

**The Bomb Beyond Borders:
Public Opinion on the Nuclear Taboo and Non-Combatant Immunity Norms
in the United States, the United Kingdom, France, and Israel**

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Draft: July 09, 2019

The authors thank Chelsea C. Green and Alida R. Haworth for their indispensable research assistance, and Fabricio M. Fialho, Christopher Gelpi, Sir Lawrence Freedman, Edward Howell, and Benoit Pelopidas for valuable comments. The authors benefited from discussions at seminars at Haifa University, the Institute for National Security Studies, MIT, the Middlebury Institute for International Affairs at Monterrey, Oxford University, the University of Pennsylvania, and the Royal Institute for International Affairs. The John D. and Catherine T. MacArthur Foundation and the Freeman-Spogli Institute at Stanford provided financial support.

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At the dawn of the 21st century, scholars and policy makers were increasingly optimistic about the power of international laws and norms to regulate the use of force. There were good reasons to be hopeful. Since the end of the Second World War, major military conflict between the world's great powers had virtually disappeared, and the death toll from the remaining conflicts was declining steadily. New institutional mechanisms for enforcing the international laws of armed conflict, such as the International Criminal Court and a host of other international tribunals, were multiplying and increasing in scope and power. Perhaps most importantly, with the end of the Cold War and the passage of over half a century since the advent of nuclear weapons, many felt a growing confidence that the world had eluded the specter of nuclear war that had haunted it since 1945.

A comforting theory, suggesting that our deliverance from this nuclear nightmare was not merely due to the balance of terror nor to a stroke of good luck, gained widespread acceptance. Proponents of this theory asserted that the use of nuclear weapons had become subject to a powerful international taboo and that a broader norm of non-combatant immunity had taken hold, at least among Western publics and elites.¹ In his 2005 Nobel Prize acceptance speech, Thomas C. Schelling celebrated the “nearly universal revulsion against nuclear weapons.”² Stephen Pinker announced in his widely read 2011 book that “the better angels of our nature” had replaced archaic, bellicose instincts, leading to a global nuclear taboo and a powerful norm protecting the immunity of non-combatants in times of war. Pinker argued that by the 1990s or earlier the “use of nuclear weapons was unthinkable because everyone knew it was unthinkable, and everyone knew that everyone knew it.”³ In 2017, 122 states gathered to sign a treaty at the United Nations permanently outlawing nuclear weapons. Any use of nuclear weapons, the signatories declared, would violate the Geneva Convention’s “rule of distinction” and would be “abhorrent to the principles of humanity and the dictates of public conscience.”

Recent public opinion research, however, has cast doubt on the strength of the norms against using nuclear weapons or deliberately killing non-combatants, at least among the public in the United States. Survey experiments conducted by Scott Sagan, Benjamin Valentino and Daryl Press have demonstrated that although the American public prefers using conventional to nuclear weapons, if all else is equal, this preference readily gives way to the desire to keep

¹ Steven Pinker, *The Better Angels of Our Nature: Why Violence Has Declined* (New York: Viking, 2011); Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-use of Nuclear Weapons since 1945* (Cambridge: Cambridge University Press, 2007).

² Thomas C. Schelling, “An Astonishing Sixty Years: The Legacy of Hiroshima,” *Prize Lecture*, December 8, 2005, Accessed November 17, 2016, http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2005/schelling-lecture.pdf.

³ Pinker, *The Better Angels of Our Nature*, p. 267.

compatriot soldiers safe or to maximize the effectiveness of U.S. military operations to protect the homeland.⁴ Other scholars have replicated and extended these findings, further undermining the case that absolute prohibitions like the nuclear taboo are powerful drivers of American public opinion.⁵ In 2018, Nina Tannenwald, one of the original and strongest proponents of the nuclear taboo theory, reaffirmed the existence of the taboo, but acknowledged that “now more than ever before, humanity risks facing a future in which the nuclear taboo, a hard-won norm that makes the world a safer place, is in retreat.”⁶

Although we now have a much clearer understanding of U.S. public attitudes about the use of nuclear weapons than we did a decade ago, we know surprisingly little about how the publics of other nuclear weapons states feel about the bomb and non-combatant immunity. It is possible, therefore, that the norms against the use of nuclear weapons and the targeting of civilians are significantly stronger in other nuclear weapons states. Indeed, as we describe below, there are some reasons to suspect that the U.S. could be an outlier regarding popular support for the use of force in general and nuclear weapons in particular.

Studying how citizens of different countries consider the use of nuclear weapons has the potential to reveal deeper theoretical insights into the sources of cross-national variation in public opinion on the use of force more generally. The use of nuclear weapons implicates two categorical prohibitions: on the use of one of the most reviled means of warfare and on the deliberate killing of civilians. At the same time, the unique power of nuclear weapons invites consequentialist calculations about trade-offs between protecting the lives of compatriot civilians and soldiers and the lives of foreign civilians. In this article we seek to understand which logic of reasoning, categorical or consequentialist, prevails in different countries. Do the publics of nuclear-armed democracies vary in the extent to which they call upon categorical norms to assess whether and how to use force or do the same cost-benefit considerations shape support for the use of force? As we explain further below, this question lies at the heart of long-running theoretical debates in the field of international relations. Mainstream rationalist theories portray

⁴ Daryl G. Press, Scott D. Sagan, and Benjamin A. Valentino, “Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons,” *American Political Science Review*, Vol. 107, No. 1 (2013), pp. 1–19; Scott D. Sagan, and Benjamin A. Valentino, “Revisiting Hiroshima in Iran. What Americans Really Think About Using Nuclear Weapons and Killing Noncombatants,” *International Security*, Vol. 42, No. 1 (2017), pp. 41–79.

⁵ Peter M. Aronow, Jonathon Baron, and Lauren E. Pinson, “A Note on Dropping Experimental Subjects who Fail a Manipulation Check,” *Political Analysis*, (2019), pp. 1–18, Charli Carpenter and Alexander Montgomery, “The Stopping Power of Norms: Saturation Bombing, Civilian Immunity, and U.S. Attitudes toward the Norms and Laws of War,” unpublished manuscript; Brian C. Rathbun and Rachel Stein, “The Greater Good: Public Opinion on the Morality of Using Nuclear Weapons,” *Journal of Conflict Resolution*, forthcoming; Michal Smetana and Marek Vranka, “Moral Foundations of the Nuclear and Chemical Weapons ‘Taboo’: New Evidence from Experimental Surveys,” unpublished manuscript.

⁶ Nina Tannenwald, “The Vanishing Nuclear Taboo,” *Foreign Affairs*, Vol. 97, No. 6 (December 2018), pp. 16–24 (18).

all states as driven by the same logic of reasoning, they minimize costs and maximize benefits, defined in terms of power or prosperity (a type of consequentialism). Constructivist theories, in contrast, allow for the internalization of norms to influence states' logic of reasoning as well as what they perceive as costs and benefits, in the first place.

Understanding the logic of public opinion about the use of nuclear weapons is critical if we hope to extend the nearly 75 year-long tradition of nuclear non-use. If the non-use of these devastating weapons has been driven primarily by categorical norms against nuclear use and the targeting of civilians, then our efforts should focus on maintaining, strengthening and spreading those norms. If, instead, states have refrained from using nuclear weapons because the countries that possess them have not often encountered situations where the perceived benefits of using them outweighed the costs, we should aim to prevent such situations from arising and to educate publics about the very serious consequences of nuclear use.

In this paper, we explore variations in public attitudes towards the use of nuclear weapons in four nuclear-armed, democratic states – the United States, the United Kingdom, France, and Israel. We employ an original cross-national survey experiment designed around a series of mock news stories about a military crisis involving a newly formed terrorist organization based in Libya that is planning a chemical weapons attack on the capital city of each country. Because Libya is within range of the nuclear forces of all four countries, and because all four countries face persistent threats of terrorism emanating from the Middle East, this design allows us to hold constant, to the extent feasible, the immediate geo-strategic context for all four countries. By manipulating selected aspects of each story, we are able to isolate the influence of categorical and consequentialist reasoning on support for nuclear weapons in each country.

We report four key findings. First, we find little support for the widespread internalization of a nuclear taboo in any country. Majorities of the public in the United States, France and Israel, and 48 percent in the United Kingdom, affirm that they would support using nuclear weapons when nuclear weapons provide significant advantages over conventional weapons in eliminating the terrorist threat. Even those who oppose using nuclear weapons overwhelmingly cite consequentialist reasons for their preference against nuclear use. Second, we also find little support for a categorical prohibition on the intentional killing of civilians. When subjects were informed that the strike would deliberately target civilian populations to “send a strong message to terrorist sympathizers” support for the use of force declined significantly in only one of the four states (the United Kingdom).⁷ Third, we found some evidence that subjects

⁷ Again, few subjects explained their opposition with reference to a categorical norm against the deliberate killing of civilians.

nevertheless felt uneasy about the use of nuclear weapons or the targeting of civilians. When asked to make an ethical assessment of using nuclear weapons, rather than to make a forced choice between nuclear and conventional options, those who described nuclear use or intentional attacks against civilians as ethical never constituted a majority – with the exception of Israel in two of our five conditions.⁸ However, particularly when “tempted” with the increased military effectiveness of nuclear weapons, subjects expressed preferences that diverged from their ethical assessments. Fourth, we find a consistent pattern in the relative “hawkishness” of citizens of each country.⁹ Our results show that Israeli respondents display the most hawkish preferences in almost every scenario we tested, while the British public is consistently the least willing to support nuclear weapons or targeting civilians. French and American citizens are roughly equally hawkish. In an exploratory analysis, we suggest that compatriot partiality, i.e. the extent to which citizens prioritize sparing compatriot over foreign civilians, plays an important role in explaining these cross-national differences in hawkishness.

Taken together, these findings offer significant advances over our current understanding of public attitudes towards the use of force and nuclear weapons. As the first study to use cross-national experimental survey data on nuclear weapons attitudes, we show that public opinion on the use of force across all four countries follows a broadly similar consequentialist logic: when forming preferences citizens evaluate whether or not to support a nuclear strike by weighing its projected effectiveness and human costs compared to the consequences of other options. Even though we find some evidence for ethical assessments that correspond to categorical prohibitions against nuclear use and non-combatant targeting, these categorical ethical beliefs barely influence public preferences in any of the four countries we surveyed. Cross-national differences in hawkishness are, therefore, not explained by a difference in the logic of public opinion across countries, but by the prevalence of consequentialist reasoners with a strong partiality for compatriots in the different countries. Publics in all four countries seek to minimize the projected costs and maximize the expected benefits of using nuclear weapons. Citizens in different countries can, however, have different understandings of costs and benefits.

We organize the remainder of this paper as follows. The first section briefly reviews previous empirical efforts to explore cross-national differences in public opinion on the use of force and nuclear weapons. Thereafter, we introduce the difference between the consequentialist and categorical logics of reasoning as the theoretical lens through which we investigate public opinion. The third section outlines the research design of our four-country survey experiment.

⁸ In two of our experimental conditions 50% or more of Israeli respondents described the nuclear attack as ethical.

⁹ In this paper we use the word “hawkish” to refer to subjects who are more willing to use nuclear weapons or target civilians.

We then present the results, showing that public opinion across the four countries largely follows the same consequentialist logic. The fifth section explores the causes of why citizens across these countries nonetheless display differences in their willingness to support nuclear weapons. We close with a discussion of the theoretical and policy implications of our findings, highlighting avenues for future research.

Explaining Cross-National Differences

Although recent scholarship has raised questions about the strength of the nuclear taboo in the United States, we still know very little about how the publics of other nuclear-armed countries think. Tannenwald argues that the taboo is widely held by the publics of many nuclear weapons states, but cautions that “it is probably not universal.”¹⁰ Likewise, T.V. Paul, who explores the “tradition of non-use” in all nuclear weapons states, finds evidence of wide variation in the extent to which policies reflect a taboo.¹¹ To date, scholars have not produced research that systematically compares public attitudes in different countries towards nuclear weapons. However, a small literature on cross-national differences in public opinion on the use of force more generally has emerged over the last two decades. Because of the difficulty of polling outside advanced democracies, most of this literature is focused on comparing European and American attitudes towards the use of force. This literature can be divided into two non-exclusive categories.

The first group of scholars posits that the same “universal logic,” or at least the same set of basic considerations, shapes support for the use of force across different countries.¹² Drawing on cross-national polling data, scholars have documented that publics in both Europe and the United States are more likely to approve the use of force when the military operation receives support from international or multilateral institutions.¹³ Civilian casualties also seem to depress support for the use of force in most nations.¹⁴ Robert Johns and Graeme Davies show that collateral foreign civilian casualties depress support for military action by roughly equal amounts

¹⁰ Tannenwald, *Nuclear Taboo*, p. 59.

¹¹ T.V. Paul, *The Tradition of Non-Use of Nuclear Weapons* (Stanford: Stanford University Press, 2009), pp.92-142.

¹² Richard C. Eichenberg, “Public Opinion on Foreign Policy Issues,” *Oxford Research Encyclopedia of Politics* (Oxford: Oxford University Press, April 2016); Robert Johns and Graeme Davies, “Civilian Casualties and Public Support for Military Action: Experimental Evidence,” *Journal of Conflict Resolution*, Vol. 63, No. 1 (2019), pp. 251-281.

¹³ Philip Everts and Pierangelo Isernia, “Trends: The War in Iraq,” *The Public Opinion Quarterly*, Vol. 69, No. 2 (Summer, 2005), pp. 264-323; id. *Public Opinion, Transatlantic Relations and The Use of Force* (London: Palgrave Macmillan 2015), p. 4; Richard Sobel and E. Shiraev, *International Public Opinion and the Bosnia Crisis* (New York: Lexington Books, 2003).

