# Just and Unjust Nuclear Deterrence

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n the early and mid-1980s, with the Cold War heating up, numerous efforts emerged to evaluate the ethics of nuclear deterrence and the potential use of nuclear weapons. In 1983, the U.S. Catholic Bishops issued their pastoral letter "The Challenge of Peace," which provided a "strictly conditional acceptance of nuclear deterrence" as a "transitional strategy" and "a step on the way toward a progressive disarmament." In 1985, a group of prominent philosophers carefully analyzed their way through the thickets of deterrence dilemmas and then heatedly debated the practicality of their conclusions with prominent political scientists in a special issue of the journal *Ethics*. Helen Caldicott in *Missile Envy* and Jonathan Schell in *Fate of the Earth* also wrote popular manifestos arguing that nuclear deterrence could not hold even for the immediate future and that near-term complete disarmament was therefore a moral imperative. Even Ronald Reagan entered the fray, providing a moral argument for his Star Wars missile defense system when he asked, "Wouldn't it be better to save lives than to avenge them?"<sup>3</sup>

Joseph Nye's 1986 book *Nuclear Ethics* rose above the din. Like all of Nye's scholarship, it was deeply researched, displayed an uncommon degree of common sense, and was beautifully written with a balanced tone. By identifying ten operational criteria for avoiding nuclear war, Nye usefully added practical steps that could make a conditional acceptance of nuclear deterrence more, well, acceptable.

In his new essay "Nuclear Ethics Revisited," Nye lists some important factors that have been introduced since the 1980s: nuclear threats from a revanchist

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Russia fighting a war of aggression in Ukraine; the rise of China and its declared intention to annex Taiwan; new technical complexity including cyber and AI threats to nuclear command and control; and the proliferation of nuclear weapons across nine states (despite an overall reduction in the number of nuclear weapons on the planet). Nye also lists what has not changed: ineffective national missile defense programs and the invulnerability of ballistic missile submarines permitting second-strike survivability. Most importantly, he still believes in the "the usability paradox": "To deter, there must be some prospect of nuclear use, either deliberate or accidental." This strong sense of continuity with the past leads Nye to repeat his ten practical steps for avoiding nuclear war as the fundamental approach to nuclear ethics.

Nye does not, however, discuss four additional important sources of discontinuity with the Cold War. These developments produce both grave dangers in the contemporary nuclear landscape and new opportunities for movement toward a safer and more just form of deterrence.

### THE TECHNOLOGICAL REVOLUTION

The first change is technological. There has been both an "accuracy revolution" in missile guidance technology that enables the United States, and possibly other states in the future, to place nuclear and conventional warheads much closer to an intended target than was possible during the Cold War, and a "low-yield revolution," which has enabled the United States to develop radically smaller strategic nuclear warheads, including flexible "dial-a-yield" weapons. Let me give a simple example: In 1960, the Polaris A-1 submarine-launched ballistic missile (SLBM), deployed on U.S. submarines, had a CEP (circle error probable) of 5,900 feet and carried a 600-kiloton nuclear warhead. If used, therefore, half of the time that massive Cold War thermonuclear weapon would have detonated over a mile away from the intended target, potentially killing many thousands of civilians. The Polaris A-1 SLBM was an indiscriminate weapon. In contrast, today the United States has deployed a nuclear weapon (the B61 Mod 12) on U.S. strategic bombers and NATO aircraft with a dial-a-yield capability that can reduce the yield to 2 percent of the atomic bomb that destroyed Hiroshima, generating less radioactive fallout, and has a CEP of less than 100 feet, thus producing far less collateral damage. The United States has also deployed low-yield warheads on submarine-launched ballistic missiles. Strategists must thoroughly debate whether

such accurate and lower-yield weapons enhance deterrence by increasing credibility of first-use and limited nuclear responses to enemy nuclear attacks or increase the likelihood of nuclear use by reducing the nuclear threshold, or both. Because these are long-range "strategic" weapons, however, the emerging debate will be quite different from earlier disputes about so-called tactical battlefield nuclear weapons, which focused on the fear that local commanders would "use" their weapons rather than "lose" them in a conventional conflict.

