-term objective for nuclear diplomacy is to constrain, not eliminate, North Korea's capabilities. In short, the objective is arms control, not disarmament. Indeed, given the U.S-led takedowns of the Saddam Hussein and Qaddafi regimes, zero nuclear warheads is not an attainable negotiating objective as the Kim family rules in Pyongyang. The regime continues to value its nuclear deterrent as essential for regime survival—and an asset to monetize through negotiations with the United States and South Korea.

THE NORTH KOREAN DOMESTIC CONTEXT

North Korea – the so-called "Hermit Kingdom"—is the most closed-off society in the world. The Kim family regime's unique strategy of national self-reliance (*juche*) has reinforced this isolation and facilitated its tight political control over the population. Despite the dearth of hard information on North Korea, U.S. policies have not been formulated in complete darkness. Indicators of the country's economic and demographic stress are, of course, more readily observable than its current political condition. In 2015, North Korea reportedly harvested enough food to feed its people for the first time in decades. Nonetheless, the estimated caloric intake per capita of 2,100 calories per day is below the 2500 recommended by the United Nations, with startling consequences: the average five-year-old boy in North Korea is now nine centimeters shorter than his counterpart in the South. The DPRK's estimated GDP of \$40 billion is dwarfed by South Korea's \$1.7 trillion.68 The DPRK's long-running economic crisis has played out against the backdrop of two changes of leadership—from

Kim Il-sung, the founder of the North Korea state, to his son, Kim Jong-il, in 1994, and then to his grandson, Kim Jong-un, in 2011. Former Soviet President Mikhail Gorbachev once described North Korea's dynastic rule as "a primitive phenomenon." And yet North Korea—essentially a failed state—conducted 2 nuclear-weapon tests and 20 ballistic missile tests in 2016 alone, and is on a possible trajectory to acquire a nuclear stockpile one-half the size of Britain's or France's arsenal.

When Kim Jong-il died in December 2011, he was succeeded by Kim Jong-un, the youngest of his three sons. Kim III's designation as heir apparent had been signaled in 2010 by his promotion to four-star general and his appointment as vice chairman of the Central Military Commission at age 27. The "Dear Respected Comrade," one of his many official titles, aggressively moved to consolidate his paramount position. An uncle by marriage, Jang Song-taek (whom some North Korea watchers believed would serve as a close adviser, if not regent, to the young leader) was executed in a purge—one in a rolling series that, according to South Korean intelligence, replaced about half of the DPRK's top 200 military and bureaucratic officials, including Defense Minister Hyon Yong-chol. North Korea expert Andrei Lankov observed, "Kim Jong-un has been significantly more brutal than his father. And he's been particularly hard on the military."

The generational continuity of the Kim family cult remains the political cornerstone of the North Korean system, but Kim Jong-un has introduced changes, both stylistic and substantive, to signal a new era. The "Dear Respected Leader" has sought to project himself as a youthful modern leader, permitting the public display of foreign influences (such as Western clothing, Disney characters, and even rock concerts) and having a wife who is a visible public figure. The Kim Jong-un regime's conflicted interests over the expansion of the non-state economy underscore the persisting dilemma. On the one hand, economic reform on the Chinese

model that unleashes the entrepreneurial power of the citizenry could pose an insidious political threat to the Kim family regime. On the other hand, even with the halting implementation of market reforms since the Kim Jong-il era, three-quarters of what people earn are estimated to come from the unregulated private economy. Nearly all North Koreans lead "a double economic life."73 The modest reforms in agriculture dating back to the late 1990s have meant the difference between subsistence and starvation for the general public. Moreover, while potentially threatened by the growth of the non-state economy, the Kim regime tangibly benefits from its cut of the proceeds. These revenues, in tandem with funds from its continued illicit activities (with large-scale drug trafficking reportedly scaled back in response to pressure from China), maintain the court economy for the elite. A United Nations Human Rights Commission of Inquiry's report calculated that Kim Jong-un annually squandered a staggering \$645 million on "luxury goods."74

Kim Jong-un must weigh competing risks: Rolling back the modest Chinese-type reforms would undermine the economy, but expanding them to empower new interest groups could threaten the Kim regime's political control. In Andrei Lankov's metaphoric formulation, "They are riding the tiger. Of course they are afraid of being eaten by it. But at least they are trying."75 Kim Jong-un's paramount one-man rule was reaffirmed in May 2016 at a rarely convened Korean Workers' Party congress that gave no hint of a move toward collective leadership or additional reform. To provide internal political guidance and to lay down a marker for foreign powers, Kim Jong-un has enunciated a guns-and-butter policy— "parallel [economic and military] development" (byungjin). This line harkens back to a slogan enunciated by Kim Il-sung in the 1950s, but which, in its current manifestation, supplants a general stress on military capabilities with specific emphasis on nuclear-weapons development. A senior U.S. diplomat, rejecting the Kim Jong-un

regime's *byungjin* line, said that it wants to "have its cake and eat it too."⁷⁶

Senior George W. Bush administration officials, who judged North Korea to be "teetering on the edge of economic collapse" (in the words of one senior official), believed that a squeeze strategy, enlisting China and South Korea, could tip it over. By contrast, the Clinton and Obama administrations eschewed this approach on the basis of its assessment that the sudden collapse of North Korea—a so-called "hard landing"—was both unlikely and carried the significant possibility of war on the Korean peninsula by triggering a final desperate act on the part of the Kim family regime. Since the 1990s, successive South Korean governments have consistently shared this assessment and have been additionally concerned, in light of the German experience after the Cold War, about the staggering economic costs of rapid reunification, as well as the uncontrolled movement of refugees to the South. In May 2003, a few weeks after the toppling of the Saddam Hussein regime, when some Bush administration officials made provocative statements about replicating the Iraq precedent in other "rogue states," South Korean president Roh Moo Hyun told White House officials during a Washington visit that Seoul would not support military action of any kind against Pyongyang.⁷⁷

China plainly views an uneasy status quo as preferable to either. A hard landing—regime collapse—would, at minimum, create a refugee crisis and risk triggering a conflict on the Korean peninsula. Alternatively, a soft landing—peaceful reunification between North and South Korea—would end North Korea's status as a buffer state and leave China with a formidable pro-Western regional power on its border. Facing unacceptable alternatives, Beijing has clearly made a strategic decision to prop up the vulnerable Kim family regime through economic assistance (food and fuel) and investments in politically connected North Korean

trading companies. China has turned a blind eye to UN sanctions adopted after successive nuclear tests since 2006 by allowing the transshipment of North Korean military goods and technology to Iran; and by serving as the primary conduit for luxury goods to maintain the lavish lifestyle of the regime's elite. An International Institute for Strategic Studies (IISS) study suggested that North Korea has increasingly become "a de facto satellite of China." That may be the case economically, but politically the Kim family regime has been anything but subservient to China.

The Kim family regime's survival strategy is to obtain the tangible benefits of outside economic engagement (e.g., siphoning off food aid for the military) while maintaining rigid control over the process and minimizing its impact on North Korean society. It appears that the Kim family recognizes that a soft landing for North Korean society means a hard landing for it. In veteran North Korea watcher Andrei Lankov's view, a soft landing is likely to turn hard very quickly. Though a fundamental question remains: is a soft landing for North Korea is indeed possible? Proponents view that unknown prospect as preferable to the known dangers of an uncontrolled collapse. U.S. hardliners regard the soft-landing approach as synonymous to appeasement and believe that such engagement, far from being an instrument of social change, runs the moral hazard of propping up an odious regime that would otherwise collapse.

"Trends that can't continue, won't," economist Herbert Stein famously observed. The North Korean people have suffered a depth of privation that would have triggered revolutions in other countries. Yet the demise of the Kim family regime, oft-predicted since the 1990s, has not occurred. Contrary to the prediction of the "collapsists" (to use economist Marcus Noland's term), the Kim family has proved adept at insulating itself and its power base from the political consequences of the country's grave economic crisis. ⁸⁰ The Kim family's remarkable durability under extreme adversity has meant that the timelines for a change of regime in Pyongyang

and North Korea's nuclear program remain out of sync. The former is indeterminate, while the latter is immediate and urgent.

Domestic politics are a key determinant of the prospects for coercive diplomacy to constrain North Korea's nuclear program. For Pyongyang, the nuclear crisis is inextricably linked to the survival of the Kim regime. In the succinct formulation of a foreign diplomat based in Seoul 15 years ago, "Everything North Korea does, whether making peace or making threats, has a single goal: to sustain the regime." That is equally true today—and encapsulates the challenge of constraining North Korea's nuclear capabilities.

NUCLEAR CAPABILITIES AND INTENTIONS

On October 8, 2006, the Kim Jong-il regime proclaimed that North Korea had conducted a nuclear-weapon test. 82 The DPRK thereby became the ninth member of the nuclear club—joining the five permanent members of the Security Council grandfathered with nuclear status into the Nuclear Non-Proliferation Treaty (NPT)—the United States, Russia, China, Britain, and France; and three states that exercised their sovereign right not to accede to the NPT—India, Pakistan, and Israel (an undeclared but acknowledged nuclear-weapon state). In this unexpected move, the Kim regime defied its key patron, China, by crossing the nuclear threshold in the face of Beijing's explicit admonitions.

The 2006 test overturned prevailing conventional wisdom about North Korea's nuclear intentions. For nearly two decades beforehand, North Korea had pursued a policy

of nuclear ambiguity—retaining the hedge inherent in its ability to produce weapons-usable fissile material, but not risking the punitive international consequences of becoming an overt nuclearweapon state. The Kim family regime regarded nuclear weapons as both a deterrent capability vital to regime survival and a bargaining chip to extract economic inducements from the United States, South Korea, and Japan. The relative emphasis placed on one or the other was contingent on domestic conditions and external circumstances.83 That ambiguity has been shed as North Korea seeks recognition as a nuclear-weapon state—a status that the United States has repeatedly declared that Washington will never accept. A full rollback of the North Korean nuclear program in the near-term is not a feasible diplomatic objective. But with North Korea poised to significantly expand its arsenal and deploy miniaturized warheads on long-range ballistic missiles capable of striking the United States, the urgent question is whether the North's nuclear intentions can be checked to prevent this breakout of its capabilities.

Pathways to the Bomb

North Korea's nuclear program was launched in 1964, when the Kim II-sung regime established a nuclear facility at Yongbyon (60 miles from Pyongyang, the capital) with a small research reactor provided by the Soviet Union. 84 In 1986, North Korea completed an indigenously engineered 5-megawatt nuclear reactor at Yongbyon that was well suited to the Democratic People's Republic of Korea (DPRK): it depended only on locally obtainable natural uranium, rather than imported heavy water and enriched uranium. U.S. concern about North Korea's nuclear intentions was triggered two years later with the construction of a new Yongbyon facility to chemically extract weapons-grade plutonium from the spent nuclear reactor fuel. Such a reprocessing facility served no purpose other than to support a nuclear weapons program.

Complementing its mastery of the plutonium fuel cycle, North Korea conducted experiments with conventional explosives essential for the development of a workable nuclear warhead. North Korea signed the Nuclear Non-Proliferation Treaty (NPT) in December 1985, reportedly in response to pressure from the Soviet Union. Between 1986, when the five-megawatt facility became operational, and 1994, when the Agreed Framework froze activity at the Yongbyon site, a CIA National Intelligence Estimate concluded that North Korea had separated sufficient plutonium from the spent fuel rods to build one or two bombs.⁸⁵

With the freezing of activity at Yongbyon in 1994 Agreed Framework, Pyongyang was faced with a dilemma of competing interests— abiding by the Agreed Framework, while preserving a nuclear hedge vital to regime survival. Reconciling the two led the Kim Jong-il regime to pursue the second pathway to the bomb employing highly enriched uranium (HEU). ⁸⁶ To achieve that alternate route to nuclear acquisition without detection, the Kim Jong-il regime turned to Pakistan, which conducted its first nuclear test in May 1998. In 2002, U.S. intelligence confirmed what had been suspected since around 1997—that Pakistan, via A.Q. Khan's notorious black market network, had bartered centrifuges for uranium enrichment to North Korea in exchange for *Nodong* ballistic missile technology. ⁸⁷

North Korea's initial nuclear stockpile, including the weapons tested in 2006 and 2009, was based on the plutonium extracted from the five-megawatt research reactor at Yongbyon. After the collapse of the Agreed Framework in 2003, U.S. diplomacy was focused primarily on reinstituting the plutonium freeze. Yet the precipitant of the second North Korean nuclear crisis in 2002-2003 was the covert uranium enrichment program, whose scope and urgency were unknown. After the UN Security Council tightened sanctions in response to the DPRK's second test, the North Korean foreign ministry confirmed what it had long denied—the existence of its uranium enrichment program. §8

In December 2010, the United States informed the IAEA that the U.S. intelligence community believed North Korea had one or more clandestine uranium enrichment facilities beyond the known Yongbyon site. As a uranium enrichment installation is more difficult to detect than a plutonium production complex, the U.S. intelligence assessment about additional covert uranium enrichment facilities raised the specter of North Korea being able to significantly augment its small plutonium-based nuclear arsenal. A White House official offered that the North Korean uranium enrichment project "appear[ed] to be much more advanced and efficient than the Iranian program."

