Routledge
Taylor & Francis Group

Security Studies

ISSN: 0963-6412 (Print) 1556-1852 (Online) Journal homepage: www.tandfonline.com/journals/fsst20

Creeds and Contestation: How US Nuclear and Legal Doctrine Influence Each Other

Janina Dill & Scott D. Sagan

To cite this article: Janina Dill & Scott D. Sagan (2025) Creeds and Contestation: How US Nuclear and Legal Doctrine Influence Each Other, Security Studies, 34:5, 833-867, DOI: 10.1080/09636412.2025.2594013

To link to this article: https://doi.org/10.1080/09636412.2025.2594013

SECURITY STUDIES
2025, VOL. 34, NO. 5, 833–867
https://doi.org/10.1080/09636412.2025.2594013

Routledge
Taylor & Francis Group

Creeds and Contestation: How US Nuclear and Legal Doctrine Influence Each Other

Janina Dill and Scott D. Sagan

ABSTRACT

What were the effects of the US's move from denying to accepting that the laws of armed conflict (LOAC) apply to nuclear weapons? We argue that the legalization of nuclear guidance and plans changed the US nuclear posture, which is now shaped by the principles of distinction and proportionality. However, the US interpretation of these principles is also shaped by unproven, but widely held, beliefs about the requirements of nuclear deterrence, what we call "creeds." US nuclear and legal targeting doctrines are co-constituted: Partly to accommodate nuclear creeds, the United States contests widely accepted interpretations of distinction and proportionality, thereby keeping nuclear targets on the table that challenge LOAC. We propose three concrete shifts in how the United States could better apply distinction and proportionality to nuclear weapons: first, narrow the definition of military objectives to exclude purely political control capabilities; second, broaden the understanding of intent by renouncing civilian casualties as a secondary purpose of nuclear strikes; third, develop better models of long-term effects of nuclear use and include these effects in proportionality calculations. We argue that following LOAC more rigorously would not, as often feared, weaken nuclear deterrence. Instead, it could strengthen it.

When the United States signed the First Additional Protocol to the Geneva Conventions in 1977, it declared that the Protocol did not apply to nuclear weapons. In 2013, however, the Obama administration's official nuclear weapons Employment Guidance announced that all nuclear plans must be "consistent with the fundamental principles of the Law of Armed Conflict"[1] (LOAC). The Trump and Biden Administrations' Nuclear Posture Reviews (NPRs) reaffirmed this commitment. Did the embrace of international law change nuclear targeting? Or was it mere "window-dressing," an attempt

Janina Dill is the Dame Louise Richardson Chair in Global Security at the University of Oxford.
Scott D. Sagan is the Caroline SG Munro Professor of Political Science at Stanford University.

[1]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. (12 June 2013), 4–5.

to bestow the legitimacy of legality onto nuclear deterrence, while avoiding the law's restrictive force? If it did make a difference, *how* did LOAC change US nuclear war plans? And are these plans now consistent with international law?

As nuclear plans are classified, the fundamental change from "law does not apply" to "all nuclear plans are fully compliant" is not well studied. The Obama guidance was the first presidential-level public acknowledgement of the force of law in the nuclear realm; however, as we will demonstrate, behind the scenes, decision-makers had earlier started to embrace the applicability of LOAC to nuclear doctrine. The literature on US nuclear strategy nevertheless mostly ignored legal considerations until the Obama administration highlighted the issue.[2] Some scholars then accused US government officials of bad faith, suggesting they knew that nuclear plans violated the law but chose to claim otherwise.[3] Some practitioners took the opposite position. General C. Robert Kehler, for example, asserted that "the president can be confident that any nuclear option presented has been … prepared in full compliance with moral principles and legal constraints."[4] Others argued that US nuclear plans obviously conform to LOAC simply because the United States officially eschews "counter-value" targeting, here understood as deliberate attacks against civilian populations, which would violate LOAC's principle of distinction.[5] It is precisely because law precludes traditional counter-value targeting that yet other experts deem the embrace of law dangerous: the resulting "counterforce only" posture, they argue, makes first-use more likely and encourages arms races.[6]

This debate is not well-grounded in history or theory, as we lack a systematic investigation of whether and how nuclear planners responded to the applicability of LOAC and whether US nuclear plans now conform to legal demands. In this article, we demonstrate that US nuclear doctrine and targeting have changed in ways that are causally tied to law, though these changes have other causes too. There is no one-way street between legal

[2]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): 126–66. https://doi.org/10.1162/isec_a_00407.

[3]Bruce G. Blair, "Loose Cannons: The President and US Nuclear Posture," *Bulletin of the Atomic Scientists* (January 2021). https://thebulletin.org/premium/2020-01/loose-cannons-the-president-and-us-nuclear-posture/.

[4]C. Robert Kehler, "Commanding Nuclear Forces," in *Managing US Nuclear Operations in the 21st Century*, ed. Charles Glaser, Austin Long, and Brian Radzinsky (Washington, DC: Brookings Institution Press, 2022), 152.

[5]Keith B. Payne, John R. Harvey, Franklin C. Miller, and Robert Soofer, "The Rejection of Intentional Population Targeting for 'Tripolar' Deterrence," *Real Clear Defense*, 26 September 2023. https://www.realcleardefense.com/articles/2023/09/27/the_rejection_of_intentional_population_targeting_for_tripolar_deterrence_982200.html.

[6]Steve Fetter and Charles Glaser, "Legal but Lethal: The Law of Armed Conflict and US Nuclear Strategy," *The Washington Quarterly* 45, no. 1 (2022): 25–37; Charles Glaser, James Acton, and Steve Fetter, "The U.S. Nuclear Arsenal Can Deter Both China and Russia," *Foreign Affairs*, 5 October 2023.

demands and changes to nuclear plans, however, meaning the kind of causal relationship between law and state behavior that is usually understood as "compliance."[7] Instead, we show that ideas about effective deterrence, what we call nuclear "creeds," also influence the US interpretation of LOAC. Partly to accommodate these creeds, the United States contests widely accepted interpretations of distinction and proportionality, thereby keeping nuclear targets on the table that challenge LOAC. US nuclear and legal doctrines are mutually constitutive: US nuclear plans and the US interpretation of distinction and proportionality logically depend on each other.[8]

In the first section, we briefly trace the gradual institutionalization of legal advice and review in nuclear planning, and we introduce our central argument that US nuclear and LOAC doctrines are now mutually constituted. In the second section, we investigate the concrete effects of legalization on nuclear ideas, showing that the gradual internalization of the idea that nuclear plans must conform to international law among political officials hastened the adoption of the United States' current "counterforce only" posture. At the same time, the move toward "counterforce only" targeting also allowed the idea of legalization to grab hold, pointing toward a process of mutual influence between law and the US nuclear posture rather than straightforward compliance. Critically, the integration of legal advice and review into STRATCOM planning in the 1990s and in 2011 had real effects on nuclear plans, elevating concerns about collateral damage and narrowing one nuclear target category: industry targets.

The third section then examines the politics of interpretation and contestation. We show that leading US government officials have interpreted LOAC in highly unusual ways (by international standards) that enable them to say and believe that US nuclear targeting plans comply with LOAC. We analyze four sites of contestation between the US position on targeting and more widespread restrictive understandings of distinction and proportionality. Two persistent "creeds" of what the United States needs to target for effective deterrence (the "political control" apparatus of the adversary and targets that cause catastrophic "collateral" civilian harm) challenge the principle of distinction. We demonstrate how the US interpretations of the definition of military objectives and of what it means to "intend civilian harm," imply ways to overcome these challenges. Moreover, we discuss contestable interpretive moves in how the United States defines "civilian harm" and "concrete and direct military advantage" that make it more likely that nuclear plans appear proportionate.

[7]Helen Kinsella and Giovanni Mantilla, "Contestation before Compliance: History, Politics, and Power in International Humanitarian Law," *International Studies Quarterly* 64, no. 3 (2020): 649–56.
[8]For the definition of co-constitution as a relationship of logical dependence, see Alexander Wendt, *Social Theory of International Politics* (Oxford, UK: Oxford University Press, 1999), 25.

In the first through third sections, we rely on de-classified documents and nine semi-structured interviews with former officials involved in STRATCOM planning and/or drafting of Nuclear Posture Reviews (NPRs) during the Clinton, Bush, Obama, and Trump administrations.[9] We draw on these interviews to fill gaps in our history of legalization of US nuclear planning in the first section. In the second and third sections, we draw on these interviews to better understand whether and how the idea that nuclear plans ought to conform to LOAC shaped these former officials' beliefs. In selecting interviewees, we sought out individuals who, our research indicated, had witnessed key milestones in the development of nuclear guidance and plans. Crucially, even among proponents of LOAC's applicability to nuclear weapons we encountered a deep concern that a rigorous application of LOAC to nuclear use could undermine or weaken deterrence. In the fourth and final section, we challenge this concern and develop the normative argument that the United States should rethink its unusual legal position, adopting more stringent legal interpretations of distinction and proportionality. We identify reasons to believe that reducing uncertainty regarding the legality of US deterrent threats may make them more credible and therefore more effective.

The Embrace of Law in the Nuclear Realm

As demonstrated in Giovanni Mantilla's contribution to this special issue, when the US government decided not to ratify the 1977 Additional Protocols of the Geneva Convention, it simultaneously ruled that the principles of distinction, proportionality, and precaution were customary international law and thus binding for the United States.[10] This began a process of legalization. By legalization we mean an institutionalization of legal advice and review in nuclear planning and the gradual official endorsement of LOAC's applicability to nuclear weapons in the United States. We first briefly trace this legalization and then introduce our argument that this embrace of law changed nuclear ideas and nuclear plans, but those nuclear ideas and plans also changed the interpretation of LOAC, a process which we call mutual constitution.

[9]We conducted the interviews in person or by video call between November 2023 and May 2024; their length varied between 50 and 120 minutes. All interviewees gave informed consent to be either named or quoted anonymously. The interviews followed an ethics protocol that the Blavatnik School of Government Research Ethics Committee at the University of Oxford (SSH/BSG_C1A-23-19) reviewed and approved.

[10]See Giovanni Mantilla, "Stealth Change: How the United States and the United Kingdom Embraced International Humanitarian Limits on Wartime Nuclear Use," in this special issue.

The Legalization of US Nuclear Guidance and Plans

When nuclear weapons first appeared, and for some decades thereafter, their use in compliance with LOAC was inconceivable. Nuclear weapons pre-date Protocol I, but not the principle of distinction, which was considered customary international law already during World War II.[11] Early Cold War-era nuclear plans consistently envisaged not only "counterforce" targeting, aiming to hold at risk Soviet and Chinese nuclear and conventional forces, but also "counter-value" targeting, which at the time meant threatening populations in cities.[12] In 1963, for example, Robert McNamara reported to the president that 533 US nuclear warheads would be aimed against "urban industry and government control" targets in the "Soviet Bloc." If carried out, these attacks were *meant* to destroy an estimated "30% of their population…and 150 of their cities."[13] Selecting targets with the purpose to kill a certain percentage of the adversary's civilian population stands in direct and irreconcilable opposition to the cardinal legal demands not to intentionally target civilians and to minimize expected civilian deaths.