## DIVERSITY OF THREATS

The second major change is the diversity of threats on the horizon. In the Cold War, the United States faced a massively nuclear-armed Soviet Union and a People's Republic of China with a smaller nuclear arsenal. Today, the United States faces not only two nuclear-armed adversaries as peer competitors, Russia and China, but also an adversary with a very small and highly vulnerable arsenal, North Korea. (The United States also may confront a nuclear-armed Iran in the future.) While Russia and China have secure second-strike nuclear forces, North Korea does not, which thus poses quite different challenges for deterrence, logics of escalation control, and prospects for damage limitation in the event of war. The purpose of counterforce targeting against North Korea is to limit the damage to the United States and its allies in a war, a possibility enhanced by U.S. missile defenses if they can be even moderately effective. According to the "2022 Nuclear Posture Review," any use of nuclear weapons by North Korea "will result in the end of that regime." 5 But against Russia and China, U.S. missile defenses will be overwhelmed and more limited counterforce nuclear options are intended, as the "Nuclear Posture Review" argues, to "end any conflict at the lowest level of damage possible on the best achievable terms." This is part of what the Pentagon calls "tailored deterrence."

In addition, the U.S. government is now concerned about "opportunistic aggression" by China or Russia if the United States is engaged in a conventional war with the other adversary and relies on nuclear weapons to mitigate those risks. Moreover, Russia, China, and North Korea also possess other weapons capable of inflicting massive harm against civilian populations—including chemical, biological, and cyberweapons. In short, there are more complex and diverse deterrence problems today than existed during the Cold War.

## THE RULE OF LAW

The third major development is the unqualified declaration by the U.S. government that the law of armed conflict—including the principles of distinction, proportionality, and precaution—applies to all plans and decisions concerning the use of nuclear weapons. During the Cold War, the U.S. government stated that the 1977 Additional Protocol I to the 1949 Geneva Conventions, which codified the obligation of all state parties to follow these principles, did not apply to nuclear weapons. In 2013, however, the Obama administration's official nuclear weapons employment report announced that "all plans must also be consistent with the fundamental principles of the Law of Armed Conflict. Accordingly, plans will, for example, apply the principles of distinction and proportionality and seek to minimize collateral damage to civilian populations and civilian objects. The United States will not intentionally target civilian populations or civilian objects."

Debates remain about how best to interpret the legal constraints on the use of nuclear weapons by the United States. And it appears doubtful that Russian and Chinese nuclear war plans are in compliance with their legal commitments under the Geneva Conventions. Still, future debates about nuclear ethics must contend with this new legal environment.

## THE RISE OF REAL AND WANNABE PERSONALIST DICTATORS

The fourth change since the Cold War is the emergence of personalist dictators in control of nuclear weapons. With the exception of the last four years of Joseph Stalin's rule, leaders of nuclear states have not made decisions on their own, but rather had cabinets or politburo colleagues that shared in these responsibilities. Kim Jong-Un and Vladimir Putin, however, are the prominent examples of personalist dictators in control of a nuclear arsenal. They surround themselves with "yes-men," and can make important decisions, including nuclear decisions, based on their own grievances, whims, and delusions. This is a new and alarming challenge to deterrence.

Both advocates and critics of deterrence often claim that pristine rationality on the part of decision-makers is a core requirement for nuclear stability. Nye, however, correctly notes that the nuclear crystal ball "can be shattered by accident or sloppy handling," <sup>11</sup>but he does not challenge the basic rationality assumption in deterrence theory.

But successful deterrence does not necessarily need leadership rationality. If rationality does not reign, deterrence can be stable, but only if there are operational checks and balances—what could be called "organizational guardrails"—to constrain unhinged leaders. These are what are lacking in Moscow today that enabled Putin to make the rash, disastrous decision to invade Ukraine on his own and to make threats to use nuclear weapons in the conflict. And institutional checks and balances are what is lacking in Pyongyang, where Kim boasts of destroying the United States if necessary and has executed potential rivals to his one-man rule.