North Korea's mastery of uranium enrichment is the Kim Jong-un regime's "new nuclear wild card," according to a May 2016 study from Stanford University's Center for International Security and Cooperation. Authored by a team of eminent nuclear physicists who had visited North Korean nuclear sites, the report concluded: "A capability to enrich uranium introduces dramatic uncertainty into any estimate of the North's nuclear future, and the truth is that we know very little about the extent of that capability."

Accelerating toward a Breakout

North Korea is on the verge of a nuclear breakout that is both *quantitative* (by sharply increasing its arsenal size) and *qualitative* (through its mastery of warhead miniaturization and long-range ballistic missiles capable of striking the U.S. homeland). With two nuclear tests and a flurry of ballistic-missile tests of various ranges in 2016-17, the tempo of North Korean activity accelerated. As detailed below, Pyongyang's determined effort to achieve a breakout is reflected across four key categories of capabilities: (1) the production of *weapons-usable material* (plutonium and highly enriched uranium); (2) *warhead design* improvements; (3) *nuclear tests* to verify the design and increase weapon-yields; and (4) *missile tests* to develop a reliable warhead-delivery system.

Weapons-usable Material—Estimating the growth of the North Korean nuclear arsenal entails a probabilistic calculation that must take multiple variables into account, notably: the existence or not of a clandestine uranium enrichment facility; whether the capacity of a covert enrichment site would be the same as that of the Yongbyon facility; whether or not North Korean warhead designs utilize the IAEA standard of 8 kg of plutonium and 25 kg of highly enriched uranium per weapon; whether or not economic sanctions will limit North Korea's access to essential materials (such as specialty steel); the amount of weapons-usable material used in the five nuclear tests to date; among others. The DPRK's projected acquisition of weapons-usable material is the key determinant driving three alternative futures for North Korea's nuclear program in the year 2020: a low-end projection of 20 weapons, a medium projection of 50 weapons, and a high-end projection of 100 weapons. 90 The Trump-Kim summit meetings have led to a North Korean moratorium on long-range ballistic missile and nuclear-weapons testing. But its production of weapons-usable material (especially of highly enriched uranium at clandestine sites) has not been constrained since the initiation of bilateral diplomacy.

Warhead Design—In March 2013, the Pyongyang regime released a saber-rattling propaganda video depicting a nuclear strike on Washington. The following month, seven years after the DPRK's first nuclear test, the Defense Intelligence Agency concluded with "moderate confidence" that North Korea had mastered the ability to produce a nuclear warhead that could be launched on a ballistic missile. The DIA's assessment cautioned, however, that the weapon's "reliability [would] be low," a reference to the significant technical hurdles that North Korea needs to overcome to attain a dependable capability. Such a nuclear warhead would need to be miniaturized for mounting on a missile, durable enough to survive the rigors of ballistic flight and the heat of reentry, and with sufficient accuracy to strike the intended target. North Korea

is likely to have obtained a proven bomb design, which China had provided Pakistan, through its nuclear black market relationship with A.Q. Khan. In July 2017, a leaked intelligence assessment of the Defense Intelligence Agency reportedly concluded that North Korea had crossed the key threshold of miniaturization—that it had mastered the capability to mount a miniaturized warhead on a ballistic missile.⁹²

Nuclear Tests—North Korea has conducted six underground explosions at its nuclear test site at Punggye-ri, a small town in the country's northeast. The tempo of North Korean activity increased in 2016 and 2017, with Pyongyang conducting three tests after a nearly three-year hiatus. North Korea declared after its fourth test in January 2016 it had successfully detonated a hydrogen bomb. That claim was given greater credence after a September 2017 test, whose yield was estimated at 100 kilotons. ⁹³ Nuclear testing is essential for warhead development. North Korea stated that its third nuclear test in February 2013 was intended to develop a "smaller and light" device that could be mounted on a ballistic missile. ⁹⁴ Analysts speculate that North Korea employed plutonium in its initial tests, with later ones after 2013 also employing highly enriched uranium. ⁹⁵

Missile Tests—North Korea's imminent nuclear breakout arises from the conjunction of capabilities: miniaturized warheads and reliable ballistic-missile delivery systems. North Korea's missile inventory is estimated at over 1,000 missiles of varying ranges. The origin of the DPRK's missile program dates to 1976 when Egypt transferred Russian Scud missiles to North Korea. The North Koreans manufactured their own version of the Scud, the Hwasong, which was followed in the 1990s by the larger Nodong missile, whose medium range of 1,300 kilometers covered potential regional targets as far as Tokyo. In 1998, North Korea tested its first multi-stage missile, the Taepodong–1, which used the Nodong

as its first stage and the *Hwasong* as its second, with an estimated range of 2,200 kilometers.

In December 2012, North Korea successfully launched a small satellite into orbit from the Sohae facility on North Korea's west coast. The launcher was a Taepodong-3 missile, also known by the space-launch designation, Unha-3. The Taepodong-3 can boost a 100 kg payload into orbit and has an estimated intercontinental range of 12,000 kilometers, which would bring California within reach. 6 Under Kim Jong-un, North Korea's missile launch facilities have expanded and the pace of missile test launches has accelerated. North Korea also tested new capabilities in April 2016—a submarine-launched ballistic missile and a new solid-fueled rocket engine (which offers an alternative to less cumbersome and vulnerable liquid-fueled engine). 97 In July 2017, North Korea successfully tested the Hwasong-14, an intercontinental ballistic missile with an estimated range of 10,000 kilometers, and in November, the more powerful *Hwasong-15*, with a projected range of 13,000, putting the U.S. homeland in range.98

U.S. intelligence officials acknowledge that they misjudged the speed of North Korea's accretion of nuclear capabilities. The miscalculation was two-fold: first, assuming that North Korea would need as much time as other nuclear-weapon states in solving technical problems; and second, underestimating the priority that the young Kim, only in his early 30s, would place on the nuclear program. 99 What had been an incremental and determined program to develop nuclear and missile capabilities became Kim's Manhattan Project—a crash effort to target the U.S. homeland with a nuclear weapon. Whether North Korea has crossed Trump's tweeted red line— "It won't happen"—is uncertain. The main focal point of uncertainty is whether North Korea had overcome the final technological challenge of warhead reentry through the atmosphere. 100 In 2018, Gen. John E. Hyten, then heading U.S. Strategic Command, stated, "The one thing they have not

demonstrated to the United States is the ability to put everything together, end to end, and use it. [W]hen we, the United States, built that capability, that endgame was the hardest part for us."¹⁰¹

A Deterrent, Bargaining Chip, or Both?

Declassified documents from the Cold War-era archives of North Korea's former allies in the Soviet Union and Eastern Europe reveal the powerful motivation underlying the Kim family regime's longstanding nuclear quest. These diplomatic cables reveal the North Korean leadership's thinking on nuclear weapons. The participants, including Kim Il-sung and his "best friend," East German leader Erich Honecker, believed the transcripts of their secret oral conversations would forever remain so. As early as August 1962, the Soviet ambassador to Pyongyang reported that the North Korean foreign minister had baldly asked of the DPRK's superpower patron, "The Americans have a large stockpile, and we are forbidden even to think about the manufacture of nuclear weapons?" Kim Il-sung reportedly made two requests to Beijing for assistance in building nuclear weapons—the first after the initial Chinese nuclear test in 1964; and the second in the early 1970s when South Korea was flirting with its own nuclear option. In 1976, a senior North Korean official angrily emphasized his country's "front-line situation" after the Kremlin had rejected as "inopportune" yet another request by Pyongyang for nuclear technology. 102 The documents reveal the mindset of a vulnerable regime that perceives the Korean War to have never ended. North Korea's nuclear intentions were fueled by perceptions both of vulnerability to superior U.S. and South Korean forces and, after the fall of communist rule in Eastern Europe and the Soviet Union, of collapse.

A telling indicator of Pyongyang's determined pursuit of nuclear weapons is that its acquisition of uranium enrichment technology from Pakistani black marketer A.Q. Khan (providing an alternate pathway to the bomb) occurred in the late 1990s, when the Clinton administration was engaging North Korea through the Agreed Framework and negotiations on ballistic missiles. The October 2002 crisis over the covert uranium enrichment program played out against the backdrop of U.S. preparations for a war of regimechange in Iraq and President Bush's inclusion of North Korea in the "axis of evil." The chief North Korean nuclear negotiator told his U.S. counterpart, "If we disarm ourselves because of U.S. pressure, then we will become like Yugoslavia or Afghanistan's Taliban, to be beaten to death."103 In June 2003, two months after U.S. tanks rolled into Baghdad to topple the Saddam Hussein regime, a North Korean Foreign Ministry official declared that the DPRK would respond to any encroachment on its sovereignty "with an immediate, physical retaliatory measure. Neither sanctions nor pressure will work on us ... As far as the issue of nuclear deterrent force is concerned, the DPRK has the same status as the United States and other states possessing nuclear deterrent forces."104 As Pyongyang claimed equivalence with the United States three years before conducting its first nuclear test, another senior DPRK official told visiting U.S. congressional staff members that Washington should "stop trying so hard to convince us to abandon our nuclear program and start thinking about how you are going to live with a nuclear North Korea."105

Kim Jong-il's signal accomplishment, in the face of concerted U.S. and international efforts to the contrary over more than two decades, was to bequeath to his son Kim Jong-un a small nuclear arsenal. Under Kim Jong-un, North Korea's declaratory policy further hardened. Pyongyang's demand that the DPRK be accepted as a "nuclear-armed nation" was codified through a constitutional amendment in April 2012. Kim announced "a new strategic line"— a guns-and-butter policy of "parallel [economic and military] development" (byungjin)—at a Korean Workers' Party central committee meeting in March 2013. Kim Jong-un,

who assumed his father's title of "Dear Leader," asserted that the country's nuclear weapons "are neither a political bargaining chip nor a thing for economic dealings." He declared that the nuclear arsenal is a "treasure" that will not be traded for "billions of dollars," and must indeed be expanded both "in quality and quantity, as long as the United States' nuclear threat continues." 106

In June 2013, three months after Kim's defiant enunciation of the *byungjin* line, the DPRK's National Defense Council issued a statement calling for high-level bilateral talks with the United States and affirming that North Korea's "legitimate status as a nuclear weapons state will be maintained without the least wavering, regardless of whether others recognize it or not, until the denuclearization of the entire Korean peninsula is realized and nuclear threats from outside are put to an end completely." Expert views differed over whether the statement was a signal reflecting genuine interest in renewed negotiations or was intended to create a political fissure among the United States, China, and South Korea, whose stances on denuclearization were converging.¹⁰⁷

North Korean declaratory policy under Kim Jong-il and Kim Jong-un has emphasized the deterrent value of the DPRK's nuclear program. After the NATO intervention in Libya in 2011, North Korea said that Qaddafi had been "tricked into disarmament" in 2003 through a U.S. assurance of regime security. In addition to their deterrent value, nuclear weapons are the one asset the Kim family regime can monetize by extracting concessions from the United States, South Korea, and Japan. Unlike oil-rich Iran, which sought a resolution of its nuclear dispute to regain access to international energy markets, North Korea has no other marketable commodity. And because the regime fears the risk of political contagion through integration into the global economy, it has

pursued an autarkic economic strategy, which has left the country impoverished. With a GDP estimated by the CIA at a paltry \$40 billion (compared to South Korea's \$1.7 trillion), North Korea is essentially a failed state with nuclear weapons.

To the extent that the nuclear program remains a negotiating bargaining chip, denuclearization—"complete, verifiable and irreversible dismantlement" (CVID)—is not a feasible near-term diplomatic objective. With full denuclearization off the table and North Korea at the threshold of acquiring the capability to target the U.S. homeland with a nuclear weapon, the urgent question is whether political space exists to negotiate an interim agreement that freezes the DPRK's nuclear capabilities to prevent a breakout.