¹⁴ Richard C. Eichenberg, “Global Public Opinion from the First Gulf War to the Invasion and Occupation of Iraq,” Paper delivered to the Convention of the International Studies Association, San Diego, March 22–25, 2006, p. 38.

in United Kingdom and the United States.¹⁵ In a study of cross-national public opinion on the war in Afghanistan, Ben Goldsmith, Yusaku Horiuchi and Takashi Inoguchi find that public opinion on the U.S. war in Afghanistan across 64 countries varies with these countries' past experience of terrorism, alliance memberships and trade relations with the United States.¹⁶ This perspective could be interpreted to imply that publics appear more or less hawkish about particular real-world conflicts because the same war creates different costs and benefits for countries with divergent geo-strategic contexts.

The second group of scholars, in contrast, asserts that the determinants of public attitudes towards military operations fundamentally diverge across countries.¹⁷ Robert Kagen has articulated this view most pointedly, opening his widely read book on American-European relations with the admonition:

“[S]top pretending that Europeans and Americans share a common view of the world, or even that they occupy the same world. On the all-important question of power – the efficacy of power, the morality of power, the desirability of power – American and European perspectives are diverging... Americans are from Mars and Europeans are from Venus... The reasons for the transatlantic divide are deep, long in development, and likely to endure.”¹⁸

Richard Eichenberg and Richard Stoll similarly argue that variations in ideology, not differing geo-strategic contexts, determine cross-national variation in the “acceptability of war.”¹⁹ They maintain that the American public is “the most ideologically conservative and the most accepting of war” of any of the NATO countries.²⁰ A related strand of research also points towards populations' divergent core values, but focusses on “retributiveness” rather than conservatism as a key factor explaining variation in the conflict behavior of democracies.²¹ Using retention of the death penalty as a proxy for a society's vengefulness, Rachel Stein, for example, shows that

¹⁵ Johns and Davies, “Civilian Casualties and Public Support for Military Action”.

¹⁶ Benjamin Goldsmith, Yusaku Horiuchi and Takashi Inoguchi, “American Foreign Policy and Global Public Opinion,” *Journal of Conflict Resolution*, Vol. 49, No. 3 (2005), pp. 408–429.

¹⁷ Goldsmith et al., “American Foreign Policy and Global Public Opinion”; Everts and Isernia, “Trends: The War in Iraq”.

¹⁸ Robert Kagen, *Paradise and Power* (New York: Alfred A. Knopf, 2003), pp. 3–4.

¹⁹ Richard C. Eichenberg and Richard J. Stoll, “The Acceptability of War and Support for Defense Spending: Evidence from Fourteen Democracies, 2004–2013,” *Journal of Conflict Resolution*, Vol. 61, No. 4 (2015), pp. 788–813.

²⁰ Id., pp. 807–808.

²¹ Foremost among them, Rachel Stein, “War and Revenge: Explaining Conflict Initiation by Democracies,” *American Political Science Review*, Vol. 109, No. 3 (2015), pp. 556–573. See also, Mario Gollwitzer, Linda J. Skitka, Daniel Wisneski, Arne Sjöström, Peter Liberman, Syed Javed Nazir, and Brad J. Bushman, “Vicarious Revenge and the Death of Osama bin Laden,” *Personality and Social Psychology Bulletin*, Vol. 40, No. 5 (2014), pp. 604–616; Peter Liberman, “Retributive Support for International Punishment and Torture,” *Journal of Conflict Resolution*, Vol. 57, No. 2 (2013), pp. 285–306; id., “Punitiveness and US Elite Support for the 1991 Persian Gulf War,” *Journal of Conflict Resolution*, Vol. 51, No. 1 (2007), pp. 3–32; id. and Linda J. Skitka, “Revenge in US Public Support for War against Iraq,” *Public Opinion Quarterly*, Vol. 81, No. 3 (Fall 2017), pp. 636–660; Sagan and Valentino, “Revisiting Hiroshima”.

democracies that have retained the death penalty longer are more likely to use force.²² Unlike its European allies, the United States retains the death penalty and thus exhibits significantly more “hawkish” behavior.²³

Unfortunately, virtually all existing cross-national studies on public opinion on the use of force suffer from the same limitations. Our ability to draw inferences about the sources of cross-national variation in support for the use of force from these studies is confounded by the vastly different strategic and political positions occupied by different countries. Studies that compare support for real-world conflicts cannot isolate whether differences in support for a particular military operation might be caused by differences in the underlying core values of different populations or by the profoundly divergent ways the same war can affect different countries. For example, Americans were much more likely to support military intervention against Iraq than European publics.²⁴ Does this really mean Americans are more “hawkish” when it comes to the use of military force? Or were Americans more willing to support the war because the 9-11 attacks caused the American public to fear the possibility of WMD terrorism more than European publics?

Even research that focuses on more general attitudes about the use of force can suffer from this kind of confounding dynamic. For example, studies have shown that Americans are much more likely than Europeans to agree that “under some conditions war is necessary to obtain justice” and that “the best way to ensure peace is through military strength.”²⁵ These divergent patterns, however, could just as easily reflect differences in the geo-strategic environments of Europe and America as they could represent an underlying difference in the willingness to use force, per-se. America’s global leadership role and its far-flung interests mean that the American public must grapple with the use of force more frequently and in different contexts than most European publics.

A second limitation of the cross-national studies discussed here, at least for our purposes, is that none of them directly investigates attitudes towards nuclear use or the targeting of civilians.²⁶ Our knowledge about the internalization of these norms is largely limited to the United States. At the same time, we cannot simply extrapolate from the studies that have shown

²² Stein, “War and Revenge”.

²³ Of course, it is also possible that universal and distinctive national forces both exert significant influences on public opinion. For this argument, see Eichenberg, “Global Public Opinion from the First Gulf War,” p. 52.

²⁴ Ronald Asmus, Philip Everts, Pierangelo Isernia, “Power, War, and Public Opinion,” *Policy Review* (Feb/Mar 2004).

²⁵ Everts and Isernia, *Public Opinion, Transatlantic Relations*, pp. 100-101.

²⁶ Johns and Davies do explore the effects of civilian casualties on support for force, but their study focuses on inadvertent civilian deaths, rather than the deliberate targeting of civilians, which is the subject of the non-combatant immunity norm. Johns and Davies, “Civilian Casualties and Public Support”.

little evidence for a nuclear taboo in the United States to public opinion in other nuclear armed democracies. Indeed, there are at least three reasons for why the United States might be an outlier when it comes to support for nuclear attacks.

First, the U.S. remains the only state to have used nuclear weapons in war. The memory of Hiroshima and Nagasaki may have associated nuclear weapons with military victory and the saving of American military lives and inured the American public to the horrors of atomic destruction.²⁷ Second, while American public support for the 1945 atomic bombings has decreased somewhat since 1945, approval of the bombings remains significantly higher in the U.S. than in other countries. A 2016 public opinion poll in the United Kingdom found that approval ratings for Truman's decision was much lower than in the United States – 28% compared to 45%.²⁸ Third, the United States is the only nuclear armed democracy to retain the death penalty. Rachel Stein, who first linked death penalty retention by democracies to war initiation, has recently shown that, in the United States, vengeful individuals are also significantly more likely to approve of the United States using “its nuclear weapons to retaliate against a foreign country that has launched a nuclear attack on its neighbor.”²⁹ If retributiveness (and death penalty retention) is predictive of preferences for nuclear use, we might expect that the other nuclear-armed democracies exhibit less hawkish preferences than the United States.

Further evidence of American exceptionalism in attitudes about the use of force can be found in the small number of multi-country polls that have been conducted on nuclear issues and non-combatant immunity norms in recent years. A 2016 report by the International Committee of the Red Cross, for example, asked whether “attacking enemy combatants in populated villages or towns in order to weaken the enemy, knowing many civilians... would be killed [was] part of war.” 62% of Israelis, 50% of Americans, 43% of French citizens, and 40% of British citizens agreed that it was.³⁰ A Gallup poll, conducted in 2011, reported that 49% of Americans, 43% of Israelis, 33% of British citizens, and 15% of French citizens indicated “it was sometimes justified for the military to target and kill civilians.”³¹ The percentage of Americans who agreed that targeting civilians was justified was the highest of all 131 countries polled. Of

²⁷ Lifton and Mitchell have called this “nuclear denial.” See Robert J. Lifton and Greg Mitchell, *Hiroshima in America: A Half-Century of Denial* (New York: Avon Books, 1995).

²⁸ Will Dahlgreen, “America ‘Was Wrong’ To Drop The A-Bomb – British Public,” *YouGov: What The World Thinks*, May 19, 2016, Accessed March 14, 2017, <https://yougov.co.uk/news/2016/05/19/america-was-wrong-drop-bomb-public/>.

²⁹ Rachel Stein, *Vengeful Citizens, Violent States: A Theory of War and Revenge* (New York: Cambridge University Press, 2019), p. 132.

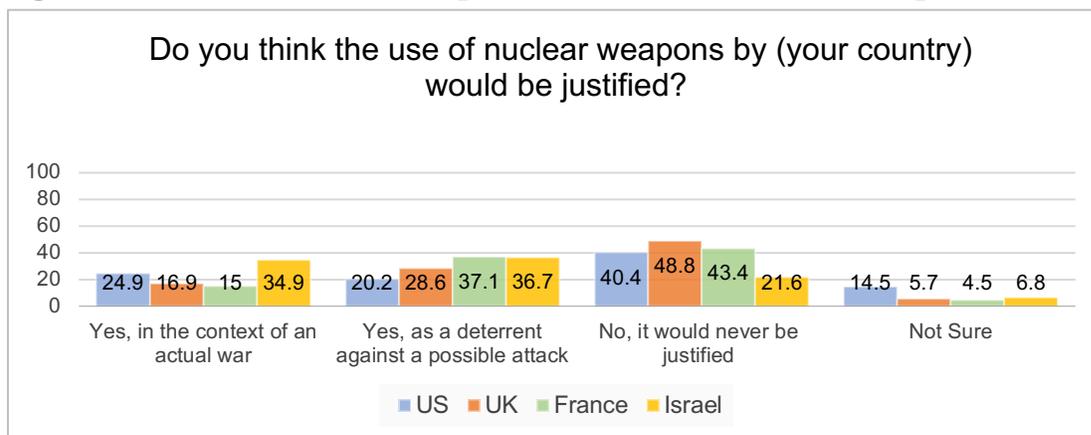
³⁰ International Committee of the Red Cross, “People on War – 2016 Survey” (Prepared by WIN Gallup International), Geneva, October 2016, Question 2 p. 26. Because the question only asks whether killing civilians is “part of war,” it is impossible to know whether respondents are indicating that the collateral killing of civilians is morally acceptable in war, or simply affirming an empirical observation about the way wars are actually waged.

³¹ Gallup, “Views on Violence,” <https://news.gallup.com/poll/157067/views-violence.aspx>.

course, neither poll offered any explanation for why civilians might be targeted or killed. In the real world, targeting civilians often results from the perception that doing so will help end the war, or deter civilians from aiding the adversary. Without examining respondents' reactions to these kinds of trade-offs it is impossible to gauge the strength of their commitment to the non-combatant immunity norm.

We found only one recent cross-national poll on attitudes about the use of nuclear weapons. The Simons Foundation reported in September 2007 that over 40% of subjects in the United States, the United Kingdom, and France agreed that using nuclear weapons “would never be justified.”³² In contrast, only 21.6% of subjects in Israel agreed with the statement while 34.9% of Israelis agreed that nuclear weapons use would be justified “in the context of an actual war.”³³ These results could be evidence of a broadly internalized nuclear taboo, at least in Europe and the United States. However, the design of the poll was flawed: respondents were given a third option, to indicate whether they supported nuclear weapons being used “as a deterrent against possible attack.” This option is ambiguous since it is not clear whether respondents who selected it would still prefer to use nuclear weapons in retaliation if deterrence failed or whether they would agree then that nuclear weapons should never be used. In addition, like the Red Cross and Gallup polls described above, this poll did not present any scenario in which violating the norm might realistically be contemplated due to projected benefits. As a result, it remains impossible to know whether confronting real-world trade-offs might alter respondents' preferences and whether they would do so consistently across all four countries.

Figure 1: Cross National Public Opinion on the Use of Nuclear Weapons



Data Source: The Simons Foundation, “Global Public Opinion on Nuclear Weapons,” Vancouver, September 2007.

³² The Simons Foundation, “Global Public Opinion on Nuclear Weapons,” Vancouver, Canada, September 2007. http://www.thesimonsfoundation.ca/sites/default/files/2007%20Poll%20on%20Global%20Public%20Opinion%20on%20Attitudes%20Towards%20Nuclear%20Weapons_0.pdf

³³ For a study suggesting that the Indian public is also willing to use nuclear weapons see Scott D. Sagan and Benjamin A. Valentino, “Atomic Attraction,” *The Indian Express*, June 3, 2016.

In sum, neither the extant literature on attitudes towards the use of force nor existing polls allow us to articulate firm expectations about cross-national differences in public opinion towards the nuclear taboo and non-combatant immunity norms in nuclear-armed democracies. At the same time, both sources of data are suggestive of important cross-national differences in hawkishness. Rather, existing empirical evidence underscores that comparing the logic of public opinion in different countries requires holding constant – to the extent that this is feasible – the influence of divergent geostrategic contexts. This is what our study seeks to do.

Two Nuclear Logics

Despite intense public attention to the potential of nuclear war during the Cold War, surprisingly little academic research has theorized the sources of public opinion on whether and how nuclear weapons should be used. What little work exists has tended to focus on exploring whether attitudes towards nuclear weapons and civilian casualties are driven primarily by material interests or by ethical norms.³⁴ We argue that this contrast obscures a deeper and more meaningful dichotomy in logics of reasoning. Those who oppose the use of nuclear weapons in all circumstances and those who prefer using nuclear weapons when they are more likely to destroy an important military target may both be guided by their ethical beliefs about right and wrong. However, those who embrace the nuclear taboo rely on categorical reasoning that sees nuclear weapons as always wrong. Those who focus on military effectiveness rely on a consequentialist logic that supports using nuclear weapons when they believe that doing so will save more lives.