It is not surprising then that US officials initially viewed attempts to codify LOAC during the negotiations of the Geneva Conventions as inimical to deterrence. In 1949, scandalized by Nazi extermination camps, the world had agreed on the Geneva Conventions which included a range of protections for persons *hors de combat*. However, the Geneva Conventions did not include detailed rules for the conduct of hostilities, for instance through aerial bombardment, nor for the use of nuclear weapons. This was not for lack of effort. The Soviet Union proposed a resolution which would have prohibited nuclear use, but which the United States and the United Kingdom firmly rejected.[14] The 1977 Additional Protocol I (AP1), in contrast, did regulate the conduct of hostilities. When the Joint Chiefs of Staff (JCS) in 1985 recommended that the United States *not* ratify the Protocol, they highlighted that "the rules against indiscriminate methods of war and excessive collateral damage in Articles 51–57 might severely limit the utility of such (nuclear and chemical) weapons."[15]

[11]International Committee of the Red Cross (ICRC), IHL Database, Volume II, Chapter 1.
[12]Brandon Rittenhouse Green, *The Revolution that Failed: Nuclear Competition, Arms Control, and the Cold War* (Cambridge, UK: Cambridge University Press, 2020).
[13]Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton, NJ: Princeton University Press, 1989), 33.
[14]Boyd van Dijk, "'The Great Humanitarian': The Soviet Union, the International Committee of the Red Cross, and the Geneva Conventions of 1949," *Law and History Review* 37, no. 1 (2019): 227. Also, see Fritz Kalshoven, *Reflections on the Law of War: Collected Essays* (Martinus Nijhoff Publishers, 2007): 755.
[15]Memorandum for the Secretary of Defense, 3 May 1985, Review of the 1977 Additional Protocols to the Geneva Convention of 1949, Annex, 90. https://www.justsecurity.org/wp-content/uploads/2022/02/just-security-1985-JSC-Joint-Chiefs-of-Staff-Review-GC-AP-I-Geneva-Conventions-Protocol-I.pdf.

The Joint Chiefs specifically objected to Article 51 of the Protocol, which forbids reprisals against protected persons and civilian objects on the grounds that "to formally renounce even the option of such attacks would remove a significant deterrent that presently protects civilians."[16] In 1987, in a clear example of nuclear doctrine influencing US legal doctrine, grounding the objection to the prohibition on belligerent reprisals against civilians, State Department legal advisor Abraham Sofaer repeated the JCS argument against Article 51 almost verbatim in his public explanation for why the United States would not ratify the Additional Protocols.[17] His statement has been quoted in Department of Defense (DOD) Law of War Manuals since that time and indeed the United States has not, to this day, ratified the Protocol.

In conventional targeting, the Protocol nonetheless coincided with important changes to the military bureaucracy. In 1974, following the outcry over the My Lai massacre, the DoD issued Directive 5100.77 on the Law of War Program which set out that Judge Advocates General (JAGs) should "ensure[…] that all U.S. military operations complied strictly with the Law of War." JAGs were given a rapidly expanding operational role, including target vetting, and eventually deployed into the theater commands.[18] Out of a desire to have all US commands conform to the same rules, the United States internally acknowledged that the principles of distinction, precaution, and proportionality codified in Protocol I were binding customary international law that applied to *all* US military operations.[19]

The institutionalization of legal advice and review in US conventional military targeting has been well documented in scholarship.[20] It is less well appreciated how this process played out for nuclear plans where a declassified STRATCOM JAG document from 1995 suggests a somewhat lagged legalization. The document complained that officers in the command still incorrectly believed that "'LOAC does not apply to nuclear operations'. This is flatly wrong…There is actually no real question that

[16]Id., 50.
[17]Abraham D. Sofaer, Remarks on the Position of the United States on Current Law of War Agreements (January 22, 1987), reprinted in Dupuis, Heywood, and Sarko, "The Sixth Annual American Red Cross – Washington College of Law Conference on International Humanitarian Law: A Workshop on Customary International Law and the 1977 Protocols Additional to the 1949 Geneva Conventions," 469.
[18]Colin H. Kahl. "In the Crossfire or the Crosshairs? Norms, Civilian Casualties, and US Conduct in Iraq," *International Security* 32, no. 1 (2007): 7–46.
[19]See Mantilla, "Stealth Change," in this special issue.
[20]Laura A. Dickinson. "Military Lawyers on the Battlefield: An Empirical Account of International Law Compliance," *American Journal of International Law* 104, no. 1 (2010): 1–28; Janina Dill, *Legitimate Targets* (Cambridge, UK: Cambridge University Press, 2015); David Kennedy, *Of War and Law* (Princeton, NJ: Princeton University Press, 2006); Michael L. Kramer and Michael N. Schmitt, "Lawyers on Horseback-Thoughts on Judge Advocates and Civil-Military Relations," *UCLA Law Review* 55 (2007): 1407; Craig Jones, *The War Lawyers* (Oxford, UK: Oxford University Press, 2020).

STRATCOM is obliged to conduct its nuclear operations in compliance with LOAC."[21] Former STRATCOM JAG, Major General Charles Dunlap states that in response STRATCOM sought to institutionalize legal advice in the nuclear planning and execution process. This resulted in 96% of STRATCOM personnel being trained in LOAC and what Dunlap characterizes as an "unparalleled level of integration of law into GLOBAL GUARDIAN 97, the strategic nuclear exercise,"—the first leap in the legalization of nuclear plans.

A second leap in the institutionalization of legal advice and review took place during the tenure of General Robert Kehler as STRATCOM Commander from 2011 to 2013, who oversaw a comprehensive review of nuclear targets. Kehler recalls that "when we sat down to begin this clean sheet process to look again at the plans, the directive to make sure that we were applying the laws of armed conflict was a prominent feature. When we were exercising war plans, the lawyer was sitting next to me."[22] Kehler stresses that LOAC was considered applicable to nuclear plans before his tenure, but "the Presidential Directive became sharper under Obama."[23] Indeed, a public reference to the role of law from the first institutionalization leap in the mid-1990s corroborates Kehler's assertion that the integration of law into nuclear planning became "sharper" under Obama: The Doctrine for Joint Theater Nuclear Operations of 1996 mentions the laws of armed conflict, but notably omits reference to specific principles. Instead, it cautions in relatively vague terms that "the law of armed conflict forces us to think about the consequences of nuclear weapons before we employ them."[24] Kehler, in contrast, was tasked with ensuring conformity of targets with concrete legal demands.

What about the political level? Both leaps in the institutionalization of legal advice and review at STRATCOM in 1995 and in 2011–2013 coincided with important milestones in the political endorsement of the applicability of LOAC to nuclear weapons. In 1995, in a submission to the International Court of Justice, which had been tasked to render an Advisory Opinion on the "Legality of the Threat or Use of Nuclear Weapons," the United States for the first time publicly claimed that it had long accepted "that various principles of the international law of armed conflict would

[21]Charles J. Dunlap, Jr., Memorandum for the STRATCOM Senior Staff, Subject: The Role of the Law of Armed Conflict (LOAC) on USTRATCOM Operations, 31 Oct 1995, 3–4. PF: https://nautilus.org/wp-content/uploads/2025/05/NISS-GW-09192018-1a-aka-19-006-USSTRATCOM-JAG-Legal-manuals-rotated-REDACTED.pdf.
[22]Interview 5 with C. Robert Kehler.
[23]Ibid.
[24]Joint Publication 3–12, Doctrine for Joint Nuclear Operations JP 3–12.1, Final Coordination, 3 September 2003, I-1.

apply to the use of nuclear weapons."[25] Just the year prior, the Clinton administration had commissioned the first ever Nuclear Posture Review, a political-level exercise meant to set out in both classified and unclassified versions what role nuclear weapons had in the US national security strategy. LOAC was not however explicitly considered in the drafting process.[26]

The second leap in the institutionalization of legal advice and review at STRATCOM meanwhile culminated in the 2013 presidential-level statement 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."[27] While the three prior NPRs do not mention LOAC, both subsequent NPRs and the Report of the 2023 Strategic Posture Commission repeat this commitment to international law. The 2022 NPR stresses that "Legal advice is integral to the preparation of these documents and includes review of their consistency with the Law of Armed Conflict."[28] The 2023 US law of war manual affirms that "[t]he law of war governs the use of nuclear weapons, just as it governs the use of conventional weapons,"[29] though it upholds that the Protocol "does not apply to the use of nuclear weapons."[30]

The Co-Constitution of US Nuclear and Legal Doctrines

What was the effect of the gradual embrace of the applicability of LOAC and the institutionalization of legal advice and review of nuclear guidance and plans? Our central argument is that legalization did not simply lead to a change in nuclear plans from incompatibility to convergence with legal demands, according to the standard account by which the application of law causes a behavioral shift best understood as compliance. For law to *cause* a change in US nuclear doctrine, we would have to make three assumptions about LOAC and the US nuclear posture that characterize causal relations: first, that the US understanding of a legal nuclear target

[25]Letter dated 20 June 1995 from the Acting Legal Adviser to the Department of State, together with Written Statement of the Government of the United States of America, p. 21. https://www.icj-cij.org/case/95.
[26]Interview 2.
[27]U.S. Department of Defense, *Report*, 4–5.
[28]U.S. Department of Defense, *National Defense Strategy*, *Nuclear Posture Review and Missile Defense Review Report* (Washington, DC: U.S. Dept. of Defense, 2022), 8. https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.pdf
[29]U.S. Department of Defense, Law of War Manual (updated 2023) (Washington, DC: U.S. Dept. of Defense, 2015), 426. https://media.defense.gov/2023/Jul/31/2003271432/-1/-1/0/DOD-LAW-OF-WAR-MANUAL-JUNE-2015-UPDATED-JULY%202023.PDF
[30]Id., 1190.

exists independently of US nuclear guidance and plans; second, that the current interpretation of LOAC preceded current nuclear guidance and plans in time; and third, that US nuclear guidance and plans would not be what they are today "but for" the demands of LOAC.[31] Here we only argue number three: LOAC affected US nuclear guidance and plans. However, LOAC, specifically the US understanding of a legal nuclear target, cannot be understood without ideas about what nuclear guidance and plans must look like to achieve deterrence. The evolution of the US nuclear posture has shaped US interpretations of LOAC, just as the latter have shaped the former. Hence the better way to understand the relationship between US nuclear and legal doctrines is one of co-constitution or logical dependence.[32]

Co-constitution processes, where the meanings of two sets of ideas or concepts logically depend on each other, are notoriously difficult to make visible.[33] To empirically validate our argument, we therefore break up the task. The second section focuses on showing how the institutionalization of legal advice and review, which we traced in the previous section, influenced the ideas of nuclear planners, nuclear guidance and, ultimately, nuclear plans. The third section shows how ideas about effective nuclear deterrence influenced how the United States interpreted the central LOAC demands of distinction and proportionality.