Iran: The Limits of "Maximum Pressure"

U.S. policy toward Iran is at an inflection point. President Trump withdrew the United States from the nuclear agreement, the Joint Comprehensive Plan of Action (JCPOA) negotiated between Iran and the world's major powers, that he inherited from the Obama administration. Trump rejected that transactional deal, focused exclusively on the nuclear issue, because it was not transformational: it did not address Iran's "malign activities" beyond the scope of the nuclear agreement. In tandem with withdrawing from the JCPOA, the Trump administration has applied "maximum pressure" on Iran—reimposing U.S. sanctions lifted under the JCPOA, attempting to block all Iranian oil exports, and pressing other states (including through the threat of extraterritorial secondary sanctions on foreign commercial entities) from conducting business with Iran. While pulling the United States out of the JCPOA, the Trump administration has maintained that the Tehran regime should remain in the agreement, abiding by the agreement's constraints on Iran's nuclear program.

Under renewed U.S. economic pressure, Iran has not followed the U.S. lead and jettisoned the JCPOA, preferring instead to let the Trump administration be the focal point of international criticism for its unilateral withdrawal decision. But Iran has begun to push the envelope of the accord (breaching the limits on uranium enrichment) to signal that it too "gets a vote" (in the phrase of

Left: President Hassan Rouhani attends a meeting during his provincial tour to Khorasan, Iran, July 14, 2019 Source: AP images former U.S. Secretary of Defense James Mattis). Two tanker explosions in the Gulf of Oman in mid-June 2019, attributed to the Islamic Revolutionary Guard Corps, reflected Iran's asymmetrical military options. The naval incident also pointed to the increasing risk of inadvertent military escalation.

The avowed goal of U.S. "maximum pressure" is to compel Iran to become a "normal" state by complying with 12 far-reaching behavioral changes—from ceasing all uranium enrichment to ending its support of Lebanese Hezbollah. While the Trump administration has eschewed regime-change rhetoric, the broad scope of Washington's 12 parameters are such that Iranian compliance would essentially require a change of regime in Tehran. Iran will reject a transformational U.S. policy viewed as a threat to regime survival. Against the backdrop of rising military tensions in the Gulf, the open questions are whether the Trump administration can navigate a pivot back to transactional diplomacy that restores and builds on the JCPOA by prioritizing among Secretary of State Mike Pompeo's 12 parameters; and whether the Tehran regime would be open to diplomatically reengaging with the United States.

U.S. POLICY EVOLUTION

From the Revolution to 9/11

U.S. estrangement with Iran, a bitter state of relations ushered in by the 1979 Revolution, is exceeded in duration only by that of Washington with North Korea and Cuba. Although the Iranian Revolution should be viewed as a broader societal rejection of Western secularism and the Shah's authoritarian rule, the political identification of the Shah with the United States became a major driver of the revolution's virulent anti-Americanism. The seizure of the American embassy by radical "students" in October 1979 was essentially an extension of the revolution. In January 1981,

Iran's theocratic regime, then consumed by the war with Iraq that had begun the previous September, concluded the Algiers Accords with the United States to end the hostage crisis. A key provision of the 1981 accord was a form of security assurance, based on the principle of state sovereignty, in which the United States pledged "it is and from now on will be the policy of the United States not to intervene, directly or indirectly, politically or militarily, in Iran's internal affairs." 109

The State Department's designation of Iran in 1984 as a state sponsor of terrorism led to the imposition of additional U.S. economic sanctions. The Reagan administration's antipathy toward Iran's "outlaw government" produced a "tilt" toward Saddam's Iraq in their attritional war, even to the point of silence when Iraqi forces used chemical weapons against Iranian military forces. And yet, even as the administration sought to block arms sales to Iran through "Operation Staunch," President Reagan approved a convoluted covert program to provide weapons via Israel to Iran, in the mistaken belief that "moderates" within the Tehran regime were supportive of a rapprochement with the United States. The resulting Iran-Contra affair (so-named because the proceeds of the arms sales were intended to fund the Contra guerrillas fighting to overthrow the pro-Moscow Sandinista regime in Nicaragua) nearly brought down the Reagan presidency. 110 In the wake of the scandal, in 1988, bilateral relations further deteriorated when the United States extended naval protection to Kuwaiti oil tankers (as part of a strategy of coercive diplomacy to compel Iran to accept a UN ceasefire with Iraq) and the U.S.S. Vincennes accidentally shot down an Iranian civil airliner over the Persian Gulf.

In his 1989 inaugural address, President George H.W. Bush made a conciliatory gesture to Iran, declaring "good will begets good will."¹¹¹ Yet the competing pulls of Iranian domestic politics produced contradictory behavior: upon his death, Sayid Ruhollah Khomeini was succeeded as Supreme Leader by a hardline cleric,

Sayyed Ali Khamenei, who emphasized the centrality of anti-Americanism in the Islamic Republic of Iran's worldview. The Clinton administration, ending the 1980s policy of alternately cultivating relations with Iraq or Iran to maintain a regional balance of power, adopted a strategy of "dual containment." In Iran's 1997 presidential election, the unexpected victory of the reformist candidate, Mohammad Khatami, over a virulently anti-American cleric, created a new political dynamic. Khatami called for "a dialogue of civilizations," though he did not go so far as to advocate the normalization of "political relations" with the United States. But Khatami's overture came as the Clinton administration received conclusive evidence from Saudi law enforcement authorities implicating the Iranian Revolutionary Guard and the Lebanese Hezbollah in the 1996 Khobar bombing. In eschewing direct military action, the administration concluded that the best way to prevent future Iranian terrorism was to ensure that Khatami prevailed in the internal power struggle.

In March 2000, Secretary of State Madeleine Albright announced the lifting of U.S. sanctions on Iran's non-oil exports and signaled the possibility of further trade liberalization if Iran ended its external conduct of concern. Addressing Iran's historical grievances impeding the normalization of relations, she acknowledged Washington's "significant role" in the 1953 coup and said that U.S. support of the Saddam Hussein regime during the Iran-Iraq War had been "shortsighted." 112 While praising the country's "trend toward democracy" under Khatami, Albright obliquely observed that key levers of state power, notably the military and the judiciary, remained in "unelected hands," a critical reference to the Supreme Leader. In Tehran, Albright's conciliatory message was dismissed by Khamenei as "deceitful and belated." The Supreme Leader's rejection politically reined in Khatami and was a blunt rebuff to the Clinton administration's exploratory initiative to improve bilateral relations. 113

The George W. Bush Administration

In his 2002 State of the Union speech, Bush included Iran in the "axis of evil," along with Iraq and North Korea, and warned that these rogue states might transfer weapons of mass destruction to their "terrorist allies, [thereby] giving them the means to match their hatred." With this redefinition of threat after 9/11, merely containing rogue states was deemed inadequate, as their threatening conduct was linked to the character of their regimes. Hence, changes of behavior necessitated changes of regimes. This argumentation—the policy shift from containment to regime change—was central to the Bush administration's case for launching a preventive war in Iraq to topple the Saddam Hussein regime. By extension, this was the strategic prism through which the Bush administration viewed the challenge posed by Iran.

In mid-2003, after Iran's covert uranium enrichment program at Natanz was exposed by the International Atomic Energy Agency (IAEA), the three major European Union governments—Britain, France, and Germany—launched the so-called EU-3 diplomatic initiative toward Iran. The effort, which, in November 2004, yielded a temporary Iranian commitment to suspend uranium enrichment, was motivated by the Europeans' strong desire, first, to avoid a replication of the trans-Atlantic breakdown that had occurred over Iraq and, second, to demonstrate the efficacy of traditional diplomacy and non-military instruments as an alternative to regime change in addressing nonproliferation challenges. The United States belatedly joined the EU-3 diplomatic effort as an indirect partner in early 2005, but the Bush administration's approach remained stymied by its unwillingness to broadly engage on the nuclear question.

The critical period between the toppling of the Saddam Hussein regime in 2003 and the election of Ahmadinejad in 2005 (who ended the EU-3's negotiated uranium enrichment suspension)

presented the last opportunity to meaningfully bound Iran's nuclear program. But again, what proved politically possible in Washington (for example, dropping U.S. opposition to Iran's joining the World Trade Organization) was politically insufficient to force a hard choice in Tehran. The package offered to Iran in June 2006 by what had by then become the "P5+1" (the permanent members of the UN Security Council—the United States, Russia, China, the United Kingdom, and France—plus Germany) conspicuously omitted the one incentive that only the United States could offer, a commitment to non-intervention. 115 As Secretary of State Condoleezza Rice bluntly put it, "Security assurances are not on the table." 116

The Tehran regime's rebuff of the P5+1 and its flouting of the United Nations' demand that Iran resume the suspension of its uranium enrichment activities led to three Security Council resolutions in 2006-2007 blocking Iranian arms exports and nuclear commerce and calling on member states to inspect cargo planes and ships entering or leaving Iran that were suspected of carrying proscribed goods. 117 The Bush administration skillfully engineered this first tranche of multilateral sanctions on Iran within the United Nations. This basic sanctions framework established by the Bush administration was one that the succeeding Obama administration would inherit and build upon to generate significant pressure on the Tehran regime in its nuclear diplomacy with Iran.

The publication in November 2007 of the unclassified summary of the U.S. National Intelligence Estimate (NIE) on Iran complicated the Bush administration's effort to build international support for measures to curb Iran's nuclear program. The NIE stated that Iran had suspended the military components of its covert nuclear program since 2003, but also noted significant advances in Iran's mastery of uranium enrichment. U.S. officials were pressed to explain why the development of a latent capability should necessitate urgent action. The NIE essentially removed

the onus from Russia and China to support additional action by the UN Security Council to curb Iran's "civilian" program and thereby deny it a latent breakout capability. 118 The public release of the document triggered a political controversy in the United States. The administration's critics cited the new estimate as proof that the White House had been exaggerating the Iranian nuclear threat, just as it had exaggerated in the lead up to the Iraq war. Hardliners on Iran lambasted the NIE's methodology and charged that the intelligence community had inappropriately crossed the line into policy prescription. Even some IAEA officials privately voiced skepticism and concern that the U.S. assessment had been too "generous with Iran." 119 Amidst widespread public speculation about the possibility of U.S. air strikes on Iran's nuclear infrastructure, the NIE finding that Iran had halted its weapons program essentially took the military option off the table during the Bush administration's final year.

In dealing with the Iran nuclear challenge, the Bush administration was caught between the precedents set in Iraq and Libya. It could not replicate the Iraq precedent of direct military intervention, and it was unwilling to offer Tehran the security assurance that had sealed the Libya deal in 2003. With its mixed message as to the objective of U.S. policy—regime change or behavior change—it was unclear whether the Bush administration was prepared, as a former U.S. official put it, to "take yes for an answer" on the Iranian nuclear challenges and thereby test the Tehran regime's intentions.

The Obama Administration

Obama signaled a shift from the Bush policy in his inaugural address, telling Iran, North Korea, and other adversarial states that they are "on the wrong side of history," but that America would "extend a hand if you are willing to unclench your fist." 120 Obama described Iran (as well as North Korea) as an "outlier"—a state flouting international norms by defying its obligations

under the Nuclear Nonproliferation Treaty (NPT). Senior White House aides confirmed that the use of the term, in an April 2010 interview with the *New York Times* about the administration's *Nuclear Posture Review*, was a calculated departure from the Bushera moniker of "rogue state." ¹²¹The shift in nomenclature from "rogue" to "outlier" was intended to convey that a pathway was open for these states to rejoin the "community of nations" if they abided by international norms.

After Iran's disputed June 2009 presidential election returned Ahmadinejad to office, the Obama administration criticized the clerical regime's crackdown on the opposition Green Movement but eschewed regime-change rhetoric and maintained its willingness to engage diplomatically on the nuclear issue. At the G-20 meeting in late September, the United States, Britain, and France jointly revealed the existence of a covert uranium enrichment facility, Fordow, near the holy city of Qom. In the face of Iran's continued flouting of a UN Security Council resolution requiring it to suspend its enrichment of uranium, the Obama administration adopted a strategy that Secretary of State Hillary Clinton described as "a two-track approach of pressure and engagement."122 The administration's starting point was to clarify the objective of U.S. policy and end the mixed message that had been emanating from Washington. It made clear, including through a letter to Supreme Leader Khamenei, that the U.S. objective was not regime change, but rather, Iranian compliance with its NPT obligations. This limitation of goal, a prerequisite for successful coercive diplomacy, created a basis for the Obama administration to build broad international support for economic sanctions targeting Iran' energy and financial sectors that brought meaningful pressure to bear on the Tehran regime.