Categorical reasoning tends to be ethical in nature: conduct that falls into certain categories is considered “inherently wrong.” A consequentialist reasoner, in contrast, could perceive their own preferences as either guided by ethical considerations or by her interests. Consequentialism in its broadest form does not prejudge what counts as a cost and what as a benefit. What counts as a consequence to be maximized versus one that ought to be avoided depends on an underlying substantive theory of moral value. Only on some accounts does moral consequentialism require that good consequences be defined in impartial reference to the common good, rather than an individual’s particular values or egoistic aims.³⁵ Consequentialist

³⁴ Echoing the long-standing dichotomization of interests and norms in international relations scholarship, explanations highlighting instrumental considerations and those emphasizing norms are often presented as mutually exclusive. See, for instance, Sarah Kreps and Sarah Maxey, “Mechanisms of Morality: Sources of Support for Humanitarian Intervention,” *Journal of Conflict Resolution*, Vol. 62, No. 8, (2018), pp. 1814-1842 (1815); Press et al., “Atomic Aversion”.

³⁵ See Rathbun and Stein, “The Greater Good” for the argument that research in international relations has often conflated utility maximization, i.e. a logic of reasoning, with egoistical preferences and a commitment to norms with “pro-social” preferences.

reasoning is, therefore, compatible with, but not necessarily synonymous with military utility seeking.³⁶ At the same time, consequentialism does not imply that citizens are indifferent between nuclear and conventional weapons or that they are necessarily unguided by ethical beliefs or norms. Consequentialist social norms could, for instance, demand that states only use nuclear weapons or kill civilians, if the projected human costs are outweighed by moral benefits, such as saving an even greater number of civilians or ending the war sooner.

Our theoretical lens has two advantages compared to prior theorizations that distinguish between interests and norms. First, it highlights the need to separately test whether individuals' preferences accord with their ethical beliefs. As mentioned, preferences that resemble a categorical logic are necessarily inspired by ethical considerations. Consequentialist reasoners may likewise perceive utility maximization as reflecting their ethical commitments. Alternatively, they may have divergent ethical beliefs that accord with categorical reasoning, but that they do not invest in their political preferences.³⁷ Second, we are able to disentangle the logic behind public opinion, i.e. categorical or consequentialist, from the public's substantive goals or utilities, i.e. what is perceived as a cost and what as a benefit, in the first place.³⁸ Again, a categorical reasoner has an immutable goal of not violating a categorical prohibition. In contrast, consequentialists who will support the military option that saves the most lives might still differ, for instance, in how much weight they give to the lives of foreign versus compatriot civilians. In other words, even consequentialist publics might differ in hawkishness depending on what they perceive as the benefits of force to be maximized.

Although these two logics of reasoning present a novel theoretical lens through which to investigate public opinion on nuclear weapons and non-combatant immunity, the existing debate between proponents and opponents of the nuclear taboo features strong echoes of both logics. Social-constructivist research on nuclear use has tended to emphasize what we call the categorical logic of reasoning as the basis for public opinion. Scholars posit that attitudes about nuclear weapons are shaped by two powerful, absolute prohibitions. The oldest of these is the prohibition on the intentional killing of civilians during war. Rules against the deliberate killing of

³⁶ R.M. Hare, *Moral Thinking: Its Levels, Method and Point* (Oxford: Clarendon Press, 1981); Walter Sinnott-Armstrong, "Consequentialism," *The Stanford Encyclopaedia of Philosophy* (Summer 2019).

³⁷ Even though these two logics align with two moral theories about the permissibility of using force, we do not propose that individuals necessarily consciously draw on moral principles when articulating views about the use of force. Neither do we assume that they are familiar with the distinction between moral consequentialism and categorical reasoning.

³⁸ The scholars who introduced the logic of appropriateness and the logic of consequences to the field of international relations arguably conflated these two dimensions of agency. The logic of consequences in their understanding is firmly associated with self-regarding preferences. The logic of appropriateness seems to denote both an ethical reasoning style and liberal other-regarding preferences or goals. James G. March and Johan P. Olsen, "The Institutional Dynamics of International Political Orders," *International Organization*, Vol. 52 (1998), pp. 943–969.

civilians are among the earliest and most institutionalized limits on warfare. They appear in every major religious text that offers guidance on behavior in armed conflict.³⁹ The norm of non-combatant immunity (sometimes called the principle of “distinction”) forms a central part of the laws of war today. Although understandings of who qualifies as a non-combatant and the concept of intentionality have evolved over the years and remain contested, the norm is unconditional.⁴⁰ Intentionally killing civilians is never permissible under any conditions in times of war.⁴¹ Article 48 of the 1977 Additional Protocol I to the Convention stipulates that combatants “shall at *all times* distinguish between the civilian population and combatants... and accordingly shall direct their operations *only* against military objectives [emphasis added]”⁴² Sahr Conway-Lanz argues that “Americans have clung to the norm of noncombatant immunity tenaciously. Most have refused to advocate the intentional killing of civilians in war for any reason...”⁴³

The second categorical norm that scholars have argued has shaped attitudes about nuclear weapons is the nuclear taboo itself. Since their invention, nuclear weapons have been inexorably tied to the norm of non-combatant immunity.⁴⁴ Given the destructive power of these weapons and the uncontrollable long-term harms to human health caused by their use, many have questioned whether they can ever be used discriminately.⁴⁵ Some have argued that immorality is inherent even in their possession.⁴⁶ Jurists and legal scholars continue to debate whether there are any conditions under which using nuclear weapons could be legal. In 1996, however, the International Court of Justice (ICJ) concluded that although international law did not proscribe the use of nuclear weapons “as such,” it unambiguously establishes that “states must never make civilians the object of attack and must consequently never use weapons that are incapable of distinguishing between civilian and military targets.”⁴⁷ The ICJ concluded,

³⁹ Seth Lazar, *Sparing Civilians* (Oxford: Oxford University Press, 2015), p. 1.

⁴⁰ Sahr Conway-Lanz, *Collateral Damage: Americans, Non-Combatant Immunity and Atrocity after World War II* (New York: Routledge, 2006), Janina Dill, *Legitimate Targets? Social Construction, International Law and US Bombings* (Cambridge: Cambridge University Press, 2015); Helen Kinsella, *The Image Before the Weapon: A Critical History of the Distinction Between Combatant and Civilian* (Cornell, Cornell University Press, 2011).

⁴¹ The official position of the U.S. government, however, is that the intentional targeting of civilian populations or objects is permissible as a “belligerent reprisal” in response to a serious violation of international humanitarian law by the adversary. Virtually all other countries believe that belligerent reprisals are not permitted under international customary law.

⁴² Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I).

⁴³ Conway-Lanz, *Collateral Damage*, p. 230.

⁴⁴ *Ibid.*

⁴⁵ Francis X. Winters, “The Nuclear Arms Race: Machine vs. Man,” in *id.* and Harold Ford, eds., *Ethics and Nuclear Strategy* (New York: Orbis Books, 1977), p. 151; Germain Grisez, “Moral Doctrine no Longer at Risk,” *National Catholic Resister*, April 24, 1983.

⁴⁶ Jonathan Schell, *Fate of the Earth* (New Yrk: Knopf, 1982), p. 56.

⁴⁷ International Court of Justice, “Legality of the Threat or Use of Nuclear Weapons,” Advisory Opinion, I.C.J. Reports July 8, 1996, para. 389.

therefore, that “the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict.”⁴⁸

Tannenwald emphasizes that the nuclear taboo co-originate with the non-combatant immunity norm. She writes, at the heart of the nuclear taboo “is the belief that nuclear weapons, because of their immense destructive power, flagrantly violate longstanding moral principles of discrimination and proportionality in the use of force. These principles, in turn, have at their core the moral intuition that it is wrong to kill non-combatants... and the sense of revulsion that many people feel with regard to nuclear weapons stems from these beliefs.”⁴⁹ Over time, however, Tannenwald argues that the norms diverged until today “*any* use of nuclear weapons is prohibited. The normative prohibition has come to be an absolute one: the weapons themselves are proscribed” regardless of their effects on civilians.⁵⁰ The “absoluteness, unthinkingness, and taken-for-grantedness”⁵¹ of the taboo is visible, Tannenwald argues, in reactions towards American proposals to build the neutron bomb in the late 1970s and early 1980s. Although the neutron bomb was designed to be much more discriminating than other nuclear weapons, Tannenwald concludes the weapon was “doomed to illegitimacy” because of its inescapable association with nuclear weapons.⁵²

The dominant alternative theoretical position suggests that attitudes towards nuclear weapons are powerfully shaped by citizens’ empirical beliefs about the effects of nuclear weapons. In this view, when citizens consider using nuclear weapons, they simply weigh the consequences of using nuclear weapons against the consequences of the available alternatives, including not attacking at all. Press, Sagan and Valentino argue that “most Americans appear to weigh the consequences of using nuclear weapons in the narrow terms of immediate military effectiveness. As a result, the public’s attitudes toward nuclear weapons lack the bright-line nature of a taboo.”⁵³ When considering nuclear weapons, they argue, “the U.S. public’s preference for nuclear options seems to grow steadily as a function of perceived utility” and “those Americans who oppose the use of nuclear weapons... seem to do so because of their concerns about the future responses of other countries” rather than a revulsion against nuclear weapons per-se.⁵⁴ We call this the consequentialist logic of reasoning.

⁴⁸ Id., para. 95.

⁴⁹ Tannenwald, *Nuclear Taboo*, pp. 58-59.

⁵⁰ Id., p. 62.

⁵¹ Id., p. 11.

⁵² Id., p. 21, also see pp. 273-282.

⁵³ Press, Sagan and Valentino, “Atomic Aversion,” p. 202.

⁵⁴ Id., p. 202.

If there is an international nuclear taboo, a substantial majority of subjects in all countries should reject the use of nuclear weapons in favor of conventional military options. In accordance with the categorical logic of reasoning, this preference for conventional strikes should be largely immovable in the face of changing projected consequences. Similarly, if citizens' attitudes reflect an internalization of the categorical prohibition against targeting civilians, we would expect that public opinion shows a strong preference against any military option that aims to kill civilians, again regardless of how effective such an attack might be in protecting the homeland and regardless of its alternatives. If, in contrast, public opinion follows a consequentialist logic, we should find that citizens prefer the military option that is projected to save most lives. That suggests that support for using nuclear weapons should increase the more effective nuclear weapons are in neutralizing the target. Support for nuclear use should also decrease the more civilians are projected to perish in an attack, regardless of whether this is intended or not.

Research Design

To test these expectations, we designed and fielded an original survey experiment in the United States, the United Kingdom, France and Israel. The international survey firm YouGov conducted the experiment in June and July 2018. An average of 1,154 subjects, all citizens over the age of 18, were interviewed in each country.⁵⁵ We selected these four countries because they are democratic, nuclear weapons states that permit unrestricted public opinion polling. We chose to survey nuclear-armed states to permit us to examine cross national attitudes about the use of nuclear weapons. We focus on democratic states because mass public opinion is more likely to influence national policy in democratic states.⁵⁶ YouGov utilizes a technique called “sample

⁵⁵ In Israel, we excluded Arab Israeli subjects (about 14% of the Israeli population) from our sample (Pew - <http://www.pewresearch.org/fact-tank/2016/03/08/key-findings-religion-politics-israel/>). Arab and Jewish citizens of Israel are known to have dramatically different opinions on the use of force. Although those differences could be quite interesting, surveying this population over the internet is especially difficult, and combined with our relatively small sample size, we would have been unable to draw confident conclusions about their beliefs. Moreover, for a variety of reasons, Arab citizens of Israel have relatively little influence over Israeli politics, especially in issues of military and foreign policy decisions. For this argument, see As'ad Ghanem, “Israel's Second-Class Citizens: Arabs in Israel and the Struggle for Equal Rights,” *Foreign Affairs* (July/August 2016).

⁵⁶ We considered also conducting a survey in India, the only other democratic, nuclear-armed state. Conducting high quality public opinion surveys in India, however, is extremely difficult. Since approximately 25% of the Indian population is illiterate and only 35% have access to the internet, face-to-face polling is the only sampling method that can ensure a representative sample. In addition, it is difficult to conceive of a military threat that might be equally credible and significant for India and the other four states, given India's limited power projection capabilities. In one internet poll of Indian attitudes towards nuclear weapons, 53 percent of Indians polled preferred using nuclear weapons to destroy a terrorist nuclear weapons laboratory even when a conventional strike would have been equally effective. 72 percent preferred the nuclear strike when the nuclear attack was described as twice as effective as the conventional option. Sagan and Valentino, “Atomic Attraction”.

matching” to approximate a representative sample in each of the four countries we surveyed.⁵⁷ All results presented in this paper are weighted, using survey weights provided by YouGov, which are calculated to match the age, gender, race and education distributions of the target populations.