How can the institutionalization of legal advice and review change the ideas of officials tasked with crafting US nuclear guidance and plans? Constructivist theories of the role of law in international relations stress that individuals who are subject to professional structures that include a demand to comply with law, thereby participate in "a practice of legality" and tend to internalize the idea that their conduct ought to meet legal demands, a belief that Jutta Brunnée and Stephen Toope call "fidelity to law."[34] By internalization we mean an individual's making a normative demand their own, so that it becomes part of their professional identity and taken for granted.[35] Internalization here is related to socialization because, as Harold Koh notes, "a repeated habit of obedience within a

[31]For a detailed explanation of these three features of causal relations, see Alexander Wendt. "On Constitution and Causation in IR," *Review of International Studies* 24, no. 5 (2001): 101–18, 105.
[32]Ibid., also Id., *Social Theory*, 25.
[33]Cornelia Navari, "Agents versus Structures in English School Theory: Is Co-Constitution the Answer?," *Journal of International Political Theory* 16, no. 2 (2020): 249–67, 267.
[34]Jutta Brunnée and Stephen J. Toope, Interactional International Law and The Practice of Legality," in *International Practices*, ed. Immanuel Adler and Vincent Pouliot, 108–45, 109.
[35]Matthew J. Hoffmann, "Norms and Social Constructivism in International Relations," in *Oxford Research Encyclopedia of International Studies* (Oxford: Oxford University Press, 2010). https://doi.org/10.1093/acrefore/9780190846626.013.60

societal setting socializes" actors into automatic recourse to law in decision-making and the belief that this is professionally appropriate.[36]

Of course, internalization in the sense of a deep conviction that the US nuclear posture must reflect legal demands is not an inevitable or the only possible result of officials' exposure to practices of legality. Ryan Goodman and Derek Jinks argue that actors might alternatively become "acculturated" to the expectation that the US posture should reflect legal demands without personally agreeing with this fully or at all.[37] They refer to acculturation as an "incomplete internalization" and describe it as "the process by which actors adopt the beliefs and behavioral patterns of the surrounding culture."[38] Acculturation means actors understand that ensuring legal compliance is part of their professional role since they are exposed to and reacting to professional structures that purport this. Acculturation works through mimicry and the perception that conformance with law is required for professional advancement or to avoid sanctions. Internalization and acculturation denote processes by which agents' ideas/identities change in light of the ideational structures to which they are exposed.[39]

Internalization grounds the expectation that legalization gradually diffused the idea among US officials that US nuclear doctrine must comply with law. Evidence of internalization is signs that the legality of US nuclear plans has reached intersubjective status in the community or that officials tasked with crafting nuclear guidance and plans take legal conformity of the US nuclear posture for granted. Moreover, if officials have internalized legality, it is connected to their professional identity and they perceive the legal conformity of nuclear guidance and plans as non-negotiable, potentially irreversible. Acculturation and internalization can work in tandem and may not always be easy to distinguish. However, suppose officials are acculturated to the US nuclear posture being in line with legal demands rather than having internalized the need for legality. In that case, we anticipate that the expectation of sanctions plays a role in why they recur to law and that they perceive the applicability of LOAC to US nuclear plans as reversible.

What about changes to the substance of nuclear guidance and plans? Constitutive relationships have causal effects.[40] So the co-constitution of legal and nuclear doctrines still implies that law makes a difference for

[36]Harold Hongju Koh, "Internalization through Socialization," *Duke Law Journal* 54, no. 4 (2005): 975–82, 978.
[37]Ryan Goodman and Derek Jinks, "Incomplete Internalization and Compliance with Human Rights Law," *European Journal of International Law* 19, no. 4 (2008): 725–48.
[38]Ryan Goodman and Derek Jinks, *Socializing States: Promoting Human Rights Through International Law* (New York, NY: Oxford University Press, 2013), 30.
[39]Note that the co-constitution at the heart of our argument is between U.S. nuclear and legal doctrines, denoting a logical dependency between ideas, not structures and agents.
[40]Colin Wight, *Agents and Structures in International Relations* (Cambridge: Cambridge University Press, 2006), 177.

US nuclear guidance and plans. In the context of conventional war, scholars have demonstrated that practices of legality—legal input into and review of target plans as well as officials' routine use of law to explain their professional choices—changed decision-makers' ideas about the range of military options available to them.[41] First, given the deep chasm between traditional nuclear doctrine and the LOAC principle of distinction, we expect that the gradual internalization/acculturation of the belief that the US posture must be legal is causally implicated in a turning away from or radical redefinition of counter-value targeting, traditionally understood as threatening to direct nuclear attacks against civilian populations. Second, as shown in the context of conventional targeting, increased legal advice and review in nuclear target planning is expected to lead to contestation about the range of objects that can be legitimately attacked, ultimately narrowing target sets (principle of distinction). Third, legal advice and review is expected to heighten concerns for collateral damage, leading to the adoption of strategies for reducing expected incidental harm to civilians (principle of proportionality).[42]

The expectations that the institutionalization of legal advice and review leads to legal internalization/acculturation and thereby to these three concrete changes in nuclear guidance and plans are derived from the literature on the role of law in international relations, specifically conventional US targeting. When it comes to the influence of US nuclear doctrine on US interpretations of LOAC, in contrast, we proceeded inductively by interpreting contemporary writing about US nuclear deterrence and conducting interviews with former officials. We conducted nine semi-structured interviews, featuring questions about what the United States holds at risk, what LOAC prohibits holding at risk, and what factors influence Russian and Chinese calculations about nuclear use. We thereby uncovered two long-standing beliefs or "creeds"—of deterrence: first, that effective deterrence requires targeting an adversary's *political* control capabilities; and second, that it depends on the expectation of catastrophic civilian harm. We call them creeds since these beliefs are not backed up by concrete evidence but have "intersubjective status in [the] community" of officials responsible for crafting nuclear doctrine and plans. These creeds persist today, and we found them reflected in how the United States interprets the principles of distinction and proportionality. In the third part, we show that the US interpretation of distinction seemingly accommodates these creeds, pointing to the influence of nuclear ideas and plans on the US understanding of a legitimate target of attack under LOAC.

[41]See Dill, *Legitimate Targets*; Kahl, "In the Crossfire"; Kyle Rapp, "Justifying Force: International Law, Foreign Policy Decision-making, and the Use of Force," *European Journal of International Relations* 28, no. 2 (2022): 337–60.
[42]See footnote 20.

The Effects of Legalization on US Nuclear Ideas and Plans

In this part we empirically show how the institutionalization of legal advice and review led to the increasing internalization of the idea that nuclear plans must conform to international law among officials involved in drafting NPRs. This belief, in turn, hastened the adoption and solidified the perceived irreversibility of the United States' current "counterforce only" posture. In terms of nuclear plans, this institutionalization of legal advice and review at STRATCOM had real effects. In line with our expectations, we find that legal advice elevated concerns about collateral damage, influenced operational exercises and weapons delivery techniques, and it led to a narrowing of the industry target category.

Nuclear Ideas: The Embrace of a "Counterforce Only" Posture

Can we find evidence for the diffusion and internalization of the idea that the US nuclear posture should be legal? James Miller, who was involved in the NPR process in both the Clinton and Obama administrations, said "the idea that nuclear war could ascribe to some kind of norm took a while to grab hold."[43] He credited technological progress, and the resulting "more discriminate employment that individual weapons with lower yield and higher precision could afford," with making legality *conceivable*.[44] He dated the idea that nuclear plans should comply with LOAC as spreading during the Clinton administration and being fully internalized by the Obama administration, so coinciding with the two described milestones in the public acceptance of LOAC and the leaps in its institutionalization at STRATCOM. He described the process of how the US nuclear posture is developed as a "daisy chain from Presidential guidance to Secretary of Defense guidance, which is typically more detailed, to guidance from the Chairman, which is typically yet more detailed, to the development of operational plans by STRATCOM. Those plans are then reviewed, and that review includes legal review."[45] Officials writing the NPRs all noted that lawyers were not in the room, with legal review only coming later.

Crucially, former officials involved in drafting successive NPRs explained why lawyers do not have direct input into the process in ways that point to an internalization of the idea that the US nuclear posture must conform to law among the relevant officials. Officials involved in the NPRs of 1994 and 2002 stressed that law played a subordinate or no role because the

[43]Interview 3 with James Miller.
[44]Ibid.
[45]Ibid.

NPR concerns high-level policy decisions rather than concrete operational plans.[46] In contrast, the explanation for the NPRs of 2010, 2018 and 2022 was invariably that the law is well "internalized," "well understood," and "taken for granted," by those making the high-level policy decisions and does not need to be brought to the table by lawyers. For instance, James Miller asserted that "the people who have been involved have enough depth and breadth of knowledge of nuclear policy to understand at least the basic legal issues."[47] Drafters of the NPR have internalized that the US nuclear posture instantiates LOAC demands.[48]

Did the belief that the US nuclear posture must be legal change decision-makers' ideas about what targets the United States should hold at risk with nuclear weapons? The answer is complicated and belies the notion of a one-way causal chain between the belief that LOAC applies and shifts in ideas about nuclear posture. Instead, we discovered a mutual reinforcement between a repudiation of "counter-value" targeting, in the traditional sense of targeting cities or civilian populations, and the embrace of legality as a standard of appropriateness, with other factors playing causal roles as well. Several former officials stressed that the United States' turn away from "counter-value" targeting made legal compliance conceivable, but that this rejection of city or population targets had causes besides legalization. They relate the decline of "counter-value" targeting to increased civilian control at the end of the Cold War and the more flexible response options and pared-down target lists that civilian planners brought in, and also to the availability of precision and low-yield capabilities.[49] At the same time, as expected, legalization hastened and solidified the repudiation of "counter-value" targeting in nuclear guidance.[50] Several interviewees further stressed that the adoption of a "counterforce-only" posture since the Obama NPR is irreversible and mentioned LOAC in this context.[51]

In turn, the United States' counterforce posture is widely believed to "take care" of LOAC compliance so that, at the policy level at least, no further legal questions arise. As Rob Soofer who co-led the Trump NPR put it: Lawyers are not in the room, but "STRATCOM is in the room, and they will tell you they cannot do minimum deterrence because that will require targeting cities."[52] "[I]f you are proponents of counter-value,

[46]Interview 2 with a former government official who was involved in the nuclear posture review process and interview 8.
[47]Interview 3 with James Miller.
[48]Also interview 1 with a former official involved in the 2022 NPR and interview 6 with a former STRATCOM official involved in the 2017 and 2022 NPRs.
[49]Interview 7 with Franklin Miller, and Interview 3 with James Miller.
[50]Interview 1.
[51]Interviews 1 and 6.
[52]Interview 4 with Robert Soofer.

you're a monster, but if you are a proponent of counterforce, you are on the right side of the law. And there is just not a lot of attention to the details," a former official involved in the Biden NPR recalled.[53] In turn, a former official involved in the Trump NPR, who suggested there was still an important role for "counter-value" targeting, referred to LOAC, making clear that "counter-value is targeting the things the adversaries value that are also legal to target."[54] All former officials who argued that "counter-value" targeting still played any role in the US nuclear posture embraced this redefined understanding of it as targeting "whatever the enemy values, except civilians."