The June 2013 electoral victory of Hassan Rouhani, who had emerged as the centrist candidate in Iran's presidential campaign, created political space in both Tehran and Washington for the

revival of a diplomatic track. Intensive negotiations between Iran and the P5+1 in Geneva that autumn yielded the Joint Plan of Action (JPOA) on November 24, 2013. This interim agreement laid out a framework for reaching "a mutually-agreed long-term comprehensive solution that would ensure Iran's nuclear program will be exclusively peaceful." Baroness Catherine Ashton, the European Union's foreign policy chief, skillfully led the P5+1 countries in bringing these complex negotiations to fruition. A senior Obama administration official revealed that the formal multilateral talks had been facilitated by secret backchannel negotiations between the United States and Iran in Oman that had proved important in bridging differences between the two sides to establish the contours of a deal. 124

The interim agreement delineated the concrete steps that the parties would carry out as they worked toward a final comprehensive agreement. For its part, Iran agreed to limitations



European Union foreign policy chief Baroness Catherine Ashton, left, and Iranian Foreign Minister Mohamad Javad Zarif, right, address the media after closed-door nuclear talks in Vienna, Austria, Nov. 24, 2014

on its nuclear fuel program—most notably, suspending production of uranium enriched to 20 percent U-235 (a significant way to the 90 percent required for a weapon), eliminating its existing 20 percent stock, and capping any further uranium enrichment at the 5 percent level (suitable for fueling a nuclear power reactor). In addition, Iran pledged neither to construct any new uranium enrichment sites nor to modernize existing facilities, and promised to halt construction of a heavy-water nuclear reactor at Arak (which, if operational, could yield substantial plutonium and thereby offer Iran an alternative route to nuclear weapons acquisition).

In return, Iran was granted limited access to frozen assets from oil sales, and the P5+1 suspended certain sectoral sanctions (e.g., auto and civil aircraft spare parts). But the core sanctions relating to oil sales and Iran's access to the international financial system were to remain in place throughout the negotiations. The interim agreement did not explicitly address Iran's core demand recognition of its "right" to enrichment under the NPT's Article IV—but the interim agreement made clear that the ensuing negotiations would focus only on limiting, not ending, Iran's uranium enrichment program. 125 The Obama administration was caught in a bind: acknowledging that a full rollback of Iran's program (no enrichment, zero centrifuges spinning) was no longer politically feasible, but unwilling to accept an interpretation of the NPT that conferred a generic right to signatory states to acquire the full nuclear fuel cycle. That the negotiations were aiming to constrain, not eliminate, Iran's uranium enrichment program was a focal point of congressional criticism of the Obama administration's nuclear diplomacy with the Tehran regime. Iran would retain the latent option for a weapon inherent in its capability to enrich uranium.

The announcement of the Joint Plan of Action in November 2013 began a marathon 20-month negotiation between the P5+1

and Iran to convert that interim agreement into a final accord. But the perennial issues—the permitted scope of Iran's uranium enrichment program under an agreement, the pace of sanctions relief commensurate to Iranian compliance, and the accounting of Iran's past weaponization efforts—remained seemingly intractable during the protracted talks. The question for the Obama administration, having realistically ceded the maximalist position of a full rollback with zero centrifuges spinning before negotiations began, was whether the Tehran regime would make the hard decision. In short, whether it would take yes for an answer—accept the P5+1's offer of a bounded uranium enrichment capability in return for sanctions relief and assurances that it did not mask a covert weapons program.

The diplomatic logjam was broken in Lausanne, Switzerland on April 2, 2015 after eight intense days of essentially bilateral U.S.-Iranian negotiations (under the P5+1 umbrella) involving Secretary of State Kerry and Secretary of Energy Ernest Moniz and their Iranian counterparts, Foreign Minister Javad Zarif and Ali Akbar Salehi, the head of Iran's atomic energy agency. The Lausanne framework, described by the *New York Times* as "surprisingly specific and comprehensive," reflected significant progress in some areas—notably, the number and sophistication of operating centrifuges, as well as Iran's permissible stock of low-enriched uranium for a 15-year period—but again deferred the thorniest issues (relating to inspections, verification, and sanctions relief) to the final round of negotiations to translate the interim parameters into a comprehensive agreement. ¹²⁶

After the conclusion of the Lausanne framework agreement, the U.S. Senate Foreign Relations Committee took up legislation to give Congress an opportunity to review any final nuclear deal. The Obama administration originally opposed the legislation, arguing that it could complicate or even scuttle the negotiations, but relented when the broad bipartisan Senate support for such a

review became evident. Yet in acquiescing to passage of the Iran Nuclear Agreement Review Act (aka the Corker-Cardin bill), the administration was able to win the removal of poison pills, such as a proposed amendment that would have linked approval of a nuclear deal to the cessation of Iran's state sponsorship of terrorism. Most significantly, the bill was structured favorably to the administration: if Congress did reject an accord, the White House would only need to secure the support of 34 Senators to prevent an override of a certain presidential veto.

The final round of negotiations began in Vienna in late June and, after an intense 17-day diplomatic endgame, a "Joint Comprehensive Plan of Action" (JCPOA) was reached on July 14, 2015. Having advanced a controversial strategy of engaging adversarial states since his first inauguration, President Obama hailed the nuclear "deal" as having "achieved something that decades of animosity have not." He declared that "every pathway to a nuclear weapon is cut off" and the accord "meets every single one of the bottom lines that we established when we achieved a framework" in Lausanne in April. ¹²⁷

The Joint Comprehensive Plan of Action (JCPOA) concluded between the P5+1 and Iran in Vienna on July 14, 2015 fulfilled the parameters of the interim framework reached in Lausanne. The 159-page nuclear accord (including 5 annexes) offered both sides a winning political narrative. The Obama administration highlighted the meaningful constraints the agreement places on Iran's nuclear program—cutting off the plutonium route to a bomb and sharply reducing the number of centrifuges to the sole uranium enrichment site at Natanz—and the extension to one year the "breakout" time Iran would need to acquire a nuclear weapon if the Tehran regime made that strategic decision. President Rouhani and his chief negotiator, Foreign Minister Mohammad Javad Zarif, could argue that JCPOA codified Iran's sovereign "right" to enrich uranium and that the Tehran regime had stood up to American bullying.

Defending the agreement before the Senate Foreign Relations Committee, Secretary of State Kerry dismissed the view that Congress should reject the agreement in order to send the Obama administration back to the negotiating table to win additional Iranian concessions: "Let me underscore the alternative to the deal we've reached isn't a 'better deal'—some sort of unicorn arrangement involving Iran's complete capitulation. That's a fantasy, plain and simple....The choice we face is between a deal that will ensure Iran's nuclear program is limited, rigorously scrutinized, and wholly peaceful or no deal at all."128 The comprehensive agreement generated heated opposition from congressional critics, at home, and the Israeli government, abroad. The Obama administration was varyingly attacked for having been "duped" or "fleeced" by Iranian negotiators, while American compromises to get to yes (as on the duration of the UN arms embargo) were cast as Neville Chamberlain-like acts of appeasement.

What the administration depicted as the agreement's great strength—that it bought time, at least 15 years—was viewed by critics as its great weakness. At the end of that period, they noted, when the key constraints on Iran's uranium centrifuge program are phased out, the "breakout" time will again shrink to an unacceptably short period. Outside experts raised specific technical questions and concerns about the implementation of the agreement. Prominent among them was the 24-day deadline over granting IAEA inspectors access to suspect sites; in Congressional testimony, Secretary of Energy Moniz argued that clandestine work involving nuclear materials would be detectable long after that period, but acknowledged that other non-nuclear activities—such as experiments on high-explosive triggers for a nuclear weapon—would be harder to detect. 129

Notwithstanding these technical issues within the agreement's parameters, the major criticisms of the Obama administration's nuclear diplomacy were on grounds beyond its realistic scope—

the Tehran regime's destabilizing regional policies (in Syria, Lebanon, and Yemen), state sponsorship of terrorism, and abysmal human rights record. The Obama administration argued that these important issues should be addressed in their own terms through the appropriate policy instruments, but that linking them to the nuclear challenge would have derailed talks. The Obama administration defended the nuclear agreement in transactional terms: it addressed a discrete urgent threat. That the deal was *transactional*, not *transformational*, was the crux of the dispute between the deal's proponents and critics.

The Trump Administration

As a presidential candidate, Trump declared his intent, if elected, to renege on the JCPOA, which he characterized as the "worst deal ever" and "a disaster." Notwithstanding that campaign stance, General James Mattis, in his Senate confirmation hearing to be Secretary of Defense, stated his support for remaining in the Iran nuclear agreement. Trump signed the periodic presidential waivers to permit the sanctions relief that the United States had committed to under the JCPOA, but the president did so reluctantly, according to press reports. The requirement to issue waivers every 90 days to continue sanctions relief by certifying that Iran was in compliance with the JCPOA had been mandated by Congress under the Iran Nuclear Agreement Review Act. The optic through which the Trump administration viewed the Iran challenge was reflected in its revival of the term "rogue" state. The designation of Iran as a "rogue" state signaled that the threat posed by the Islamic Republic was linked to the character of its ruling regime. Therefore, transactional diplomacy, such as the JCPOA, that addressed a discrete issue was inadequate because it did not address "malign activities" beyond the scope of the agreement—that is, the agreement was not transformational.

Rejecting pleas from the leaders of the Britain, France, and

Germany, President Trump declared on May 8, 2018 that the United States was unilaterally withdrawing from the JCPOA and would reimpose stringent economic sanctions on Iran. Two weeks later, speaking at the Heritage Foundation, Pompeo laid out "a new Iran strategy"—the centerpiece of which was "12 very basic requirements" or "musts":

- Declare to the IAEA a full account of the prior military dimensions of its nuclear program, and permanently and verifiably abandon such work in perpetuity
- 2. Stop enrichment and never pursue plutonium reprocessing
- **3.** Provide the IAEA with unqualified access to all sites throughout the entire country
- **4.** End its proliferation of ballistic missiles and halt further launching or development of nuclear-capable missile systems
- **5.** Release all U.S. citizens, as well as citizens of our partners and allies
- **6.** End support to Middle East terrorist groups, including Lebanese Hezbollah, Hamas, and the Palestinian Islamic Jihad
- Respect the sovereignty of the Iraqi Government and permit the disarming, demobilization, and reintegration of Shia militias
- **8.** End its military support for the Houthi militia and work towards a peaceful political settlement in Yemen
- **9.** Withdraw all forces under Iranian command throughout the entirety of Syria
- 10. End support for the Taliban and other terrorists in Afghanistan and the region, and cease harboring senior al-Qaida leaders

- **11.** End the IRG Quds Force's support for terrorists and militant partners around the world and
- **12.** End its threatening behavior against its neighbors (i.e., Israel, Saudi Arabia, and the UAE).

These 12 "musts" were accompanied by a plea to the Iranian people to "ponder" the priorities of its ruling regime. That appeal to the Iranian public plus the comprehensive scope of the Trump administration's demands revived the question whether the U.S. objective was regime change or behavior change. Administration officials stated that it was simply pressing the Tehran regime to comply with international norms. But, as one observer quipped, the administration was basically demanding that Iran no longer be Iran.