The United States is not immune to such nuclear dangers. Indeed, Donald Trump was a wannabe personalist dictator. He tried to surround himself with yesmen, made belligerent threats to attack North Korea with "fire and fury," and didn't bother to read intelligence reports. Fortunately, he failed when Secretary of Defense James Mattis "slow rolled" some of Trump's most rash military orders and when Chairman of the Joint Chiefs Mike Milley cautioned military commanders to check with him first if Trump tried to use military force, including nuclear weapons, after losing the 2020 election.<sup>12</sup>

## RETHINKING NUCLEAR DETERRENCE

These new conditions require a fundamental rethinking of nuclear deterrence, not just minor tweaks of policy. I favor implementation of Nye's ten principles for avoiding nuclear war, but offer five additional principles for a more just nuclear deterrence in the twenty-first century.

First, the United States and all nuclear states should sever the link between deterrence and the mass killing of civilians. It is striking to observe how so many Americans—ethicists and strategists, hawks and doves alike—appear to think that only the threat of massive destruction of cities can deter war. This is strange and even tragic. Personalist dictators may not care greatly about the lives of their own civilian populations, but they are likely to care about their military power, their regime's grip on power, and their own personal lives. Such leaders may be deluded and rash, but they are not suicidal.

This leads me to favor basing deterrence (nuclear if necessary; conventional whenever possible) on counter-military and counter-leadership targeting—threatening to destroy an adversary's military power and senior civilian and military leadership—which is both more legal and more moral than targeting population

centers. I recognize that leadership targeting can create reciprocal fears of decapitation, just as counterforce targeting can lead to concerns about preemption. But I would rather accept those risks than accept the growing risks of counterpopulation threats being considered incredible today. Threats to target enemy populations for the sake of deterrence might be considered bluffs by an adversary today, increasing the likelihood of an adversary's aggression. Moreover, the United States has always targeted adversaries' senior leadership, suggesting basing deterrence on such threats would not be as destabilizing as critics maintain.<sup>13</sup>

A nuclear doctrine that is clearly compliant with the law of armed conflict and ethical principles would also enhance the credibility of U.S. deterrence by decreasing concerns about military compliance. As former United States Strategic Command (USSTRATCOM) commander Robert Kehler has argued, "Unresolved dilemmas, especially those involving the enduring role of nuclear weapons or the basic ethical legitimacy for them, can erode the credibility of our deterrent in the minds of our adversaries, cause our allies to question the validity of U.S. security threats to them, and ultimately influence the perceptions of our own military members . . . . Such issues can make the very thing we are trying to prevent more likely." 14

A second principle of a more just nuclear deterrence policy is to adopt what Jeffrey Lewis and I call "the nuclear necessity principle": the U.S. military should not plan to use nuclear weapons against any target that could be effectively destroyed with conventional weapons and should use the lowest-yield nuclear weapon possible against the few deeply buried or hardened targets that could not be destroyed otherwise. <sup>15</sup> One critic of our proposal privately told me that following this principle would reduce collateral damage, and that reducing collateral damage would weaken deterrence. But if the United States uses collateral damage for the sake of deterrence, the damage cannot be considered collateral, and that use of a nuclear weapon is therefore illegal under international humanitarian law. <sup>16</sup>

A third principle is to reject targeting of civilian populations under any circumstances, even in response to an enemy's attack on one's own civilian population. Some U.S. strategists argue that the arcane legal doctrine of "belligerent reprisal"—the idea that it is acceptable to attack enemy civilians in response to an attack on your own civilians—undergirds nuclear deterrence.<sup>17</sup> In contrast, I believe we should put a nail in the coffin of belligerent reprisal. A simple statement by the U.S. government—"The United States will not intentionally target civilian

populations or civilian objects by way of belligerent reprisal"—would clarify its position and more fully comport with both ethical and legal principles of noncombatant immunity.<sup>18</sup>