The general equation of legality with "counterforce" targeting in turn appears to give decision-makers license to not ask for detailed legal input during the drafting: "During the nuclear posture review, it wasn't a big debate: We are not going to target cities in line with law of armed conflict. Now let's move on," Robert Soofer recalled about the Trump NPR. An official involved in the Biden NPR likewise stressed that "there is no deep dive. The folks accept the premise and the assumption that it is [legal]. Well, if you are doing counterforce, it is."[55] This narrative that a counterforce posture ensures compliance with LOAC is also present in nuclear planning at STRATCOM according to a high-level civilian official: "They are told there will be plans to achieve the following objectives. Those objectives are not illegal objectives. Because the policy is to be compliant with the law of armed conflict. So, they are not given objectives that are illegal, and it is not that difficult to build a plan that is legal to achieve a legal objective."[56]

The equation of a counterforce posture with a legal one, the taken-for-granted status of both legality and counterforce targeting, and the connection between legality/counterforce and an appropriate professional identity—where only a "monster" would advocate for the alternative—all suggest that legalization led to an internalization of legal demands. Of course, one would not expect that to be the case for *all* former officials, and we also found evidence pointing more toward acculturation where legal conformity is motivated instrumentally or by a need to avoid professional or even criminal sanctions. It is possible that an official who orders or executes a nuclear attack that manifestly violates LOAC would be committing a crime under the War Crimes Act of 1996 and thus be subject to prosecution.[57] This has,

[53]Interview 1.
[54]Interview 6.
[55]Interview 1.
[56]Interview 6.
[57]Oona Hathaway, Alyssa Yamamoto, Srinath Reddy Kethireddy, and Aaron Haviland, "The US, the War in Yemen, and the War Crimes Act – Part I," *Just Security* (2 April 2018). https://www.justsecurity.org/54444/us-war-yemen-war-crimes-act/.

in principle, been possible for a long time, but the awareness and relevance of this fact are a result of acculturation: One former official recalls a nuclear submarine commander in the early 1990s asking whether lawyers had reviewed nuclear plans. He was invited to attend a meeting in which the answer was that he should avoid asking the question—at this point professional advancement required not invoking LOAC.[58] Today, in stark contrast, STRATCOM Commanders themselves have noted that they have a duty not to follow an illegal order, even if the President issued it.[59] In the words of General John Hyten, "every year I get trained in the law of armed conflict. And the law of armed conflict has certain principles and necessities, distinction, proportionality, unnecessary suffering. … You could go to jail for the rest of your life. It applies to nuclear weapons."[60]

To conclude, the gradual endorsement of LOAC as applicable to nuclear weapons changed the ideas of officials involved in articulating the US nuclear posture through successive NPRs, hastening and solidifying the adoption of a counterforce only posture, which is now perceived as synonymous with a legal posture. While the adoption of the current posture had other pull factors besides legalization, its perception as irreversible and connected to professional identities cannot be understood without recourse to internalized legalization: if you advocate for counter-value targeting in the traditional understanding you are a monster. Of course, actors that responded to the diffusion of LOAC in the professional structures that surround them with acculturation rather than a deep internalization of fidelity to law, may well change their ideas about both the law and counter-value targeting if those structures around them changed to repudiate the applicability of LOAC or its importance under an administration that places less value on compliance with the law. Neither legalization nor a counterforce posture is in fact irreversible.

Nuclear Plans: Two Evasions of Law and Three Real Effects

What were the effects of the gradual acceptance of the customary LOAC principles on US nuclear targeting plans? Before the 1990s, the effect was minimal at best, despite instances of policy makers grappling with law. In 1973, according to George Bunn, the legal counsel to the US Arms

[58]Interviews 2 with a former government official who was involved in the nuclear posture review process.
[59]See Statement of C. Robert Kehler, Senate Armed Services Committee (14 November 2017) https://www.foreign.senate.gov/imo/media/doc/111417_Kehler_Testimony.pdf; and General John E. Hyten, "2017 Halifax International Security Forum Plenary 2 – Nukes: The Fire and the Fury" forum, Halifax, Nova Scotia, Canada (18 November 2017), Halifax International Security Forum, https://halifaxtheforum.org/wp-content/uploads/2017/11/HISF-2017-Transcript.Plenary-2.Nukes-The-Fire-and-the-Fury.pdf (henceforth Hyten, "Halifax Forum").
[60]Hyten, "Halifax Forum."

Control and Disarmament Agency, "US targeting plans were revised to exclude what are called "population per se" targets. This was done in part because State Department lawyers thought international law so required."[61] However, declassified documents reveal that this 1970s change in declaratory policy was mere window-dressing: "The current change in employment policy removes populations per se from the list of objective targets. This change can be used to clarify the public record in this regard and reduce the moral onus associated with US nuclear doctrine."[62] At the same time, the guidance ordered the military to target at least one industrial site inside each of the largest 250 Soviet and 125 Chinese urban areas which led to an increase in the number of urban targets in US war plans.[63] Indeed, since 50% of Chinese industry was concentrated in only 25 cities, the guidance led to both *more* expected collateral civilian damage and *less* destruction of war supporting industry, a realization that caused this particular distribution requirement to be dropped.[64] Walter Slocombe, later US Under Secretary of Defense, acknowledged that the "[m]assive attacks on industrial targets, transportation, and material resource targets … would not be distinguishable from attacks on the population as such."[65] In short, law was considered in a way that brought nuclear targeting no closer to meeting legal demands such as minimizing expected civilian deaths.

The history of "urban withholds" in nuclear targeting provides a second example of early attempts to legalize nuclear planning which did not lead to actual changes that would have improved conformity with law—in this case due to resistance from military planners. In the 1980s, civilian policymakers requested a nuclear option to withhold initial attacks on Soviet targets, including military targets, inside cities to increase the likelihood that the Soviet leadership might end a war without escalation to wide-spread mutual civilian destruction. According to Secretary of Defense Casper Weinberger, the no targeting of civilian targets was "intended primarily to cause our nuclear war plans to conform to Western morality," while

[61]George Bunn, "US Law of Nuclear Weapons," *Naval War College Review* 37, no. 4 (1984): 58.
[62]"Memorandum for the President," Subject: Policy for Planning the Employment of Nuclear Weapons, Office of the Secretary of Defense, U.S. Department of Defense, 29 January 1975), 3. https://nsarchive.gwu.edu/sites/default/files/documents/6895270/National-Security-Archive-Doc-22-Office-of.pdf#page=18.
[63]Nuclear Targeting Policy Review, November 1978, p viii, https://nsarchive.gwu.edu/document/19355-national-security-archive-doc-28-u-s-department. Analysis of Targets Pursuant to US Nuclear Policy, NSDM 242. https://www.archives.gov/files/declassification/iscap/pdf/2012-037-doc01.pdf.
[64]Nuclear Targeting Policy Review, November 1978, p viii, https://nsarchive.gwu.edu/document/19355-national-security-archive-doc-28-u-s-department. Analysis of Targets Pursuant to US Nuclear Policy, NSDM 242. https://www.archives.gov/files/declassification/iscap/pdf/2012-037-doc01.pdf.
[65]Walter Slocombe, "Preplanned Operations," in *Managing Nuclear Operations*, ed. Ashton B. Carter, John D. Steinbruner, and Charles A. Zraket (Brookings Institution Press, 1987), 129.

the urban withhold policy was designed to control escalation.[66] In the late 1980s, however, Franklin Miller discovered that "the instruction to provide a presidential withhold for selected urban areas had been interpreted in such a way that 'urban area' was defined as part of a city where 95 percent of the population resided, thereby opening up most of the city center (dominated by government buildings rather than residences) to attack."[67] This bureaucratic maneuver by Strategic Air Command planners undercut the civilian authorities' escalation control strategy. It also challenged the principle of distinction, since many government buildings are not military objectives.

In contrast to these early examples of legalization without effect, both leaps in the institutionalization of legal advice and review in STRATCOM planning in the mid-1990s and in 2011 had the expected real effects. Open-source evidence suggests that legal advice first and foremost elevated concerns about collateral damage.[68] The principle of precautions demands the minimization of expected incidental civilian harm as much as "feasible" in direct tension with early-Cold War nuclear targeting doctrine which had sought to maximize deaths among the adversary civilian population. A declassified STRATCOM document written by Dunlap provides a critical example of the principle of precautions influencing nuclear plans: During GLOBAL GUARDIAN 97, the strategic nuclear exercise, senior officials picked a legitimate military target for a limited US nuclear attack, but the STRATCOM planners recommended that a specific nuclear warhead and delivery vehicle be employed, to reduce collateral damage in compliance with the principle of precaution.[69]

In a similar vein, Kehler later wrote that one of the substantive changes made in response to the sharpened demand to integrate law into nuclear planning by the Obama administration was to "expand non-nuclear strike alternatives and add significant flexibility to our contingency plans.…In addition to applying tactics and techniques to minimize collateral effects, planners examined opportunities to create the intended effect with conventional weapons."[70] This is an important public explanation of *how* LOAC influenced nuclear target plans: reducing collateral damage through delivery tactics as demanded by the principle of precaution and replacing some

[66]Memorandum for the Chairman, JCS, Collateral Damage Restraint, 12 November 1985. https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/MDR_Releases/FY18/FY18_Q4/Collateral_Damage_Restraint_12Nov1985.pdf.
[67]Franklin C. Miller, "Establishing the Ground Rules for Civilian Oversight," in *Managing US Nuclear Operations in the 21st Century*, ed. Glaser et al., 61 (see footnote 4).
[68]Charles J. Dunlap, Jr., "Taming Shiva: Applying International Law to Nuclear Operations," *The Air Force Law Review* (1997): 165.
[69]Dunlap, "Memorandum," 11.
[70]C. Robert Kehler, "Nuclear Weapons and Nuclear Use," *Daedalus* 145, no. 4 (2016): 57, 59.

nuclear plans with conventional alternatives given their better projected consequences for civilians.