Secretary Pompeo's special adviser on Iran, Brian Hook, stated that the objective of the administration's "maximum pressure" strategy comprehensive economic sanctions—was to compel the Tehran regime to accept Washington's 12 "very basic requirements," while denying it the financial resources to pursue its activist regional agenda. However, a recent Congressional Research Service report also noted an implicit transformative goal: "Administration statements also suggest that an element of the policy could be to create enough economic difficulties to stoke unrest in Iran, possibly to the point where the regime collapses."131 Trump's withdrawal announcement was coupled with the re-imposition of the nuclear-related U.S. sanctions that had been lifted under the JCPOA. 132 "Maximum pressure" was further ramped up through extraterritorial, so-called "secondary" sanctions on foreign commercial entities doing business in Iran. Foreign companies that had laid plans for projects and investments in Iran after the signing of the JCPOA were given the stark choice of being able to conduct business in the United States or Iran. The European Union, protesting this strong-arm tactic, has attempted to create

a financial mechanism that would allow European businesses to circumvent U.S. secondary sanctions. But the consequence has been that major European corporations, such as Siemens and Renault, have withdrawn from the Iranian market.¹³³

In the year after the U.S. withdrawal from the JCPOA, the Trump administration further ramped up its "maximum pressure" strategy. In April 2019, the administration designated the Islamic Revolutionary Guard Corps (IRGC), an official arm of Iran's military, a Foreign Terrorist Organization (FTO). The Pentagon had reportedly opposed this political escalation on the grounds that it increased the vulnerability of U.S. military forces; and, indeed, Iran countered by designating as terrorists U.S. military personnel in the region, and labeling the United States a state sponsor of terrorism. 134 In May, with the goal of driving Iranian oil exports to "zero," the State Department announced that the United States would no longer waive U.S. secondary sanctions on any country purchasing Iranian oil. 135 In tandem with these political and economic measures, the United States also bolstered its military presence with the deployment of a carrier strike group and groundbased aircraft to the Gulf region. 136

Iran responded to the U.S. "maximum pressure" campaign by threatening to breach the JCPOA limits on its nuclear program and to prevent oil tankers from passing through the Strait of Hormuz. Several attacks on shipping occurred in May-June 2019, which the United States attributed to Iran. Secretary Pompeo described the attacks on shipping as "an unacceptable campaign of escalating tension by Iran." Other governments stated that the evidence of Iranian complicity was not conclusive, and a Russian official accused the Trump administration of "aggressive, accusatory rhetoric and artificially fueling anti-Iranian sentiment." On June 20, Iran shot down an unmanned U.S. drone, which it claimed was in Iranian airspace. Tweeting, "Iran just made a big mistake," Trump ordered a retaliatory air strike on 3 Iranian military sites,

but rescinded it when informed of the projected Iranian casualties.

In the wake of the tanker attacks and the drone shoot down, the administration escalated U.S. sanctions by taking the politically loaded step of targeting Iran's Supreme Leader Ali Khamenei and anyone associated with him.¹³⁸ Trump declared that the sanctions on Khamenei were justified because he is "ultimately responsible for the hostile conduct of the regime." Iran responded with its own political signal to "maximum pressure"—breaching the JCPOA constraints by increasing its stock of low enriched uranium beyond the 300 kg limit and increasing the limit on enrichment from 3.67 to 4.5 percent.¹³⁹ By summer 2019, the risk of military escalation and inadvertent conflict between the Iran and the United States had increased considerably, and the Tehran regime was evidently reassessing its continued observance of the JCPOA as it coped with the domestic economic consequences of the Trump administration's "maximum pressure" campaign.

THE IRANIAN DOMESTIC CONTEXT

Revolutionary State or Ordinary Country?

The Iran nuclear issue is embedded in the broader context of the state's societal evolution. The 1979 Iranian Revolution brought about not just a change of regime, but also the wholesale transformation of the country's social order and institutions. For U.S. administrations from Carter to Trump, the challenge of forging a coherent strategy toward Iran has been complicated by the dual nature of political power that emerged from that 1979 upheaval—a duality reflected in the country's very name, the Islamic Republic of Iran. Iran exists as a "republic" in an international system of like states, while its "Islamic" character asserts a source of legitimacy from outside the state system.

This dual identity has produced a schism: is Iran an "ordinary" state that accepts the legitimacy of the international system; or a revolutionary state that rejects the norms of a system regarded by Iranian hardliners as U.S.-dominated?

Within Tehran's theocratic regime, the competing pulls of radicalism and pragmatism have agitated Iranian politics, which are typically characterized as a struggle between "conservatives" and "reformers." But that neat categorization obscures significant distinctions between and within the two groups, which may align differently on any domestic or foreign policy issue. 140 In the case of Iran's nuclear challenge, many so-called conservatives, who emphasize fealty to the revolution's ideals, are motivated by the fear that Iranian accommodation to outside pressures on this critical issue, which has put the Islamic Republic at odds with the international community, will encourage additional demands on other issues and erode the regime's domestic legitimacy and stability. For the conservative hardliners, revolutionary activism abroad, such as support for Hezbollah, remains an integral part of Iran's identity and a source of legitimacy at home. The opacity of Iranian decision-making gives rise to the perennial question of whether the Tehran regime's actions are coordinated, or whether institutions, such as the Islamic Revolutionary Guard Corps or intelligence service, have the capacity to act autonomously.

The Islamic Republic's unique fusion of religion and politics institutionalized systemic tensions. Eliminating the separation between mosque and state through the 1979 constitution was the realization of Ayatollah Khomeini's revolutionary vision. His unique personal stature was a pivotal factor in the unfolding of the revolution, and that charismatic leadership was tangibly symbolized in the position of Supreme Leader (*vali-ye faqih*), conferring to him paramount religious and political authority. After Khomeini's death, in June 1989, a peaceful transfer of power occurred: Sayyid Ali Khamenei, a cleric known more for his political activism

than his religious scholarship, was named Khomeini's uccessor as Supreme Leader.

Compared with those of the Supreme Leader, the powers of the president are quite circumscribed. He is the chief executive, with the power to appoint government ministers, subject to approval by the parliament (Majlis), and run the government bureaucracy (particularly those parts dealing with social services and management of the economy). But as Middle East historian Shaul Bakhash observes, the president's powers are often more notional than real since "[t]he Supreme Leader is constitutionally empowered to set the broad policies of the Islamic Republic, and in practice he has acquired additional means of interfering in the running of the government."¹⁴¹ Among these instruments of control was Khamenei's creation of "a vast network of 'clerical commissars' in major public institutions who are empowered to intervene in state matters to enforce his authority."142 Iran's foreign policy is affected by the distribution of institutional power between the Supreme Leader and the president, which can vary according to the personalities and ideological orientations of the individuals holding those key positions—witness the shifts from Khatami to Ahmadinejad to Rouhani.

Rouhani's Election

Four years after the regime's suppression of the Green Movement or "Persian Awakening," Hassan Rouhani, a pragmatic centrist who had been Iran's chief nuclear negotiator under Khatami, emerged as the surprise victor in the June 2013 presidential campaign. As *The Economist* observed, Rouhani campaigned on "the rhetoric of moderation, technocracy and rapprochement with the West." The reformist opposition ended its ambivalence late in the campaign to back Rouhani, an establishment figure who, in actuality, proposed no fundamental changes to the Islamic Republic's foreign or domestic policies. Rouhani ran as a consensus-builder, someone who could bridge the political chasm between conservatives and

reformists. During the campaign, he appealed to both sides by emphasizing that the country could continue its nuclear program while making improvements in living standards: "It is important for centrifuges to spin, but people's lives should run too." ¹⁴⁴ His commanding victory was widely interpreted as a rebuke to the ultra-conservatives, who had been politically ascendant in the Ahmadinejad era. For the reformists, Rouhani was the vessel of their hopes for change to revive the country's stagnant economy, ease social restrictions, and end the country's international isolation through negotiations with the West on the nuclear question. Yet, as both the Supreme Leader and the Revolutionary Guard congratulated Rouhani on his victory, the conservatives could also claim a measure of victory: his election brought the return of a cleric to the presidency and restored, as the *New York Times* put it, "a patina of legitimacy to the theocratic state." ¹⁴⁵

The looming question after his election was whether Rouhani could negotiate a deal with the P5+1 within the bounds set by Khamenei. In analyzing those parameters, Iran expert Shahram Chubin argued that the Supreme Leader maintained his belief that, notwithstanding the shift in Washington's rhetoric from Bush to Obama, the United States remained committed to the objective of regime change, and that pressuring Iran on the nuclear issue was a means to that end. But while mitigating his personal political risk, Khamenei empowered Rouhani to test whether an acceptable nuclear deal with the P5+1 could yield meaningful sanctions relief for the country's beleaguered economy.¹⁴⁶

Though Rouhani had delegated authority on the nuclear issue, his foreign policy writ did not extend to Iran's regional policies. Most notably, on Syria and Iraq, Khamenei gave the institutional lead to the Quds Force, the Revolutionary Guard's extraterritorial special forces (whose name derives from the Persian word for Jerusalem). Thousands of members of the Quds Force, as well as Lebanese Hezbollah fighters, were deployed to fight in Syria's attritional

civil war to prevent the overthrow of the Bashar al-Assad regime, a key regional ally of Iran. Giving the Revolutionary Guard responsibility for Iran's regional policies, while the president manages the nuclear negotiations, was consistent with Khamenei's strategy of maintaining and playing off the regime's multiple power centers. Iran's activist foreign policy in Syria and Lebanon is viewed by regime hardliners as central to the Islamic Republic's identity and a source of domestic legitimation. But the drain of Iranian resources to support the Assad regime called that interventionist foreign policy into question and refocused attention on the country's economy, whose ailing condition had been central to Rouhani's electoral victory.

Under "Maximum Pressure"

In return for the negotiated constraints on its nuclear program under the JCPOA, Iran received substantial sanctions relief. Iran's economy rebounded—with oil exports returning nearly to pre-sanctions levels, Iran's restored access to frozen oil revenues, increased foreign investment in the energy and industrial sectors (such as cars), and annual GDP growth reaching an impressive 7 percent. This revival of the Iranian economy, which contributed to Rouhani's reelection in May 2017, was derailed by the Trump administration's reimposition of U.S. sanctions in May 2018.

Through the threat of extraterritorial secondary sanctions, the administration sought to cut off all Iranian oil exports and thereby deny the Tehran regime the revenues necessary to sustain it. Just before the U.S. withdrawal from the JCPOA, Iran was exporting some 2.5 million barrels of oil per day. By July 2019, after a year of tightened U.S. sanctions, that figure had declined to just 100,000 barrels, according to oil industry sources. ¹⁴⁹ In May 2019, the Trump administration ceased waiving U.S. secondary sanctions on eight countries and, in July, sanctioned a Chinese state-owned oil trading company for purchasing Iranian oil in defiance of U.S. sanctions. ¹⁵⁰

For a year after Trump's withdrawal from the JCPOA in May 2018, Iran appeared willing to let the United States suffer the brunt of international criticism for torpedoing a nuclear deal between Iran and the world powers that was working (according to the IAEA) and for employing extraterritorial sanctions on foreign governments to coerce them into joining the United States' economic war on Iran. But with Iran pushed into an inflationary recession through the re-imposition of U.S. sanctions, the Tehran regime's calculus of decision is changing. According to Ali Vaez, the Tehran regime "feels compelled to prove to U.S. policy makers the bankruptcy of their belief that severe pressure can force Tehran to yield." 151 Hardliners, such as the IRGC, who opposed nuclear diplomacy and have Rouhani on the defensive, can game sanctions through the black market to their financial benefit. As Vaez concludes, "The net effect is a country with its economy in ruins but its regime intact."152 Moreover, the regime retains a monopoly on force, which it would employ without compunction against any domestic political challenge to its continued rule. Within this context, the Iranian decision to breach the JCPOA constraints on its uranium enrichment program is the subject of speculation whether it is to increase its bargaining leverage with Washington, or to push the Europeans to take palliative economic measures to preserve the nuclear deal or to signal a reassessment of its nuclear intentions—or an amalgam of those motivations.

NUCLEAR CAPABILITIES AND INTENTIONS

Origins and Development

Iran's nuclear motivations are not specific to the Islamic Republic. Suspicions of Iran's nuclear intentions date to the Shah's era. The initial components of Iran's nuclear infrastructure (a five-megawatt light-water research reactor and related laboratories at the Tehran Nuclear Research Center) were acquired through

nuclear cooperation with the United States under the "Atoms for Peace" program. After acceding to the NPT in 1970, the Shah launched an ambitious plan to develop civil nuclear energy, which envisioned not only reactor construction but also the acquisition of nuclear fuel-cycle technology (including uranium enrichment and reprocessing) to reduce the country's reliance on outside assistance. The Ford administration viewed nuclear cooperation with Iran as a tangible symbol of the U.S. bilateral relationship with a key regional ally, as well as a potentially lucrative commercial opportunity for U.S. firms. Secretary of State Henry Kissinger later acknowledged that proliferation concerns did not figure in the Ford administration's decision to permit the transfer of fuel-cycle technology. 153 Although "no evidence has emerged confirming that Iran actually began a dedicated nuclear weapons program under the Shah," concluded an International Institute for Strategic Studies (IISS) report, "...Iranian officials appreciated that the acquisition of enrichment and reprocessing facilities for Iran's civilian nuclear power program would inherently create a nuclear weapons option..."154

After the 1979 Revolution, Khomeini ordered a halt to construction of German-made nuclear reactors at Bushehr. This gave rise to a belief that the Supreme Leader was anti-nuclear. Yet the memoir of former nuclear negotiator and current Iranian President Hassan Rouhani recounts that, during his exile in Paris, Khomeini rebuffed the recommendation of a visiting Iranian scientific delegation to scrap the nuclear program on economic grounds. Khomeini reportedly recognized the strategic value of keeping the option open. ¹⁵⁵ In the mid-1980s, as the clerical regime faced a national security imperative at the height of the attritional Iran-Iraq War, it indeed revived the nuclear infrastructure inherited from the Shah. Upon Khomeini's death, in 1989, Iran looked to China and Russia as potential sources of nuclear technology. Russia took over the Bushehr reactor project,

and Beijing provided components for a key uranium conversion facility in Esfahan.