We randomly assigned subjects in each country to one of five treatment groups or to a control group (each treatment group in each country constituted an average of 166 subjects and the control condition constituted an average of 324 subjects per country). In each of the five treatment groups, we asked respondents to read a mock news story. Subjects in the control condition read no story.⁵⁸ The stories were clearly identified as fictional, but were designed to be equally realistic from the points of view of respondents in each of the four countries. All subjects were encouraged to “imagine how you would feel about these events if they were happening in the real world today.” We constructed the stories to mimic typical newspaper stories of between 650-700 words. This format allowed us to emphasize and repeat key elements of the experimental treatment in the story headlines, pull quotes and summary tables and to provide sufficient contextual information to limit potentially confounding assumptions subjects might make across different conditions.⁵⁹ This format is also intended to heighten the realism of the experience for subjects, increasing the external validity of any findings.⁶⁰

In all five versions of the news story, subjects read that their country’s political leadership had received credible information that a “previously unknown Islamist terrorist group” based in a remote town in northern Libya was planning a chemical weapons attack on buses in the nation’s capital. The story reported that the information about the attack was initially uncovered by Swedish intelligence agents who had intercepted specialized chemicals and equipment used to produce sarin gas, a deadly nerve toxin often used in chemical weapons.⁶¹ Two smugglers, employees of a Swedish chemical plant, had been apprehended by Swedish authorities and had confirmed under questioning that previous chemical shipments had already arrived at the terrorist facility in Libya where chemical weapons were being manufactured by the terrorist group. This scenario was designed to maximize the credibility of the intelligence regarding the

⁵⁷ For a detailed description of this method see YouGov, https://smpa.gwu.edu/sites/g/files/zaxdzs2046/f/downloads/YG_Matching_and_weighting_basic_description.pdf

⁵⁸ Footnote here on why it is unclear that using a “random” story is better in this context.

⁵⁹ All respondents were asked two “manipulation check” questions to determine whether they comprehended the key aspects of the treatments. Subjects who answered incorrectly were asked to read the story again. Over 85 percent of subjects answered correctly the first time and 100 percent answered correctly the second time.

⁶⁰ The full stories are included in Appendix A1. The British, French and Hebrew versions of the stories will be available in an online appendix.

⁶¹ We chose Sweden as the source of the intelligence to avoid potential suspicions on the part of citizens that the intelligence might have been manipulated by domestic political authorities.

terrorist plot, decreasing the likelihood that subjects would question whether the threat was genuine. We selected Libya as the location for the terrorist facility because it provided the most plausible location from which a terrorist group might operate and strike against any of the four states and because Libya is within range of both the nuclear and conventional weapons systems of all four states. In addition, none of the four states surveyed had a manifestly adversarial or friendly relationship with Libya in 2018.⁶²

The story reports that political leaders are currently deciding how to respond to the information of the imminent terrorist attack. The news story features a leaked military report by the country's top military advisers, outlining two potential military options being considered to preempt the attack. Subjects read that because the precise location of the underground bunker that the terrorists are using to assemble the weapons within the Libyan town is unknown, "destroying it will require either a large conventional strike or the use of a nuclear weapon." The first option would use 50 conventionally armed cruise missiles to destroy the facility. The second option would use a single nuclear-tipped cruise missile. Because both strikes use pilotless cruise missiles, the report states that neither would risk any compatriot military fatalities. The military report emphasizes that if no action is taken, the terrorists will carry out the attack, which is projected to kill 3,000 civilian compatriots and that the country "only has one shot at destroying the facility," since the terrorists are likely to relocate if the facility is not destroyed in the first strike.⁶³ The article also states clearly that the "report does not recommend which option the president [or prime minister] should choose."

The first two treatment groups are designed primarily to explore the prevalence and strength of categorical opposition to the use of nuclear weapons. In condition 1, which we label "effectiveness 90/90," all of the relevant consequences of the nuclear and conventional strikes are identical. Each strike has a 90% probability of destroying the terrorist facility and preventing the planned attack. The report states that although the military "will attempt to minimize civilian loss of life" in both strikes, 2,700 Libyan civilians will be "unavoidably killed" as a "regrettable side-effect" of either strike, "including immediate deaths and deaths resulting from long term consequences" of the strikes. Thus, the only difference between the two strikes in this condition

⁶² The article states that although some of the townspeople are politically sympathetic to the terrorist group, many oppose them and "there is no evidence... that support for the group extends beyond political sympathy. Citizens... have not provided any material aid or recruits to the terrorists." The townspeople, therefore, clearly meet international legal standards for civilian status.

⁶³ We chose an estimated 3,000 compatriot civilian deaths in order to equalize the expected number of Libyan civilian deaths and the expected number of compatriot civilian lives saved in the nuclear strike in most of our scenarios. In treatments 1, 2 and 4, the nuclear strike is estimated to kill 2,700 Libyan civilians and has an estimated 90 percent probability of destroying the chemical weapons facility and preventing the terrorist attack. Thus, the nuclear strike is expected to save 2,700 compatriots.

is the type of weapon used. Condition 2 (effectiveness 90/45) is identical to condition 1, except that the conventional strike is described as only 45% likely to destroy the terrorist target, while the nuclear option remains 90% effective. This condition, therefore, forces subjects to consider whether avoiding the use of nuclear weapons is more important than doubling the likelihood of preventing the terrorist attack.

Condition 3 (“nuclear 100k deaths”) allows us to explore how subjects weigh the consequences of using nuclear weapons for the adversary’s civilians against the greater military utility of nuclear weapons. This condition mirrors condition 2, except that the more effective nuclear strike would now unavoidably kill 100,000 Libyan civilians instead of the 2,700 collateral civilian deaths estimated in the conventional strike.

Condition 4 (“target civilians”) is designed to test the strength of the categorical non-combatant immunity norm. It mirrors condition 1, with both strikes estimated to be equally effective and Libyan civilian fatalities projected at 2,700 for either military option. The civilian fatalities resulting from both strikes in this condition, however, are explicitly described as intentional, rather than a “regrettable side-effect” as in condition 1. The article states that the attacks will “target the facility and surrounding civilian population” and that the military report concludes that by “targeting the civilian population, both strikes would ‘send a strong message to terrorist sympathizers everywhere to reject ideologies of terror.’”

Finally, we designed a fifth condition (“Christian 100k deaths”) to explore whether subjects weigh the consequences of using force differently depending on the identity of those who bear the costs of force. Since nothing in consequentialism determines which costs matter, it seems likely that in-group bias or out-group hostilities could lead subjects to accord greater moral weight to protecting some kinds of lives. In the context of our scenario, anti-Islamic sentiments could drive an increased willingness to accept the increased collateral deaths of the Libyan civilians. Condition 5, therefore, is identical to condition 3 (nuclear 100k deaths), with 100,000 civilian fatalities expected to be killed by the nuclear strike, except that the population of the Libyan town is described as evenly divided between Roman Catholics and Muslims.⁶⁴ Thus, subjects in this condition can assume that roughly half of the civilian fatalities from either strike will be Christian.

After reading the news stories, respondents were asked a series of questions about their preferences and beliefs about the use of force in this situation. These include, which military

⁶⁴ Libya does, in fact, have a sizable Roman Catholic minority.

option subjects prefer and the extent to which they consider each option ethical.⁶⁵ Subjects were also given the opportunity to rank order their preferred options, including the option not to strike the target at all. We further asked subjects to explain their choice in their own words in open-response questions. After responding to this series of questions (our primary dependent variables) subjects were asked to answer a series of additional questions designed to gauge their political beliefs, the degree of their attachment to their own nations, and their beliefs about other nations. Subjects in the control group only received this second set of questions. The relevant details of each condition are summarized in Table 1, below. Note that the conditions are not fully crossed, so it is not possible to experimentally compare each condition to every other condition in the experiment.

Table 1: Treatment Conditions

TREATMENT CONDITION	1: Effectiveness 90/90	2: Effectiveness 90/45	3: Nuclear 100k deaths	4: Target Civilians	5: Christian 100k deaths
MILITARY EFFECTIVENESS OF NUCLEAR AND CONVENTIONAL STRIKES	Nuclear: 90% Conventional: 90%	Nuclear: 90% Conventional: 45%	Nuclear: 90% Conventional: 45%	Nuclear: 90% Conventional: 90%	Nuclear: 90% Conventional: 45%
ESTIMATED LIBYAN CIVILIAN DEATHS	Nuclear: 2,700 Conventional: 2,700	Nuclear: 2,700 Conventional: 2,700	Nuclear: 100k Conventional: 2,700	Nuclear: 2,700 Conventional: 2,700	Nuclear: 100k Conventional: 2,700
INTENTIONAL TARGETING OF LIBYAN CIVILIANS?	NO	NO	NO	YES	NO
RELIGION OF LIBYAN TOWNSPEOPLE	Muslim	Muslim	Muslim	Muslim	Mixed Muslim-Christian
COMPARE CONDITION WITH:	2 & 4	1 & 3	2 & 5	1	3

Results

The Nuclear Taboo and Civilian Immunity: A Consequentialist Public

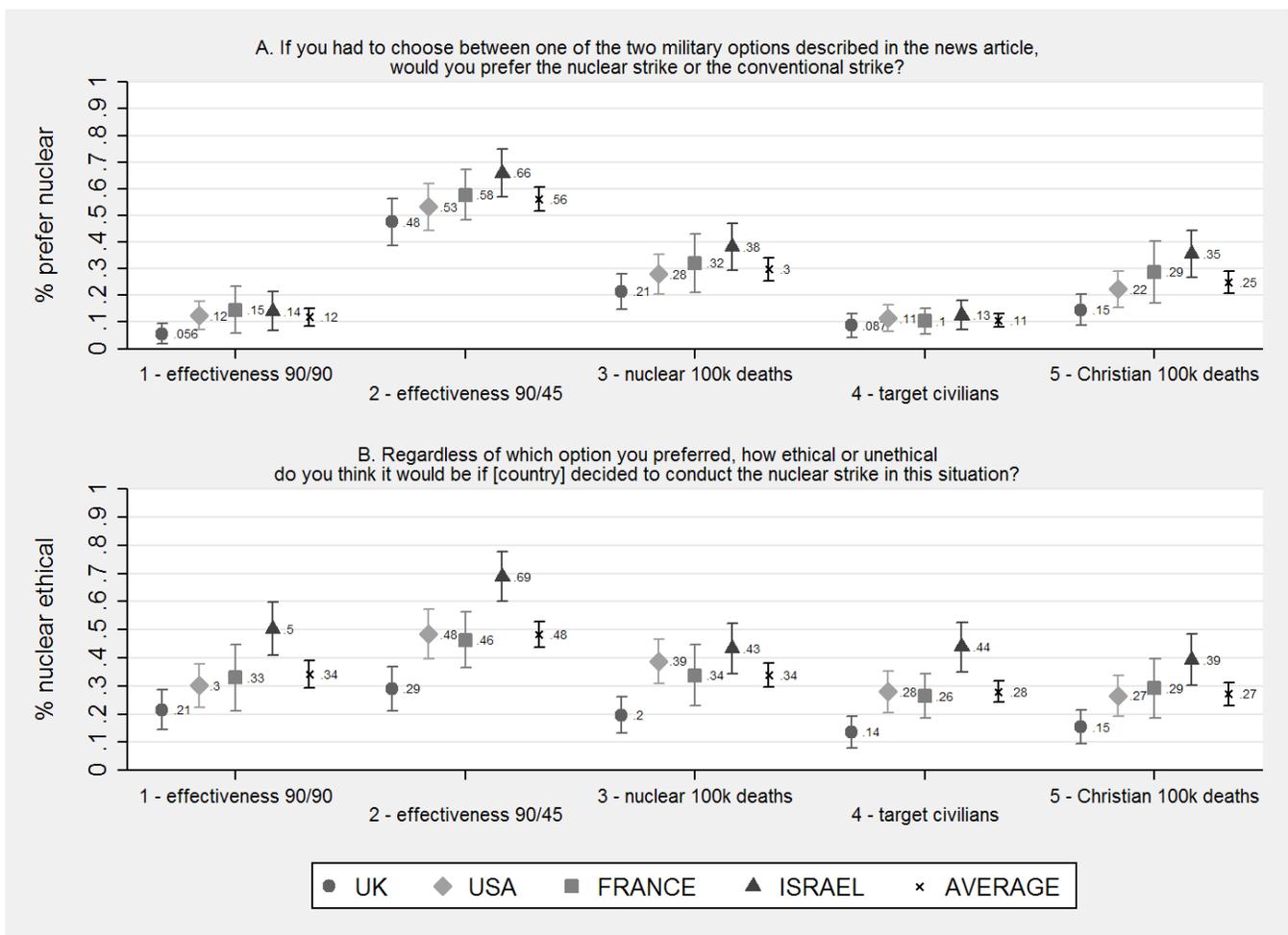
The results presented in Figure 2 below show the percentages of subjects in each country who preferred the nuclear strike (panel A) and who agreed that launching the nuclear strike would be ethical (panel B). In addition to the four countries, a fifth category (designated with an “x” symbol) represents the average of responses, aggregated across all countries.

Our results provide relatively little support for a widespread internalization of categorical norms against nuclear weapons. Although only 12 percent of respondents (averaging across the four countries) preferred the nuclear strike when the consequences of nuclear and conventional weapons were described as equal (condition 1, panel A), 34 percent nevertheless believed that launching the nuclear strike in that situation would be ethical (panel B). Moreover, subjects’ willingness to use nuclear weapons increased over four times (to 56 percent) when the article

⁶⁵ Most of our questions were asked on a 6 or 7-point interval scale. For ease of interpretation, however, in this paper we present most of our results in binary form. Unless otherwise noted, our results remain consistent using either the interval or binary form. All question wordings are provided in Appendix 2.

reported that the nuclear strike would be twice as likely as the conventional strike to destroy the terrorist target (condition 2). These increases were strongly statistically significant in every country. Indeed, a majority of the public in every country preferred the nuclear strike in condition 2, with the exception of the United Kingdom, where 48% preferred it. This pattern of results is not consistent with a strong, categorical taboo on the use of nuclear weapons. Rather, the greater willingness of subjects to support the use of nuclear weapons when they offer an increased ability to destroy the terrorist target and prevent an attack on their homeland suggests that most respondents view the decision to use nuclear weapons primarily in consequentialist terms.