A second effect of LOAC that we expected was a narrowing of available targets. We uncovered such a change concerning industry targeting. LOAC requires that only adversary's industry is targeted that "makes an effective contribution to military action" in line with the customary definition of military objectives. During the 1970s and 1980s, the "deterrence requirement" to destroy the adversary's "economic base needed to sustain a war" had been replaced with the narrower requirement to destroy "the industrial ability to wage war," which still includes many targets that do not make an effective contribution to military action.[71] Reagan's National Security Decision Directive 13 mentioned "industrial facilities which provide immediate support for military operations," which better reflects the legal definition of a military objective.[72] However, separately NSDD 13 demanded that pre-planned attack options include "[t]he industrial/economic base of the Soviet Union (and its allies)." This broad understanding of the industry target set was eventually contested. According to one official involved in Presidential Decision Directive/NSC 60 of 1997 "the lawyers came back and said, we have a problem with this language.…It was the view of the lawyers, that the definition of war supporting industry meant war supporting industry. It did not mean the broad economic, industrial base."[73]

A third example of the effect of LOAC on US nuclear plans is the gradual inclusion of radioactive fallout in proportionality considerations. The 1995 JCS guidance document on *Joint Nuclear Operations* simply required that US forces "will limit collateral damage consistent with employment purposes and desired effect on the target."[74] The 2019 JCS *Nuclear Operations* guidance, however, was more directive, stating that "the law of war governs the use of nuclear weapons," listing "intensity of the blast wave, thermal effects, radiation" among the considerations that should influence weapons' yield selection, and noting that a "higher HOB [Height of Burst] may be selected to alter the weapons effects footprint or to avoid the production of fallout."[75] The guidance also requires that commanders "must ensure their staff judge advocate is involved in nuclear operations planning and targeting processes."[76]

[71] See Sagan, *Moving Targets*, 10–57.
[72] One way to interpret "effective" is in terms of immediacy.
[73] Interview 9.
[74] Joint Publication 3–12. Doctrine for Joint Nuclear Operations, 15 December 1995, II-6. https://www.nukestrat.com/us/jcs/JCS_JP3-12_95.pdf.
[75] Joint Publication 3–73, Nuclear Operations, 11 June 2019, III-3-4, https://irp.fas.org/doddir/dod/jp3_72.pdf.
[76] Id, III-4.

To conclude, the acceptance of the applicability of customary LOAC to nuclear weapons first failed to lead to real changes in targeting that would have brought the US nuclear posture in closer conformity with substantive legal demands such as the minimization of expected civilian deaths or the direction of attacks against military objectives only. In contrast, the institutionalization of legal advice and review in nuclear planning in the mid-1990s and under President Obama had discernible effects on US nuclear plans, spotlighting the legal demands to minimize expected civilian deaths and to distinguish between the broad industrial base of the enemy and their war-supporting industry.

The Effects of Nuclear Ideas and Plans on US LOAC Interpretation

Thus far, we have showed that legalization changed nuclear ideas, helped shift the US nuclear posture toward counterforce only targeting via internalization and, in line with expectations, had concrete effects on nuclear plans. However, during our research we also found evidence that ideas about nuclear deterrence and use shaped the US position on LOAC. The DoD Law of War manual, for example, references nuclear weapons doctrine when explaining the US positions on the interpretation of "specially affected states," "contrary practices" for "persistent objectors," the "superfluous injury rule," and what is (and is not) "excessive incidental harm."[77] In addition, in public writing and our interviews, we uncovered how two "creeds" about the requirements of nuclear deterrence remain in tension with distinction, and how beliefs about the features of nuclear use challenge proportionality. US deviations from the standard interpretations of distinction and proportionality, in turn accommodate these two creeds and ideas.

Deterrence Requires Targeting the Adversary's "Political Control"

Former officials stress that "there is remarkable consistency in US nuclear plans from shortly after the beginning of the nuclear age all the way up to today."[78] According to Franklin Miller, plans have long focused on "four canonical target sets": first, nuclear forces or WMD infrastructure; second, (conventional) military forces; third, war supporting industry or infrastructure; and fourth, the adversary's "military and political leadership."[79] Distinction requires that each attack is directed against a military objective.

[77]U.S. Department of Defense, Law of War Manual, 32–33, 368–69, and 375.
[78]Interview 5.
[79]Interview 7 with Franklin Miller.

According to Protocol I, a military objective is an object which by its "nature, location, purpose or use" makes "an effective contribution to military action." The first two target sets undoubtedly comply with distinction as they comprise military objectives by nature. Whether the second two target sets comply with distinction depends on how they are interpreted. We showed in the aforementioned that the war supporting industry target set has shrunk in response to demands of LOAC, but we will show here that the belief persists among many defense officials that for effective deterrence the United States needs to hold at risk not just leaders that are legitimate targets due to their military command roles, but also a wider set of persons and objects—the "political control apparatus" of the adversary's state. This target set includes objects with a looser connection to military action than the "effective contribution" required by LOAC.

Legally, civilian political leaders are not legitimate targets, unless they are integrated into the chain of command and are hence combatants. The DOD Law of War Manual has a restrictive definition: "Leaders who are not members of an armed force or armed group (including heads of State, civilian officials, and political leaders) may be made the object of attack if their responsibilities include the operational command or control of the armed forces. …Planning or authorizing a combat operation is an example of taking a direct part in hostilities."[80] The infrastructure that such leaders rely on for command and control also often counts as a military objective since it makes an effective contribution to military action and its targeting will usually afford a definite military advantage. As early as 1974, however, US nuclear targeting guidance called for holding at risk a much broader set of "internal political control" capabilities, including both persons and objects: "Destroy the political leadership of the enemy, its control resources, and its military command structure to the extent necessary or practicable in order to neutralize its ability to engage in effective warfare and *to exercise internal political control*."[81] This inclusion of internal political control infrastructure was caused in part by US and UK Cold War intelligence assessments that discovered several hardened and deeply-buried "leadership" bunkers in the Soviet Union designed to protect an estimated 175,000 Communist Party and government personnel.[82] This led to a wide-spread view in the US government, though there were dissenting views, that, as Richard Pipes put it, "the Soviet Union thinks it can fight and win a nuclear war."[83]

[80]U.S. Department of Defense, Law of War Manual, 233.
[81]Policy Guidance for The Employment of Nuclear Weapons, 3 April 1974, 4, emphasis added. https://nsarchive2.gwu.edu/NSAEBB/NSAEBB173/SIOP-25.pdf.
[82]See Sagan, *Moving Targets*, 50–52 and 81–82 and Steve Fetter and Sébastien Philippe, "Distinction Without a Difference: The UK Shift from Population to Leadership Nuclear Targeting," in this special issue.
[83]Richard Pipes, "Why the Soviet Union Thinks It Can Fight and Win a Nuclear War," *Commentary*, July 1977. For the debate on this issue inside the CIA see "Moscow's View on Victory in General Nuclear War" ND.

Fifty years later, the belief persists that deterrence requires holding at risk broader political rather than just military command and control objects as well as political leaders not integrated into the chain of command. Franklin Miller for example argued that "deterrence means holding at risk targets that communicate to the adversary leadership that the State at the end of the day (after a nuclear war) will not be there. You won't be there as a person. The support network you have, all of those organs you rely upon to run your country will not exist.…It is the elements of Chinese State power. It is the elements of Russian State power. We say to the Dictator: that state which you hope to emerge from the rubble with, won't exist." When asked whether government lawyers ever questioned this approach as a potential challenge to distinction, Miller answered in the negative.[84] Miller has also written that "Since effective deterrence requires targeting what potential enemy leaders value, we must be able to threaten, separately and in combination, both Russia's and China's key assets—including their leaders' ability to command and control the state."[85] The 2023 Final Report of the Strategic Posture Commission likewise stresses that "the most effective deterrent … means holding at risk key elements of their [China's and Russia's] leadership, the security structure maintaining the leadership in power."[86]

Can the United States have it both ways, argue that nuclear plans comply with distinction and target the adversary's means of political (rather than just military) control? The Protocol's definition of a military objective as defined by an effective contribution to military action appeared verbatim in US conventional targeting manuals.[87] Nevertheless, the United States has long maintained that objects with a looser nexus to military action than "an effective contribution" can count as military objectives, namely those that are "war-sustaining," which broadens the category to include political control capabilities. The US Law of War Manual defends war-sustaining as a way in which an object can make an effective contribution to military action.[88] There are several examples of the United States relying on this looser definition of military objectives in conventional targeting. In 2003, during Operation Iraqi Freedom, one target set sought "the suppression of the regime's ability to command Iraqi forces and *govern*

[84]Interview 7 with Franklin Miller.
[85]Franklin C. Miller, "Outdated Nuclear Treaties Heighten the Risk of Nuclear War," *Wall Street Journal*, 21 April 2022. Also see Keith Payne, John Harvey, Franklin Miller, and Robert Soofer, "The Rejection of Intentional Population Targeting for Tripolar Deterrence," *Real Clear Defense*, 23 September 2023.
[86]Congressional Commission on the Strategic Posture of the United States, *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Alexandria VA: Institute for Defense Analysis 2023), 30. https://www.ida.org/-/media/feature/publications/a/am/americas-strategic-posture/strategic-posture-commission-report.ashx
[87]Department of the Army, The Law of Land Warfare, Field manual FM 27-10 (1956/1976), para 40 c), 5. The relevant provision is not listed among those amended in 1976.
[88]U.S. Department of Defense, Law of War Manual, 296.

the State [emphasis added]."[89] In a war seeking regime change, party head-quarters and civilian political structures sustain the war though they do not make an effective contribution to military action.[90] The United States also targeted poppy crops of the Taliban and the cash of the Islamic State of Iraq and Syria (ISIS), likewise with the argument that these objects "sustained" the war.[91]

International lawyers and other states are critical of the United States' argument that war-sustaining objects are military objectives. The International Law Association maintains that "[t]here is no indication in State practice that objects contributing to the enemy's war-sustaining effort qualify as such as military objectives."[92] Marco Sassoli argues that "to include 'war-sustaining capability' means to abandon the limitation to military objectives, and to admit attacks on political, financial … and psychological targets, as long as they influence the possibility or the decision … of the enemy to continue the war."[93] Janina Dill has defended a "one-causal step theory" of distinction according to which the contribution to military action an object makes is "effective" for the purposes of LOAC only if it materializes in one causal step, which is not the case for most targets that merely "sustain" the capacity of a belligerent to continue fighting such as the "elements of state power."[94] In contrast, Ryan Goodman argues that the "United States has now made clear that war-sustaining objects are a subset of the standard definition of military objectives,"[95] tracing the position back to attacks against the cotton supply of the Confederacy.[96]

While the term and US practice are indeed long-standing, it remains doubtful that the principle of distinction is able to put any part of a society's economy or political apparatus off limits when interpreted in this way, which puts this interpretation in tension with the object and purpose

[89]T. Michael Moseley, *Operation Iraqi Freedom: By the Numbers* (Washington DC: U.S. Department of Defense Assessment and Analysis Division, 2003), at 4f, https://www.globalsecurity.org/military/library/report/2003/uscentaf_oif_report_30apr2003.pdf; also Gregory Fontenot, E. J. Degen and David Tohn, *On Point: The United States Army in Operation Iraqi Freedom* (CreateSpace Independent Publishing Platform, 2005).