Details of Iran's extensive covert program to acquire sensitive nuclear technology surfaced after the IAEA's June 2003 report that charged Iran with possessing undeclared nuclear facilities and pursuing activities outside the NPT safeguards system. 156 Of particular importance were essential design plans and components that Pakistani black marketer A.Q. Khan provided for a pilot uranium-enrichment plant at Natanz. In its 2011 report, the IAEA reported that by the late 1980s, just as the Iran-Iraq War was ending, Iran established a unit to organize covert procurement activities for an undeclared nuclear program. By the late 1990s or early 2000s, the clandestine nuclear program was consolidated under the "AMAD Plan," whose scope of activities included three key projects: converting uranium ore into the gaseous feedstock for centrifuges to enrich uranium at the then covert Natanz site, high-explosive experiments potentially linked to developing the trigger for nuclear weapons, and the redesign of the Shahab-3 missile reentry vehicle capable of carrying a nuclear payload. 157 By the late 1990s, at the height of Khatami's reformist presidency, Iran crossed the important technological threshold of self-sufficiency in centrifuge manufacturing.¹⁵⁸

Infrastructure and NPT Compliance

Centrifuges are essential equipment for uranium enrichment, the multistage industrial process in which natural uranium is converted into special material capable of sustaining a nuclear chain reaction. Natural uranium occurs in two forms—U-238, making up 99 percent of the element, and the lighter U-235, accounting for less than 1 percent. But the latter is a fissionable isotope that emits energy when split. Uranium ore is crushed into a powder, refined, and then reconstituted into a solid form, known as "yellowcake." The yellowcake is then superheated and transformed into a



Iran's uranium enrichment facility at Natanz (aerial view)

gas, uranium hexafluoride (UF6). That gas is passed through a centrifuge and spun at high speed, with the U-238 drawn to the periphery and extracted, while the lighter U-235 clusters in the center and is collected. The collected U-235 material is passed through a series of centrifuges, known as a cascade, with each successive pass-through increasing the percentage of U-235. Uranium for a nuclear reactor should be enriched to contain approximately 3 percent uranium-235, whereas weapons-grade uranium should ideally contain at least 90 percent.

Iran developed indigenous facilities to support each phase of the uranium enrichment process: two uranium ore mines, whose reserves could produce 250-300 nuclear weapons, according to U.S. intelligence;¹⁵⁹ a yellowcake production facility; a facility for converting yellowcake into uranium hexafluoride gas in Esfahan; and two enrichment sites, Natantz and Fordow, with 19,000 centrifuges, of which some 10,000 were operational. They were predominantly the first-generation IR-1 model, although Iran had begun installing the more sophisticated IR-2 model, which is more reliable and estimated to have six times the output of IR-1s. ¹⁶⁰ The industrial-scale Natanz site, located 200 miles south of Tehran, could potentially house 50,000 centrifuges. The Fordow enrichment site near Qom is too small to be economically rational as part of a civil nuclear program and is invulnerable to a military strike because it is deeply buried. Those attributes, as well as its location on a Revolutionary Guard base, aroused concern that its intended purpose was to receive low-enriched uranium produced at Natanz for further enrichment to weapons-grade material.

The publication of the unclassified summary of the U.S. National Intelligence Estimate (NIE) on Iran in November 2007 recast the debate about the country's nuclear capabilities and intentions. According to the NIE, U.S. intelligence agencies concluded with "high confidence" that Iran "halted its nuclear weapons program" in 2003 "in response to increasing international scrutiny and pressure." Further, the agencies "do not know whether [Iran] currently intends to develop nuclear weapons." While concluding that Iran had suspended work on that part of its covert military program relating to weapon design, the 2007 NIE also cited significant progress in Iran's declared "civil work" relating to uranium enrichment that "could be applied to producing [fissile material for] a nuclear weapon if a decision is made to do so:"

"Tehran at a minimum is keeping open the option to develop nuclear weapons." "162

Though the IAEA and U.S. intelligence concluded that Iran's weaponization efforts had been suspended in 2003, the IAEA has sought to clarify the "possible military dimensions" of Iran's nuclear

program. Of particular interest is Parchin, a military complex southeast of Tehran, where Iran reportedly conducted important weapons-related experiments, including high-explosive tests for nuclear triggers. In mid-2013, satellite imagery revealed that Iran had essentially razed and paved over the site to prevent IAEA inspectors from obtaining environmental samples to confirm the nature of the activities at that clandestine location. 163

JCPOA Constraints

The JCPOA creates meaningful constraints on Iran's nuclear intentions and capabilities. ¹⁶⁴ It cuts off the plutonium pathway to the bomb, and blocks Iran's access to highly enriched uranium until 2030 (after which Iran would remain subject to IAEA safeguards).

Iran's nuclear intentions—The JCPOA's preamble contains a bald declaration of non-nuclear intent (reinforcing Iran's NPT Article II commitment and Khamenei's 2003 *fatwa*) to which the Tehran regime will be held accountable: "Iran reaffirms that under no circumstances will Iran ever seek, develop, or acquire any nuclear weapons."

Uranium enrichment—For 10 years, Iran will retain a sole uranium enrichment facility at Natanz with 5,060 IR-1 (first generation) centrifuges. Iran's excess centrifuges currently installed, approximately 14,000 IR-1s and the more advanced IR-2s will be taken off the production line and stored under IAEA continuous monitoring. For 15 years, the level of uranium enrichment at Natanz can only go up to 3.67 percent—below weapons-grade—and Iran's total stock of low-enriched uranium will not exceed 300 kg. Iran's second site at Fordow will be converted into a research center no longer producing enriched uranium; its currently-installed centrifuges will either spin without uranium or remain idle. For eight years, the agreement imposes limitations on Iran's centrifuge research and development, followed by a "gradual evolution, at a reasonable pace...for exclusively peaceful purposes."

Plutonium production—The JCPOA limits Iran's plutonium production by requiring the conversion of the heavy-water reactor at Arak into a modernized reactor using low-enriched uranium instead of natural uranium. For 15 years, Iran will neither construct additional heavy-water reactors nor a reprocessing facility for the separation of plutonium from spent fuel rods. Thereafter, the formal restrictions are lifted, but Iran has declared that it "does not intend" to construct a facility capable of spent fuel reprocessing.

Transparency and monitoring—As an NPT signatory, Iran is already obligated to declare all nuclear facilities, nuclear-related activities, and stocks of fissile material. Under the JCPOA, Iran will observe the Additional Protocol to its IAEA safeguards agreement. The Additional Protocol provides the IAEA not only with the authority to gain short-notice access at declared sites, but also, critically, a right of access to undeclared facilities if the IAEA has suspicion of activities proscribed by the JCPOA. Verification of the agreement is to be accomplished through "a long-term IAEA presence in Iran" (including the monitoring of Iranian uranium production for 25 years, inventories of centrifuge components for 20 years, and the mothballed centrifuges at Natanz and Fordow for 15 years). The JCPOA also requires Iran to account for its past covert work on weaponization—so-called PMD (possible military dimensions—e.g., Parchin). This thorny issue—the satisfactory resolution of which is linked to sanctions relief—is to be settled through implementation of the "Roadmap for Clarification of Past and Present Outstanding Issues" regarding Iran's nuclear program, which the IAEA concluded separately with the Tehran regime.

Iran's Nuclear Hedge Strategy

The Tehran regime's questionable defense of its unfettered "right" to nuclear technology (including uranium enrichment) under the NPT's Article IV resonates with the 120 developing countries that constitute the so-called Non-Aligned Movement (NAM). At the

NAM summit in August 2012, the organization, voicing concern that the major powers were seeking to monopolize the production of reactor fuel, endorsed Iran's position in the nuclear dispute with the P5+1. To bolster the Tehran regime's claim of benign nuclear intentions, Iranian officials point to the fatwa, a religious decree, made by Khamenei in October 2003, "forbidding the production, stockpiling and use of weapons of mass destruction, and specifically nuclear arms." This language was incorporated into the text of the JCPOA, though scholars of Islam note that fatwas are not immutable; Shi'ite clergy make pragmatic shifts in response to changed circumstances. ¹⁶⁶

An important feature distinguishing Iran from other countries of proliferation concern—North Korea under the Kim family regime or Iraq under the former Saddam Hussein regime—is its quasidemocratic character. Iran has an engaged and somewhat cynical public, which has an uneasy relationship with a regime whose political legitimacy was damaged by its brutal crackdown on the Green Movement in 2009. Rouhani's election, a reflection of that disaffection, produced a rare consensus across Iran's political elite for revitalized nuclear diplomacy. But the old divisions persist and could be reactivated in the wake of Trump's decision to withdraw from the JCPOA and apply "maximum pressure."

According to Nima Gerami, elite views on the nuclear program fall within three camps. The first group is hardline "nuclear supporters," who are critical of negotiated constraints on Iran's nuclear capabilities, oppose the full transparency and accountability of the nuclear program as required by the NPT and now the JCPOA, and resist outside efforts to dictate the Islamic Republic's security policies. Ayatollah Mohammad Taghi Mesbah-Yazdi, the spiritual leader of the conservative "Steadfast Front," stated in 2005: "The most advanced weapons must be produced inside our country even if our enemies don't like it. There is no reason that [our enemies] have the right to produce a special type of weapon,

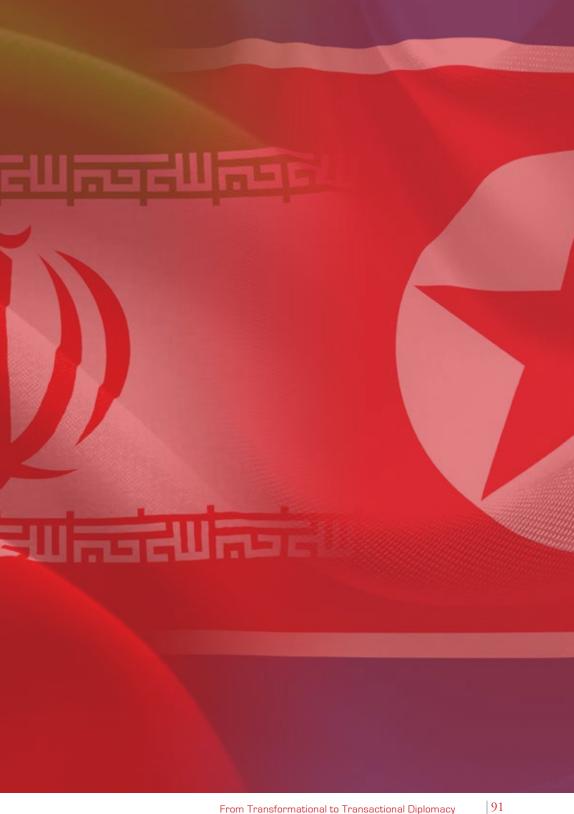
while other countries are deprived of it."¹⁶⁷ The second camp, "nuclear centrists," led by Rouhani and former President Hashemi Rafsanjani, view negotiated limitations on Iran's nuclear capabilities as an acceptable political price to pay for ending the country's international isolation and reaping the economic dividends. A third, relatively marginal, camp incorporates former government officials and academics affiliated with the banned reformist Islamic Iran Participation Front. These "nuclear detractors" question the economics of the purported energy rationale for the nuclear program and argue that the Tehran regime's nuclear aspirations have actually weakened the country by triggering the imposition of stringent international sanctions. ¹⁶⁸

The nuclear centrists reflect the preponderance of Iranian public opinion, which supports neither a full rollback of the nuclear program nor a near-term breakout to acquire nuclear weapons. Rouhani's unexpected election created political space for nuclear diplomacy with the P5+1, which yielded a comprehensive agreement in July 2015. Under the deal, Iran retains a bounded uranium enrichment program capacity that leaves Iran, as it has been for the last fifteen years, a nuclear threshold state. Iran's mastery of the nuclear fuel cycle creates an inherent "breakout" option for weaponization. (That is the crux of the dispute over the nuclear diplomacy between the United States and Israel, which wants a rollback of Iran's enrichment capability to deny the Tehran regime that hedge option.) A major focus of the negotiations was extending that potential breakout period to at least a year (through agreed limits on the number and sophistication of centrifuges, as well as on the permissible level of enrichment and uranium stockpile).