Figure 2: Preference for Nuclear Strike Option and Ethical Assessments, by Country and Condition



Subjects' views of the ethics of the nuclear strike suggest a somewhat more complicated picture. On average, subjects rated the strike significantly more ethical in condition 2 (48%) than in condition 1 (34%). The increase between conditions, however, was much smaller than the increase in preferences for the nuclear strike. On average, significantly fewer subjects in

condition 2 rated the nuclear strike ethical (48%) than preferred it (56%).⁶⁶ Some subjects, in other words, preferred the strike even though they believed it was unethical. Indeed, in the UK, only 29% said the strike would be ethical, even though 48% preferred it. These results suggest that at least some subjects do attach ethical significance to the use of nuclear weapons. These subjects acknowledge that using nuclear weapons constitutes a transgression of some kind, but this concern is not enough to overcome their desire to minimize the risks of harm to their compatriots.

The broad consequentialist pattern in the responses is reinforced by the results from condition 3, in which subjects read (as in condition 2) that nuclear weapons would be twice as effective in destroying the terrorist target, but would now kill 100,000 Libyan civilians instead of the 2,700 who would die in the conventional strike. In line with consequentialist reasoning, subjects appeared to weigh the increased effectiveness of nuclear weapons against the increased fatalities they produced. The four-country average preference for the nuclear strike (panel A) declined dramatically from 56% in condition 2 to 30% in condition 3. The declines were strongly statistically significant for each of the four individual countries, although support for nuclear weapons remained significantly higher than in condition 1, where the nuclear strike would kill the same number of civilians as the conventional strike but provided no military advantage.

Subjects were also significantly less likely to judge the attack as ethical in condition 3 (34%) than in condition 2 (48%). Whereas subjects in condition 2 were more likely to prefer the attack than to say it was ethical, in condition 3 we found the opposite pattern – subjects (averaging across countries) were significantly more likely to say the nuclear strike was ethical (34%) than they were to prefer it (30%).⁶⁷ For most individual countries, however, the difference was small. Only in the United States was the gap between preferences and ethical assessments greater than 5%.⁶⁸ The addition of thousands of Libyan civilian deaths to the balance sheet, in other words, did relatively little to change ethical views of the strike in most countries, despite significantly decreasing subjects' support for it. This should not be taken to mean, however, that most subjects had few ethical reservations about the killing of 100,000 civilians. More likely, it suggests that most subjects who were ethically troubled by killing civilians were already troubled by the use of nuclear weapons and had little way in our survey to express deeper concerns.

The comparison between conditions 1 and 4 represents our main test of the strength of the categorical non-combatant immunity norm. As with the nuclear taboo, we found at best

⁶⁶ At the country level the differences were statistically significant only for the UK and France.

⁶⁷ The differences between conditions 2 and 3 were significant for the US, UK and France at $p < .1$ and for Israel at $p < .001$.

⁶⁸ $p = .0033$ for US ethical vs preference.

modest evidence of the internalization of a categorical prohibition on the intentional killing of civilians. In these two conditions the nuclear and conventional strikes were described as equally effective. In condition 1, however, the civilian fatalities expected in both strikes were described as “unavoidable,” and a “regrettable side-effect” of the attack on the military target. In contrast, in condition 4, subjects read that both the nuclear and conventional strikes would intentionally target local civilians to “send a message” to terrorist supporters. Since both the nuclear and conventional strikes violated the non-combatant immunity norm in condition 4, we would not expect to see a difference in preferences for the nuclear option between conditions 1 and 4 – and we do not find any (on average, nor for any individual country). Subjects, do, however, rate the intentional nuclear attack against civilians in condition 4 as slightly, but significantly, less ethical than the strike that kills civilians unintentionally in condition 1 (34% to 28%).⁶⁹ Although ethical ratings decline for citizens of each country, the effect is small and significant only for the four-country average.⁷⁰

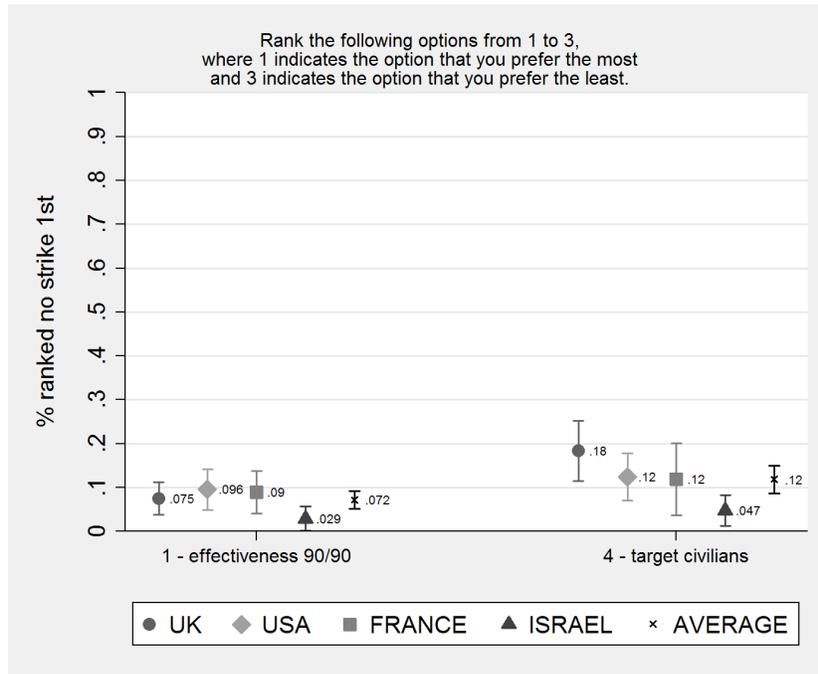
To explore the categorical non-combatant immunity norm further, we also asked subjects to rank order their preferences for three options for responding to the terrorist threat – launching the nuclear strike, launching the conventional strike, and not striking the target at all. Figure 3 shows the percentage of subjects who ranked the “do not attack” option first in conditions 1 and 4. Subjects who believed that deliberately targeting civilians is never acceptable should have preferred not launching any attack at all in condition 4, and they should have been much more likely to prefer this option in condition 4 than in condition 1. Averaging across all four countries, we did find that subjects in condition 4 were somewhat more likely (4.7 percentage points) to rank not striking as their most preferred option than subjects in condition 1.⁷¹ It is important to note, though, that despite this change between conditions, the vast majority of subjects across countries (88.2 percent) still preferred some form of military attack, even when the strikes intentionally targeted civilians. Moreover, the disaggregated results reveal that the acceptance of the categorical prohibition on attacks against civilians appears to be limited largely to citizens of the U.K. British respondents’ preferences for “no strike” increased by 11 percentage points between conditions 1 and 4, while no other country changed by more than 3 points. Indeed, the UK is the only country in which preference for the “no strike” option increased significantly between these two conditions. Again, therefore, our results reflect at best a weak internalization of the categorical norm against targeting civilians

⁶⁹ The four-country average ethical rating for the *conventional* strike was also lower in condition 4 than condition 1 ($p=.07$).

⁷⁰ The decline for the UK between conditions 1 and 4 is significant at $p=.09$.

⁷¹ This difference was statistically significant ($p=.014$)

Figure 3: Preference for “Do Not Strike” Option, by Country and Condition



In order to gain a deeper understanding of the logic behind respondents’ choices, we asked all subjects to briefly describe in their own words, “the single most important reason they preferred” the nuclear or conventional strike. Subjects who ranked not striking at all first when presented with all three options, were additionally asked to describe the most important reason for that preference. Using a team of four human coders, we systematically identified all responses that expressed a categorical opposition to nuclear weapons or the intentional targeting of civilians.⁷² The open-ended responses provide little indication of categorical reasoning in any of the four countries. Even among people who opposed using nuclear weapons, very few subjects referenced taboo logic, with less than 10 percent, on average, expressing categorical rejections of nuclear weapons in any condition. Subjects more frequently explained their opposition to nuclear weapons using taboo rationales in condition 2, in which nuclear weapons were most attractive on consequentialist terms, than in all other conditions.⁷³ Although few subjects from any country used categorical reasoning to reject the nuclear weapons, Israelis who opposed the nuclear strike were significantly less likely than citizens in all other countries to cite such reasons.⁷⁴

⁷² Coding procedures for open-ended responses are described in appendix 3.

⁷³ The difference between condition 2 and condition 3, however, was significant only at $p=.066$

⁷⁴ The difference between Israel and France, however, was significant only at $p=.061$

We found similar results when we examined the open responses from subjects in conditions 1 and 4 who preferred not striking the terrorist facility at all for evidence of a categorical prohibition on targeting civilians. No subjects in the UK, France or Israel cited civilian immunity as the reason for their preference for preferring no strike in condition 4. In the United States, 14 percent did cite immunity, but because the numbers of respondents who preferred the no strike option are so small, none of the differences between countries or conditions was statistically significant.

Thus, the pattern of responses between conditions strongly suggests that subjects in all four countries draw on a consequentialist, rather than a categorical logic, when assessing the use of nuclear weapons. Two additional patterns, revealed by examining the differences between countries, however, provide further clues for understanding the sources of public opinion on nuclear weapons. First, not only did citizens of all four countries respond to changes in the relevant consequences of nuclear weapons (military effectiveness and the number of civilian collateral fatalities), they did so in nearly identical ways. We found no significant interactive effects between citizenship and the relevant conditions for nuclear preferences, ethical ratings, or preferences for no strike. In other words, citizens from different countries changed their attitudes by proportionally indistinguishable amounts across each set of conditions. For example, increasing the number of expected Libyan civilian casualties in the nuclear strike from 2,700 in condition 2 to 100,000 in condition 3 decreased preferences for using nuclear weapons from 48 to 21 percent (a 56 percent change) in the U.K. This change was statistically indistinguishable from the corresponding decreases in the U.S., France and Israel – 47, 44 and 42 percent respectively.

Second, although the treatments seem to have affected each country in similar ways, we found a remarkably stable pattern of responses between countries within each condition. Across all four conditions, citizens of the U.K. were the least willing to use nuclear weapons, the most likely to register moral reservations about the nuclear attack, and among the most likely to prefer not attacking at all. Israelis, on the other hand, were almost always the most willing to prefer the use of nuclear weapons, the most likely to say doing so was ethical, and the least likely to prefer not striking at all. Israelis are statistically significantly more likely than British citizens to prefer nuclear weapons in every condition except condition 4, to judge the nuclear option ethical in every condition, and less likely to prefer not striking in every condition except condition 3. American and French citizens are typically located below Israel and above Britain and are statistically indistinguishable from one another in every condition on all three measures. To revise Robert Kagan's metaphor, it appears that Israelis are from Mars and British citizens are

from Venus, while the French and Americans are from somewhere in between (perhaps here on Earth).

In sum, while citizens in all four countries appear to reason with a broadly similar, consequentialist logic, public opinion across the four countries differs markedly and consistently in hawkishness. In other words, Israeli hawks and British hawks think about nuclear weapons in much the same ways. Israel simply has many more hawks.

Compatriot Partiality, Vengefulness and Cross-National Differences in Attitudes about Nuclear Use

How can we explain the relatively stable pattern of differences between countries across these different conditions? What makes Israeli and British citizens view the use of nuclear weapons so differently? As we noted above, the existing literature lacks strong theories for cross-national variations in hawkishness. Moreover, since our study was designed primarily to detect differences in attitudes between countries and conditions, it is not well powered statistically to explore differences between subgroups within different countries. Nevertheless, we conducted an exploratory analysis of two explanations for the differences between countries, and found some suggestive results.

First, we explored whether subjects' relative partiality for their own citizens versus foreign citizens might explain why some subjects and countries were more hawkish than others. The results described above tell us that citizens of all four countries construct their opinions about nuclear use largely by weighing the various consequences of these weapons. The fact that most people are consequentialist reasoners, however, tells us nothing about what kinds of consequences they value most. In particular, it seems likely that citizens of some countries might place much greater weight on protecting the lives of their fellow citizens compared to the lives of foreigners, while others might adopt the cosmopolitan view that all human life is equally worthy of protection. We call the extent to which individuals favor the welfare of their own citizens over non-citizens "compatriot partiality." A significant body of research suggests that variations in out-group hostility and in-group biases can powerfully influence individuals' beliefs about the world, including their attitudes about the use of force.⁷⁵ These biases may lead subjects to accord greater weight to saving compatriot civilians' lives (and hence to the effectiveness of

⁷⁵ A. Burcu Bayram, "Due Deference: Cosmopolitan Social Identity and the Psychology of Legal Obligation in International Politics," *International Organization*, Vol. 71, No. S1 (2017), pp. S137-S163; Richard, K. Hermann, "How Attachments to the Nation Shape Beliefs About the World: A Theory of Motivated Reasoning," *International Organization*, Vol. 71, No. S1 (2017), pp. S61-S84; Henry Tajfel and J.C. Turner, "The Social Identity Theory of Intergroup Behavior," in J. T. Jost & J. Sidanius eds., *Key Readings in Social Psychology* (New York: Psychology Press, 2004), pp. 276-293; Scott D. Sagan and Benjamin A. Valentino, "Weighing Lives in War: How National Identity Influences American Public Opinion about Foreign Civilian and Compatriot Fatalities," *Journal of Global Security Studies*, forthcoming.

certain military options) than to saving foreign civilians' lives. Subjects who place a greater relative value on the lives of members of their in-group should be particularly willing to tolerate harms to out-groups and to violate competing ethical norms when doing so might increase the possibility of saving compatriot lives.