The fact that an adversary has violated the law does not provide a sufficient legal or moral reason to violate the rights of noncombatants merely because they are citizens of the offending state. When North Vietnam tortured American prisoners of war, few argued that the United States morally should or legally could torture North Vietnamese prisoners held by U.S. forces. When ISIS bombed cafes in Paris, beheaded prisoners, or sexually abused American aid workers, few argued that the United States morally should or legally could bomb markets in Syria, behead ISIS prisoners, or sexually abuse women supporting ISIS. It would be appropriate for the United States to stop threatening to deliberately kill millions of innocent civilians, even in the name of deterrence, when it rightly no longer threatens to perpetrate similar illegal acts against individual innocent civilians.

My fourth principle is to get rid of the U.S. policy of "calculated ambiguity" and limit nuclear deterrent threats to potential responses to nuclear attacks. The "2022 Nuclear Posture Review," in contrast, threatened that the United States might use nuclear weapons in response to an adversary's use of "non-nuclear capabilities . . . that could inflict strategic-level damage" on the United States or its allies. This was widely interpreted to be a reference to a potential cyber- or biological attack that could kill many American or allied civilians. But the nuclear necessity principle would suggest that a U.S. response to such an attack should use conventional weapons to destroy the perpetrators or their capabilities in order to prevent a second attack, rather than to seek revenge through nuclear retaliation. The best long-term strategy would be to base deterrence of biological weapons and cyberattacks on deterrence by denial: developing the capability to protect populations and infrastructure from such threats to such a high degree that no enemy could effectively use such weapons.<sup>20</sup>

Indeed, it is by no means clear that a nuclear response is appropriate even after a limited nuclear attack. Putin has repeatedly threatened to use nuclear weapons in the war of aggression against Ukraine. The United States must develop credible, but deescalatory, plans to respond to any such nuclear attack, whether against Ukraine or NATO. For example, the Obama administration ran a top-secret, high-level war game in 2016 in which the Russians launched a single nuclear missile at a NATO airbase in the Baltics. One group of Obama deputies, including Avril

Haines and Colin Kahl, ordered a conventional retaliatory strike against Russian military forces, presumably against the Russian base that launched the nuclear attack. Other senior Obama officials, however, preferred to respond to the Russian nuclear strike by launching U.S. nuclear weapons against military targets in Belarus—even though Belarus had not participated in the Russian attack on the Baltics in the war game.<sup>21</sup> The deputies had the better strategy. One hopes that such prudent strategic thinking remains strong in the Biden administration and subsequent administrations.

## DETERRENCE AND DISARMAMENT

The fifth principle is to work in good faith toward the goal of global nuclear disarmament. Nye is right to caution that disarmament does not seem "possible in the near term of world politics" today. And he is highly opposed, as am I, to the occasional siren calls for unilateral U.S. disarmament. But I am surprised that Nye does not argue more forcefully for nuclear disarmament as a serious goal and recognize that continuous efforts to achieve progress in disarmament are an important strategy to reduce nuclear risk in the near term. An ethical approach to nuclear deterrence must include efforts to walk the walk, not just talk the talk, of nuclear disarmament. I say this for three reasons.

First, working in good faith for nuclear disarmament is the law of the land. Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) requires all members to work in "good faith" toward the elimination of nuclear weapons. That was compromise language between nuclear states that wanted nothing in the treaty to restrict them and some nonnuclear states that wanted a time-bound commitment. But since the U.S. Senate has ratified the NPT, U.S. leaders are obligated to follow that rule, even if they have not always done so.