For Iran, the JCPOA is compatible with Iran's core national security requirements, as the country faces no existential threat from a foreign power necessitating the urgent acquisition of nuclear weapons. Indeed, to the extent that the Iranian leadership

perceives a threat to regime survival, the sources are *internal* rather than external. ¹⁶⁹ From a national security perspective, the nuclear hedge (which the Tehran regime retains under the agreement) is Iran's strategic sweet spot—maintaining the potential of a nuclear option, while avoiding the regional and international costs of actual weaponization. As former President Hashemi Rafsanjani candidly admitted in 2005: "As long as we can enrich uranium and master the [nuclear] fuel cycle, we don't need anything else. Our neighbors will be able to draw the proper conclusions." ¹⁷⁰

The JCPOA left Iran with the capabilities to retain its hedge option. But the negotiated constraints on Iran's uranium enrichment program ensured that this latent capability would remain latent—and that the international community would have adequate warning of any potential breakout. A full rollback of Iran's nuclear program—zero centrifuges spinning—was never a feasible goal of nuclear diplomacy. Yet that is now a key element of the transformative agenda—one of Secretary Pompeo's "very basic requirements"—that the Trump administration's "maximum pressure" campaign aims to coerce Iran into accepting. The Tehran regime has signaled its defiance by breaching the JCPOA constraints on its uranium enrichment program—that against the backdrop of escalating military tensions in the Gulf. The evident limits of "maximum pressure" should occasion a reevaluation of U.S. strategy—and, as discussed in the following section, a pivot back to the transactional from the transformational.





From Transformational to Transactional Diplomacy

NONPROLIFERATION STRATEGIES

Transformational versus Transactional

Nonproliferation strategies divide along James MacGregor Burns's classic policy dichotomy between transformational and transactional. A transformational strategy would entail a wholesale change in the target state's strategic culture and nuclear intentions, which typically would require a change of regime. A transactional strategy, by contrast, does not entail a near-term change of that magnitude, instead focusing on shifting the regime's calculus of decision on a cost-benefit basis.

South Africa's nuclear reversal in 1994, in which it dismantled its small nuclear arsenal, occurred after a change of regime from minority to majority rule, and, with that altered political environment, a shift in the strategic perspective that had been the impetus for acquiring nuclear weapons. South Africa's transformational change, driven primarily by internal forces, contrasts with that in Iraq in 2003, which was controversially accomplished through external agency in the form of a U.S.-led preventive war of regime change. Post-Saddam Iraq has not revived its nuclear ambitions because the program, which never crossed the threshold of weaponization, derived from the megalomania of that dictator. A transformative nuclear reversal also occurred in Libya in 2003, when Qaddafi gave up his nascent capabilities in

Left: A video grab from KCNA shows a Unha-3 rocket (a variant of the Taepodong-2) launching at North Korea's West Sea Satellite Launch Site in Cholsan county, North Pyongan province on December 13, 2012.

Source: Reuters

return for a tacit but clear assurance of regime security. (That the Libyan dictator was toppled in 2011 by an international coalition under a "humanitarian intervention" rubric has since complicated the U.S. ability to credibly deploy a security assurance in its nuclear diplomacy with North Korea and Iran.)

A successful transformational strategy—one leading to full nuclear disarmament—requires a far-reaching change of (South Africa, Iraq) or within (Libya) a regime. The dilemma with North Korea and Iran is that the two clocks—the nuclear and regime-change timelines—are not in sync. The nuclear challenge is urgent, whereas the prospects for regime change or evolution in Pyongyang and Tehran is uncertain. Policymakers can't wait for an indeterminate regime-change process to unfold as these states develop threatening military capabilities. This disjunction calls for decoupling the immediate nuclear issue from the longterm question of regime change. That logic supports the pursuit of transactional diplomacy to constrain, not eliminate, capabilities (i.e., arms control vice disarmament). Cold War arms control in the 1970s offers a pertinent precedent. Pragmatically pursuing strategic arms limitations with the Soviet Union to reduce the risk of nuclear war, the Nixon administration did not link transactional diplomacy on that essential issue to transformational progress in other areas (such as Soviet meddling in what was then called the Third World and the Kremlin's human rights record).

But the bind with North Korea and Iran is that the perceived threat posed by these "rogue" states derives not solely from their capabilities, but from the character of their ruling regimes. They are hostile proliferators that combine dangerous capabilities with hostile intent. The JCPOA negotiated between Iran and the P5+1 was a quintessential example of *transactional diplomacy*. A deal, not a grand bargain, the agreement focused on the discrete, urgent nuclear issue. The Obama administration made the pragmatic, though controversial, determination to narrow the scope of

negotiations to solely the nuclear issue. It did so based on the assessment that a broadened scope of negotiations encompassing all issues of concern with Iran (such as its longstanding support for Hezbollah) would have doomed the talks. Before the 2016 presidential election, proponents of the JCPOA viewed it as a precedent for transactional diplomacy that could be applied to North Korea, which was on the cusp of acquiring the breakout capacity to target the U.S. homeland with a nuclear weapon.

President Trump embraced the position of JCPOA opponents, whose criticism was that the agreement was not transformational that it did not address Iran's "malign activities" beyond its scope. Withdrawing from the JCPOA (even while insisting that the Tehran regime should remain within the agreement and abide by its constraints on Iran's nuclear program), the Trump administration adopted a transformational strategy in the form of Secretary of State Pompeo's comprehensive list of 12 "very basic requirements" or "musts." While administration officials have declared that the objective of U.S. policy is not regime change, Iranian compliance with the sweeping U.S. demands for behavioral change would basically necessitate a change of regime in Tehran. Moreover, the Trump administration's "maximum pressure" campaign to deny the Tehran regime any oil revenues, coupled with its appeals to the Iranian people to voice their objections to the Tehran regime's "malign activities," point to regime change as the tacit objective of U.S. policy.

With North Korea, the Trump administration's transformational strategy is less explicit. Nonetheless, Washington's goal of full denuclearization upfront in return for sanctions relief is at odds with the Pyongyang regime's core strategic interest. The Kim family views nuclear weapons in the dual role of deterrent to external attack and a source of leverage to extract economic benefits from the United States, South Korea, and Japan. The U.S. intelligence community has assessed that the Kim family will

not relinquish military capabilities that it perceives as essential to regime survival. That is the crux of the ongoing diplomatic impasse between Washington and Pyongyang. The open question is whether the Trump administration will be willing to break the impasse by pivoting from the transformational to the transactional. Transactional diplomacy would aim to prevent North Korea from acquiring the breakout capability of targeting the U.S. homeland with an intercontinental ballistic missile (ICBM) fitted with a nuclear weapon. Ironically, a transactional deal with North Korea could become a precedent for reengaging Iran, where the objective with respect to the nuclear program would be to keep Iran's latent nuclear capability latent. But a revived diplomatic track to negotiate a JCPOA "plus" or "2.0" could broaden the scope by incorporating discrete priority issues among Secretary Pompeo's 12 parameters (such as limiting ballistic-missile ranges) on which the Tehran regime is prepared to negotiate.

The (Problematic) Military Option

"All options are on the table" has been the mantra across U.S. administrations to indicate that force remains a policy instrument to be employed should the target state cross a designated "red line." With Iran, significantly, that line was set not on uranium enrichment, but on weaponization. North Korea has a much more advanced nuclear program, with an estimated arsenal weapons in the 30-60 range and a demonstrated ICBM capability. The Kim family regime ignored the calls for restraint from the United States and China when North Korea first tested a nuclear weapon in 2006. Now the focus of U.S. policymakers has been on preventing the North from acquiring the capability to target the U.S. homeland with a nuclear weapon. In January 2017, President-elect Trump tweeted his red line, "It Won't Happen." 171

The challenge of enforcing a red line, when elusive or ambiguous

proof makes it appear wavy, was evident in the case of Syria in August 2013, when the Assad regime used chemical weapons against domestic insurgents. The Obama administration initially said that it lacked "airtight" evidence that the Assad regime had crossed a U.S.-declared "red line." That December, a UN report found credible evidence of chemical attacks, but was precluded by its Security Council mandate to identify whether the attack was carried out by the Assad regime or the opposition.

The uncertainty about the Assad regime's actual use of chemical weapons as a trigger for U.S. action would pale in comparison to the inherent uncertainty surrounding Iran's or North Korea's opaque nuclear programs. Indeed, with Iran, the challenge of determining whether it has crossed the "red line" of weaponization is compounded by the Tehran regime's hedge strategy, which cultivates ambiguity about its nuclear capabilities and intentions. Iran, now responding to U.S. "maximum pressure" by testing the limits of the JCPOA's constraints on its program, has made progress along the technological continuum toward weaponization, but would be unlikely to make a dramatic move (such as conducting a nuclear test or withdrawing from the NPT) that would openly cross the red line of weaponization—even in the event of the JCPOA's full breakdown. So far as Iranian progress falls short of overt weaponization, such as the shortening of Iran's breakout time to a few months or weeks, it would be hard for the U.S. administration to sustain the case for military action at home or abroad. After Iraq, when flawed intelligence on Saddam Hussein's WMD programs was central to the Bush administration's case for preventive war, the United States would simply not get the benefit of the doubt. And doubt there would be in the absence of hard evidence of weaponization. With North Korea, the uncertainty centers on whether it has mastered the complex integrated set of technologies required to target the United States—that is, nuclear-warhead miniaturization, a ballistic missile

capable of being fitted with a nuclear warhead and with adequate range, and a warhead able to survive reentry into the earth's atmosphere and strike with accuracy.

The "all options on the table" formulation of U.S. policymakers is an oblique reference to the possibility of American airstrikes on Iran's and North Korea's nuclear infrastructures. With each, that openly debated option—what would be the most telegraphed punch in history—runs up against four major liabilities.

First, military action would only set back the programs, not end them. With Iran, which has mastered the uranium enrichment process to acquire the requisite material for a weapon, the program could be reconstituted. In November 2011, Secretary of Defense Leon Panetta estimated that an attack would only delay the Iranian program by three years. ¹⁷² North Korea has an even larger, more diversified, nuclear program, likely including several clandestine sites (which may or may not be known to U.S. intelligence). In that case, military strikes would set back, not eliminate a nuclear program, which could be reconstituted over time.

Second, an American attack could well generate a nationalist backlash within Iran or North Korea with the perverse consequence of bolstering the regimes. Analyses arguing that a military strike on Iran's nuclear sites would essentially be the starting gun of a counterrevolution against the regime are not persuasive. In North Korea, which is ruled by a family cult that has made the nuclear program a symbol of national pride, the anticipated backlash would be intense.

Third, military strikes on "hot" sites containing nuclear weapons or toxic fissile material (e.g., uranium hexafluoride, enriched uranium, plutonium, etc.) could have disastrous environmental consequences. The proximity of Iranian sites to population centers poses a potential radiological risk to thousands of civilians. ¹⁷³ The threat of

collateral damage to the environment and civilian population has been a major constraint on the use of force in past cases (e.g., in the case of Iraq's Osiraq reactor in 1981, Israel struck before nuclear fuel was loaded; during Operation Desert Fox against Saddam's Iraq in 1998, the United States eschewed attacks on suspect chemical and biological weapons sites).

And fourth, perhaps most fundamentally, military action would be viewed by North Korea and Iran as the initiation of a regimetoppling war. With Iran, the envisioned scope of U.S. military action would reinforce that Iranian perception: an air campaign would likely be of the magnitude of Operation Desert Fox in Iraq, which spanned four days in late December 1998, rather than a single mission like Israel's lightning air strike on the Iraqi Osiraq reactor in 1981. Khamenei has warned that U.S. military action would lead to Iranian retaliation against U.S. interests worldwide. Even a "limited" attack on Iran's nuclear sites could well escalate into a regional conflict. With North Korea, the escalatory risks are even more acute. No U.S. policymaker could embark on military action against North Korea's nuclear and missile infrastructure even a limited so-called "bloody nose" strike—while discounting the likelihood of large-scale conventional or even nuclear retaliation. 174

That the U.S. "red lines" on weaponization pushed off a decision on the use of force as an alternative to diplomacy is a reflection, as in Syria, of how unattractive and problematic the military option would be.