One indication of the power of compatriot partiality is apparent in the comparison between conditions 3 and 5 (Figure 2). In both conditions, subjects read that the nuclear option would be twice as effective as the conventional option, and that nuclear weapons would kill 100,000 Libyan civilians, compared to 2,700 in the conventional strike. In condition 5, however, subjects also read that half of the Libyan civilian victims would be Christians. The four-country average preference for the nuclear strike declined from 30% when the victims were all Muslim, to 25% when half of them were Christian. Although this difference was relatively small and not strongly significant ($p=.1$), the decline in the average ethical ratings of the nuclear strike was larger, dropping from 34% to 27% ($p=.03$). Ethical ratings fell for all four countries in condition 5, but the decline among American citizens, where the Christian in-group identity is plausibly the strongest, was the largest (12%) and the only statistically significant change.

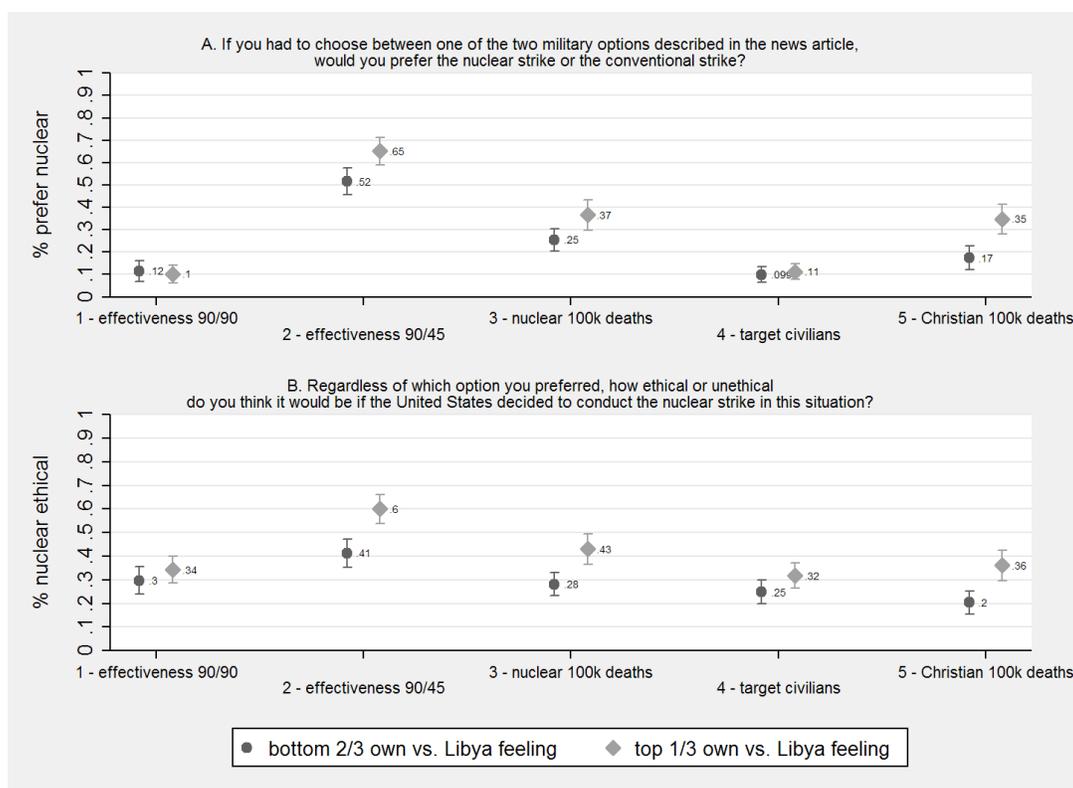
To further explore whether variation in the strength of compatriot partiality might be driving some of the significant cross-country variations we observe, we asked all subjects to use standard 100 point "feeling thermometers" to rate their levels of "warmth" or "coldness" towards their own country and towards Libya, where the terrorist facility was located. We then subtracted subjects' Libya feeling thermometer score from their "own country" score. Figure 4 shows how subjects (pooled across all four countries) in the highest 3rd of the resulting variable (i.e., the largest relative weighting of their own country) compare to subjects in the bottom 2/3rd across all 5 conditions on their preferences for using nuclear weapons and their ethical assessments of the nuclear strike.⁷⁶ Because compatriot partiality is likely correlated with several other individual-level attributes that might also influence attitudes about the use of force, the results in figure 4 are adjusted after controlling for measures of age, gender, education, political conservatism, and religiosity.

Subjects in the top 3rd of the compatriot partiality measure were more likely to prefer using nuclear weapons and judge them ethical in every condition, except 1 and 4. In addition, we found evidence that high compatriot partiality subjects responded differently to the increasing military effectiveness of nuclear weapons between conditions 1 and 2 than did low compatriot partiality subjects. High compatriot partiality subjects increased their support for the

⁷⁶ We use the dichotomous measure for ease of interpretation. The patterns remain consistent when using the continuous version of the feeling thermometer variable.

nuclear strike by 55 percentage points across the two conditions, compared to 40 points for more cosmopolitan subjects.⁷⁷ Ethical assessments of the strike increased by 26 percentage points across the two conditions for high compatriot partiality subjects, but by just 11 points for the low partiality group. Subjects who place a higher value on their own compatriots, in other words, were more willing to use nuclear weapons to increase the chances of protecting those compatriots from attack. Surprisingly, however, we found no significant interactions between compatriot partiality and conditions 2 and 3, in which we varied the number of Libyan civilians killed by the nuclear strike. One possibility is that, at this very high level of foreign civilian fatalities, even subjects who place a relatively high weight on the lives of compatriots are equally swayed by the sheer number of deaths on the other side.

Figure 4: Preference for Nuclear Strike Option and Ethical Assessments, by Compatriot partiality and Condition



The second explanation for cross national variation that we explored focuses on the desire for vengeance. As we described above, scholars have collected substantial evidence indicating that variations in “retributiveness” can help explain variations in preferences for the

⁷⁷ The interaction between compatriot partiality and condition was significant at $p=.021$ for nuclear preference and $p=.013$ for nuclear ethics.

use of force, including nuclear weapons, between both individuals and countries. Although our conditions were not designed to vary the degree to which the use of nuclear weapons might be seen as retribution, the comparison between condition 1, in which the deaths resulting from the attack were described as regrettable, and condition 4, which the attack would “send a strong message to terrorist sympathizers everywhere to reject ideologies of terror” is a close approximation. To measure retributiveness, we use respondents’ support for the death penalty for convicted murderers, as previous scholars have done. Interestingly, while the United States is the only one of the four countries in our survey to retain the death penalty, support for capital punishment is surprisingly high in all three countries – 52% in the UK, 63% in France, 64% in the United States and 66% in Israel.⁷⁸

Figure 5: Preference for No Strike and Ethical Assessment of Nuclear Strike, by Death Penalty Approval (Conditions 1 & 4)

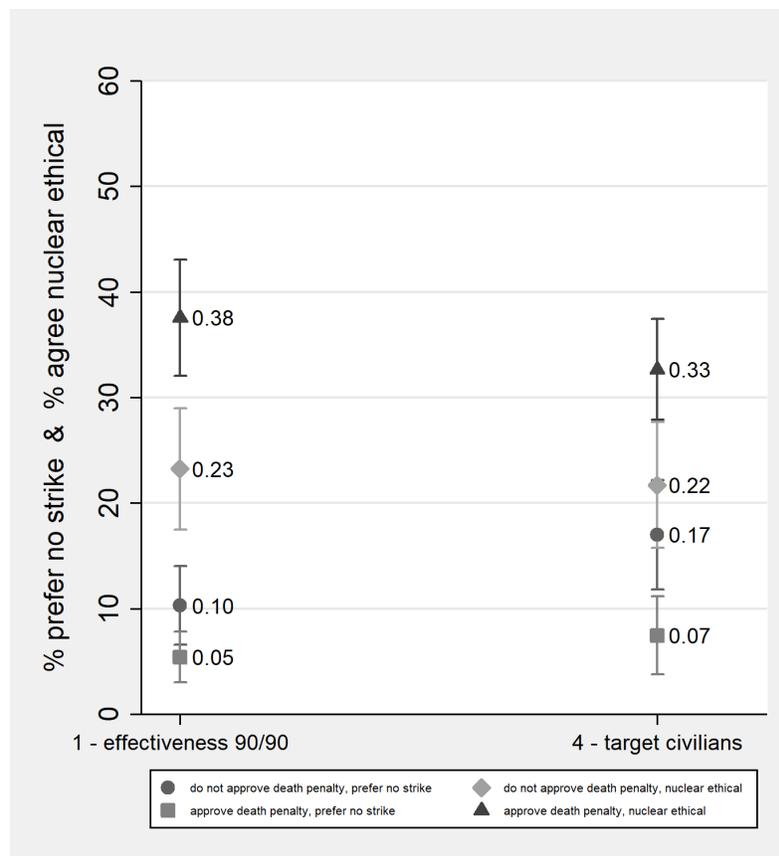


Figure 5 shows the percentages of subjects in conditions 1 and 4 who preferred not striking the target and who rated the nuclear strike as ethical, disaggregated by death penalty

⁷⁸ Approval of the death penalty in the UK was statistically significantly lower than in the other three countries. There were no statistically significant differences between Israel, France and the United States.

support.⁷⁹ Subjects who approved of the death penalty were more likely than those who opposed it to call the nuclear strike ethical and less likely to prefer not striking the target in both conditions. However, we found no significant interactions between support for the death penalty and the two conditions (or any of our other conditions). In other words, death penalty supporters did not respond to the opportunity for retribution in condition 4 differently than those who opposed the death penalty. Rather, both groups reduced their ethical ratings of the strike and increased their preference for not striking by statistically indistinguishable degrees. It is possible that subjects simply did not see condition 4 as a clearer opportunity for retribution than condition 1. These results could also mean, however, that the association between the death penalty and increased willingness to use force – at least in our scenarios – is not driven by retributiveness, but by some other correlate of death penalty support.

Although we found relatively few strong interactive effects between individual-level attributes and our five conditions, it is still important to examine why some subjects are more likely to prefer using nuclear weapons and to rate the nuclear strike as ethical, regardless of condition. To that end, figure 6 presents the marginal effects for nuclear preference by country, age, sex, religiosity, college education, political conservatism, support for the death penalty, and compatriot partiality on subjects' preferences for and ethical assessment of the nuclear strike. We also include variables for each experimental condition to show the relative sizes of the treatment effects. The UK and condition 1 serve as baseline categories in these models, so the marginal effects of the country and condition variables in figure 6 represent the relative effect of each country compared to the UK and each condition compared to condition 1.⁸⁰

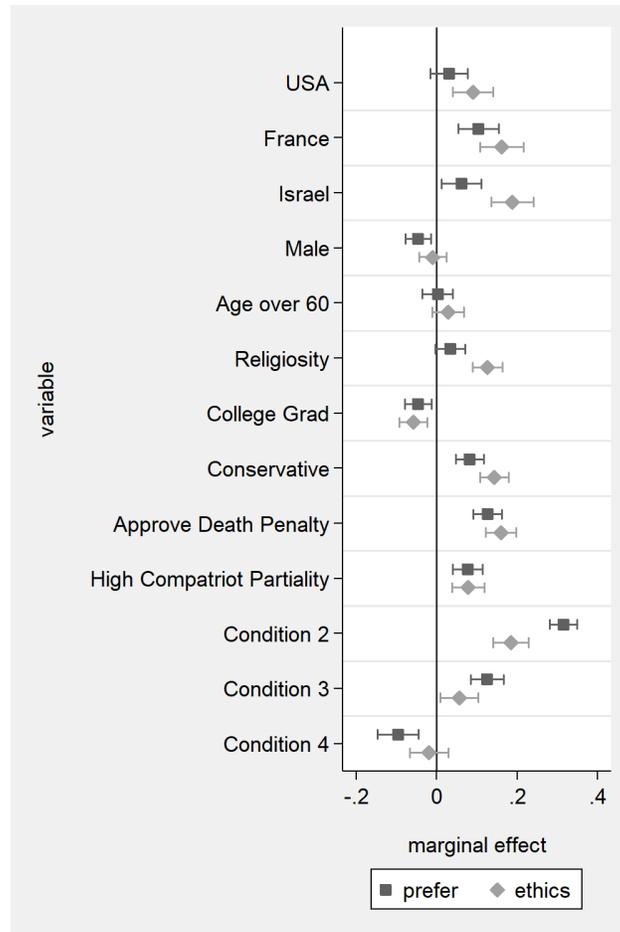
After controlling for these variables, US citizens are no longer distinguishable from citizens of the UK in their preferences for the nuclear option. France and Israel remain more likely to prefer nuclear weapons than the UK, but the differences are relatively small. The differences between the countries on ethical ratings remain much larger, however, suggesting that the factors in our model explain less of the variation between countries on this measure. Variables representing standard demographic characteristics like age, sex, and education have relatively small, and mostly statistically insignificant effects for both nuclear preferences and ethical assessments. Political conservatism, support for the death penalty and high compatriot partiality have much stronger effects, increasing the probability of preferring nuclear weapons and rating the nuclear strike ethical by between 8% and 16%. Interestingly, while highly religious

⁷⁹ Again, we control for age, gender, education, political conservatism, and religiosity.

⁸⁰ Keep in mind that our experiment was designed to compare condition 1 to conditions 2 and 4 only. Comparisons between other conditions can be made visually.

subjects were no more likely to prefer the nuclear strike, they were 13% more likely to say it was ethical, perhaps reflecting Old Testament views about retribution.