Second, the active pursuit of nuclear disarmament, even if slower than some would like, helps keep the nuclear peace by encouraging governments in nonnuclear states to support nonproliferation. Without such support, the number of states with nuclear weapons would increase. More nonnuclear weapons states, for example, cooperate with the United States at NPT review conferences when it is perceived to be pursuing good-faith efforts at disarmament, as was the case during the Obama administration.<sup>23</sup>

The final reason to support the goal of nuclear disarmament is that even if nuclear deterrence can be maintained successfully—and there are good reasons

to worry that it cannot—the risk of a nuclear war by accident or through misperception still exists. Nye endorses Thomas Schelling's notion that deterrence must rely on "the threat that leaves something to chance." But the problem with the threat that leaves something to chance is . . . that it leaves something to chance.

Strategists, ethicists, and legal experts should work together to rethink how deterrence might still work in a world without nuclear weapons. Thomas Schelling poured cold water on this idea when he argued that in any crisis or war that happens in a world without nuclear weapons, an arms race would occur and the first state to reacquire the bomb would use it with impunity.<sup>25</sup> But such impunity would not exist, for surely states with strong conventional military capabilities in a world without nuclear weapons could still retaliate. It is strange to note how often Schelling's clever argument about the "instability of small numbers" is repeated without this important counterpoint.<sup>26</sup>

Since nuclear disarmament is a long-term goal with many bumps in the road, we must work hard to maintain just nuclear and conventional deterrence along the way. And because nuclear deterrence is inherently risky, we must work hard in good faith toward the distant disarmament goal. Relying on nuclear deterrence for U.S. security is like walking across thin ice. The fact that we have done it for so long without falling through does not mean that we should assume that the ice will hold forever.

#### Notes

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- Ronald Reagan, "Address to the Nation on Defense and National Security" (speech, Oval Office, White House, March 23, 1983), Ronald Reagan Presidential Library and Museum, www.reaganlibrary. gov/archives/speech/address-nation-defense-and-national-security.
   Joseph S. Nye Jr., "Nuclear Ethics Revisited," Ethics & International Affairs 37, no. 1 (Spring 2023), p. 6.
- <sup>4</sup> Joseph S. Nye Jr., "Nuclear Ethics Revisited," *Ethics & International Affairs* 37, no. 1 (Spring 2023), p. 6. <sup>5</sup> "2022 Nuclear Posture Review," in U.S. Department of Defense, *National Defense Strategy of the United States of America* (Washington, D.C.: U.S. Department of Defense, 2022), p. 12, media.defense. gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF.
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- <sup>7</sup> Ibid., p. 12.
- <sup>8</sup> U.S. Department of Defense, *Report on Nuclear Employment Strategy of the United States Specified in Section 491 of 10 U.S.C.* (Washington, D.C.: Department of Defense, June 12, 2013), pp. 4–5, uploads. fas.org/2013/06/NukeEmploymentGuidance\_DODbriefo61213.pdf.
- <sup>9</sup> Scott D. Sagan and Allen S. Weiner, "The Rule of Law and the Role of Strategy in U.S. Nuclear Doctrine," *International Security* 45, no. 4 (Spring 2021), pp. 126–66, direct.mit.edu/isec/article-abstract/45/4/126/100569/The-Rule-of-Law-and-the-Role-of-Strategy-in-U-S?redirectedFrom=fulltext. For a contrary position, see Steve Fetter and Charles Glaser, "Legal but Lethal: The Law of Armed