[90]See Dill, *Legitimate Targets*.

[91]Iulia E. Padeanu, "Accepting that War-Sustaining Objects are Legitimate Targets under IHL Is a Terrible Idea," *Yale Journal of International Law* (2017); Michael E. Schmitt and Eric W. Widmar, "On Target" Precision and Balance in Contemporary Law of Targeting," *Journal of National Security Law and Policy* 7 (2014): 379–409.

[92]International Law Association, "The Conduct of Hostilities and IHL: Challenges in the 21st Century," *International Law Studies* 93 (2017): 322–71, 341.

[93]Marco Sassoli, "Targeting: The Scope and Utility of the Concept of "Military Objectives" for the Protection of Civilians in Contemporary Armed Conflicts," in *New Wars, New Laws? Applying Laws of War in 21st Century Conflicts* (Brill Nijhoff, 2005), 181–210; similar Frits Kalshoven, "Noncombatant Persons," in *The Law of Naval Operations*, ed. Horace B. Robertson, Jr. (Newport, RI: Naval War College Press, 1991), 70.

[94]Dill, *Legitimate Targets*, 121ff.

[95]Ryan Goodman, "The Obama Administration and Targeting 'War-Sustaining' Objects in Non-International Armed Conflict," *The American Journal of International Law* 110, no. 4 (2016): 663–79.

[96]Horace B. Robertson," The Principle of the Military Objective in the Law of Armed Conflict," *United States Air Force Academy Journal of Legal Studies* 8, no. 35 (1997): 50–51.

of the principle of distinction.[97] Targeting political control as a war-sustaining object is arguably even more problematic for the law's regulative and protective capacity than targeting war-sustaining industry: differentiation between an adversary as a state (and its political power) and the adversary as a belligerent (and its military power) is what the very project to limit war through law rests on. The United States acknowledges that its position on distinction among objects is an international outlier. The Commander's Handbook on the Law of Naval Operations cautions that "Commanders participating in coalition operations should be aware that some allies and partners do not believe war-sustaining objects are military objectives."[98]

Deterrence Requires the Expectation of Catastrophic Civilian Harm

Although the belief that directly targeting whole cities is beneficial for deterrence is now hard to find, the belief that deterrence requires an expectation of catastrophic civilian harm persists. Robert Soofer, a senior Trump administration official leading the 2018 NPR, stated that "any use, large-scale use of nuclear weapons, actually, even, probably small-scale nuclear weapons, is going to cause tremendous harm and destruction but that is what creates a deterrent effect." Franklin Miller testified to Congress in 2021 that "Our policy and programs seek to make clear to a potential aggressor that there will be no winners in a nuclear war and that an act of aggression against us or our allies risks escalation to nuclear war and the destruction of the aggressor's homeland."[99] In 2025, Gregory Weaver listed the following as an argument against targeting only an adversary's war-supporting industries: "Targeting adversary defense industrial infrastructure in accordance with the Law of Armed Conflict will do far less damage to adversary civil society and economic infrastructure than the deliberate targeting of these assets…"[100]

Senior military leaders also embrace this creed. In 2018, STRATCOM commander General Kevin Chilton, stated that the fear of the effects of nuclear fallout against civilian populations was "essential for deterrence." "This argument [that many nuclear targets could be destroyed with conventional weapons] does not appreciate the "long, dark shadow" cast by

[97]For this argument, see Janina Dill, "The 21st Century Belligerent's Trilemma," *European Journal of International Law* 26, no. 1 (2015): 83–108.
[98]*The Commander's Handbook on the Law of Naval Operations*, March 2022, 7–6. https://usnwc.libguides.com/ld.php?content_id=66281931.
[99]Frank C. Miller, "United States Nuclear Deterrence Policy and Strategy," *Senate Armed Services Committee: Strategic Forces Subcommittee*, 28 April 2021.
[100]Greg Weaver, "The Role of Counterforce Targeting in Alternative Strategies for the Two-Peer Threat Environment," in *Counterforce in Contemporary U.S. Nuclear Strategy*, ed. Brad Robert (Lawrence Livermore National Laboratory, 2025), 111.

the destructive power of nuclear weapons and the deterrent effect that "shadow" enables. … Imagining this destructive power combined with the effects of nuclear fallout from a single warhead that can be delivered within 30 minutes of launch produces the kind of fear in our adversaries that is essential for deterrence."[101] A 2022 statement of former STRATCOM commander General Robert Kehler follows a similar logic: "I was concerned that increasingly restrictive constraints and legal interpretations appropriate to conventional war may not be achievable (or desirable, if carried to extremes) when applied to nuclear weapons and their unavoidable collateral effects. The risk associated with those collateral effects is a major factor which contributes to deterrence."[102]

If the civilian harm that a nuclear strike is expected to cause is necessary for deterrence, and this expectation is part of the rationale for choosing a target, that is, causing civilian harm is an animating purpose of the attack, would the attack not violate distinction? API expresses the principle of distinction without references to intent, but the prohibitions against "directing" an attack against civilians or making them "the object" of attack are generally understood as prohibiting intentionally harming civilians. In this reading, a violation of distinction means purposively engaging in an attack that the attacker knows (or should know) to be directed against a civilian object or person. A violation of distinction does not require that civilian casualties are brought about with purpose.[103] However, as Tom Dannenbaum and Janina Dill have argued, an "attack that is directed against a military object but has the purpose to harm proximate civilians would be directed at *both* the military objective (as the target) and the civilians (whose harming is one of the attack's animating purposes); neither would be harmed 'incidentally.'"[104] International criminal jurisprudence supports that attacks on both civilian and military targets are attacks directed against both in violation of distinction.[105] A target chosen for the deterrence value of the civilian harm that it is expected to cause therefore violates distinction.

Can the United States have it both ways, claiming to comply with distinction and build its deterrence strategy around the expectation of catastrophic civilian harm? Only by conceiving of intent in overly narrow

[101]Kevin P. Chilton, "Defending the Record on US Nuclear Deterrence," *Strategic Studies Quarterly* 12, no. 1 (2018): 12–21, 13.
[102]Kehler, "Commanding Nuclear Forces," in *Managing US Nuclear Operations in the 21st Century*, ed. Glaser et al., 150 (see footnote 4).
[103]Tom Dannenbaum and Janina Dill, "International Law in Gaza: Belligerent Intent and Provisional Measures," *American Journal of International Law* 118 no. 4 (2024): 659–83.
[104]Jens David Ohlin, "Targeting and the Concept of Intent," *Michigan Journal of International Law* 35, no. 1 (2013): 79–130, 85.
[105]Compare: *Prosecutor v. Ntaganda*, ICC-01/04-02/06-2666 (March 30, 2021), paras 418, 424, 491; *Prosecutor v. Katanga*, ICC-01/04-01/07 (Mar. 7, 2014), para. 802.

terms which count merely the "primary" purpose of an action as intended, discounting consequences that are also foreseen and sought as unintended, if they are secondary. The first recorded example of this overly narrow understanding of prohibited purpose harks back to the early 1970s when, as mentioned above, the United States declared it was not targeting "populations per se" but still relied on large scale civilian harm to prevent an enemy's recovery. The 1974 Memorandum on Nuclear Weapons Policy stated: "It is not the intent of this guidance to target civilian population per se."[106] However, the same document states that "[a] very important *purpose* of attacks on urban, industrial, political, and economic base of the Soviet Union and the People's Republic of China … is to minimize the strategic power and influence of these countries in the postwar era and to prolong their postwar recovery (emphasis added)."[107] Without "substantial damage to residential structures and populations" (acknowledged as foreseen), these attacks would not have achieved their *stated* purpose (retarding recovery), making that damage very much intended.

This narrow conception of intent is operational also in US legal doctrine on conventional targeting. Legal majority opinion holds that targeting the will of enemy combatants is permitted, but attacks against the morale of the civilian population or civilians' will to support the war are prohibited.[108] Article 51(2) of the Protocol states that "the civilian population as such, as well as individual civilians, shall not be the object of attack. Acts or threats of violence the primary purpose of which is to spread terror among the civilian population are prohibited." Somewhat confusingly this provision mentions the "primary purpose." There is no indication, however, that this should be understood as generally the right interpretation of what it means to intend to attack the civilian population. The Commentary to the Protocol flatly states that "the Conference wished to indicate that the prohibition [against targeting civilians] covers acts intended to spread terror."[109]

The US Law of War Manual seemingly affirms the interpretation that civilian morale is not a military objective: "Diminishing the morale of the civilian population and their support for the war effort does not provide a definite military advantage." However, the Manual then cites a statement

[106]"Memorandum for General Scowcroft, Nuclear Weapons Employment Policy" (Office of the Secretary of Defense, U.S. Department of Defense, 10 April 1974). https://nsarchive.gwu.edu/sites/default/files/documents/6895270/National-Security-Archive-Doc-22-Office-of.pdf#page=18.
[107]U.S. Department of State Office of the Historian, "National Security Decision Memorandum 242."
[108]Marco Sassòli, "Legitimate Targets of Attacks under International Humanitarian Law," *HPCR Policy Brief* (2003).
[109]Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims and International Armed Conflicts (Protocol I), 8 June 1977, Commentary of 1987, 618, para 1940. https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-51/commentary/1987?activeTab=undefined.

by Judith A. Miller, former General Counsel to the Department of Defense, about targeting during Operation Allied Force in 1999, which leaves the door open to targeting civilian morale after all: "I will readily admit that, aside from directly damaging the military electrical power infrastructure, NATO wanted the civilian population to experience discomfort, so that the population would pressure Milosevic and the Serbian leadership to accede to UN Security Council Resolution 1244, but the intended effects on the civilian population were secondary to the military advantage gained by attacking the electrical power infrastructure."[110] Not only is "discomfort" of the civilian population foreseen and desired (instrumental to achieving the purpose of the attack), Miller in fact casts it as "intended," just an intended effect among other intended effects. Former Navy JAG Michael Schmitt similarly argues that intended effects of an attack on the civilian population, specifically its morale, can be discounted if the attack also has a proper military purpose.[111]

The interpretation of distinction as fulfilled if one of several foreseen and sought effects of an attack is military, even if one forseen and sought effect is terrorizing or killing civilians likely robs the principle of its power to limit warfare. Seperately, in the wider context of criminal law suggesting that killing civilians for the purpose of deterrence is unintended would also be plainly absurd. Imagine a defendant in a murder case argued that the primary purpose of killing their spouse was to spend the inheritance on a noble cause. The fact that the victim, whom he or she disliked, would also be dead was merely a foreseen and sought secondary effect, but not intended; or, if it was intended, it was not relevant for the purposes of the murder charge because it was secondary (though necessary and welcomed) to the main intended purpose of supporting a worthy cause. In criminal law terms the death of the spouse would be the predicate purpose. We would hardly allow it to be discounted as unintended. Yet, on one reading, US LOAC doctrine allows civilian casualties, which are fully expected and a "required" consequence of nuclear use for the purpose of deterrence to be discounted as unintended.