Figure 6: Marginal Effect of Treatments and Demographics on Preference for and Ethical Assessment of the Nuclear Strike



Conclusion

Although public opinion on real-world military operations and wars varies widely across countries, our findings suggest that most individuals draw upon the same logic of reasoning to form attitudes towards the use of nuclear weapons: a consequentialist logic that centers on the effects of a military operation for the preservation of human life. The more effective the use of force is projected to be in neutralizing a threat to compatriot civilians and the homeland, the more support it attracts. The greater the number of foreign civilians who are expected to be killed in a military operation, the less likely are individuals across all four countries to endorse a nuclear strike. Categorical reasoning, namely a nuclear taboo and an absolute prohibition on

intentionally targeting civilians, does little to shape public opinion on the use of force in the United States, the United Kingdom, France or Israel. Even though individuals' ethical assessments reveal that majorities in all countries, except in Israel, find nuclear use and targeting civilians ethically troubling, their consequentialist preferences regularly diverge from these ethical beliefs.

Recently scholars have criticized the use of mock news stories for investigating respondents' attitudes towards military operations without priming subjects by highlighting that the military options contemplated could be considered in violation of legal or ethical norms.⁸¹ Charli Carpenter and Alexander Montgomery in particular have argued that such experiments "prime[...] respondents to *disregard* moral and legal taboos [emphasis in original]"⁸² and therefore underestimate the "internalization" of norms against the use of nuclear weapons and the victimization of civilians.⁸³ We believe that a marker of a norm's internalization - especially categorical norms - is that subjects express preferences that are compatible with the norm even when they are not reminded of this norm's existence. Internalization, as described by Kathryn Sikkink and Martha Finnemore, is the final stage of a norm life cycle.⁸⁴ Norms are internalized when they are "taken for granted" and introduced into a person's habitus. People do not need to be reminded that cannibalism is against the law when presented with an opportunity to violate that deeply held taboo. Compliance at the internalization stage is subconscious.⁸⁵ Moral and legal taboos against nuclear use or the targeting of civilians would, therefore, be internalized precisely when they are reflected in individuals' preferences without individuals' needing to be primed to think about law or ethics.

Internalization, of course, is different from an individual's mere recognition that a norm or law exists, that it is valid, and that it denotes unethical conduct. Our findings, however, suggest that even when respondents are explicitly asked to make an ethical assessment as opposed to stating a preference for action, they displayed very little categorical reasoning. Respondents' assessment of a nuclear attack as ethical drops by only 6% on average across the four countries when the nuclear attack is described as intentionally directed against civilians.

⁸¹ Carpenter and Montgomery, "Stopping Power of Norms"; Alexandria A. Nylen and Charli Carpenter, "Questions of Life and Death: (De)constructing Human Rights Norms Through US Public Opinion Surveys," *European Journal of International Security*, Vol. 4, No. 2 (2019), pp. 142-162.

⁸² Carpenter and Montgomery, "Stopping Power of Norms", p. 18.

⁸³ *Id.*, p. 8.

⁸⁴ Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," *International Organization*, Vol. 52, No. 4 (1998), pp. 887-917895.

⁸⁵ Norm internalization is helped along and often depends on the institutionalization and habituation of norm-compliance. See Thomas Risse and Kathryn Sikkink, "The Socialization of International Human Rights Norms into Domestic Practices," in Thomas Risse, Stephen Ropp and Kathryn Sikkink, eds., *The Power of Human Rights: International Norms and Domestic Change* (Cambridge: Cambridge University Press), p. 5.

Although, majorities across three of the four countries describe using nuclear weapons as unethical, these majorities shrink, in Israel to just over 30%, when the nuclear option has “better consequences.” Open-ended answers reveal that in all four countries, individuals who reject nuclear use even when it is described as more effective in destroying the target, do so because they worry that such an attack would set a precedent that makes nuclear use against their own country more likely in the future. In addition, even when subjects read that nuclear and conventional weapons would have identical effects, many expressed the worry that the radiation and environmental damage caused by nuclear weapons could be much worse than expected. Rather than revealing the importance of “moral and legal taboos,” our research primarily shows respondents’ agreement with consequentialist norms against nuclear use and civilian casualties, consequentialist norms that do not always influence individuals’ preferences.

Although we find that public opinion in all four countries follows the same logic of reasoning, we also find substantive differences in attitudes towards the use of nuclear weapons. Higher compatriot partiality helps explain why Israelis are more likely to support a nuclear strike and less likely to prefer holding back from striking at a terrorist target, while British citizens are more reluctant to resort to nuclear weapons and more likely to prefer not using force at all. Cross-national differences in hawkishness are thus not explained by a difference in the logic of public opinion, but by the prevalence of hawks, i.e. consequentialist reasoners with a strong partiality for compatriots, in the different countries. Nuclear doves are consequentialists too, they just weigh the consequences of the use of force for foreign and compatriot civilians more equitably.

These conclusions have important implications for central debates in international relations theory. Mainstream rationalist theories of international relations portray all states as driven by the same logic of reasoning, they minimize costs and maximize the projected benefits of action defined in terms of power or prosperity. Constructivist theories, in contrast, allow for the internalization of norms to influence states’ logic of reasoning, as well as their perceptions of what constitutes a cost and what a benefit. Although international relations theories tend to speak primarily to how states act rather than what publics prefer, research has firmly established a link between both in democratic states. Our findings, then, suggest that rationalist theories are half right. Public opinion in different states is driven by the same logic of reasoning, a rationalist cost benefit analysis, largely unencumbered by categorical norms. However, mainstream theories are wrong to suggest that publics all maximize the same goals or utilities. In fact, on average Israelis perceive the costs and benefits of using military force slightly differently than British respondents. Publics that appear more hawkish put greater weight on keeping the in-group safe

and less weight on sparing foreign civilians, while others seek to minimize all human costs of the use of force in more equal measure.

Our findings also have important policy implications. First, they suggest an answer to the puzzle of nuclear non-use. If the political elites responsible for the decision to use nuclear weapons reason as their publics do, the non-use of nuclear weapons since 1945 is likely the result of the belief that the negative consequences of nuclear weapons – including the number of civilians they would kill – outweigh their advantages over other alternatives in most military crises. As John Mueller (2010) writes,

Although nuclear countries have been at war or at military loggerheads with other countries from time to time since 1945, their nuclear restraint in these contests... seems to stem at least as much from perceptions of the weapons' military uselessness as from concerns about breaking any prohibitory tradition or taboo. That is, it has been less a tradition of nonuse than of non-usefulness.... At no point, it may well be, were there reasons to use the weapons that were compelling from a strictly military point of view (62).

Second, our findings are instructive for how we can best prevent nuclear use by states in the long-run. Anti-nuclear activists have expended considerable energy on strengthening the perceived public taboo on nuclear weapons use. The recently adopted Treaty on the Prohibition of Nuclear Weapons likewise bans nuclear strikes on the grounds that there is a categorical difference between conventional and nuclear weapons, casting the latter as “abhorrent to the principles of humanity and the dictates of public conscience.”⁸⁶ Our research suggests that their ethical qualms about nuclear weapons notwithstanding, most citizens across our four countries are prepared to support a nuclear strike if the positive consequences of nuclear use outweigh the negative consequences of holding back. For those seeking to mobilize public opinion against these weapons, our results suggest that their efforts might be better spent educating the public, not that nuclear weapons are inherently evil, but rather that their effects on humans and the environment are worse than they may understand and that breaking the 70-year-old tradition of nuclear non-use is likely to lead to further uses against their own country in the future. In short, rather than appealing to the better angels of our nature, it might be more effective to appeal to the better calculators of our perceived utilities.

Similarly, our findings offer new insight into how public opinion may serve as a constraint on civilian victimization on the battlefield. Sahr Conway Lanz argues that after the Second World War, “intent became the moral fulcrum in American attitudes towards non-

⁸⁶ Preamble, UN Treaty on The Prohibition of Nuclear Weapons, 6 July 2017, A/CONF.229/2017/L.3/Rev.1.

combatant immunity,”⁸⁷ a way to reconcile “massively destructive ways of war .. with the norm of non-combatant immunity.”⁸⁸ This may be true for military practitioners and policy makers. However, as far as public opinion in the investigated nuclear-armed democracies is concerned, our results suggest that consequentialist calculations undergird public attitudes about civilian casualties.⁸⁹ Public reluctance to support targeting civilians stems not from the conviction that *intentionally* killing civilians is inherently wrong. Instead, it is connected to a general concern that foreign civilian casualties, whether intended or not, are ethically problematic specifically if the magnitude of civilian harm far outstrips the gain in military effectiveness. If “the centrality of intention” in military discourse has indeed “contributed to a complacent stance towards the problem of collateral damage,”⁹⁰ as some scholars argue, our findings serve as a reminder that the public cares much more about the number of civilian casualties than about good intentions.

⁸⁷ Conway-Lanz, *Collateral Damage*, p. 229.

⁸⁸ *Id.*, p. 185.

⁸⁹ Benjamin A. Valentino, “Moral Character or Character of War?” *Daedalus*, Vol. 145, No. 4 (2016), pp. 127-138.

⁹⁰ *Id.*, p. 230; Neta Crawford, *Accountability for Killing: Moral Responsibility for Collateral Damage in America's Post-9/11 Wars* (New York: Oxford University Press, 2013).

APPENDIX A: NEWS STORIES (USA VERSIONS)

Story 1

(Taboo - conventional 90%, nuclear 90%)

Terrorists Planning Chemical Weapons Attack on Washington, D.C.. Joint Chiefs Say Nuclear and Conventional Airstrikes Have Equal Chance of Destroying Terrorist Chemical Weapons Lab in Libya

If Successful, the Terrorist Attack Would Kill an Estimated 3,000 Americans

Officials from intelligence organizations in Sweden and the United States have determined that an imminent chemical weapons attack against Washington, D.C. city buses is being planned by a previously unknown Islamist terrorist group based in Daraya, a small, Muslim city in northern Libya. If successfully carried out, experts estimate that the terrorist attack on Washington would kill approximately 3,000 people.

High-ranking administration officials speaking on the condition of anonymity confirm that the president and senior officials have received a report from the Joint Chiefs of Staff describing two U.S. military options for destroying the terrorist chemical weapons facility where the weapons are being produced. The facility is located in a deeply buried bunker once used by the Libyan military. Because the precise location of the bunker is not known, destroying it will require either a large conventional strike or the use of a nuclear weapon.

The emergence of the new terrorist organization in Daraya has evenly divided the population of the remote city. While half of the citizens openly cheered for the group, carrying its flags in public protests against the West, the other half strongly oppose the terrorists.

There is no evidence, however, that support for the group extends beyond political sympathy. Citizens of Daraya have not provided any material aid or recruits to the terrorists.

The first military option described in the report would target the facility using 50 conventionally-armed cruise missiles launched from navy ships currently deployed in the Mediterranean Sea. The second option would utilize a single nuclear-armed missile fired from a submarine. The Joint Chiefs' report does not recommend which option the president should choose.

—
“Nuclear and conventional weapons would be equally effective against this deeply buried target.”

—
The report concludes that the nuclear and conventional strikes would be “equally effective against this deeply buried target.” According to the report, the conventional strike and nuclear strike both have a 90 percent chance of successfully destroying the chemical weapons lab.

The report comes days after Swedish intelligence agents intercepted specialized chemicals and equipment used to produce sarin gas, a potent nerve toxin, on their way to Libya.

Two smugglers, employees of a Swedish chemical plant, confirmed that previous shipments had already arrived in Daraya, where the weapons were assembled and ready for use.

Although investigators are confident the terrorists have not yet produced functional chemical weapons, the weapons will be operational within days unless action is taken to destroy them. The report states that no other nation has forces in the area capable of acting in time and that the U.S. “only has one shot at destroying the facility,” since the terrorists are likely to relocate the lab if it is not destroyed in the first strike.

The report emphasizes that the United States will attempt to minimize civilian loss of life in Daraya in both strikes and that the remote location of the terrorist facility should contain civilian fatalities to within the city – the nearest population center is over 150 miles away.

—
“2,700 Libyan civilians in the remote city would be unavoidably killed in either the nuclear or conventional strikes.”

—
Because many conventional weapons would be required to destroy the weapons lab, the Joint Chiefs expect that the conventional and nuclear options would result in approximately the same number of Libyan fatalities: an estimated 2,700 Libyan civilians would be killed as a “regrettable side-effect” of either strike, including immediate deaths and deaths resulting from long term consequences of the conventional or nuclear strikes.

As both options will rely on missiles launched from naval vessels, the report concludes that “no U.S. military personnel are at risk in either operation.”

Target: Terrorist Chemical Weapons Facility in Libya

	CONVENTIONAL STRIKE	NUCLEAR STRIKE
Probability of destroying target	90%	90%
Estimated Libyan civilian deaths	2,700	2,700

If no action is taken, the terrorists will carry out attack, killing 3,000 American civilians.

Story 2

(Taboo - conventional 45%, nuclear 90%)

Terrorists Planning Chemical Weapons Attack on Washington, D.C.. Joint Chiefs Say Nuclear Airstrike Doubles Chances of Destroying Terrorist Chemical Weapons Lab in Libya

If Successful, the Terrorist Attack Would Kill an Estimated 3,000 Americans

Officials from intelligence organizations in Sweden and the United States have determined that an imminent chemical weapons attack against Washington, D.C. city buses is being planned by a previously unknown Islamist terrorist group based in Daraya, a small, Muslim city in northern Libya. If successfully carried out, experts estimate that the terrorist attack on Washington would kill approximately 3,000 people.

High-ranking administration officials speaking on the condition of anonymity confirm that the president and senior officials have received a report from the Joint Chiefs of Staff describing two U.S. military options for destroying the terrorist chemical weapons facility where the weapons are being produced. The facility is located in a deeply buried bunker once used by the Libyan military. Because the precise location of the bunker is not known, destroying it will require either a large conventional strike or the use of a nuclear weapon.

The emergence of the new terrorist organization in Daraya has evenly divided the population of the remote city. While half of the citizens openly cheered for the group, carrying its flags in public protests against the West, the other half strongly oppose the terrorists.