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- See Scott D. Sagan, "Armed and Dangerous: When Dictators Get the Bomb," Foreign Affairs 97, no. 6 (November/December 2018); and Rose McDermott, "Psychology, Leaders, and New Deterrence Dilemmas," in Vipin Narang and Scott D. Sagan, eds., The Fragile Balance of Terror: Deterrence in the New Nuclear Age (Ithaca, N.Y.: Cornell University Press, 2023), pp. 39-62.
- <sup>11</sup> Nye, "Nuclear Ethics Revisited," p. 6.
- 12 Helene Cooper, "Milley Defends His Actions at the End Of Trump's Term, Saying Top Officials Knew of His Calls to China," New York Times, September 28, 2021, www.nytimes.com/2021/09/ 28/us/politics/milley-trump-china-pelosi.html.
- <sup>13</sup> Scott D. Sagan, Moving Targets: Nuclear Strategy and National Security (Princeton, N.J.: Princeton University Press, 1989), pp. 35, 50-52.
- <sup>14</sup> C. Robert Kehler, "Nuclear Weapons & Nuclear Use," *Dædalus* 145, no. 4 (Fall 2016), pp. 50–61, at pp. 51-52, www.amacad.org/publication/nuclear-weapons-nuclear-use.
- 15 Jeffrey G. Lewis and Scott D. Sagan, "The Nuclear Necessity Principle: Making U.S. Targeting Policy Conform with Ethics & the Laws of War," Dædalus 145, no. 4 (2016), pp. 62-74, direct.mit. edu/daed/article/145/4/62/27110/The-Nuclear-Necessity-Principle-Making-U-S.
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- <sup>17</sup> Theodore T. Richard, "Nuclear Weapons Targeting: The Evolution of Law and U.S. Policy," Military Law Review 224, no. 4 (2016), pp. 862-978, papers.ssrn.com/sol3/papers.cfm?abstract\_id=2924907.
- <sup>18</sup> For additional analysis of belligerent reprisal see Adil Ahmad Haque, "Renouncing Reprisals: An Opportunity for the Biden Administration," Just Security, April 1, 2021, www.justsecurity. org/75553/renouncing-reprisals-an-opportunity-for-the-biden-administration/. Also see Christopher A. Ford, John R. Harvey, Franklin C. Miller, Keith B. Payne, Bradley H. Roberts, Scott D. Sagan, and Allen S. Weiner, "Are Belligerent Reprisals against Civilians Legal?," International Security 46, no. 2 (Fall 2021), pp. 166-72.

  19 U.S. Department of Defense, "2022 Nuclear Posture Review," p. 9.
- <sup>20</sup> Christine Parthemore and Andy Weber, "A Deterrence by Denial Strategy for Addressing Biological Weapons," War on the Rocks, September 23, 2021, warontherocks.com/2021/09/a-deterrence-bydenial-strategy-for-addressing-biological-weapons/.
- <sup>21</sup> Fred Kaplan, The Bomb: Presidents, Generals, and the Secret History of Nuclear War (New York: Simon & Schuster, 2020), pp. 254-58.
- <sup>22</sup> Nye, "Nuclear Ethics Revisited," p. 14.
- <sup>23</sup> Harald Müller, "A Nuclear Nonproliferation Test: Obama's Nuclear Policy and the 2010 NPT Review Conference," in "Arms, Disarmament & Influence: International Responses To The 2010 Nuclear Posture Review," special issue, *Nonproliferation Review* 18, no. 1 (February 2011), pp. 219–36. Also see Jeffrey W. Knopf, "Nuclear Disarmament and Nonproliferation: Exploring the Linkage Argument," *International Security* 37, no. 3 (Winter 2012/13), pp. 92–132.
- <sup>24</sup> Nye, "Nuclear Ethics Revisited," p. 6.
- <sup>25</sup> Thomas C. Schelling, "A World without Nuclear Weapons?," Dædalus 138, no. 4 (Fall 2009), pp. 124–29, at p. 127, direct.mit.edu/daed/article/138/4/124/26802/A-world-without-nuclear-weapons.
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Abstract: In this essay, I propose five principles to make U.S. nuclear deterrence policy more just and effective in the future: sever the link between the mass killing of innocent civilians and nuclear deterrence by focusing targeting on adversaries' military power and senior political leadership, not their population; never use or plan to use a nuclear weapon against any target that could be destroyed or neutralized by conventional weapons; reject "belligerent reprisal" threats against civilians even in response to enemy attacks on one's own or allied civilians; replace nuclear "calculated ambiguity" threats against biological or cyberattacks with "deterrence by denial" strategies; and work in good faith toward eventual nuclear disarmament.

Keywords: deterrence, nuclear weapons, law of armed conflict, nuclear targeting, Joseph S. Nye Jr.