How Can Nuclear Strikes Be Proportionate?

The first creed was that the United States must target the adversary's political apparatus for effective deterrence, which makes catastrophic civilian casualties inevitable. The second creed was that this expectation of

[110]Judith A. Miller, Commentary, *U.S. Naval War College International Law Studies* (2002), 78, 102, 110.
[111]M.N. Schmitt, *Fault Lines in the Law of Attack* (TMC Asser Press, 2012), 175–205, 285. See also Stephen T. Hosmer, *Why Milosevic Decided to Settle When He Did* (Santa Monica, CA: RAND Corporation, 2001).

catastrophic civilian casualties is required for deterrence, which makes it intended. Of course, if someone contested our interpretation of intentionality and asserted that US targeting does not in that sense challenge distinction, they would still have to account for how these planned nuclear strikes can, in expectation, be proportionate. The principle of proportionality demands that expected "incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof" is not excessive in relation to the "concrete and direct military advantage" to be anticipated from an attack. Estimating the civilian harm caused by a nuclear strike, even one against military objects narrowly conceived, is difficult and estimates are contested. Yet, estimated fatalities can range into the tens of millions, depending on targeting, long-range environmental effects, and fallout assumptions.[112] Can such nuclear strikes be proportionate? There is a debate on this question, which we do not seek to settle here.[113] But we do note that the current US LOAC interpretation includes two moves that make an affirmative answer to the question appear more plausible.

The first move is to define "civilian harm" narrowly, counting immediate casualties while excluding those caused by long-term fallout and broader environmental and societal impacts of nuclear use. While the 2019 JCS targeting guidance requires that commanders consider fallout and radiation effects in selecting the yield and the height of burst of weapons, it says nothing about long-term versus immediate effects.[114] A declassified 2018 STRATCOM directive, however, clearly states: "The expected loss of civilian life, injury to civilians and damage to civilian objects is generally understood to mean such immediate or direct harm foreseeably resulting from the attack. Remote harms that could result from the attack do not need to be taken into consideration."[115] This echoes the DOD Law of War Manual distinction between direct/immediate and remote harms.[116] The central problem is that large-scale fatalities from radioactive fallout would be both immediate/direct and longer-term/remote.

The US position is in tension with dominant understandings of proportionality. While subject to some debate, "may be expected" is generally taken

[112]See Sébastien Philippe and Ivan Stepanov. "Radioactive Fallout and Potential Fatalities from Nuclear Attacks on China's New Missile Silo Fields," *Science and Global Security* 31, no. 1–2 (2023): 315.
[113]Sagan and Weiner, "Rule of Law," 146–50.
[114]Joint Publication 3–73, Nuclear Operations, 11 June 2019, https://irp.fas.org/doddir/dod/jp3_72.pdf
[115]"LOAC and Targeting," Briefing Slides, STRATCOM JAG, 14 May 2018, 27 (Slide 14): https://nautilus.org/wp-content/uploads/2025/05/NISS-GW-09192018-1a-aka-19-006-USSTRATCOM-JAG-Legal-manuals-rotated-REDACTED.pdf.
[116]U.S. Department of Defense, Law of War Manual, 270. "The exclusion of remote harms is based on the difficulty in accurately predicting the myriad of remote harms from the attack…as well as the primary responsibility of the party controlling the civilian population to take measures to ensure that population's protection."

to mean more than the first order immediate consequences of an attack. It includes harms that are reasonably foreseeable even if they are not immediate effects. "The ICRC has expressed the view that reverberating effects that are foreseeable in the circumstances must be taken into consideration in the proportionality assessment of an attack."[117] Of course, what is reasonably foreseeable, particularly of a weapon that is rarely if ever used, almost entirely depends on the effort states put into modeling strike scenarios. The US Law of War Manual excludes remote harms in part based on the difficulty of accurately predicting them, which adds urgency to the question to what extent the United States can accurately predict long-term fallout and environmental damage, including nuclear winter, from nuclear use. While scholars and non-governmental organizations have steadily advanced their understanding of the long-term consequences of nuclear use, it appears the United States government has not fully used those findings. One former official suggested that the US government has deliberately avoided studying the longer-term effects of nuclear use.[118] A 2023 National Academy of Sciences report warns that STRATCOM does not currently have the information to perform proper assessments of collateral damage, particularly of casualties from "fires; damage in modern urban environments; electromagnetic pulse effects; and climatic effects, such as nuclear winter."[119]

The proportionality principle also requires an assessment of the "concrete and direct military advantage" anticipated to result from a nuclear strike. Many potential nuclear targets can be destroyed also with conventional weapons at systematically lower civilian costs. The second move is that former government officials in interviews repeatedly stated that the military advantage of a nuclear strike for the purpose of proportionality would not primarily be the destruction of the targeted capabilities, but "the restoration of deterrence."[120] "You are applying it [proportionality] to restoring deterrence, because you're saying my objective is to make the other guy stop using nuclear weapons; you're actually conducting a strike with an objective of convincing him to stop,"[121] one official argued. "Restoring deterrence" is obviously significantly weightier an advantage than the destruction of any specific military capability, making it more likely that a particular nuclear attack option appears proportionate.

[117]International Committee of the Red Cross; ICRC, *International Expert Meeting Report: The Principle of Proportionality* (Quebec, June 2016), 45.
[118]Interview 2.
[119]National Academies of Sciences, Engineering, and Medicine, *Risk Analysis Methods for Nuclear War and Nuclear Terrorism* (Washington, DC: The National Academies Press, 2023). https://doi.org/10.17226/26609. Also see National Academies of Sciences, Engineering, and Medicine, *Potential Environmental Effects of Nuclear War* (Washington, DC: The National Academies Press, 2025). https://doi.org/10.17226/27515.
[120]Interview 4 with Robert Soofer and interview 7.
[121]Interview 6.

The desire to restore deterrence is a potentially legitimate strategic goal in a limited war, but it is a deeply problematic measure of the military advantage for a specific attack. Understanding "restoring deterrence" as the concrete and direct military advantage in the proportionality calculation raises thorny doctrinal questions. The Commentary to Protocol I states that "military advantage can only consist in ground gained and in annihilating or weakening the enemy armed forces."[122] Sending "a message to the adversary's leadership to stop" is something quite different. An ICRC expert guidance on the principle of proportionality avers that "the experts considered deterrence in the same manner [as messaging to the adversary's leadership]. It was cautioned that deterrence is an open-ended concept, much of which has nothing to do with a concrete and direct military advantage."[123] Of course, "restoring deterrence" can be reframed as "saving American or allied civilian lives," lives that would be lost in the adversary's nuclear strike that restored deterrence prevents. There is a legal debate about whether saving compatriot civilian lives counts as a concrete and direct military advantage. Morally, it is attractive for a belligerent to convert the military advantage of a planned attack into lives saved, though this raises the question how many of "their civilians" it is acceptable to kill as collateral damage in the attempt to save a specific number of "our civilians."[124]

It appears that, like the term "counterforce targeting," the term "restoring deterrence" has become a shorthand for "legally compliant" and a reason for not thinking through the legal issues involved in US nuclear doctrine, here the question of what military advantage could render proportionate potentially millions of civilian casualties. Beneath the surface of these interpretive moves to accommodate the catastrophic civilian harm that nuclear use likely causes in the confines of proportionality, lingers the belief that putting definitive limits on collateral damage is inimical to deterrence. Former STRATCOM Commander Robert Kehler cautions that [p]robably somebody could make an argument that says collateral damage is too great for the objective that you're going to achieve. Some would make that argument. My argument would be, no, I want the Russians to believe that if we begin to use nuclear weapons, that everything that they hold dear is at risk."[125] Another former official said: "I want to destroy these leadership bunkers. I can't think of any price that the people I know would consider disproportionate who would say, oh well no, you could kill a million people, but you can't kill 2 million people in response to that."[126]

[122]ICRC Commentary of 1987, para 2218.
[123]ICRC Expert Guidance on the Interpretation of the Principle of Proportionality.
[124]Moral philosophers tend to think of this as the correct way of determining the proportionality of violence. See for instance Adil Haque, *Law and Morality at War* (Oxford, UK: Oxford University Press, 2017).
[125]Interview 5.
[126]Interview 2.

Is Law "the Destroyer of Worlds"?

Our analysis in the third section suggests three ways in which US nuclear plans could better meet legal requirements: first, by narrowing the definition of military objectives to exclude political control capabilities without military command-and-control functions; second, by broadening the understanding of intent by renouncing civilian casualties as a purpose and to assiduously minimize foreseeable civilian harm; and third, by developing better models of long-term effects of nuclear use and integrating those effects into proportionality calculations.[127] If the United States took these steps, it would not embrace new legal obligations, but more rigorously implement principles that the United States has embraced but understood differently from how they are cast in the treaty that codifies their now customary versions.[128] The key question is how to access the costs and benefits of taking such steps. Here we present the case for why the United States *should* take these steps.

We argued that the United States misinterprets LOAC partly to accommodate what officials believe to be requirements of effective deterrence and likely features of nuclear use. Would giving up these legal interpretations not then weaken deterrence? Charles Glaser, Steve Fetter, and James Acton claim that applying international law to nuclear doctrine has already weakened deterrence because LOAC precludes more traditional counter-population targeting and encourages what they consider "destabilizing" counterforce targeting.[129] But they conflate "counterforce" targeting with "counter-nuclear" targeting, and assume that targeting an enemy's nuclear forces increases the likelihood of war through what Thomas Schelling called "the reciprocal fear of surprise attack." Nuclear crisis "instability" and false warning problems are legitimate concerns. Still, the fact that counterforce targeting has been dominant for so many years without leading to nuclear war should at least raise doubts about whether following LOAC automatically increases the risk of war through such pathways.

Moreover, when the Obama Administration contemplated issuing negative security assurances about not using nuclear weapons against non-nuclear states even if they used chemical or biological weapons (CBW), many strategists feared that this would weaken deterrence. The 2010 NPR nonetheless contained such assurances and coupled them with a threat of

[127] An interpretive clarification about what a "concrete and direct" military advantage of a nuclear strike looks like for the purpose of the proportionality analysis may likewise be required.
[128] See *Just Security* for a series of posts discussing discrepancies between customary law and the U.S. Law of War Manual, https://www.justsecurity.org/tag/law-of-war-manual/.
[129] Glaser et al., "Legal but Lethal."

a conventional response.[130] There have been no CBW attacks against the United States or its allies since 2010. Since these major declaratory steps—embracing LOAC, repudiating counter-value targeting, and eschewing nuclear use in response to some states' CBW attacks—did not weaken deterrence, it seems less likely that a narrower understanding of military objectives, a broader understanding of prohibited purpose, and a more stringent interpretation of proportionality would increase Russian or Chinese willingness to attack the United States.