There is no evidence, however, that support for the group extends beyond political sympathy. Citizens of Daraya have not provided any material aid or recruits to the terrorists.

The first military option described in the report would target the facility using 50 conventionally-armed cruise missiles launched from navy ships currently deployed in the Mediterranean Sea. The second option would utilize a single nuclear-armed missile fired from a submarine. The Joint Chiefs' report does not recommend which option the president should choose.

“Nuclear weapons would be dramatically more effective against this deeply buried target.”

The report concludes that the nuclear strike would be “dramatically more effective against this deeply buried target” than the conventional attack. According to the report, the conventional strike has a 45 percent chance of successfully destroying the chemical weapons lab while nuclear weapons increase the chances of success to 90 percent.

The report comes days after Swedish intelligence agents intercepted specialized chemicals and equipment used to produce sarin gas, a potent nerve toxin, on their way to Libya.

Two smugglers, employees of a Swedish chemical plant, confirmed that previous shipments had already arrived in Daraya, where the weapons were assembled and ready for use.

Although investigators are confident the terrorists have not yet produced functional chemical weapons, the weapons will be operational within days unless action is taken to destroy them. The report states that no other nation has forces in the area capable of acting in time and that the U.S. “only has one shot at destroying the facility,” since the terrorists are likely to relocate the lab if it is not destroyed in the first strike.

The report emphasizes that the United States will attempt to minimize civilian loss of life in Daraya in both strikes and that the remote location of the terrorist facility should contain civilian fatalities to within the city – the nearest population center is over 150 miles away.

—
“2,700 Libyan civilians in the remote city would be unavoidably killed in either the nuclear or conventional strikes.”

—
Because many conventional weapons would be required to destroy the weapons lab, the Joint Chiefs expect that the conventional and nuclear options would result in approximately the same number of Libyan fatalities: an estimated 2,700 Libyan civilians would be killed as a “regrettable side-effect” of either strike, including immediate deaths and deaths resulting from long term consequences of the conventional or nuclear strikes.

As both options will rely on missiles launched from naval vessels, the report concludes that “no U.S. military personnel are at risk in either operation.”

Target: Terrorist Chemical Weapons Facility in Libya

	CONVENTIONAL STRIKE	NUCLEAR STRIKE
Probability of destroying target	45%	90%
Estimated Libyan civilian deaths	2,700	2,700

If no action is taken, the terrorists will carry out attack, killing 3,000 American civilians.

Story 3

(Proportionality – conventional 45%, nuclear 90% with 100,000 Libyan civilian fatalities)

Terrorists Planning Chemical Weapons Attack on Washington, D.C.. Joint Chiefs Say Nuclear Airstrike Doubles Chances of Destroying Terrorist Chemical Weapons Lab in Libya, but Risks Higher Civilian Fatalities

If Successful, the Terrorist Attack Would Kill an Estimated 3,000 Americans

Officials from intelligence organizations in Sweden and the United States have determined that an imminent chemical weapons attack against Washington, D.C. city buses is being planned by a previously unknown Islamist terrorist group based in Daraya, a small, Muslim city in northern Libya. If successfully carried out, experts estimate that the terrorist attack on Washington would kill approximately 3,000 people.

High-ranking administration officials speaking on the condition of anonymity confirm that the president and senior officials have received a report from the Joint Chiefs of Staff describing two U.S. military options for destroying the terrorist chemical weapons facility where the weapons are being produced. The facility is located in a deeply buried bunker once used by the Libyan military. Because the precise location of the bunker is not known, destroying it will require either a large conventional strike or the use of a nuclear weapon.

The emergence of the new terrorist organization in Daraya has evenly divided the population of the remote city. While half of the citizens openly cheered for the group, carrying its flags in public protests against the West, the other half strongly oppose the terrorists.

There is no evidence, however, that support for the group extends beyond political sympathy. Citizens of Daraya have not provided any material aid or recruits to the terrorists.

The first military option described in the report would target the facility using 50 conventionally-armed cruise missiles launched from navy ships currently deployed in the Mediterranean Sea. The second option would utilize a single nuclear-armed missile fired from a submarine. The Joint Chiefs' report does not recommend which option the president should choose.

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“Nuclear weapons would be dramatically more effective against this deeply buried target.”

—
The report concludes that the nuclear strike would be “dramatically more effective against this deeply buried target” than the conventional attack. According to the report, the conventional strike has a 45 percent chance of successfully destroying the chemical weapons lab while nuclear weapons increase the chances of success to 90 percent.

The report comes days after Swedish intelligence agents intercepted specialized chemicals and equipment used to produce sarin gas,

a potent nerve toxin, on their way to Libya. Two smugglers, employees of a Swedish chemical plant, confirmed that previous shipments had already arrived in Daraya, where the weapons were assembled and ready for use.

Although investigators are confident the terrorists have not yet produced functional chemical weapons, the weapons will be operational within days unless action is taken to destroy them. The report states that no other nation has forces in the area capable of acting in time and that the U.S. “only has one shot at destroying the facility,” since the terrorists are likely to relocate the lab if it is not destroyed in the first strike.

The report emphasizes that the United States will attempt to minimize civilian loss of life in Daraya in both strikes and that the remote location of the terrorist facility should contain civilian fatalities to within the city – the nearest population center is over 150 miles away.

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2,700 Libyan civilians in the remote city would be unavoidably killed in conventional strike. 100,000 would be unavoidably killed if nuclear weapons are used.”

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The Joint Chiefs expect that the nuclear strike would result in higher Libyan civilian fatalities than the conventional strike. An estimated 2,700 Libyan civilians would be killed as a “regrettable side-effect” of the conventional strike, while approximately 100,000 would be killed as a side-effect of the nuclear strike, including immediate deaths and deaths resulting from long term consequences of the conventional or nuclear strikes.

As both options will rely on missiles launched from naval vessels, the report concludes that “no U.S. military personnel are at risk in either operation.”

Target: Terrorist Chemical Weapons Facility in Libya

	CONVENTIONAL STRIKE	NUCLEAR STRIKE
Probability of destroying target	45%	90%
Estimated Libyan civilian deaths	2,700	100,000

If no action is taken, the terrorists will carry out attack, killing 3,000 American civilians.

Story 4

(Distinction - conventional 90%, nuclear 90%, both options intentionally target civilians)

Terrorists Planning Chemical Weapons Attack on Washington, D.C.. Joint Chiefs Say Nuclear and Conventional Airstrikes Have Equal Chance of Destroying Terrorist Chemical Weapons Lab in Libya, Striking Civilian Population near Terrorist Base Would “Send a Strong Message to Terrorist Sympathizers Everywhere”

If Successful, the Terrorist Attack Would Kill an Estimated 3,000 Americans

Officials from intelligence organizations in Sweden and the United States have determined that an imminent chemical weapons attack against Washington, D.C. city buses is being planned by a previously unknown Islamist terrorist group based in Daraya, a small, Muslim city in northern Libya. If successfully carried out, experts estimate that the terrorist attack on Washington would kill approximately 3,000 people.

High-ranking administration officials speaking on the condition of anonymity confirm that the president and senior officials have received a report from the Joint Chiefs of Staff describing two U.S. military options for destroying the terrorist chemical weapons facility where the weapons are being produced. The facility is located in a deeply buried bunker once used by the Libyan military. Because the precise location of the bunker is not known, destroying it will require either a large conventional strike or the use of a nuclear weapon

The emergence of the new terrorist organization in Daraya has evenly divided the population of the remote city. While half of the citizens openly cheered for the group, carrying its flags in public protests against the

West, the other half strongly oppose the terrorists. There is no evidence, however, that support for the group extends beyond political sympathy. Citizens of Daraya have not provided any material aid or recruits to the terrorists.

The first military option described in the report would target the facility and the surrounding civilian population using 50 conventionally-armed cruise missiles launched from navy ships currently deployed in the Mediterranean Sea. The second option would target the facility and the surrounding population with a single nuclear-armed missile fired from a submarine. The Joint Chiefs’ report does not recommend which option the president should choose.

—
“Nuclear and conventional weapons would be equally effective against this deeply buried target.”

—
The report concludes that the nuclear and conventional strikes would be “equally effective against this deeply buried target.” According to the report, the conventional strike and nuclear strike both have a 90 percent chance of successfully destroying the chemical weapons lab. The report also states that by

targeting the civilian population both strikes would “send a strong message to terrorist sympathizers everywhere to reject ideologies of terror.”

The report comes days after Swedish intelligence agents intercepted specialized chemicals and equipment used to produce sarin gas, a potent nerve toxin, on their way to Libya. Two smugglers, employees of a Swedish chemical plant, confirmed that previous shipments had already arrived in Daraya, where the weapons were assembled and ready for use.

Although investigators are confident the terrorists have not yet produced functional chemical weapons, the weapons will be operational within days unless action is taken to destroy them. The report states that no other nation has forces in the area capable of acting in time and that the U.S. “only has one shot at destroying the facility,” since the terrorists are likely to relocate the lab if it is not destroyed in the first strike.

Although both strikes are intended to maximize destruction and

civilian fatalities in Daraya, the remote location of the terrorist facility should contain civilian fatalities to within the city – the nearest population center is over 150 miles away.

—
“2,700 Libyan civilians in the remote city would be killed in either the nuclear or conventional strikes.”

—
Because many conventional weapons would be required to destroy the weapons lab, the Joint Chiefs expect that the nuclear and conventional options would result in approximately the same number of Libyan fatalities: an estimated 2,700 Libyan civilians living in Daraya would be killed, including immediate deaths and deaths resulting from long term consequences of the conventional or nuclear strikes.

As both options will rely on missiles launched from naval vessels, the report concludes that “no U.S. military personnel are at risk in either operation.”

Target: Terrorist Chemical Weapons Facility in Libya

	CONVENTIONAL STRIKE	NUCLEAR STRIKE
Probability of destroying target	90%	90%
Estimated Libyan civilian deaths	2,700	2,700

If no action is taken, the terrorists will carry out attack, killing 3,000 American civilians.

Story 5

(Religion – conventional 45%, nuclear 90%, town is 50% Christian)

Terrorists Planning Chemical Weapons Attack on Washington, D.C.. Joint Chiefs Say Nuclear Airstrike Doubles Chances of Destroying Terrorist Chemical Weapons Lab Located in Mixed Muslim-Christian City in Libya

If Successful, the Terrorist Attack Would Kill an Estimated 3,000 Americans

Officials from intelligence organizations in Sweden and the United States have determined that an imminent chemical weapons attack against Washington, D.C. city buses is being planned by a previously unknown Islamist terrorist group based in Daraya, a small, multiethnic Muslim and Christian city in northern Libya. If successfully carried out, experts estimate that the terrorist attack on Washington would kill approximately 3,000 people.

High-ranking administration officials speaking on the condition of anonymity confirm that the president and senior officials have received a report from the Joint Chiefs of Staff describing two U.S. military options for destroying the terrorist chemical weapons facility where the weapons are being produced. The facility is located in a deeply buried bunker once used by the Libyan military. Because the precise location of the bunker is not known, destroying it will require either a large conventional strike or the use of a nuclear weapon.

Libya is home to a large Roman Catholic minority population, and half of the residents of Daraya are Christian. The emergence of the new terrorist organization in Daraya has evenly divided the population of the remote city. While half of the citizens openly cheered for the group, carrying

its flags in public protests against the West, the other half strongly oppose the terrorists. There is no evidence, however, that support for the group extends beyond political sympathy. Citizens of Daraya have not provided any material aid or recruits to the terrorists.

The first military option described in the report would target the facility using 50 conventionally-armed cruise missiles launched from navy ships currently deployed in the Mediterranean Sea. The second option would utilize a single nuclear-armed missile fired from a submarine. The Joint Chiefs' report does not recommend which option the president should choose.

“Nuclear weapons would be dramatically more effective against this deeply buried target.”

The report concludes that the nuclear strike would be “dramatically more effective against this deeply buried target” than the conventional attack. According to the report, the conventional strike has a 45 percent chance of successfully destroying the chemical weapons lab while nuclear weapons increase the chances of success to 90 percent.

The report comes days after Swedish intelligence agents intercepted specialized chemicals and

equipment used to produce sarin gas, a potent nerve toxin, on their way to Libya. Two smugglers, employees of a Swedish chemical plant, confirmed that previous shipments had already arrived in Daraya, where the weapons were assembled and ready for use.

Although investigators are confident the terrorists have not yet produced functional chemical weapons, the weapons will be operational within days unless action is taken to destroy them. The report states that no other nation has forces in the area capable of acting in time

and that the U.S. “only has one shot at destroying the facility,” since the terrorists are likely to relocate the lab if it is not destroyed in the first strike.

The report emphasizes that the United States will attempt to minimize civilian loss of life in Daraya in both strikes and that the remote location of the terrorist facility should contain civilian fatalities to within the city – the nearest population center is over 150 miles away.

2,700 Libyan civilians in the remote city would be unavoidably killed in conventional strike. 100,000 would be unavoidably killed if nuclear weapons are used.”

The Joint Chiefs expect that the nuclear strike would result in higher Libyan civilian fatalities than the conventional strike. An estimated 2,700 Libyan civilians would be killed as a “regrettable side-effect” of the conventional strike, while approximately 100,000 would be killed as a side-effect of the nuclear strike, including immediate deaths and deaths resulting from long term consequences of the conventional or nuclear strikes.

As both options will rely on missiles launched from naval vessels, the report concludes that “no U.S. military personnel are at risk in either operation.”

Target: Terrorist Chemical Weapons Facility in Libya

	CONVENTIONAL STRIKE	NUCLEAR STRIKE
Probability of destroying target	45%	90%
Estimated Libyan civilian deaths	2,700	100,000

If no action is taken, the terrorists will carry out attack, killing 3,000 American civilians.