A PIVOT TO TRANSACTIONAL DIPLOMACY

North Korea

After the two Trump-Kim summits, negotiations are at an impasse. With North Korea rejecting the transformational objective of full nuclear disarmament, the United States should pivot to transactional diplomacy. The near-term diplomatic objective should be to prevent North Korea's quantitative and qualitative breakout—the ability to target the United States—by negotiating a freeze on North Korea's nuclear and missile programs. Siegfried Hecker, former director of the Los Alamos National Laboratory, calls these goals the "Three No's": (1) no new weapons (freezing North Korean production of plutonium and enriched uranium), (2) no testing of weapons or ballistic missiles, and (3) no exports of nuclear technology or weapons. The Afreeze would preclude the additional testing that North Korea still needs to master warhead miniaturization, reliable long-range missiles, and warhead reentry and guidance (a capability North Korea has yet to demonstrate).

The initiation of a diplomatic track after the Singapore summit in June 2018 created an opportunity to achieve a freeze agreement—one that, in the near term, optimizes the interests among all the major parties. Such an interim agreement would forestall a North Korean nuclear breakout (the urgent U.S. interest), while preventing the collapse of the North Korean regime and the loss of a buffer state (the Chinese interest) and leaving the Kim family regime in power with a minimum nuclear deterrent (the paramount North Korean interest). An interim agreement that constrained North Korea's capabilities would make the best of a bad situation. The American narrative would be that a freeze agreement is an interim step toward the long-term goal of denuclearization.

The U.S. and China have a mutual interest in preventing a North

Korean strategic breakout. This conjunction of interest creates the political space for coordinated diplomacy to freeze North Korean capabilities. But that prospect is complicated by Sino-American tensions over trade and China's assertive sovereignty claims in the South China Sea. The best argument is an appeal to China's self-interest—that a North Korean nuclear breakout would have adverse consequences for Chinese strategic interests in northeast Asia as Japan, South Korea, and the United States respond.

With the Singapore and Hanoi summits, the sense of imminent crisis has abated and both China and South Korea have made clear that the period of "maximum pressure" is over. In this new political environment, transactional diplomacy should employ coercive engagement to induce or compel North Korean acceptance of constraints on its nuclear program. That said, the decline of multilateral support for economic sanctions in the wake of Singapore undercuts that strategy.

The sanguine rhetoric of Singapore has given way to the hard reality of negotiating constraints on North Korea's ballistic missile and nuclear programs. The Kim regime reportedly rejected a U.S. proposal for North Korea to immediately reduce its nuclear stockpile by 60-70 percent. North Korea's history gives new meaning to the traditional arms control challenge of trust but verify. And the United States rejected a North Korean proposal at Hanoi to shut its Yongbyon facility in return for the lifting of sanctions. ¹⁷⁶

The Kim family regime excels at dilatory tactics and will exploit any ambiguity in an agreement. A telling indicator of the current challenge is that after North Korea signed onto the Nuclear Nonproliferation Treaty, in 1985, the Pyongyang regime didn't declare its nuclear materials to be put under International Atomic Energy Agency safeguards for more than six years.

North Korea is currently balking at an essential prerequisite for negotiations—a declaration of its nuclear and missile facilities (including a suspected covert uranium-enrichment site). The North Koreans evidently believe that providing such a declaration would essentially be providing the United States with a target list should negotiations fail.

Nevertheless, the impact of the landmark Singapore summit is palpable in both strategic and psychological dimensions. One manifestation of how the summit meeting changed the psychology of the nuclear crisis was Trump's characterization of Kim. Before the summit, the imputation of irrationality was a driver of consideration of the military option. After the Singapore summit, Trump declared that he and Kim "have developed a very special bond" and that he can "trust" the North Korean dictator. The message was essentially that he now regarded North Korea as a conventional adversary rather than a "rogue" state ruled by a "madman." Should nuclear diplomacy stall or fail, this change in perception makes it more acceptable to consider the strategic option that the Trump administration has hitherto rejected—deterrence.

The current nuclear crisis with North Korea (the third in 30 years) is shaped by the outcome of the previous two crises. Incredibly, North Korea has a nuclear arsenal that could expand to almost half the size of the United Kingdom's by 2020. A near-term full rollback of the North's nuclear and missile capabilities is not a realistic possibility. A freeze agreement constraining those capabilities—that is, bending the curve—is what the newly initiated round of diplomacy should aim to achieve. Such an agreement would buy time—one of the major goals of nonproliferation policy—and allow the indeterminate timeline for a change or evolution of the regime in Pyongyang to play out.

Iran

In June 2019, after Iranian-attributed attacks on Gulf shipping and Iran's downing of an unmanned U.S. drone, military tensions between the two countries peaked. The risk was compounded by the possibility of misperception and miscalculation, which could lead to inadvertent conflict and escalation. Acknowledging the risk, U.S. envoy Brian Hook stated, "It's important we do everything we can to de-escalate" tensions with Iran.¹⁷⁸

A major driver of those tensions was the U.S. strategy of "maximum pressure," which has essentially amounted to an economic war on Iran. The Trump administration has pressed to end all Iranian oil exports to deny the Tehran regime revenues and bar foreign commercial activities. The U.S. imposition of extraterritorial secondary sanctions has roiled relations with Washington's European allies. Major European corporations, such as Siemens, when threatened with the choice of conducting commerce in the United States or Iran, have withdrawn from the latter. These tensions over trade compound the resentment expressed over the Trump administration's reneging on the JCPOA in May 2018—an agreement requiring years of complex multilateral diplomacy to achieve and with which Iran was in compliance at the time according to the IAEA.

The combination of the JCPOA withdrawal and secondary sanctions diplomatically isolated the United States. The Trump administration's 12 "musts" fueled the perception among the world's major powers who had partnered with United States on the JCPOA that the U.S. objective was regime change. It also has led to concern that the U.S. "maximum pressure" would prompt Iran to respond by surpassing the JCPOA's limits on uranium enrichment—and, in turn, that the breach would be seized upon in Washington as a pretext for military action. Some noted the similarities between the Trump administration's saber rattling and

the Bush administration's rhetoric in 2002-2003 during the lead up to the Iraq War. In July 2019, amidst heightened tensions in the Gulf, Prime British Minister Boris Johnson told President Trump that the UK would not support U.S. military strikes against Iran.¹⁷⁹ A European Union official depicted a linkage, stating, "The original sin causing the current escalation in the Gulf is the U.S. violation of the Iran nuclear deal."¹⁸⁰

After aborting the military strike on Iran in late June 2019, President Trump declared that he was "not looking for war," was open to negotiations with Iran without preconditions, and that his goal was not regime change. "They can't have a nuclear weapon," Trump declared. "We want to help them. We will be good to them. We will work with them. We will help them in any way we can. But they can't have a nuclear weapon." That reprised Trump's statement in a press conference with Japanese Prime Minister Shinzo Abe: "We're not looking for regime change. 182 I want to make that clear. We're looking for no nuclear weapons." These statements suggest an opening, the possibility of political space for a revived diplomatic track for "a JCPOA 2.0." 183

The negotiators of the JCPOA had not envisioned it as a standalone agreement. The intention had been to expand on the deal to address other discrete issues, not part of the original JCPOA deal. In spring 2018, before the U.S. withdrawal announcement in May, French President Macron had sought to initiate such a move. A "JCPOA 2.0 plus" would be an extension of transactional diplomacy. A prerequisite for the revival of a diplomatic track would be a pivot by the Trump administration from its transformational strategy by prioritizing among Pompeo's 12 parameters.

Negotiations on a JCPOA 2.0 could encompass the following issues:

Sunset Provisions—Between 10 and 15 years after the implementation of the JCPOA, the constraints on Iran's uranium enrichment are lifted. In 2026, Iran may begin to modernize its uranium enrichment program with the installation of more advanced centrifuges. In 2031, the 300 kg limit on Iran's stockpile of enriched uranium expires and Iran will be permitted to enrich uranium above the 3.67 percent level of U-235. The expiration of these limits would shorten the breakout time required for Iran to acquire a nuclear weapon to less than 12 months. ¹⁸⁴ As Iran has no urgent necessity to acquire the bomb, and indeed the maintenance of a hedge option is Iran's strategic sweet spot, the Tehran regime may be open to an extension of the sunset provisions, perhaps extending them for another decade.

Ballistic missiles—Iran's Supreme Leader Khamenei has imposed a 2000-kilometer limit on the range of its ballistic missiles. The missile program got its impetus during the Iran-Iraq War during the 1980s (when Iraq targeted Iranian cities with Scud missiles) and makes up for Iran's lack of a modern capable air force. The JCPOA did not cover ballistic missiles, but a separate UN Security Council resolution in 2015, coinciding with the signing of the nuclear accord, called on Iran to refrain from conducting tests of a ballistic missile that could carry a nuclear weapon. Denying Iran an ICBM capability (such as that North Korea has developed to threaten the U.S. homeland) should be a priority. JCPOA 2.0 negotiations should aim to codify Khamenei's 2000-kilometer limit on ballistic missile ranges.

Regional issues—Since the revolution, the Tehran regime has viewed its external mission (such as supporting Hezbollah) as a source of domestic legitimation. But the costs of Iran's foreign

expeditionary activities have also become a focal point of domestic criticism at a time of economic crisis and scarce resources at home. Across the region, the record is not one-sided. In Iraq, in the fight against Islamic State (ISIS) forces, U.S. and Iranian interests align; elsewhere—Lebanon, Syria, Yemen—they sharply diverge. The JCPOA 2.0 negotiating agenda could focus on measures to reduce the risk of regional conflict. For example, limitations on missile and military infrastructure in Lebanon and Syria could avert war between Israel and Iran. ¹⁸⁵ In addition, the United States and Iran could discuss procedures to prevent inadvertent escalation and conflict in the Gulf. That was the impetus behind the U.S.-Soviet Incidents at Sea agreement of 1972, which could serve as a model.

Sanctions relief—Iran will not consider accepting the elements of a JCPOA 2.0 without tangible economic relief. That would require the Trump administration to lift the sanctions it reimposed on Iran after withdrawing from the JCPOA, and revoking the secondary sanctions that essentially make it impossible for foreign firms to conduct business in Iran.

Security assurances—Just as the JCPOA included language from Khamenei's fatwa codifying Iran's intent not to acquire nuclear weapons, a JCPOA 2.0 could reprise language from the 1981 Algiers agreement on non-interference and President Trump's affirmation that the United States does not seek regime change in Iran.

The Trump administration has run up to the limits of "maximum pressure" with the Tehran regime. Iran will not accept the 12 "musts" that it views as an imperative to commit regime suicide. By breaching the JCPOA's limits on uranium enrichment, and employing an asymmetrical strategy to threaten Gulf shipping, the Tehran regime has met "maximum pressure" with its own pressure. The attendant risks of conflict and inadvertent military escalation have spiked.

Iran's Supreme Leader, ruling out resumed negotiations with the United States, baldly declared in May 2019: "We will not negotiate with America, because negotiation has no benefit and carries harm... We will not negotiate over the core values of the revolution. We will not negotiate over our military capabilities." This statement came on the heels of President Rouhani raising the possibility of talks with Washington. Foreign Minister Zarif subsequently asserted that Iran's breaching of the JCPOA's limits on uranium enrichment could be reversed if the United States rejoined the nuclear agreement. Iran has a record of backtracking from previously staked-out positions—Ayatollah Khomeini famously drank "the chalice of poison" when he acquiesced to ending the Iran-Iraq War under pressure. Within the current political context, a complication for the resumption of diplomacy is that those who championed the JCPOA, notably Rouhani and Zarif, were undercut by the Trump administration's withdrawal and the re-imposition of economic sanctions that triggered a deep recession. If a diplomatic track is revived, the Tehran regime cannot be expected to accept an expanded JCPOA 2.0 if all the United States is prepared to put on the table are the benefits that Iran was due to receive under JCPOA 1.0.

In his classic book, *Bridging the Gap*, the late political scientist Alexander George wrote, "The job of policy analysts is to provide an *analytic judgment* as to what is likely to be the best policy option. The policymaker, however, has to exercise a broader *political judgment* as to what option is the most appropriate." This monograph has made the *analytic* case for shifting from transformational to transactional strategies to address manage the nuclear crises with North Korea and Iran. But whether policymakers will exercise the political judgment to make that shift remains an open question.

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