The creeds that deterrence requires holding at risk the "political control apparatus" of the adversary and that it requires an expectation of catastrophic civilian harm are anachronistic. They cast Putin's Russia, Xi's China, and Kim's North Korea as Soviet-style leaders with a Communist ideology and a massive civil-defense program designed to permit the party to survive a nuclear war. Moreover, the creeds display a kind of mirror imaging, assuming that what might deter a democratic leader is what is needed to deter a personalist authoritarian dictator. Kevin Chilton's suggestion that deterrence must be based on "the long dark shadow" of threating civilian populations, for example, mirrors his assertion that holding at risk the President in the White House with a direct conventional missile attack would be a weaker deterrent to the United States than threatening to destroy Washington's civilian population with a less accurate nuclear weapon.[131]

Are authoritarian leaders not more likely to be deterred by credible threats to their own lives than by threats to their civilian populations? Since Putin, Xi, and Kim top their chains of command, they are combatants. Threating what they value does not require targeting their political control apparatus or civilian populations; neither does it hence require violating LOAC. It would be permissible to target successors in the leadership command and control apparatus, but it would not be legal nor necessary for deterrence, we believe, to target a wider set of police, party, or propaganda organizations, all of which help maintain political control, but have no military command and control functions and do not straightforwardly count as military objectives/combatants under LOAC. Although the dynamics of deterrence are impossible to predict with confidence, it is reasonable to question the creeds that imply that a better implementation of distinction and proportionality would weaken deterrence.

[130]Nuclear Posture Review, 2010, viii. https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf.
[131]Chilton, "Defending the Record," 13–14.

Moreover, if there *was* a tension between avoiding and legalizing the use of nuclear weapons, the answer to the question which one the United States should prioritize would not be obvious. Avoiding nuclear use is an urgent moral imperative, but this does not itself imply that the deterrence value of nuclear weapons should be maximized at the expense of all other morally relevant considerations. If the United States declared now that it was rejecting legal constraints to hold at risk illegal targets with nuclear weapons, as Fetter, Glaser, and Acton have advocated, this would likely have devastating knock-on effects for the ability of LOAC to constrain conventional targeting. It is conventional war which kills civilians every day in many places around the world. LOAC does not prevent all evils of conventional war, but it prevents enough to mean that undermining LOAC carries a steep moral cost. At the same time, the factual question whether any specific legal constraint on targeting emboldens adversaries or increases risks of escalation is almost impossible to answer. In short, the moral costs of eschewing LOAC are foreseeable and devastating, the moral costs of further embracing it are speculative.

Some strategists may argue that the United States should maintain its current policy of claiming to follow LOAC based on contestable interpretations. There is, however, a risk in US nuclear plans not clearly meeting the demands of distinction and proportionality. Legal ambiguities undermine deterrence credibility. Exemplifying this, President Trump tried to deter Iran from retaliating after the United States assassinated the Islamic Revolutionary Guard Corps commander in 2020 with a threat of an illegal counter-retaliation, which failed to deter Iran: He tweeted "if Iran strikes Americans, or American assets," the US has "targeted 52 Iranian sites … some at very high level and important to Iran and the Iranian culture, and those targets, and Iran itself."[132] Iran's foreign minister, Mohammad Javad Zarif tweeted back calling targeting of cultural sites a war crime.[133] Secretary of State Mike Pompeo in response stated that "We'll behave lawfully. We'll behave inside the system. We always have and we always will."[134] Even though Trump, doubled down on the illegal threat,"[135] Defense Secretary Mike Esper insisted on the US commitment to LOAC. When asked whether he would execute an illegal order, Esper responded, "as I

[132]Peter Baker and Susan Glasser. "Inside the War between Trump and His Generals," *The New Yorker*, 8 August 2022. https://www.newyorker.com/magazine/2022/08/15/inside-the-war-between-trump-and-his-generals; Laurel Wamsley, "NPR Choice Page," Npr.org., 6 January 2020. https://www.npr.org/2020/01/06/794006073/trump-says-hell-target-iran-s-cultural-sites-that-s-illegal.
[133]Javad Zarif, https://Twitter.com/JZarif/Status/1213742809095770113. Twitter. 5 January 2020. [We note that if the cultural site was used for military purposes, targeting it may not in fact be a war crime.
[134]Laurel Wamsley, "NPR Choice Page," Npr.org., 6 January 2020. https://www.npr.org/2020/01/06/794006073/trump-says-hell-target-iran-s-cultural-sites-that-s-illegal.
[135]Wamsley, "NPR Choice Page."

said the United States military will, as it always has, obey the laws of armed conflict."[136] Trump then walked back his claim that he would attack cultural sites, conceding that "If that's what the law is, I like to obey the law."[137] Iran subsequently launched 12 missiles against two US bases in Iraq.[138] The United States did not retaliate. In short, senior officials publicly rejected a president's illegal plans that also failed to deter an enemy.

This example suggests that the more members of the chain of command have internalized law or are acculturated to follow it, the more likely they are to delay or refuse a manifestly illegal nuclear launch order. Illegal threats lack "inherent credibility:" One element of uncertainty in deterrence, particularly in a democracy, is whether a launch decision will be carried out. In 2016, James Miller similarly argued that "minimizing civilian casualties if deterrence fails is both a more credible and a more ethical approach."[139] C. Robert Kehler agreed: "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."[140] In that sense, a more rigorous application of distinction and proportionality to US nuclear plans might strengthen rather than weaken deterrence.

The second potential deterrence benefit of rigorous implementation of LOAC is that a bolder US embrace could encourage actors in other states to strengthen norms constraining nuclear use. Given Russia's and China's apparent unwillingness to apply LOAC to nuclear weapons, there is little hope for direct reciprocity from US adversaries.[141] Moreover, Chinese and Russian officials may be skeptical about US claims about legal compliance, just as American officials were skeptical about Soviet and Chinese claims to follow a No-First-Use doctrine.[142] Still, in the September 2022 crisis over potential Russian nuclear use against Ukrainian cities, for example,

[136]Washington Post, "Watch Live: Defense Secretary Esper Holds News Conference at Pentagon on Iran, Iraq," 7 January 2020.[https://www.youtube.com/watch?v=iYLHaQF2tVQ&ab_channel=WashingtonPost.
[137]The New York Times. "Iran 'Concludes' Attacks, Foreign Minister Says," 7 January 2020. https://www.nytimes.com/2020/01/07/world/middleeast/trump-iran.html#:~:text=Iran%20has%20%E2%80%9Cconcluded%E2%80%9D%20its%20attacks.
[138]*The New York Times*, "Iran 'Concludes' Attacks, Foreign Minister Says," 7 January 2020. https://www.nytimes.com/2020/01/07/world/middleeast/trump-iran.html#:~:text=Iran%20has%20%E2%80%9Cconcluded%E2%80%9D%20its%20attacks.
[139]Quoted in William J. Broad and David E. Sanger, "As U.S. Modernizes Nuclear Weapons, 'Smaller' Leaves Some Uneasy," *New York Times*, 11 January 2016, https://www.nytimes.com/2016/01/12/science/as-us-modernizes-nuclear-weapons-smaller-leaves-some-uneasy.html.
[140]Kehler, "Nuclear Weapons," 51–52.
[141]See Col. Theodore Richard, "Can International Law Constrain Russian Behavior?" *Lawfare*, 8 November 2023, https://sites.duke.edu/lawfire/2023/11/08/col-ted-richard-on-can-international-law-constrain-russian-behavior and Fiona Cunningham, "Other than Law: Legitimizing China's Nuclear Strategy," in this special issue.
[142]Caitlin Talmadge, Lisa Michelini, and Vipin Narang, "When Actions Speak Louder than Words: Adversary Perceptions of Nuclear No-First-Use Pledges," *International Security* (Spring 2024): 7–46.

being able to credibly remind Russian military leaders that they would be personally responsible for executing a manifestly illegal order would surely have made Russian nuclear use less rather than more likely. Clearly articulated US positions on how distinction and proportionality apply to nuclear weapons could also encourage more detailed and serious discussions of the humanitarian consequences of nuclear war. Participation by the United States in debates regarding how nuclear use can meet LOAC demands could reinvigorate legal discourse about nuclear deterrence more broadly. In short, a new and rigorous debate is needed in an arena that is dominated by voices that seek to ban nuclear weapons use by law, ban the use of law from nuclear war plans or claim that the United States already straightforwardly complies with the law.[143]

Conclusion

This paper showed that the acceptance of LOAC's applicability to nuclear weapons and the institutionalization of legal advice and review in nuclear guidance and planning influenced the ideas of officials involved in developing the nuclear doctrine of the United States. Law thereby helped shift the US posture toward a counterforce only posture, and we found concrete evidence that legal advice and review influenced nuclear plans, chiefly by narrowing a target set and elevating concerns over collateral damage. At the same time, ideas about the "requirements" of effective deterrence and the likely features of nuclear use also shaped US LOAC doctrine.

The legalization of the US nuclear posture hence instantiates an important theoretical argument about the constitutive power of international law. Legalization did not mechanistically shift nuclear plans toward a static end-state best understood as "compliance," the way causal relations are usually conceived, with a cause (beliefs that targets must be legal) preceding and existing independently from an outcome (compliant nuclear plans). Instead, we find a co-constitutive relationship, a mutual logical dependence, between the idea that nuclear plans must be legal and the idea that distinction and proportionality must be interpreted in contestable—and internationally contested—ways. Ultimately, US nuclear plans may not patently challenge legal demands, but they are not straightforwardly in compliance with international law either. The story of the US reluctant embrace of law in the nuclear realm is one of unproven creeds and ongoing contestation.

[143]Laura Considine, "Contests of Legitimacy and Value: The Treaty on the Prohibition of Nuclear Weapons and the Logic of Prohibition," *International Affairs* 95, no. 5 (2019): 1075–92; Rebecca Davis Gibbons, "The Humanitarian Turn in Nuclear Disarmament and the Treaty on the Prohibition of Nuclear Weapons," *The Nonproliferation Review* 25, no. 1–2 (2018): 11–36.

Acknowledgements

We thank the MacArthur Foundation for financial support. We benefited from discussions of this work during presentations at the Belfer Center for International Security at Harvard University, the Center for International Security and Cooperation at Stanford University, the Blavatnik School of Government at Oxford University, the Center for Strategic and International Studies (CSIS), the Carnegie Endowment for International Peace, Kings College London (International Law Colloquium), Freie Universität Berlin (KFG Colloquium), the US Naval Academy (McCain Conference), the UK Foreign and Common Wealth Office, the US Department of Defense, NATO Legal Division, and the International Committee of the Red Cross. For detailed comments, we thank Francesca Giovannini, Helen Kinsella, Madelene Materna, Theodore Richard, and Henry Shue. We also thank Shreya Lad and Gina Park Sinclair for their excellent research assistance.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

The John D. and Catherine T. MacArthur Foundation supported this work.